

# Greauxing Resilience at Home

A Collection of Lessons and Case Studies from Louisiana and Beyond



GEORGETOWN CLIMATE CENTER



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# Table of Contents

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1. **About This Report**
2. Miami-Dade County, Florida: **Little River Adaptation Action Area Plan**
3. Mecklenburg County, North Carolina: **Charlotte-Mecklenburg Storm Water Services, Risk Assessment/Risk Reduction (RARR) Tool**
4. City of New Orleans, Louisiana: **Gentilly Resilience District Projects**
5. City of North Miami, Florida: **Good Neighbor Stormwater Park and Repetitive Loss Master Plan**
6. City of Houston, Texas: **Resilient Houston and Affordable Housing and Nature-Based Efforts**
7. St. John the Baptist Parish, Louisiana: **Resilient Planning, Affordable Housing, Environmental, and Funding Initiatives**
8. City of Asheville, North Carolina: **Affordable Housing, Environmental, and Climate Resiliency Initiatives**
9. City of Atlanta, Georgia: **Prioritizing Affordable Housing and Nature in the Face of New Growth**
10. City of Austin, Texas: **Affordable Housing and Green Infrastructure Efforts**
11. City of Norfolk, Virginia: **PlaNorfolk 2030, Norfolk Vision 2100, and Resilience Zoning Updates**
12. City of Baton Rouge–Parish of East Baton Rouge, Louisiana: **Imagine Plank Road Plan for Equitable Development**
13. City of Baton Rouge–Parish of East Baton Rouge, Louisiana: **Ardendale Master Plan and Guiding Principles**
14. City of Columbia, South Carolina: **Columbia Compass: Envision 2036 and Affordable Housing Task Force**
15. City of Baton Rouge–Parish of East Baton Rouge, Louisiana: **Scotlandville Community Strategic Plan**
16. City of Charlotte, North Carolina: **Pilot Naturally Occurring Affordable Housing (NOAH) Subsidy Program**
17. City of Richmond, Virginia: **Maggie Walker Community Land Trust and Richmond Land Bank**
18. City of Boulder, Colorado: **Affordable Housing, Manufactured Housing, and Environmental Plans and Initiatives**
19. City of Denham Springs, Louisiana: **Denham Strong Long-Term Community Recovery Plan**
20. City of Donaldsonville, Louisiana: **Donaldsonville Strategic Plan 2020–2025**
21. Town of Warrenton, Virginia: **Fauquier Habitat for Humanity Haiti Street Neighborhood Revitalization**
22. City of Gonzales, Louisiana: **Gonzales Comprehensive Plan**
23. City of New Orleans, Louisiana: **Resilient Housing Prototype in the Seventh Ward**
24. City of Portland, Oregon: **Planning and Zoning for Manufactured Housing Communities**
25. Town of Washington, Virginia: **Rush River Commons Mixed-Use Development**

# ABOUT THIS REPORT

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Louisiana is one of the hardest-hit areas in the United States as extreme weather events and regular flooding become more frequent and intense.<sup>1</sup> These challenges often fall “first and worst” on Black, Indigenous, and People of Color or “BIPOC” and low-income communities.<sup>2</sup> This is especially true in the U.S. Gulf Coast region and the state of Louisiana.

Over time, these challenges are being exacerbated by population increases and transitions as climate and non-climate drivers (e.g., people moving out of urban centers into more rural areas) influence where people choose — or are able — to live.

In southeast Louisiana, resilient, affordable housing initiatives are critical to ensuring equitable adaptation that takes into consideration the myriad overlapping challenges facing all Louisianans, but especially those living in communities that have long borne a disproportionate burden of risk.

Over a two-year period between fall 2020 and spring 2022, **Capital Region Planning Commission** and **Georgetown Climate Center** partnered with dozens of people from government, private, and nonprofit sectors and community stakeholders in Region Seven of the **Louisiana Watershed Initiative**.<sup>3</sup> The result of that partnership effort is **Greauxing Resilience at Home: A Regional Vision**<sup>4</sup> (Regional Vision), a resource to inform Region Seven’s ongoing work to increase community resilience by promoting affordable housing and nature-based solutions.

Regional and local governments in Region Seven can use the Regional Vision to identify potential legal, planning, and policy tools and projects to increase the affordability and availability of housing and the use of nature-based solutions. In addition, the Regional Vision offers insights for policymakers across Louisiana, throughout the Gulf Coast region, and nationally.

This report is composed of 24 individual case studies developed by Georgetown Climate Center to support the Regional Vision. These case studies describe best and emerging practices, tools, and examples from Louisiana and other U.S. jurisdictions to make progress on these complex and challenging issues. These case studies are intended to provide transferable lessons and ideas for regional and local governments addressing housing and mitigating flood risk as integrated parts of comprehensive community resilience strategies. Collectively, these case studies present a suite, although not an exhaustive list of tools and approaches that can be used to facilitate any of these efforts.

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1 STATE OF LA., LOUISIANA CLIMATE ACTION PLAN: CLIMATE INITIATIVES TASK FORCE RECOMMENDATIONS TO THE GOVERNOR 15–16 (Feb. 2022), available at <https://gov.louisiana.gov/assets/docs/CCI-Task-force/CAP/ClimateActionPlanFinal.pdf>.

2 See *id.* at 15–17.

3 The Louisiana Watershed Initiative is an effort to create a paradigm shift in floodplain management towards a strategy that approaches flood risk reduction from a nature-based solutions and land-use-based approach. A part of this approach includes identifying eight separate regional watershed management areas to assist in achieving cross-jurisdictional activities.

Region Seven is one of these eight watershed regions. Region Seven encompasses the upper part of the toe of Louisiana’s boot. It spans eastward from the Mississippi River near Baton Rouge across the Northshore (i.e., north of Lakes Pontchartrain and Maurepas) to Mississippi and along the Mississippi River to the Bonnet Carré Spillway. The region includes 13 parishes and 45 incorporated municipalities.

4 To reflect their connection to Louisiana’s cultural heritage, the project team and members of Region Seven that participated in this process chose to use the word “Greaux,” a French-inspired phonetic spelling of the word “Grow,” to brand this product.

Where possible, all the case studies share a consistent organizational format to allow easier cross-comparison of tools, processes, and takeaways:

- The **Background** section introduces the regional and local context (e.g., location, demographics) for each case study, including the following facing each jurisdiction: extreme weather risks, housing and environmental challenges, and development pressures.
- The **Housing** section focuses on the legal, planning, and policy tools and projects that have been designed and implemented to support the growth and preservation of housing affordability and availability.
- The **Environment** section highlights how vulnerable habitats like floodplains and other open spaces are being restored, conserved, and protected as a part of comprehensive resilience strategies to provide important ecosystem and community benefits like reducing flood risk and creating community assets, such as parks and trails.
- The **Community Engagement** section summarizes how governments have provided different types of public engagement opportunities and how affected residents have contributed to these planning and decisionmaking processes.
- The **Funding** section identifies how the programs, plans, and projects discussed have been funded by federal, state, and local government and private and nongovernmental sources.
- The **Next Steps** section captures the anticipated future actions that featured case study jurisdictions may take in implementing these tools and strategies.
- The **Considerations and Lessons Learned** section concludes with the primary takeaways from each example that other regional and local policymakers and communities may consider when developing or implementing their own housing and resilience strategies using these legal, planning, and policy tools.

A few additional notes about the case studies:

- **The case studies selected prioritize relatable and scalable models from places similar to Louisiana:** Wherever possible, Georgetown Climate Center aimed to acknowledge and lift up the work of jurisdictions and nongovernmental actors in Region Seven and neighboring watershed regions to inspire peer-to-peer sharing and actions from as close to home as possible. These resources are drawn from 12 states, with an emphasis on regions and local areas in the Gulf and Mid-Atlantic: Colorado, Florida, Georgia, Illinois, Iowa, Louisiana, New York, North Carolina, Oregon, South Carolina, Texas, and Virginia. Examples and lessons drawn from these regions are easiest to apply to a Louisianan context because they feature similar geography or analogous impacts from flooding and other climate effects.
- **There are no perfect, “one-size-fits-all” solutions:** While the case studies and resource entries informing the Region Vision are instructive for Region Seven and beyond, none of them are “perfect” examples of how to solve these complex and challenging issues. Georgetown Climate Center found no single case study or resource that provides a point-for-point or model for what Region Seven is trying to accomplish. No other jurisdiction identified is currently trying to integrate housing, flooding, equity, resilience, and population changes together in a single plan, ordinance, or policy. However, some jurisdictions are moving in that direction, or are making progress on discrete elements of what will eventually become a more holistic strategy. Therefore, this report and the Regional Vision draw analogous connections and recommendations that can be combined to facilitate more comprehensive planning and land-use efforts.

The case studies in this report were informed by interviews with practitioners and community leaders in charge of designing and overseeing this work. No statements or opinions, however, should be attributed to any individual or organization included in the *Acknowledgements* section of this report.

It is also important to note that the examples described in each case study are ongoing and the content included in this report is current as of spring 2022. For future updates about these and other case studies and the Regional Vision, please visit [Greaxing Resilience at Home: A Regional Vision](#) and Georgetown Climate Center’s [Adaptation Clearinghouse](#).

## *Miami-Dade County, Florida*

# Little River Adaptation Action Area Plan

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## EXECUTIVE SUMMARY

The Little River Adaptation Action Area (AAA) plan was released in January 2022 as part of the process to implement the Miami-Dade County Sea Level Rise Strategy. Adaptation Action Areas are locations that are especially prone to climate impacts like coastal flooding so that they can be prioritized for funding and planning purposes.<sup>1</sup> The Little River AAA is made up of parts of the City of Miami, as well as the Village of El Portal and two unincorporated areas.

Identified as one of the communities in that area most susceptible to climate impacts, Miami-Dade County's Office of Resilience, in collaboration with Florida's Department of Environmental Protection and private partners like Savino-Miller Design, developed the adaptation plan to address existing conditions across five sectors by offering distinct adaptation tools that can help mitigate the impacts of climate within each sector. From this plan, local policymakers and planners can take the generalized idea behind AAA — and the practice of making adaptation plans more specific to localities — as well as the specific projects and programs recommended within the document and implement them in their own communities.

## BACKGROUND

Miami-Dade County is located in the southeastern most part of Florida, encompassing more than 2,000 square miles.<sup>2</sup> It is home to parts of two national parks — the Everglades and Biscayne Bay — 34 unincorporated cities (and several additional unincorporated areas), and incorporated cities like Miami, Florida City, and Sweetwater.<sup>3</sup> With a population of around 2.7 million people, the is

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<sup>1</sup> ARCADIS, MIAMI-DADE COUNTY SEA LEVEL RISE STRATEGY (2021), available at <https://miami-dade-county-sea-level-rise-strategy-draft-mdc.hub.arcgis.com/>.

<sup>2</sup> *About Miami-Dade County*, MIAMI-DADE COUNTY (2021), <https://www.miamidade.gov/global/disclaimer/about-miami-dade-county.page>.

<sup>3</sup> *Cities Within Counties*, DIV. OF LIBRARY INFO. SERV., FL. DEP'T OF STATE (2022), <https://dos.myflorida.com/library-archives/research/florida-information/government/local-resources/citycounty-list/counties/#Miami-Dade>.

primarily Hispanic, (62.8 percent), Black (15.3 percent,) and white (12.8 percent white).<sup>4</sup> Over 75 percent of people speak a language other than English as their first language at home.<sup>5</sup>

Little River — one community within Miami-Dade County — includes the Village of El Portal, the northern part of Miami, and two unincorporated areas.<sup>6</sup> It has almost 19,000 residents, 68 percent of which are Black, and has a median household income of around \$30,000.<sup>7</sup> Most of the neighborhoods within Little River are located on the Little River itself, the Little River Canal, or Biscayne Bay.<sup>8</sup>

Because of the community's location and its low elevation, many residents are concerned about the threat of sea-level rise and flooding. In recent years, King tides<sup>9</sup> and heavy rainfall events have damaged or destroyed homes, overwhelmed infrastructure and drainage systems, and caused septic systems to fail, ultimately forcing families to leave their homes.<sup>10</sup> In the Little River community alone, residents reported that they were experiencing repeated damage to their yards, basements, and garages due to flooding, which also led to mold and additional structural issues.<sup>11</sup> Streets are flooding every day due to rainstorms, and urban development in the area has replaced much of the natural, green spaces that historically would help with stormwater drainage.<sup>12</sup>

To address these issues, as well as other associated climate impacts, the county developed the [Miami-Dade Sea Level Rise \(SLR\) Strategy](#), which outlines five adaptation approaches: (1) to build on fill; (2) to build like the Keys; (3) to build on high ground around transit; (4) to expand green- and blueways; and (5) to create green and blue neighborhoods.<sup>13</sup> As part of the implementation plan, the county identified several communities likely to be most impacted by climate change, and designated them as Adaptation Action Areas (AAA).

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<sup>4</sup> Data USA: Miami-Dade County, FL, DATA USA, <https://datausa.io/profile/geo/miami-dade-county-fl> (last visited Jan. 13, 2022).

<sup>5</sup> *Id.*

<sup>6</sup> Savino Miller Design Studio, Adaptation Plan: Little River Adaptation Action Area 8 (2022).

<sup>7</sup> *Little River*, NICHE (2022), <https://www.niche.com/places-to-live/n/little-river-miami-fl/residents/>.

<sup>8</sup> Savino Miller Design Studio, Adaptation Plan: Little River Adaptation Action Area 8 (2022).

<sup>9</sup> “A King Tide is a higher-than-normal tide that typically lasts about 3 hours. King Tides occur annually and predictably; in September through November in Miami. King Tides may cause residents to experience ‘sunny day flooding’ where a street or other areas will temporarily become flooded when it is not raining.” *King Tides*, MIAMI.GOV (2022), <https://www.miamigov.com/My-Government/ClimateChange/King-Tides>.

<sup>10</sup> Savino Miller Design Studio, Adaptation Plan: Little River Adaptation Action Area 10 (2022).

<sup>11</sup> *Id.* at 30.

<sup>12</sup> *Id.*

<sup>13</sup> ARCADIS, MIAMI-DADE COUNTY SEA LEVEL RISE STRATEGY (2021), available at <https://miami-dade-county-sea-level-rise-strategy-draft-mdc.hub.arcgis.com/>.



## Adaptation Action Areas

In 2011, the State of Florida passed a law to enable local governments to adopt optional comprehensive plan designations for areas that experience coastal flooding and are vulnerable to sea-level rise for the purpose of prioritizing funding for infrastructure projects and adaptation planning.<sup>14</sup> Under the state Community Planning Act, local governments can adopt AAA and consider policies in their local comprehensive plans to increase a community's resilience.<sup>15</sup>

In 2015, the state developed a guidance document to better assist counties and municipalities in Florida with exploring the potential use of AAA.<sup>16</sup> As such, AAA have been used throughout Florida, including in Miami-Dade County.

According to Miami-Dade County, an AAA "is a flexible planning tool that allows Miami-Dade County to work directly with community members to create a more detailed adaptation plan for a focus area. It also facilitates the coordination of projects such as road, park and green infrastructure, and water and sewer improvements, among others."<sup>17</sup> The Little River Community was identified as one of these AAA.

There are many benefits of identifying a neighborhood or larger area as an AAA. Throughout Florida, AAA planning and identification have allowed local governments and stakeholders to align plans and capital projects across the region to better leverage available resources; better educate and collaborate with community stakeholders to identify values, challenges, and potential solutions to adapt to sea-level rise; and create more forward-thinking plans that include, among other recommendations, next steps and potential policy changes that can be implemented.<sup>18</sup> Additionally, "AAA planning enhances opportunities to learn from and collaborate with residents, community leaders and neighborhood organizations to determine which adaptation approaches are preferred for a given area."<sup>19</sup> The collaborative aspect of AAA brings together stakeholders, organizations, and agencies when they otherwise may have been siloed to create a more

<sup>14</sup> Georgetown Climate Ctr., *Creation of "Adaptation Action Areas" in Florida's Community Planning Act*, ADAPTATION CLEARINGHOUSE (June 2, 2011), <https://www.adaptationclearinghouse.org/resources/creation-of-e-adaptation-action-areas-e-in-florida-s-community-planning-act.html>.

<sup>15</sup> *Id.*

<sup>16</sup> Georgetown Climate Ctr., *Adaptation Action Areas Guidebook: A Planning Guidebook for Florida's Local Government*, ADAPTATION CLEARINGHOUSE (Aug. 2015), <https://www.adaptationclearinghouse.org/resources/adaptation-action-areas-guidebook-a-planning-guidebook-for-florida-s-local-government.html>.

<sup>17</sup> Savino Miller Design Studio, *Adaptation Plan: Little River Adaptation Action Area 16* (2022).

<sup>18</sup> *Id.*

<sup>19</sup> ARCADIS, MIAMI-DADE COUNTY SEA LEVEL RISE STRATEGY 57 (2021), available at <https://miami-dade-county-sea-level-rise-strategy-draft-mdc.hub.arcgis.com/>.



holistic approach to address the short- and long-term needs of communities that are especially susceptible to the impacts of climate change.

Further, the legal authority and guidance resources behind AAA lend them a greater amount of statewide legitimacy and awareness that might not exist for purely local or jurisdiction-specific land-use plans and zoning designations. Since these optional plan designations are codified in a state statute, state and local policymakers together have a shared term and understanding of how AAA can increase local resilience to flooding and climate impacts. This can help to attract more attention to AAA, reduce the time and effort involved in socializing new concepts within and across governments, and decrease the time it takes to plan for and implement potential actions on the ground.

This state support, however, is importantly balanced by the fact that AAA are a model that can be adapted to fit local needs and context and are not a “one-size-fits-all” tool that lack flexibility.

## OVERVIEW OF THE LITTLE RIVER ADAPTATION ACTION AREA PLANNING EFFORT

Miami-Dade County’s Office of Resilience has been working with the Florida Department of Environmental Protection and Savino Miller Design Studios to develop a plan to implement adaptation projects in the Little River AAA.<sup>20</sup> The multijurisdictional planning effort began in October 2020 with the collection of background research on the community as a whole. From there, the county has worked to engage with community members as Savino Miller Design Studios developed the plan. The Adaptation Plan for the Little River Adaptation Action Area was published in January 2022.<sup>21</sup> The publication of this plan marks the first county-led pilot of an AAA in Miami-Dade County. The Little River area was selected after a convergence of different factors, including increased attention relating to poor water quality and fish kills in Biscayne Bay, where the Little River canal was a significant contributor to these issues. Other issues related to septic, especially with increase flooding and contamination of the groundwater table. These issues, backed by political support due to the election of Mayor Daniella Levine Cava, enabled by a state planning grant, led to the start of this work.

The plan begins with a brief executive summary that lays out the unique characteristics and issues the Little River community faces due to climate change.<sup>22</sup> Because of the expansive community engagement process that is embedded into AAA planning, the document also includes stories and experiences collected directly from community members living within the Little River AAA, and contains a section of the risks and challenges that climate change poses to the neighborhoods.

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<sup>20</sup> Savino Miller Design Studio, Adaptation Plan: Little River Adaptation Action Area 16 (2022).

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* at 12.

These include risks related to flooding, equity and historic discrimination concerns, and issues stemming from the impacts of extreme heat.<sup>23</sup> This section also breaks down the consequences that these risks and challenges have on five distinct sectors: stormwater and drainage, wastewater systems, housing, natural areas and greenspace, and transportation.<sup>24</sup>

To address the issues outlined in the five sectors, the rest of the plan outlines “Next Steps,” which explores a mix of adaptation approaches, which are “supported by specific tools.”<sup>25</sup> The adaptation approaches and accompanying tools, which are outlined in the Miami-Dade County SLR Strategy, are specifically adapted to the Little River community and the unique challenges the AAA faces. As such, the plan prioritizes four specific projects to address the most urgent issues facing residents of the Little River AAA: improving local stormwater management, expanding greenspaces, addressing housing issues, and transitioning septic systems to the main sewer system.<sup>26</sup> The plan also provides specific examples of where these priority projects are being implemented. Finally, the authors of the plan outline the various policy changes that can take place, and how implementation of the plan recommendations can be monitored.<sup>27</sup>

The parts below focus on the elements and recommendations in the Little River AAA plan that deal with affordable housing and nature-based solutions to mitigate flood risk.

## HOUSING

In the Little River community, there are three public housing structures — Kline Nunn, Little River Plaza, and Little River Terrace.<sup>28</sup> In 2017, the county released an action plan that identified the first two developments as some of the county’s assets most vulnerable to climate change.<sup>29</sup> In addition to these affordable housing units, other types of homes throughout the Little River include “private mobile home communities, private and multifamily residences, and private single-family homes.”<sup>30</sup> The housing stock impacted by sea-level rise and flooding is exacerbated by an ongoing housing crisis in the Little River community and Miami-Dade County more broadly. Specifically, there is a current housing shortage within the Little River community, and as of today, communities of color and those who rent or have low- or fixed-incomes are most severely impacted.<sup>31</sup> To determine the level of vulnerability in the Little River community, the county developed a map that differentiates between land/property usage, while also color coding which

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<sup>23</sup> *Id.* at 30–35.

<sup>24</sup> *Id.* at 36–45.

<sup>25</sup> *Id.* at 48.

<sup>26</sup> *Id.* at 60.

<sup>27</sup> *Id.* at 70–72.

<sup>28</sup> *Id.* at 40.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> *Id.* at 41.

areas are most at risk of flooding and sea-level rise.<sup>32</sup> The Office of Resilience recommends that any further housing development should be redirected to the less flood-prone areas identified by the map, while also taking into account “the potential displacement of existing communities in less flood-prone areas due to increased, new development and potentially higher property taxes.”<sup>33</sup>

Outside of this general recommendation, the Little River AAA plan outlines several adaptation tools specific to future home development, including elevating buildings, elevating critical equipment, and the potential creation of a voluntary buyout program.

- Elevating buildings:** Currently, most homes in the Little River AAA were built in the 1960s and 1970s, before the existence of modern floodplain management standards.<sup>34</sup> This has resulted in many of the homes — including low-income and multi-family units — having first-floor elevations well below base flood elevation levels set by the Federal Emergency Management Agency. Elevating buildings will involve raising structures above expected sea-level rise levels, as well as retrofitting them with measures that can help reduce flood risk to the structure.<sup>35</sup> Relating to existing structures, buildings can be elevated through “elevating an existing structure in-place by filling the lower levels of the home and raising the roofs, beams, doors, and windows,” or like filling the lower levels of a home and raising the roof, or using piling.<sup>36</sup> However, while it can be cost-effective to plan for elevation in new developments, practices like piling can be expensive, and the burden typically falls to the homeowner. While elevated structures can save homeowners money in the long-term, upfront investments in these changes can be expensive for individuals. As one potential option to reduce this initial expense, the Office of Resilience recommends that neighborhoods could plan on grouping multiple homes as part of an elevation project to consolidate and reduce overall costs.<sup>37</sup>
- Elevating critical equipment:** Whereas raising the height of entire buildings can be extremely costly, permanently raising critical equipment like air conditioning units, generators, and fuel tanks can be less expensive and a more immediate way to prepare for higher water levels.<sup>38</sup>
- Offering voluntary buyouts:** Federal, state, and local government [programs](#) exist that offer willing homeowners an opportunity to sell their property to the government in instances where that property has been flooded or is at risk of flooding.<sup>39</sup> This land is then

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<sup>32</sup> *Id.* at 46.

<sup>33</sup> *Id.* at 86.

<sup>34</sup> Savino Miller Design Studio, Draft Adaptation Plan: Little River Adaptation Action Area 130 (2021).

<sup>35</sup> *Id.* at 47.

<sup>36</sup> Savino Miller Design Studio, Adaptation Plan: Little River Adaptation Action Area 86 (2022).

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*



typically restored to public open spaces, which can help to drain stormwater runoff. Implementing a similar program in Little River for low-income homeowners could be extremely helpful, but more “conversations and education are needed for residents in the AAA who are interested in exploring the voluntary buyout option.”<sup>40</sup>

Currently, Miami-Dade County is seeking funding to redevelop and renovate the three existing affordable housing developments with these adaptation tools in mind.<sup>41</sup> Expected to start in the summer of 2022, the Public Housing and Community Development Department’s plan to retrofit these properties to “modern resilience and sustainability standards” is estimated to cost \$29 million.<sup>42</sup>

## ENVIRONMENT

### Green Spaces

Much of the lower Little River neighborhood landscapes have been transformed from naturally flowing rivers into a managed canal system.<sup>43</sup> Where once there was a river slough and wildlife, now there are canals and urban communities. While there are still a “few pockets of green space and natural areas,” one of the main goals of the Office of Resilience, (as stated in the plan), is to expand green- and blueways throughout the community.<sup>44</sup> Several places in the Little River AAA area are already being expanded or renovated to improve the environment within these communities.<sup>45</sup> For example, the Village of El Portal is working to plant trees along routes that children take to school and increase access to water for all residents.<sup>46</sup> In addition, Miami is exploring how to enhance parks near the water, with an additional goal of developing green spaces near future transit projects.<sup>47</sup>

To further increase access to green spaces and improve parks, the strategy outlines two adaptation tools: expanding green spaces and increasing living shorelines.

- **Expanding green spaces:** Green spaces like parks and wetlands offer several benefits to the community in which they are located, including functioning as a place to collect, treat, and store water. In redeveloping open spaces using green infrastructure projects like urban forests, mangroves, and the installation of living shorelines, communities can make more room for increasing water levels. “Green spaces can help block debris from moving

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<sup>40</sup> *Id.*

<sup>41</sup> Savino Miller Design Studio, Adaptation Plan: Little River Adaptation Action Area 86 (2022).

<sup>42</sup> *Id.*

<sup>43</sup> *Id.* at 42.

<sup>44</sup> *Id.*

<sup>45</sup> *Id.* at 53.

<sup>46</sup> *Id.* at 84.

<sup>47</sup> *Id.*

through our canal system during storm events, reduce stormwater runoff, filter water before it enters the canals and ground, and support recreation and physical and mental well-being.”<sup>48</sup> Several parks and open spaces are slated for redevelopment, which should incorporate planting more trees and upgrading natural stormwater infrastructure.

- **Increase living shorelines:** Living shorelines are areas along the water that are stabilized and protected from storms, waves, and erosion through the use of natural elements like plants and rocks.<sup>49</sup> In addition to shoreline protection benefits, living shorelines can also create habitats for natural resources.

Currently, the county’s Department of Parks, Recreation, and Open Spaces (PROS) is working to expand the current footprint of a park within an unincorporated coastal area to include a recently acquired 1.4 acres of adjacent property.<sup>50</sup> Between the estimated start of the project in March 2022 and the estimated completion in spring 2023, PROS plans to host public meetings in an effort to better incorporate residents’ input for design elements relating to the park.<sup>51</sup> In a more inland unincorporated area, PROS is working with partners like CITY Furniture and the Arbor Day Foundation to plant over 400 trees in an existing park to reduce flooding and the impacts of extreme heat.<sup>52</sup> Eventually, the plan is that “the park will benefit from the design and installation of a bioswale for onsite stormwater storage and water quality treatment near [the] existing parking lot.”<sup>53</sup>

## Drainage and Stormwater

Because the broader Little River area is made up of several municipalities and unincorporated areas, local stormwater management, ownership, and operation consists of various agencies and entities, including Miami-Dade County, the City of Miami, the Village of El Portal, and the Florida Department of Transportation.<sup>54</sup> The primary drainage system within the Little River AAA is made up of the Little River canal and its associated salinity control structures, the smaller canals, and the neighborhood systems, which consist of street inlets, pipes, pumps, French drains, and exfiltration trenches.<sup>55</sup> When conducting a study relating to potential flood mitigation alternatives, the South Florida Management District (the District) found that the Little River area and its drainage infrastructure was among the most vulnerable in the area.<sup>56</sup> This is primarily due to the

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<sup>48</sup> Savino Miller Design Studio, Draft Adaptation Plan: Draft Little River Adaptation Action Area 36 (2021).

<sup>49</sup> SAVINO MILLER DESIGN STUDIO, ADAPTATION PLAN: LITTLE RIVER ADAPTATION ACTION AREA 86 (2022). In comparison, sea walls typically are considered gray infrastructure and use manmade materials.

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

<sup>53</sup> *Id.*

<sup>54</sup> Savino Miller Design Studio, Draft Adaptation Plan: Draft Little River Adaptation Action Area 128 (2021).

<sup>55</sup> *Id.*

<sup>56</sup> *Id.* at 33.

fact that when the stormwater system was designed, sea-level rise was not necessarily a risk that was taken into account.<sup>57</sup> The amount of low-lying areas in the community, and the continued use of inadequate or malfunctioning French drain systems continues to exacerbate flooding issues,<sup>58</sup> as does the high concentration of impervious surfaces in several “pockets” throughout the AAA.<sup>59</sup>

In the past, the Department of Transportation and Public Works used financing from general obligation bonds to fund the construction of new stormwater pump stations and the retrofitting of existing pump stations to better service and provide flood relief for certain neighborhoods in the Little River AAA.<sup>60</sup> Additionally, both Miami and the Village of El Portal have Stormwater Management Plans that include phased improvements that will help decrease flooding.<sup>61</sup>

To continue to address stormwater and drainage concerns, the Little River AAA plan offers four adaptation tools: improving the regional drainage system, improving local stormwater management, increasing permeable surfaces, and expanding green spaces.

- **Improving the regional drainage system:** The District has continued to leverage grant opportunities to study how to improve the Little River canal and flood control in the Central and South regions of Miami-Dade County. Improving the regional drainage system further will require a “vast flood protection network consisting of an extensive system of canals, water control structures, levees, and reservoirs managed by the South Florida Water Management District.”<sup>62</sup>
- **Improving local stormwater system:** To improve the stormwater system and management, the current drainage network should be modified to minimize the extent and duration of flooding during heavy rainfall. This modification can include the installation of backflow preventers and increasing spaces to store and treat water through the use of green infrastructure.<sup>63</sup>
- **Increasing permeable surfaces:** These types of surfaces (using green or manmade materials) — which help with absorption and drainage — can be installed in parks and open, green spaces throughout the community. Permeable surface projects are best suited in places where groundwater levels have not yet reached the surface.

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<sup>57</sup> *Id.* at 128.

<sup>58</sup> “A French drain is a trench filled with a perforated pipe and gravel that allows water to drain naturally from your yard.” *How to Install a French Drain*, THE HOME DEPOT, <https://www.homedepot.com/c/ah/how-to-install-a-french-drain/9ba683603be9fa5395fab9012cc2665> (last visited Jan. 10, 2022).

<sup>59</sup> Savino Miller Design Studio, Draft Adaptation Plan: Draft Little River Adaptation Action Area 129 (2021).

<sup>60</sup> *Id.* at 33.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.* at 36.

<sup>63</sup> *Id.*



- **Expanding green spaces:** The expansion of green spaces can assist in filtering stormwater and can hold excess water during rain and weather events.

Specific instances where these types of tools have been (or are planning to be) implemented include stormwater management improvement in the Lake Belmar area of the AAA, which is an unincorporated coastal area.<sup>64</sup> Estimated to cost around \$10 million, the Miami-Dade's Department of Public Works and Transportation (DTPW) is looking to start construction in early 2023 to retrofit the existing drainage systems within a neighborhood, install new drainage infrastructure, and construct a new pump station that will help to keep stormwater moving throughout the system.<sup>65</sup>

Farther inland in Larchmont, which is also unincorporated, DTPW is partnering with the Division of Environmental Resources Management in a multiphase project to improve local stormwater management and water quality.<sup>66</sup> The first phase of the project will involve retrofitting existing drainage pipes with lining, replacing certain parts of the drainage infrastructure that is currently causing leaks, and installing a new pollution control structure.<sup>67</sup> "The improvements will help mitigate repetitive flooding, extend the service life of the drainage infrastructure and improve water quality[, and] benefit approximately 2,000 residents in the area."<sup>68</sup> Phase two is a pilot project that will be deployed in the community to install new water quality control measures within pipes and pump stations and at various points of intersection in the existing drainage infrastructure.<sup>69</sup> This will not only help to improve the water quality for residents of the neighborhood, but will also keep harmful chemicals and bacteria from entering the Little River canal and Biscayne Bay.<sup>70</sup>

## Septic Systems

In the Little River AAA alone, it is estimated that over 100 septic systems are already failing due to the high level of the groundwater table.<sup>71</sup> This means that, in households that are dependent on septic systems, wastewater is not treated properly.<sup>72</sup> There is also a significant risk that during storm events, this untreated water can flood the home.<sup>73</sup> Two unincorporated areas of the Little

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<sup>64</sup> Savino Miller Design Studio, Adaptation Plan: Little River Adaptation Action Area 64 (2022).

<sup>65</sup> *Id.* The pump station installation and operation will be funded by a \$3,000,000 Resilient Florida grant.

<sup>66</sup> *Id.* at 68.

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

<sup>71</sup> Savino Miller Design Studio, Draft Adaptation Plan: Draft Little River Adaptation Action Area 38 (2021).

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*

River AAA most affected by these issues are not tied to the county's sanitary sewer infrastructure.<sup>74</sup>

To address septic systems concerns, the AAA plan outlines two adaptation tools: converting septic systems to sewer systems and raising drain fields.

- **Converting septic to sewers:** This process will essentially require that households that currently use septic systems be connected to the central sewer system.
- **Raising drain fields:** Because the expansion and connection to the centralized sewer system can incur significant costs and take long periods of time, raising a drain field within a community can be the most cost-effective, short-term solution. A drain field is an area filled with unsaturated soil where septic wastewater is discharged. This soil can help treat and disperse the wastewater until it eventually is absorbed back into the groundwater table.<sup>75</sup> By elevating, or “mounding” a drain field — especially in places where groundwater is extremely close to the surface — wastewater has more time to filter through the soil before it reaches the water table.<sup>76</sup>

Plans are currently underway within the Little River AAA to connect households currently dependent on septic systems to sewer lines.<sup>77</sup> Some areas of Little River already border existing sewer infrastructure, making it easier to connect to the sewer system in a quicker, more economical fashion<sup>78</sup>. In some instances, when the distance between a property and the county sewer system is minimal — or a “feasible distance” — property owners are actually required to make this connection at their own expense.<sup>79</sup>

Some locations that fall in the Little River AAA are taking a phased approach to transition from septic. In one unincorporated coastal area, the county's Water and Sewer Department (WASD) are spending upwards of \$1,000,000 to convert around 40 residential properties along two streets to finish the transition process to remove the septic tanks and drain fields and design and install new public sewer infrastructure to connect the properties to the main lines.<sup>80</sup> Inland, WASD is spending \$18 million to similarly convert 40 residential properties.<sup>81</sup>

While the first stage of work is in the construction and completion phase, the latter is still in the design phase, which accounts for the price differentiation. It is important to highlight these high costs. One estimation concluded that connecting just 475 properties using septic in Miami-Dade

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<sup>74</sup> *Id.*

<sup>75</sup> *How Your Septic System Works*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/septic/how-your-septic-system-works> (last visited Jan. 13, 2021).

<sup>76</sup> Savino Miller Design Studio, Draft Adaptation Plan: Draft Little River Adaptation Action Area 41 (2021).

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

<sup>79</sup> *Id.*

<sup>80</sup> Savino Miller Design Studio, Adaptation Plan: Little River Adaptation Action Area 64 (2022).

<sup>81</sup> *Id.* at 68.

County could cost upwards of \$19 million.<sup>82</sup> Because a significant number of septic systems are already failing in the Little River AAA and the cost of conversion is so high, the short-term solution of mounding drain fields could be vital to maintain the quality of water within the groundwater table.<sup>83</sup>

## COMMUNITY ENGAGEMENT

Community engagement throughout the development of the Little River AAA plan has been significant. At the very beginning of the process — collecting background research — stakeholders and community members were asked to “fill in gaps in knowledge.”<sup>84</sup> This involved one-on-one conversations with various community-based organizations, partners in academia, people within county and municipal departments, and individual residents living within the Little River community. The five sectors on which the adaptation tools are based — stormwater and drainage, septic systems and sewer, parks and green spaces, housing, and streets and transportation — evolved directly from these conversations, wherein these individuals and entities helped to determine long-standing and emerging issues within the AAA.<sup>85</sup>

To develop the draft AAA plan, the county, in collaboration with its partners, hosted five online community forums dedicated to listening to residents that “live, work, and play in the Little River Adaptation Action Area.”<sup>86</sup> The purpose of these community forums was to hear directly from residents what challenges they faced relating to rising sea levels and increased flooding events, what programs were working to address these challenges, new ideas or programs that could be implemented to mitigate them, and how the county could better invest in adaptation measures.<sup>87</sup>

Additionally, the county hosted five separate “key issue” webinars focused on educating the community about the effects climate change may have on water quality, septic systems, parks, housing and equity, and home elevation; and how individuals were currently being affected by climate impacts within these areas. The responses from residents are articulated in the AAA plan, which includes direct quotes and stories from residents relating to issues they have had with each of the given sectors the AAA plan addresses.

Acknowledging that not all concerned stakeholders would be able to attend these webinars, Miami-Dade County also worked with partners to “spread the word,” both in-person and online, about seeking input for the development of the AAA plan. Other outreach methods included door-

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<sup>82</sup> Savino Miller Design Studio, Draft Adaptation Plan: Draft Little River Adaptation Action Area 41 (2021).

<sup>83</sup> *Id.*

<sup>84</sup> *Id.* at 8.

<sup>85</sup> *Id.*

<sup>86</sup> *Planning for Sea Level Rise in the Little River Adaptation Area*, MIAMI-DADE COUNTY, FL OFFICE OF RESILIENCE, <https://adaptation-action-area-in-little-river-mdc.hub.arcgis.com/> (last visited Jan. 13, 2021).

<sup>87</sup> Savino Miller Design Studio, Draft Adaptation Plan: Draft Little River Adaptation Action Area 9 (2021).



hangers, hosting a King Tide Day event, in-person and virtual flyers, direct letters to those living in unincorporated areas, and more.<sup>88</sup>

## FUNDING

The development of the Little River AAA plan itself was supported by a \$75,000 Resilient Planning grant from the Florida Department of Environmental Protection. These state grants require a local match, which the county met through in-kind staff time and resources.

Beyond that, the cost of implementing identified adaptation tools and ultimately achieving the five strategies envisioned by the Miami-Dade Sea Level Rise Strategy will require significant monetary backing. “Successful adaptation means sourcing financial resources and assistance from multiple sources so that communities, especially low-wealth and historically marginalized neighborhoods, do not bear the brunt of the costs.”<sup>89</sup> Some projects have already been funded, either partially or fully, by existing grants or loans. For example, Miami-Dade County has already received \$5.4 million from the State of Florida to help transition households from septic to sewer.<sup>90</sup> The county is currently applying for additional funding to complete the transition of 1,650 septic systems in the area to the county’s sewer system, which will cost upwards of \$68 million.<sup>91</sup>

For those projects not yet funded or financed, the Little River AAA plan provides a potential funding resources table that includes the type of capital, top funding and financing pathways, and in some instances, even specific partners and funders. For example, projects relating to local stormwater management can leverage grants from foundations, the state, or the federal government — including from the National Fish and Wildlife Foundation, The Kresge Foundation, or the U.S. Environmental Protection Agency. Stormwater utility fees, established by the Florida Department of Environmental Protection, can also be used.<sup>92</sup> For other projects, like septic to sewer conversion, pathways like tax increment financing can be implemented by municipalities in partnership with developers.<sup>93</sup>

## NEXT STEPS

The Little River AAA plan includes policy recommendations that can hopefully turn these adaptation projects and tools into reality. The Office of Resilience recommends that the county,

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<sup>88</sup> *Id.*

<sup>89</sup> *Id.* at 79.

<sup>90</sup> *Id.* at 41.

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

<sup>93</sup> *Id.*

municipalities, and other key stakeholders take immediate next steps within the next five years and beyond to:<sup>94</sup>

1. Continue seeking funds to adapt critical assets and infrastructure, with a priority to address immediate public and environmental health and urgent safety needs including failing septic systems, vulnerable housing, and chronic stormwater flooding.
2. Conduct a pilot program to upgrade small-scale stormwater infrastructure to reduce debris, pollution, nutrients and address poor water quality which is contributing to fish kills and seagrass die off.
3. Design and install a demonstration green infrastructure stormwater management project within our parks system.
4. Continue quarterly AAA-focused interdepartmental and interjurisdictional coordination meetings to align ongoing projects and identify new priority resilience projects in order to seek funding.
5. Explore the feasibility of AAA designation in the County Comprehensive Development Master Plan (CDMP), the county's local comprehensive plan.
6. Continue engaging with residents and other stakeholders to give them progress updates about discuss opportunities for further collaboration including developing resilience project proposals building off of the plan.
7. Develop a multilingual water quality educational campaign with partners around the Little River that considers targeted messaging for local businesses and light industrial or commercial areas in the watershed.
8. Continue partnership with the South Florida Water Management District and other agencies to identify ways to reduce flood risk and improve water quality over the long term.
9. Integrate specific language to preserve and expand tree canopy into all applicable county project proposals to help manage flood, water quality and extreme heat risks.
10. Address vulnerable septic systems in the AAA through coordinated planning and funding.
11. Engage public, private, and nonprofit stakeholders as part of a pilot for the Living Shoreline Design Guidelines project and explore perceptions, preferences, barriers, and collaborations for implementation.

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<sup>94</sup> The following policy recommendations are taken directly from the Little River AAA Adaptation Plan. SAVINO MILLER DESIGN STUDIO, ADAPTATION PLAN: LITTLE RIVER ADAPTATION ACTION AREA 71 (2022).

12. Conduct an analysis of coastal structures/seawalls in the Little River AAA to identify additional opportunities for natural infrastructure and water recreation access (which may tie into future living shoreline design guidelines).
13. Leverage federal and state funds to expand weatherization and other resilience retrofits, such as elevation for private and public affordable housing.
14. Develop a pilot program strategy to train and hire local residents in blue - green jobs.

The Office of Resilience, through the plan, also notes potential metrics it can use to measure implementation success and conduct future research within specific sectors:<sup>95</sup>

- Improving local stormwater management: Frequency of stormwater infrastructure maintenance, water quality, flooding extent, groundwater levels, and repetitive loss relating to specific properties.
- Septic to sewer conversion: Number of septic systems, water quality, and utility debt or assistance needs.
- Expanding green spaces: Number, type and quality of green spaces, access to green spaces (within less than a ten-minute walk), percentage of tree canopy cover, and impervious surface area.
- Making housing stock more resilient and expanding affordable housing: Percentage of cost-burdened renters, percentage of owner-occupied versus renter-occupied housing units, and first floor elevation of building

## CONSIDERATIONS AND LESSONS LEARNED

The Little River AAA plan is an example of how intensive, purposeful outreach to a community cannot only help create trust between government agencies and the people that they serve, but it can also help direct the course of an adaptation plan itself. In this instance, it was only through community involvement and engagement that Miami-Dade County, Savino Miller Design Studios, and other related partners were able to develop the major themes around which the AAA plan is based: stormwater and drainage, wastewater systems, housing, natural areas and greenspace, and transportation. By viewing the Miami-Dade SLR Strategy and its corresponding adaptation strategies through the lens of these major themes, these entities were able to better propose adaptation tools that better fit the needs of the Little River AAA.

The plan also shows that integration between overarching, governing plans and plans specific to neighborhoods is vital. In this instance, the governing document is the Miami-Dade SLR Strategy. However, the Little River AAA strategy incorporates the guiding principles of the SLR strategy

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<sup>95</sup> *Id.* at 72.

throughout, and even directly addresses how the five adaptation approaches outlined by the SLR Strategy can be implemented in the Little River community by using the adaptation tools described in a previous section. AAA in and of themselves are an example of how adaptation plans and the processes involved in developing them can be neighborhood-specific, and driven by the unique needs and problems faced by the community.

During the Little River AAA development process, government agencies and Savino Miller were able to leverage various different projects and initiatives already taking place within the community that also provide co-benefits across different sectors. For example, the South Florida Water Management District and the C7 Basin had just been identified as two of the most vulnerable places across all basins within the state. A fish kill in 2021 in the Biscayne Bay due to warmer temperatures and overpollution — as well as another study that showed that hundreds of residents with septic systems had experienced severe flooding — highlighted these vulnerabilities. When projects were taken to address water quality issues, they benefited the fish species, improved the stormwater infrastructure, and helped to mitigate flooding impacts. These projects served as the impetus for the AAA project in Little River. Like Miami-Dade County, other local policymakers can consider how planning and land-use tools can be used to advance climate, environmental, social, and other benefits simultaneously. This can increase support for this type of work by bringing together more concerned stakeholders and also help to provide other strategic advantages, such as increasing the potential types of funding that could be used for project implementation.

To be effective and act on the trust communities placed in planning processes, other plans like the Little River AAA one should be designed with forward-thinking implementation in mind to increase chances of policy and project recommendations being put into practice.

The Little River AAA plan fleshes out specific policy recommendations that can be undertaken to encourage the development of many of these adaptation tools.

Additionally, while most of these projects fall under the overarching theme of facilitating resilience, other funding opportunities exist outside the environmental sphere that can help get these types of projects up and running. One of the key elements of the AAA plan is its breakdown of how different projects can be categorized to leverage different funding sources. For example, stormwater management projects could leverage grant funding from philanthropies and foundations. The AAA plan also highlights the importance of considering one-time funding opportunities — such as the federal American Rescue Plan. Plans can potentially enable governments and communities to mobilize faster and gain a strategic advantage in securing one-time and other funding opportunities because they include priority projects that can be funded, versus having to start from scratch only after funding announcements are made by different entities.



# *Mecklenburg County, North Carolina*

## **Charlotte-Mecklenburg Storm Water Services, Risk Assessment/Risk Reduction (RARR) Tool**

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### **EXECUTIVE SUMMARY**

Charlotte-Mecklenburg Storm Water Services (CMSWS) is a joint municipal–county stormwater utility that manages and maintains the regulated floodplains within Mecklenburg County, North Carolina, including the City of Charlotte. CMSWS has developed a system for assessing community flood risk through the Mecklenburg County Risk Assessment/Risk Reduction (RARR) Tool for comprehensive mapping, impact analysis, and county-wide floodplain management. This map-based application allows the agency to collect and analyze flood risk data to help identify and reduce flood risk at the parcel level and regionally.

RARR is a data-driven framework and set of tools that dynamically assess, evaluate, and ultimately prioritize flood mitigation strategies. The flood risk analysis processes supported by the RARR tool, along with the resulting solutions that CMSWS offers as described in this case study and a companion report, can guide other local jurisdictions in flood resilience planning, and promote climate adaptive policies.

### **BACKGROUND**

According to CMSWS, there are 19,841 acres of land designated as being in the “Community Floodplain” across Mecklenburg County, and more than 20,000 parcels of land that are in or come in contact with the floodplain, representing five percent of the land in the county.<sup>1</sup> CMSWS partners with the Federal Emergency Management Agency (FEMA) to assess flood risks and develop floodplain maps (also referred to as Flood Insurance Rate Maps). Additionally, CMSWS develops Community Floodplain maps. The FEMA Floodplain shows where flooding is likely to occur now, and the Community Floodplain shows where flooding is likely to occur in the future, based on expected development to come. In 2000, Charlotte-Mecklenburg became the first

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<sup>1</sup> REF: *Charlotte-Mecklenburg Stormwater Services — Floodplains*, CITY OF CHARLOTTE, N.C., <https://charlottenc.gov/StormWater/Flooding/Pages/FloodplainsandMaps.aspx> (last visited Dec. 6, 2021).

community in the nation to show both current and future floodplains on its official floodplain maps.<sup>2</sup>

After two back-to-back severe storm and flooding events in the region, CMSWS initiated a Floodplain Buyout Program in 1999, which is a continued success today.<sup>3</sup> The program works to relocate interested residents out of floodplains, reduce flood damages to infrastructure, and return the properties to open space. Floodplain buyouts have been entirely voluntary in Mecklenburg County, and to date about 85 percent of owners who go through the appraisal and offer process, ultimately choose to participate in a buyout.<sup>4</sup>

During the program's tenure, CMSWS has purchased over 400 flood-prone houses, apartment buildings, and businesses located in floodplains throughout Charlotte-Mecklenburg, and moved over 700 families and businesses to less vulnerable locations outside of local floodplains.<sup>5</sup> Additionally, 185 acres of public open space have been returned to open space — to allow the floodplain to function with natural resilience during heavy precipitation events, while providing a sustainable community asset.<sup>6</sup> The conversion restores the beneficial flood retention and water quality improvement functions of the land and creates other community amenities like greenways and recreational areas.

## OVERVIEW OF RISK ASSESSMENT/RISK REDUCTION (RARR) TOOL

In establishing the Floodplain Buyout Program, CMSWS began the mapping and prioritization process for homes that face recurrent flooding. The resulting Risk Assessment/Risk Reduction (RARR) Tool in use today has evolved over twenty years to allow CMSWS to assess community flood hazards, evaluate and prioritize actions to mitigate risk, and track the success of flood mitigation projects over time. The RARR platform is a highly interactive online application that allows the agency to view flood and risk data across Mecklenburg County. It was designed to improve data connectivity for real-time flood event management and risk communication, to prioritize mitigation attention for structures in the floodplain at greatest risk, and in turn, to help prioritize county expenditures.

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<sup>2</sup> *Id.*

<sup>3</sup> REF: *Charlotte-Mecklenburg Storm Water Services — Floodplain Buyout Program*, CITY OF CHARLOTTE, N.C., <https://charlottenc.gov/StormWater/Flooding/Pages/FloodplainBuyoutProgram.aspx> (last visited Dec. 6, 2021).

<sup>4</sup> For more detail, Georgetown Climate Center has profiled this buyout case study in the *Managing the Retreat from Rising Seas: Lessons and Tools from 17 Case Studies* report at: <https://www.adaptationclearinghouse.org/resources/managing-the-retreat-from-rising-seas-eo-charlotte-mecklenburg-county-north-carolina-floodplain-buyout-program.html>.

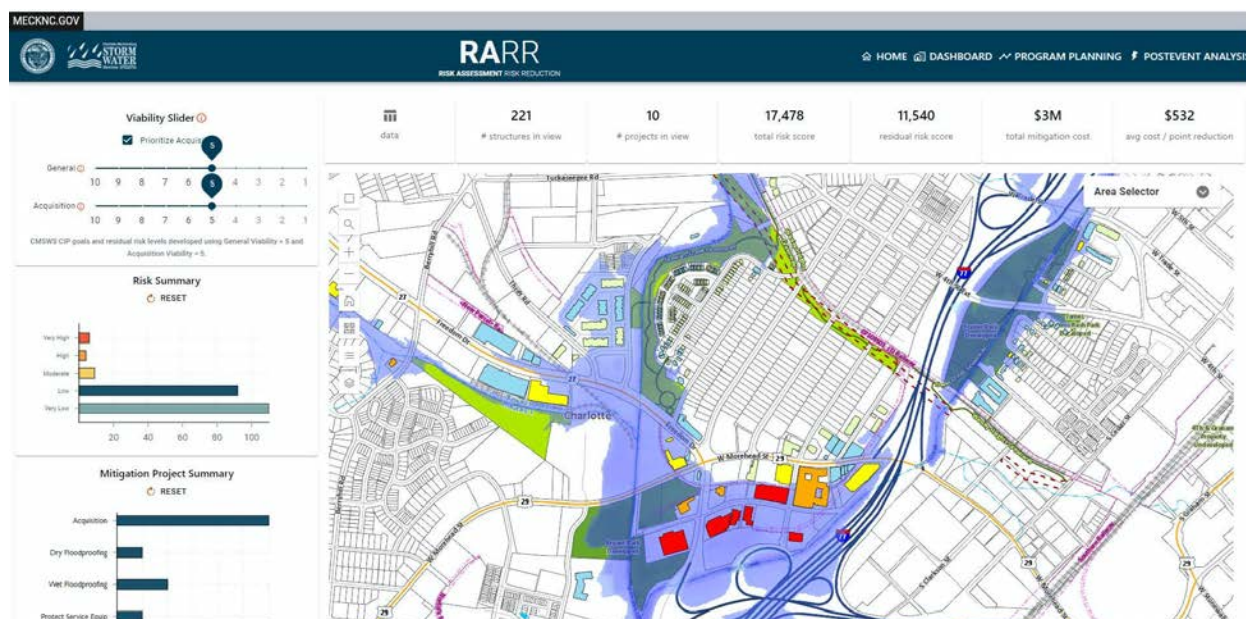
<sup>5</sup> REF: *Charlotte-Mecklenburg Storm Water Services — Floodplain Buyout Program*, CITY OF CHARLOTTE, N.C., <https://charlottenc.gov/StormWater/Flooding/Pages/FloodplainBuyoutProgram.aspx> (last visited Dec. 6, 2021).

<sup>6</sup> *Id.*

CMSWS has an existing flood Risk Assessment and Risk Reduction (RARR) Plan that was developed in 2012 that aided CMSWS when it initially rolled out the tool.<sup>7</sup> This plan has provided a comprehensive framework for parcel-level evaluation of flood risk and flood mitigation techniques. Implementation of the RARR Plan has enabled the identification of properties at greatest flood risk, requisite mitigation strategies, and prioritized flood-risk reduction projects in Mecklenburg County. Built on this framework, CMSWS collects and inputs flood assessment and impact data, along with updated land use maps — which allows for the RARR Tool to support meaningful flood risk analysis ahead of a flood.

## Flood Mitigation

CMSWS uses the RARR Tool on a daily basis, while keeping a focus on long-term flood mitigation goals to build a more resilient landscape and community. The RARR Tool includes information from numerous datasets, such as elevation certificates, tax parcels, flood hazard layers, natural buffers, and other community planning layers.<sup>8</sup> The tool can be dynamically updated to reflect any changes in the source data (e.g., updated floodplain mapping, real estate values, etc.) in real time.



To identify potential flood mitigation options, CMSWS developed a unique point system to use with the tool that accounts for the relative risk of each structure evaluated. This allows CMSWS

<sup>7</sup> *Id.*

<sup>8</sup> For a more complete list of data categories for risk assessments, see CHARLOTTE-MECKLENBURG STORM WATER SERVS., FLOOD RISK ASSESSMENT AND REDUCTION COMMUNITY GUIDEBOOK 9, available at <https://charlottenc.gov/StormWater/Flooding/Documents/FloodRiskAssessmentandReductionCommunityGuidebook.pdf>.

to rank potential projects and investments — including buyouts, when appropriate and supported by willing sellers.

However, it is important to note that CMSWS does not make decisions based on points and ranking alone — the RARR Tool is a guide. CMSWS builds on the points assigned to a particular parcel and flood mitigation option by also considering other factors. This more holistic combination of factors includes evaluating the cost, short- and long-term impacts, parcel-level risk along with risk to other structures, and regional planning. This comprehensive flood risk and mitigation assessment process includes community-wide resilience planning — such as developing linkages to other publicly owned land or land acquisitions that could lead to a future greenway.

CMSWS recognizes that the investment in the development of the RARR Tool has prepared the county region for the “next big flood,” and rapid response. With the RARR system, CMSWS can predict within a day or two the impact and cost of a flood, as well as the project cost for future mitigation efforts. Whereas previously, without the tool, this would have taken months to determine by assessing and measuring flood damage to each structure on the ground. In turn, the agency can quickly execute critical decisions, such as identifying priority home buyout areas for consideration, within three or four weeks of flooding.

Ultimately, CMSWS acknowledges that all flood risk cannot be removed entirely from Mecklenburg County. For example, the agency will not be able to buyout all homes in the floodplain even if there was collective interest from affected residents. As such, CMSWS has chosen to operate under a management goal of realizing “residual risk,” and determining acceptable or sustainable levels of this risk. “Residual risk” is a total of all risk that is not going to be mitigated, and a highly significant metric for CMSWS planning.<sup>9</sup> While making evaluations utilizing the RARR Tool, CMSWS’s primary goal has been to reduce potential losses and reach residual risk.

Other jurisdictions looking at potential tools to monitor flood risk and inform mitigation decisions can look to create their own version of the RARR Tool. However, it is important to note that the RARR tool itself was developed in place and cultivated to specifically address CMSWS’s goals in the Mecklenburg County region. Therefore, it is not a “plug and play” tool. Rather, the RARR Tool and CMSWS strategies offer an example of a system that other jurisdictions could adopt for flooding or other climate impact adaptation planning.

## LOSS AVOIDED TOOL

Learning how to effectively communicate the future severity of flood risk, and the capacity for resilience to policymakers and residents is critical to implementing sustainable, adaptive, long-term solutions. CMSWS demonstrates its successes through the capacity of resilience planning

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<sup>9</sup> *Id.* at 91–92.



with the RARR Tool and its methodologies, to promote engagement and commitment to building a resilient landscape and community.

To help identify the economic value of structures that have been saved from flooding by implementing mitigation strategies, CMSWS also created the Loss Avoided Tool — deemed a “sister tool” of the RARR Tool that runs on the same online platform. CMSWS runs the Loss Avoided Tool after every flood in Mecklenburg County to calculate losses avoided due to mitigation investments that have already been implemented. This tool helps CMSWS predict losses avoided by calculating flooding depth in inches and feet — in terms of what structures would have flooded and what the associated monetary cost would have been before the mitigation actions were deployed.

These results work to bridge the gap between access to the technical data and communicate the successes of the RARR program with policymakers and the local community. Over the last twenty years, CMSWS has invested about \$65 million in state, federal, and local funds, and saved about \$30 million through avoided losses. Therefore, CMSWS already has a nearly 50 percent return on investment that will never decrease in value. This combination of a real-time flood monitoring and risk mitigation tool with a loss avoided component can be replicated by other stormwater authorities or regional and local governments to demonstrate the fiscal, social, and environmental benefits, among others, of investing public dollars into resilience strategies and data-driven decision-support tools.

## FUNDING

CMSWS partnered with the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) through the Flood Apex Program to further develop the RARR Tool, the county’s enhanced flooding risk analysis, and an iterative adaptive planning process for communities located in this region, and beyond. The overall aim was for CMSWS to be able to enhance its use of the RARR Tool and also share its pioneering work with other interested jurisdictions across the country. To that end, some of the funding from DHS resulted in the publication of the **Flood Risk Assessment and Community Guidebook**.<sup>10</sup>

The guidebook aims to lead other communities through how they can similarly obtain and develop data, and demonstrates how that data can be used to assess flood risk and evaluate mitigation options. It also describes how to establish, fund, and monitor a locally specific mitigation strategy, as well as how to communicate the strategy and results to the community. For more information, please see a summary of the [Flood Risk Assessment and Community Guidebook](https://www.dhs.gov/publication/st-flood-risk-assessment-and-reduction-community-guidebook), also here in the Adaptation Clearinghouse.

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<sup>10</sup> *Flood Risk Assessment and Reduction Community Guidebook*, U.S. DEP’T OF HOMELAND SEC., <https://www.dhs.gov/publication/st-flood-risk-assessment-and-reduction-community-guidebook> (last visited Jan. 14, 2021).

The CMSWS program and updates to the RARR Tool are generally funded by stormwater fees levied to property owners throughout the service area.<sup>11</sup>

## CONSIDERATIONS AND LESSONS LEARNED

CMSWS's RARR Tool is one example of a decision-support tool for flood mitigation that other regional and local jurisdictions and stormwater and drainage authorities can consider replicating to make their communities more resilient. In addition to flood mitigation decisions, examples like the RARR Tool can aid in the development of regional and local plans, like local comprehensive, climate adaptation or resilience, infrastructure, capital improvement, and drainage plans.

As disaster events and flooding increase in frequency and intensity due to climate change, policymakers in coastal, riverine, and inland areas will need real-time, data-driven tools to protect people and property and create and restore natural community assets and spaces. As the Guidebook suggests, other jurisdictions can evaluate how to adapt the RARR Tool based on their own needs, priorities, and local context.

Notably, CMSWS administers the tool in coordination with an overall plan, project ranking system, and risk reduction strategy that enable a more consistent approach to flood mitigation throughout the county region. This approach can result in greater transparency and accountability in the community and the more efficient expenditure of limited public dollars.

In addition, CMSWS's Loss Avoided Tool provides a bridge between the technical experts that administer the RARR Tool and policymakers and residents evaluating the effectiveness and benefits of mitigation decisions made by the stormwater authority. This can help CMSWS demonstrate the benefits of the RARR Tool and justify the continued use of the RARR Tool and CMSWS's investments in flood mitigation. Other governments interested in building a similar tool should also consider how the information the tool provides can be best leveraged to effectively translate successfully implemented flood mitigation and resilience strategies to the public. Given that all the pieces of the RARR Plan and Tool and Loss Avoided Tool are interlinked, jurisdictions evaluating a new tool should think about how to design a strategic plan and translational loss avoided system around the tool for these reasons.

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<sup>11</sup> REF: *Charlotte-Mecklenburg Storm Water Services — Floodplain Buyout Program*, CITY OF CHARLOTTE, N.C., <https://charlottenc.gov/StormWater/Flooding/Pages/FloodplainBuyoutProgram.aspx> (last visited Dec. 6, 2021).

# *City of New Orleans, Louisiana*

## **Gentilly Resilience District Projects**

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### **EXECUTIVE SUMMARY**

In 2015, the City of New Orleans released its Resilient New Orleans strategy outlining the city's vision and plan for building a more equitable, adaptable, and prosperous New Orleans. The strategy outlines various recommendations, which all go towards one of three main goals: adapting to thrive, connecting to opportunity, and transforming city systems.

One project featured in Resilient New Orleans is the Mirabeau Water Gardens project. Informed by the design and stormwater management features outlined in the Greater New Orleans Urban Water Plan, the Mirabeau Water Gardens project, once completed, will serve as a recreational, environmentally friendly amenity for the community that also reduces flood risk. Specifically, a former convent will be converted into a public green space. This project is part of an overall plan to create the Gentilly Resilience District — a 12-project program designed to make a small neighborhood in New Orleans more resilient to the impacts of climate change and future disaster and flood events. Additional projects a part of the Gentilly Resilience District include the Pontilly Neighborhood Stormwater and the Blue and Green Corridors projects.

Throughout the development of the plans and programs relating to the Gentilly Resilience District, local policymakers offered numerous opportunities for community input. Most of the projects not only increase community resilience, but also offer new spaces for the community to gather, educate residents on the benefits associated with green infrastructure, and incorporate safe walking and biking paths throughout the neighborhood.

### **BACKGROUND**

New Orleans is the largest city located in the state of Louisiana within Orleans Parish.<sup>1</sup> Home to one of the largest international ports, much of the economic focus of the city revolves around shipping, distribution, and manufacturing.<sup>2</sup> As of 2019, over 390,000 individuals resided within the city-proper.<sup>3</sup> Approximately 24 percent of this population falls below the national poverty line, with the median household income at around \$45,600.<sup>4</sup> In Louisiana, families of four with an

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<sup>1</sup> *New Orleans, La.*, INFOPLEASE, <https://www.infoplease.com/us/cities/new-orleans-la> (last visited July 23, 2021).

<sup>2</sup> *Id.*

<sup>3</sup> *New Orleans, LA*, DATAUSA, <https://datausa.io/profile/geo/new-orleans-la/> (last visited July 23, 2021).

<sup>4</sup> *Id.*

annual household income of \$25,570 are considered “extremely low income.”<sup>5</sup> As of March 2021, for every 100 households that fall under this category, only 49 affordable housing and rental units exist.<sup>6</sup>

Roughly 50 percent of the greater New Orleans area lies below sea level, and the average elevation of the city is roughly six feet below that point.<sup>7</sup> Accordingly, climate-driven sea-level rise and flooding are some of the biggest threats to New Orleans.<sup>8</sup> Moreover, low-income households are more likely to be located in these areas.<sup>9</sup>

While the Army Corps of Engineers had built up a system of levees and seawalls to keep the city from flooding over the course of the 1900s, hurricane events still flooded New Orleans in 1915, 1940, 1947, 1965, 1969, and in 2005, with Katrina.<sup>10</sup> On August 29, 2005, Hurricane Katrina slammed into the city, filling some neighborhoods with upwards of 12 feet of water and costing the lives of many.<sup>11</sup> Since then, the Army Corps has constructed storm damage risk reduction systems costing upwards of \$14.5 billion.<sup>12</sup>

Despite that, there have still been flooding issues within the city. In 2016, a slow-moving storm system dumped between 20 and 30 inches of rain in certain areas over a three-day period, due primarily to water level rise in the creeks, waterways, and rivers throughout the city.<sup>13</sup> When Hurricane Ida hit in September 2021, the levees and floodwalls built by the Army Corps post-Katrina held, but the city still had to deal with significant power outages.<sup>14</sup> Additionally, levees outside the city failed — for example, in Lafitte, which is just south of New Orleans, storm surges

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<sup>5</sup> “Extremely low income (ELI) renter households have incomes at or below the poverty level or 30% of the area median income,” as per the National Low Income Housing Coalition’s tabulations of the American Community Survey’s Public Use Microdata Sample. NAT’L LOW INCOME HOUSING COAL., THE GAP: A SHORTAGE OF AFFORDABLE HOMES 9 (Mar. 2021), available at [https://reports.nlihc.org/sites/default/files/gap/Gap-Report\\_2021.pdf](https://reports.nlihc.org/sites/default/files/gap/Gap-Report_2021.pdf).

<sup>6</sup> *Id.*

<sup>7</sup> Hurricane Katrina, HISTORY (Aug. 9, 2019), <https://www.history.com/topics/natural-disasters-and-environment/hurricane-katrina>.

<sup>8</sup> How Humans Sank New Orleans, THE ATLANTIC (Feb. 6, 2018), <https://www.theatlantic.com/technology/archive/2018/02/how-humans-sank-new-orleans/552323/>.

<sup>9</sup> Lauren Abbattista, et al., *Climate Change and Sea Level Rise in New Orleans, LA*, STORYMAPS ARCGIS (Nov. 11, 2020), <https://storymaps.arcgis.com/stories/f0fe108a4f3b42e9919c4cb9e4eda673>.

<sup>10</sup> Hurricane Katrina, HISTORY (Aug. 9, 2019), <https://www.history.com/topics/natural-disasters-and-environment/hurricane-katrina>.

<sup>11</sup> How Humans Sank New Orleans, THE ATLANTIC (Feb. 6, 2018), <https://www.theatlantic.com/technology/archive/2018/02/how-humans-sank-new-orleans/552323/>.

<sup>12</sup> *Id.*

<sup>13</sup> Advocate Staff Report, *What Caused the Historic August 2016 Flood, and What Are the Odds It Could Happen Again?*, THE ADVOCATE (Aug. 5, 2017), [https://www.theadvocate.com/louisiana\\_flood\\_2016/article\\_3b7578fc-77b0-11e7-9aab-f7c07d05efcb.html](https://www.theadvocate.com/louisiana_flood_2016/article_3b7578fc-77b0-11e7-9aab-f7c07d05efcb.html).

<sup>14</sup> Jake Bittle, *The Levees Worked in New Orleans -- This Time*, CURBED (Sept. 2, 2021), <https://www.curbed.com/2021/09/levees-louisiana-hurricane-ida-managed-retreat.html>.

topped in some places at around 12 feet.<sup>15</sup> Concerns around flooding from hurricanes still exist, as the levee system was only designed to protect against a 100-year storm.<sup>16</sup>

## OVERVIEW OF RESILIENT NEW ORLEANS

To mitigate these impacts on New Orleans, the city produced the Resilient New Orleans strategy. The strategy builds on a decade of risk assessments and planning within New Orleans with a commitment to implementation. The Resilient New Orleans plan was developed by the City of New Orleans as part of the Rockefeller Foundation’s 100 Resilient Cities Initiative. 100 Resilient Cities (100RC), pioneered by The Rockefeller Foundation, was a nonprofit organization dedicated to helping cities around the world become more resilient to the physical, social, and economic challenges that are a growing part of the 21st century.<sup>17</sup> The program concluded on July 31, 2019, though the Rockefeller Foundation continued to support 100RC network cities and Chief Resilience Officers with an additional \$8 million commitment.

The document is organized according to three visions: adapting to thrive, which requires the city embracing a changing environment; connecting to opportunity, which focuses on remaining an equitable city; and transforming city systems, which will make the city more “dynamic and prepared.”<sup>18</sup> There are 14 overarching strategies that are divided to fit under one of the visions. To implement the strategies, the document then identifies and describes a variety of actions that are either already ongoing, or that can be implemented by different agencies and partners across the city.<sup>19</sup> In the document, the city calls for resilience action to be taken across various sectors, including affordable housing, water infrastructure, economic development, and transportation. Many strategy recommendations involve analyzing and amending zoning ordinances and development regulations and incorporating resilience into local planning documents and guidance. This analysis includes the lead and partner agencies that will carry the policy forward, the funding source that will support it, and the current status of the action.

This resource entry describes the ways in which the strategies and projects recommended in the Resilient New Orleans document — particularly those focused on the Gentilly neighborhood — can help improve environmental conditions and the ability to withstand climate impacts, as well as increase affordable housing stock and resilience within the community.

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<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> Georgetown Climate Ctr., *100 Resilient Cities*, ADAPTATION CLEARINGHOUSE (2019), <https://www.adaptationclearinghouse.org/organizations/100-resilient-cities.html>.

<sup>18</sup> CITY OF NEW ORLEANS, LA., HOUSING FOR A RESILIENT NEW ORLEANS: A FIVE YEAR STRATEGY (2016), available at <https://www.nola.gov/home/buttons/resilient-housing/>.

<sup>19</sup> For example, to achieve the vision of transforming city systems, Resilient New Orleans recommends the strategy of integrating resilience-driven decisionmaking across public agencies. Featured actions to advance this strategy include establishing a Mayor’s Office of Resilience and Sustainability, Launching a City Resilience Index, and continuing to use the existing One Stop Shop for City Permits and Licenses, among other actions.



## ENVIRONMENT

### Green and Blue Spaces

#### Mirabeau Water Gardens

As part of the actions outlined in the Resilient New Orleans strategy, city leaders, in collaboration with private developers Waggonner & Ball and nonprofit Greater New Orleans, Inc., developed the Mirabeau Water Gardens project.<sup>20</sup> The project, which broke ground in Spring 2020, will transform 25 acres of previously open space in the city's Filmore neighborhood into a recreational, environmentally conscious, and educational amenity for the community that will also significantly reduce flood risk. The 25 acres of space that are being developed to house the Mirabeau Water Gardens project was leased to the city by the Sisters of St. Joseph, on the condition that it be used to create an amenity for the community that “evoke[s] a huge systemic shift in the way humans relate with water and land.”<sup>21</sup> Rather than rebuild the convent that had been damaged by Hurricane Katrina in 2005, the nuns decided to lease the land to the city for \$1 on the premise that it be used to protect the environment.<sup>22</sup> Located between Bayou St. John and the London Avenue Canal, previously, the land had been an empty, blighted property. Once completed, this project will address the issues of flooding and subsidence within the neighborhood by draining water that the community's drainage infrastructure cannot handle.

Through “innovative site design and stormwater management systems,” the project will bring several benefits to the community.<sup>23</sup> The water gardens will provide underground retention for stormwater runoff, as well as recreational, walkable features throughout the park. This will lessen the burden on the city's water infrastructure system, increase home values by decreasing flood risks for surrounding properties, lower air temperatures through increased vegetation, and improve air quality within the community. Additionally, the gardens will serve as a tool to educate the community about how natural processes can be used to filter stormwater and improve water quality.<sup>24</sup> Once completed, the gardens are designed to temporarily store upwards of 10 million

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<sup>20</sup> *Mirabeau Water Garden*, WAGGONNER & BALL, <https://wbae.com/projects/mirabeau-water-garden-2/> (last visited May 25, 2022).

<sup>21</sup> *Id.*

<sup>22</sup> This is an example of a public-private partnership with a faith-based organization. Alex Fox, *Nuns Are Turning a Convent into a Wetland to Fight Flooding in New Orleans*, THE HILL (Jan. 7, 2020), <https://thehill.com/changing-america/resilience/smart-cities/477197-nuns-are-turning-a-monastery-into-a-wetland-to-fight>.

<sup>23</sup> CITY OF NEW ORLEANS, LA., MIRABEAU WATER GARDEN: DRAINAGE IMPROVEMENTS AND GREEN INFRASTRUCTURE PROJECT (Fall 2019), available at [https://nola.gov/nola/media/Climate-Action/Progress/MirabeauFactSheet\(revised\).pdf](https://nola.gov/nola/media/Climate-Action/Progress/MirabeauFactSheet(revised).pdf).

<sup>24</sup> *Id.*

gallons of water in the site's detention pond.<sup>25</sup> The entire project is expected to be completed in November 2021.<sup>26</sup>

## Blue and Green Corridors

Another project that focuses on expanding community access to green spaces throughout the Gentilly Resilience District is the Blue and Green Corridors project. Blue corridors refer to the canals running through the neighborhood, while green corridors are the areas of land between roads, canals, and other thoroughfares. The blue corridors portion of the project deals primarily with water management, and is focused on creating a system of canals in larger areas with water features and play spaces that can also serve as neighborhood parks.<sup>27</sup> Green corridor projects are focused on land management surrounding the canals or blue corridor, and will create green spaces in smaller portions of areas where vegetation — including trees, plants, and permeable sidewalks — will help with drainage issues.<sup>28</sup> The city is essentially adapting “key public assets, including boulevards, parkways/medians, and adjacent park spaces to improve community resilience.”<sup>29</sup> The two corridor projects will help to create a network of interconnecting passages that will reduce flood risk while also creating safe, green spaces for people to travel and spend time while learning about environmental sustainability. Taken together, this focus on both blue and green corridors provides an example of a holistic approach to stormwater management that has the additional benefit of providing new community assets (e.g., parks, pathways, bike lanes, etc.).

The blue and green corridors will benefit the community in several ways. First, vegetation and green spaces, as well as stormwater canals, will help to reduce neighborhood flooding.<sup>30</sup> These stormwater projects will also have the added benefit of improving water quality by using drainage technology and green infrastructure improvements. Neighborhood infrastructure, especially relating to bikeways and safe walkways, will also be improved through these projects. Neighborhood revitalization projects will help “educate the public on the benefits of living in a sustainable community[,] create beautiful areas for the public to visit, congregate in, and enjoy to strengthen a sense of community[, and] demonstrate that green infrastructure can contribute to

<sup>25</sup> *Residents Hopeful for Mirabeau Water Garden Project Promises*, FOX8 (Jan. 15, 2020), <https://www.fox8live.com/2020/01/16/residents-hopeful-mirabeau-water-garden-project-promises/>.

<sup>26</sup> CITY OF NEW ORLEANS, LA., MIRABEAU WATER GARDEN (Aug. 2018), available at <https://www.nola.gov/resilience-sustainability/resources/fact-sheets/mwg-fact-sheet-9-14-18/>.

<sup>27</sup> CITY OF NEW ORLEANS, LA., BLUE & GREEN CORRIDOR (Aug. 2018), available at [https://nola.gov/resilience-sustainability/resources/fact-sheets/blue-green-fact-sheet9-14-18\\_updated/](https://nola.gov/resilience-sustainability/resources/fact-sheets/blue-green-fact-sheet9-14-18_updated/).

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> CITY OF NEW ORLEANS, LA., BLUE AND GREEN CORRIDORS PROJECT (Feb. 2020), available at [https://nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Blue-Green-Corridors/BGC\\_FactSheet\\_0220.pdf/?lang=en-US](https://nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Blue-Green-Corridors/BGC_FactSheet_0220.pdf/?lang=en-US).

beautiful and functional public spaces.”<sup>31</sup> Project designs were completed in Summer 2020, and construction is expected to be completed in August 2022.

## Stormwater and Flooding Infrastructure

The Pontilly Neighborhood Stormwater Network project is another example being advanced in the Pontchartrain Park and Gentilly Woods neighborhoods as part of the overall Gentilly Resilience District improvements. As a whole, the project includes a variety of different improvements to different parts of the community that work to absorb stormwater, including permeable pavement installation on sidewalks and parking lots and improvements to increase the storage capacity of Dwyer Canal.<sup>32</sup> The project is designed to slow and store stormwater in the two neighborhoods, improve water quality, and reduce the burden on the areas’ current drainage systems. This area has the potential to store upwards of 8.1 million gallons of stormwater.<sup>33</sup>

The goal of this stormwater network is to reduce flood risks in the community, as well as beautify these two neighborhoods through green infrastructure development and canal improvements — which will have the added benefits of adding educational and recreational amenities to the community. Through the creation of a stormwater drainage system, flooding in the communities can be reduced by at least 14 inches during a 10-year rain event.

The project itself has been broken up into two distinct phases. Phase I — the first, which implemented green infrastructure and drainage improvements in April 2021.<sup>34</sup> Phase II, which is currently under development, focuses on improvements to the Dwyer Canal that currently divides the two neighborhoods.<sup>35</sup>

Phase I of the project, which focused on drainage and infrastructure, involved significant stormwater retention installations throughout the community. Project leads included the city Department of Public Works and private developers. Designs for the project were completed in Spring 2019, and construction started in Fall 2020.<sup>36</sup> Project examples from Phase I included the redevelopment of certain streets located near Southern University at New Orleans using pervious

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<sup>31</sup> *Id.*

<sup>32</sup> Jeff Adelson, *These Improvements Will Help 2 New Orleans Neighborhoods Capture 8 Million Gallons of Stormwater*, NOLA.COM (Apr. 22, 2021), [https://www.nola.com/news/politics/article\\_c12330e4-a2da-11eb-ac34-3f8ab1d19296.html](https://www.nola.com/news/politics/article_c12330e4-a2da-11eb-ac34-3f8ab1d19296.html).

<sup>33</sup> Katherine Hart, *Neighbors Celebrate the Pontilly Stormwater Network: ‘It’s Been Actually Saving Us from Flooding,’* GENTILLY MESSENGER (Apr. 25, 2021), <http://gentilymessenger.com/neighbors-celebrate-the-pontilly-stormwater-network-its-been-actually-saving-us-from-flooding/>.

<sup>34</sup> *Id.*

<sup>35</sup> CITY OF NEW ORLEANS, LA., PONTILLY PHASE II: DWYER CANAL IMPROVEMENTS (2020), *available at* [https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Dwyer-Canal/PontillyPhaseII\\_Q12020FactSheet-05062020.pdf?lang=en-US](https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Dwyer-Canal/PontillyPhaseII_Q12020FactSheet-05062020.pdf?lang=en-US).

<sup>36</sup> *Pontilly Phase II: Dwyer Canal Improvements*, CITY OF NEW ORLEANS, LA., <https://www.nola.gov/resilience-sustainability/gentilly-resilience-district/pontilly-neighborhood-ii/> (last updated Jan. 6, 2022).

pavement, where the campus has a stormwater retention capacity of around 282,000 gallons.<sup>37</sup> Throughout both neighborhoods, 24 street basins were installed, which will hold more than 510,000 gallons of stormwater.<sup>38</sup> Existing stormwater lots throughout Pontchartrain Park and Gentilly Woods were upgraded to the point where they can now hold upwards of 3.3 million gallons of stormwater.<sup>39</sup> Lastly, several urban bioswales were constructed throughout the communities.<sup>40</sup> Bioswales are areas of land that are covered in vegetation and designed to collect, treat, and filter stormwater runoff as it travels downstream.<sup>41</sup> They are good examples of green infrastructure that not only slow runoff speeds, but also help to clean the water at the same time.<sup>42</sup> On April 25, 2021, members of the Pontchartrain Park and Gentilly Woods neighborhoods gathered to mark the completion of this phase of the project.<sup>43</sup>

Phase II of the project, which broke ground in spring 2021, focuses on improving the Dwyer Canal cutting through the two communities. Spearheaded by the city and private partners SCAPE Landscape Architecture and Infinity Engineering, the ultimate goal of this project is to ensure that the canal can better serve as a rainwater detention site and also that new recreational and educational installations will allow the canal to connect, rather than divide and separate, the two communities.<sup>44</sup> Walking paths and environmental learning opportunities will be spaced along the canal to “enhance the natural beauty of the historic New Orleans neighborhood.”<sup>45</sup> The project is expected to be completed in fall 2021.

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<sup>37</sup> Katherine Hart, *Neighbors Celebrate the Pontilly Stormwater Network: ‘It’s Been Actually Saving Us from Flooding,’* GENTILLY MESSENGER (Apr. 25, 2021), <http://gentilymessenger.com/neighbors-celebrate-the-pontilly-stormwater-network-its-been-actually-saving-us-from-flooding/>.

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

<sup>41</sup> *Bioswales: Urban Street Design Guide*, NAT’L ASS’N OF CITY TRANSP. OFF., <https://nacto.org/publication/urban-street-design-guide/street-design-elements/stormwater-management/bioswales/> (last visited Oct. 19, 2021).

<sup>42</sup> *Id.*

<sup>43</sup> Katherine Hart, *Neighbors Celebrate the Pontilly Stormwater Network: ‘It’s Been Actually Saving Us from Flooding,’* GENTILLY MESSENGER (Apr. 25, 2021), <http://gentilymessenger.com/neighbors-celebrate-the-pontilly-stormwater-network-its-been-actually-saving-us-from-flooding/>.

<sup>44</sup> CITY OF NEW ORLEANS, LA., PONTILLY PHASE II: DWYER CANAL IMPROVEMENTS (2020), available at [https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Dwyer-Canal/PontillyPhaseII\\_Q12020FactSheet-05062020.pdf?lang=en-US](https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Dwyer-Canal/PontillyPhaseII_Q12020FactSheet-05062020.pdf?lang=en-US); Katherine Hart, *Neighbors Celebrate the Pontilly Stormwater Network: ‘It’s Been Actually Saving Us from Flooding,’* GENTILLY MESSENGER (Apr. 25, 2021), <http://gentilymessenger.com/neighbors-celebrate-the-pontilly-stormwater-network-its-been-actually-saving-us-from-flooding/>.

<sup>45</sup> *Pontilly Phase II: Dwyer Canal Improvements*, CITY OF NEW ORLEANS, LA., <https://www.nola.gov/resilience-sustainability/gentilly-resilience-district/pontilly-neighborhood-ii/> (last updated Jan. 6, 2022).

## COMMUNITY ENGAGEMENT

### Mirabeau Water Gardens

In 2017, before ground broke on the Mirabeau Water Gardens project, the city presented at a local charter school to community stakeholders and leaders about the problems the community faced due to flooding, options relating to how these problems could be fixed, and benefits the projects could offer to the community.<sup>46</sup>

### Blue and Green Corridors Projects

The city and its partners undertook significant community engagement efforts to ensure that the communities' voices would be heard during the development and construction of the Blue and Green Corridors projects. The city used multiple tools to conduct resident outreach. First, the city sent out mailers to affected residents.<sup>47</sup> In addition, the city held open houses, attended health fairs, conducted door-to-door outreach, and posted signs in public, well-visited places.<sup>48</sup> Further, since 2018, the city has supported several different outreach forums, including community leadership meetings, visioning workshops, festivals, press conferences, and design review committee meetings.<sup>49</sup>

Throughout the development process, the city presented several times in an online forum, where the public was given time to ask questions about the status of the project, and give commentary on the design aspects of it.<sup>50</sup> A July 2020 presentation included an overview on which specific projects were most important to the community, which were identified as abundant lighting, fitness equipment, green infrastructure.<sup>51</sup> Continued maintenance of the character of the Gentilly neighborhoods was also identified as a priority. The presentation included a list of concerns from the community, which included flooding, poor lighting, and lack of shade.<sup>52</sup>

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<sup>46</sup> CITY OF NEW ORLEANS, LA., MIRABEAU WATER GARDEN PROJECT (Aug. 5, 2017), *available at* <https://nola.gov/resilience-sustainability/resources/community-outreach/mirabeau-comm/>.

<sup>47</sup> CITY OF NEW ORLEANS, LA., PONTILLY PHASE II: DWYER CANAL IMPROVEMENTS (2020), *available at* [https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Dwyer-Canal/PontillyPhaseII\\_Q12020FactSheet-05062020.pdf/?lang=en-US](https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Dwyer-Canal/PontillyPhaseII_Q12020FactSheet-05062020.pdf/?lang=en-US).

<sup>48</sup> *Id.*

<sup>49</sup> *Blue & Green Corridors*, CITY OF NEW ORLEANS, LA., <https://nola.gov/resilience-sustainability/gentilly-resilience-district/blue-green-corridors/> (last visited May 25, 2022).

<sup>50</sup> *Id.*

<sup>51</sup> CITY OF NEW ORLEANS, LA., BLUE & GREEN CORRIDORS: 90% DESIGN UPDATE COMMUNITY MEETING (July 2020), *available at* [https://nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Blue-Green-Corridors/200730-Community-Presentation-\(1\).pdf/?lang=en-US](https://nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Blue-Green-Corridors/200730-Community-Presentation-(1).pdf/?lang=en-US) (PowerPoint presentation).

<sup>52</sup> *Id.*



## Pontilly Neighborhood Stormwater Network

Significant community engagement and outreach was undertaken during the design stage of both phases of the Pontilly Neighborhood Stormwater Network project. In 2016, the New Orleans Department of Public Works, Office of Resilience and Sustainability, and the Office of Neighborhood Engagement first presented to the community's neighborhood associations with proposed projects, and provided the public with an opportunity to ask questions and provide feedback.<sup>53</sup> The city also distributed surveys to project area residents and held forums for community leaders.<sup>54</sup> Further, before construction on each phase of the project, the city presented to project area residents regarding information on the projects, and offered opportunities for input.<sup>55</sup>

## FUNDING

### Mirabeau Water Gardens

The Mirabeau Water Gardens project is funded by a Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant (HMGP)<sup>56</sup> of \$13 million and a \$10.5 million Disaster Recovery grant from the U.S. Department of Housing and Urban Development through the (HUD) National Disaster Resilience Competition (NRDC).<sup>57</sup>

### Blue and Green Corridors

The Blue and Green Corridor projects will be funded through a \$28 million grant from the NDRC.<sup>58</sup>

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<sup>53</sup> *Pontilly Neighborhood Stormwater Network*, CITY OF NEW ORLEANS, LA., [https://nola.gov/resilience-sustainability/\(hmgp\)-stormwater-projects/pontilly/](https://nola.gov/resilience-sustainability/(hmgp)-stormwater-projects/pontilly/) (last visited May 25, 2022).

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> Georgetown Climate Ctr., *FEMA Hazard Mitigation Program*, ADAPTATION CLEARINGHOUSE, <https://www.adaptationclearinghouse.org/resources/fema-hazard-mitigation-grant-program.html> (last visited Nov. 19, 2021).

<sup>57</sup> For more information about the National Disaster Resilience Competition, see Georgetown Climate Ctr., *HUD National Disaster Resilience Competition*, ADAPTATION CLEARINGHOUSE (June 14, 2014), <https://www.adaptationclearinghouse.org/resources/hud-national-disaster-resilience-competition.html>.

<sup>58</sup> CITY OF NEW ORLEANS, LA., BLUE & GREEN CORRIDORS PROJECT (Winter 2021), available at <https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Blue-Green-Corridors/BlueGreen2021.pdf/?lang=en-US>.

## Pontilly Neighborhood Stormwater Network

Phase I of the Pontilly Neighborhood Stormwater Network was funded through a \$15 million hazard mitigation grant from FEMA and a \$3.4 million award through the NDRC.<sup>59</sup> Phase II of the project was through another NRDC award of \$2.1 million.<sup>60</sup>

## NEXT STEPS

These projects, and the Gentilly Resilience District, are worth highlighting because of the extensive amount of community involvement in the creation of many of the plans and programs associated with the district as a whole. Many of the projects integrate innovative green infrastructure, including community rain gardens, permeable pavements and sidewalks, and other stormwater and infrastructure installations. It is important to note, however, that the actual implementation of many of these projects has been extremely delayed, according to community members and stakeholders on the ground in the Gentilly neighborhood. This is due in part to transitions in government leadership, COVID, and the difficulty of cross-agency collaboration.<sup>61</sup>

For example, because the projects in the Gentilly Resilience District are, in part, funded by the HUD NDRC, the agency is required to approve any “de-bundling” contracts. De-bundling typically occurs when projects are granted large funds, which must be broken down into smaller projects in order to ensure that smaller, community-led businesses can afford to compete and bid on their design and construction. In this instance, the approval process has resulted in several delays relating to entering the construction phase of many of the projects, though “kick-off” and ground-breaking events began in April 2021.

## CONSIDERATIONS AND LESSONS LEARNED

Despite some issues and delays with implementation, Resilient New Orleans and the Gentilly Resilience District provide several takeaways and lessons for local governments and communities seeking to increase resilience and combat flood risk through community-led approaches.

First, it is important to build community resilience around a central plan, as the city did here with the Resilient New Orleans plan, to connect project planning and implementation. Other regional

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<sup>59</sup> CITY OF NEW ORLEANS, LA., PONTILLY NEIGHBORHOOD STORMWATER NETWORK (Fall 2019), *available at* <https://www.nola.gov/nola/media/Climate-Action/Progress/PontillyFactSheet.pdf>.

<sup>60</sup> CITY OF NEW ORLEANS, LA., PONTILLY PHASE II: DWYER CANAL IMPROVEMENTS (2020), *available at* [https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Dwyer-Canal/PontillyPhaseII\\_Q12020FactSheet-05062020.pdf/?lang=en-US](https://www.nola.gov/getattachment/Resilient-New-Orleans/NDR-GRD-Projects-Programs/Dwyer-Canal/PontillyPhaseII_Q12020FactSheet-05062020.pdf/?lang=en-US).

<sup>61</sup> These comments and opinions on implementation were gathered through a number of interviews with individuals working on the ground in the Gentilly Community.

and local policymakers and communities can follow suit to coordinate and leverage funding for projects, especially where they can provide significant benefits for communities.

Second, local governments should work directly with communities to advance resilience in line with their interests and needs. The need for or benefits of unique public-private partnerships e.g., with local faith-based entities like the St. Joseph convent and other organizations, can help to maximize the value of community assets. Local governments designing and building resilience projects should engage consistently and often with any neighborhood or community they are looking to create a plan for, to learn better what problems affect that community, what solutions will work best to address those problems, and what organizations and projects are already operating within the area, so that any solutions can leverage existing resources.

Third, local governments and communities should look to reuse, re-envision, and in some cases, restore vacant and blighted parcels. When undertaking this type of transformation, project leaders can also look to leverage co-benefits of these projects i.e., community resilience, stormwater retention/reduced flooding, improving water quality to make them more successful.

Fourth, note that funding is key to be able to implement these types of large-scale, expensive projects. Post-disaster funding sources, like those distributed from FEMA and HUD, were used here to build future community resilience against chronic and storm-based flooding, among advancing other community and environmental benefits. Other local policymakers with similar access to these types of federal or state funding opportunities can look to build resilience into grant proposals. However, where these types and amounts of funding are harder to replicate, policymakers and communities can look to alternative sources of funding, public-private partnerships, and smaller-scale neighborhood projects.

## *City of North Miami, Florida*

# Good Neighbor Stormwater Park and Repetitive Loss Master Plan

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## EXECUTIVE SUMMARY

The City of North Miami, Florida Good Neighbor Stormwater Park is a public open space with the capacity for local flood prevention, doubling as a stormwater reservoir. A repurposed vacant lot within North Miami's residential neighborhood of Sunny Acres, this adaptive stormwater green infrastructure is vegetated with an array of native trees and plants, while also acting as a communal space with walking paths and artistic structures that educate the public on flooding hazards.

The project was funded in part through the Van Alen Institute's Keeping Current: Repetitive Loss Properties Grant design competition, won by the City of North Miami, and the landscape architecture firm Dept. for implementation. The Stormwater Park was once considered a repetitive loss property by the Federal Emergency Management Agency (FEMA), due to repetitive flooding from stormwater and sea-level rise — common across South Florida neighborhoods.

As a part of the project, the landscape architects selected to design the park were also asked to put together a plan that could support the replication of this pilot project across the region in the most flood vulnerable communities. Dept. developed a Repetitive Loss Master Plan, which illustrates priority strategies for flood risk reduction and resilient design. Other local decisionmakers of flood-prone communities with vacant, abandoned, deteriorated, or repetitive loss lots can look to North Miami's example for green infrastructure public space design planning that goes beyond capturing stormwater, and integrates the community's well-being — such as access to green space — for greater long-term resilience.

## BACKGROUND

The City of North Miami is located in Miami-Dade County, near the southern tip of Florida on Biscayne Bay on the eastern seaboard. U.S. Census Bureau findings from 2020 report the city has a reported population of around 60,000 residents, with great diversity in the region as approximately two thirds of the population is Black or African American, one third Hispanic or Latinx, and one third white.<sup>1</sup>

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<sup>1</sup> *Quick Facts: North Miami City, Florida, U.S. CENSUS BUREAU,* <https://www.census.gov/quickfacts/northmiamicityflorida> (Apr. 2020 Census results) (last visited Dec. 16, 2021).

North Miami is one of the most vulnerable areas in the nation to sea-level rise, with an estimated nearly 7,000 residents per square mile according to 2010/2020 U.S. Census findings.<sup>2</sup> On a coastline reckoning with extreme weather events, coastal erosion, and flooding, the county's population of 2.6 million is also the largest population in the United States exposed to sea-level rise.<sup>3</sup> The Third National Climate Assessment confirms that South Florida, including Miami-Dade County, is anticipated to experience extreme impacts from climate change, such as significant sea-level rise, higher storm surges along with the potential for increased hurricane intensity and heavy precipitation events.<sup>4</sup> Even on sunny days in this region, the streets regularly flood at high tide — and just three feet of sea-level rise would leave a substantial part of South Florida underwater.<sup>5</sup>

The city faces compounding vulnerabilities beyond climate change impacts, such as 20 percent of the population living in poverty.<sup>6</sup> Additionally, recognizing the continued threat of sea-level rise and flooding, the city surveyed their residents' septic systems in 2010 — typically homes without access to the sewer system — to find troubling results. The city stated that:

Unfortunately, due to the rise of the underground water table, influenced by sea level rise, soils are more saturated, resulting in many underperforming septic systems. Of approximately 221 systems identified in the city of North Miami, it is predicted that 80% will be completely compromised by 2040; and that all systems will become non-viable by 2069.<sup>7</sup>

This finding demonstrates one of many concerning impacts from flooding that can be addressed with progressive community and city-wide planning that supports green infrastructure and other flood mitigation projects. Ongoing innovations in coastal adaptation and resilient infrastructure and landscapes, like the Green Neighbor Stormwater Park and Repetitive Loss Master Plan, are needed to protect communities from sea-level rise and recurrent flood losses.

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<sup>2</sup> *Id.*

<sup>3</sup> Stéphane Hallegatte et al., *Assessing Climate Change Impacts, Sea Level Rise and Storm Surge Risk in Port Cities: A Case Study on Copenhagen*, OECD ENVIRONMENT WORKING PAPERS (2008), <http://dx.doi.org/10.1787/236018165623>.

<sup>4</sup> U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT 841 (2014).

<sup>5</sup> ARCH CREEK STUDY AREA BRIEFING BOOK FOR ULI [URBAN LAND INSTITUTE] ADVISORY SERVICES PANEL, MAY 22–27, 2016, available at <https://www.miamidade.gov/green/library/arch-creek-briefing-book.pdf>.

<sup>6</sup> *Quick Facts: North Miami City, Florida*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/northmiamicityflorida> (Apr. 2020 Census results) (last visited Dec. 16, 2021).

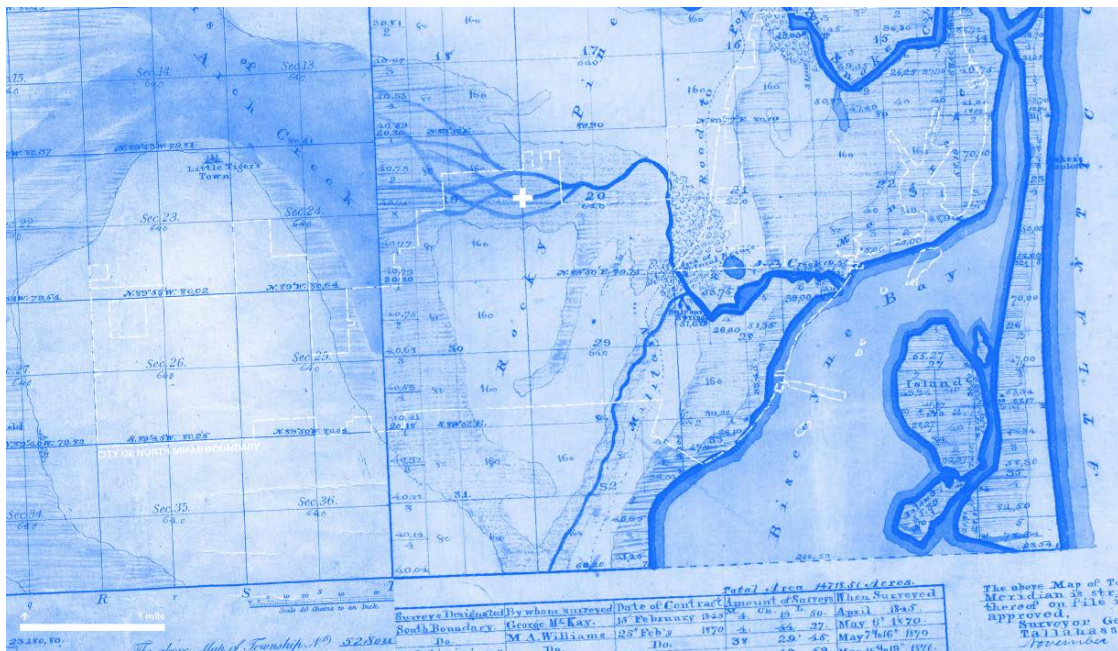
<sup>7</sup> CITY OF NORTH MIAMI, RESILIENTNOMI QUARTERLY E-NEWSLETTER (Feb. 2020), available at <https://northmiamifl.gov/DocumentCenter/View/9311/E-Newsletter-Volume-1-2020-PDF>.



# OVERVIEW OF THE GOOD NEIGHBOR STORMWATER PARK

Years ago, the city recognized that older stormwater conveyance systems were no longer a match for today's flooding and wanted to convert these abandoned lots to green infrastructure that could handle stormwater retention. Rather than simply implementing detention ponds and allowing the sites to remain unused, the city aimed to simultaneously create open space for residents. In 2019, North Miami commissioned a pilot project and master plan to consider the best approach to future repetitive loss acquisitions.

The City of North Miami first purchased the repetitive loss properties that would become the home of the Good Neighbor Stormwater Park through the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program.<sup>8</sup> If a homeowner files for flood insurance twice in a ten-year period, FEMA labels it a repetitive loss property. More specifically, a repetitive loss property is any insurable building for which two or more claims of more than \$1,000 were paid by FEMA's National Flood Insurance Program (NFIP) within any rolling ten-year period.<sup>9</sup>



*This image shows waterways as once flowing through the North Miami landscape with an indicator to note the Good Neighbor Stormwater Park's current location.*

<sup>8</sup> See Georgetown Climate Ctr., *FEMA Hazard Mitigation Grant Program*, ADAPTATION CLEARINGHOUSE, <https://www.adaptationclearinghouse.org/resources/fema-hazard-mitigation-grant-program.html> (last visited Dec. 16, 2021).

<sup>9</sup> *Repetitive Loss Structure*, FED. EMERGENCY MGMT. AGENCY, <https://www.fema.gov/node/405233> (last updated Mar. 5, 2020) (definition of "repetitive loss structure").

Van Alen Institute initiated the Keeping Current: A Sea-Level Rise Challenge for Greater Miami funding competition to enhance community resilience and “create visionary and implementable design solutions to sea-level rise.”<sup>10</sup> Once the City of North Miami’s portfolio of repetitive loss properties was selected, the city invited architects and designers to submit proposals for how to transform the flooded lots into open space public areas that manage stormwater flooding.

Dept. is a Houston-based landscape architecture and urban design studio that was chosen for its Stormwater Park design.<sup>11</sup> Dept. was awarded \$80,000 to develop and implement the pilot site, as well as to create a master plan for other repetitive loss properties in North Miami. The proposed Repetitive Loss Vision Plan outlines how to fund and design more of these projects to transform other flood-prone vacant lots into climate resilient community assets.

The parts that follow provide more detail about both the Good Neighbor Stormwater Park and the Repetitive Loss Vision Plan.

## ENVIRONMENT

### Stormwater Retention

The Good Neighbor Stormwater Park was designed with a new piping and basin system to provide additional stormwater storage space that can subsequently decrease the amount of flooding on nearby properties. A retention basin to mitigate flooding can hold and infiltrate much larger volumes of stormwater than an average repetitive loss property that goes unmanaged. The Stormwater Park is now a sustainable climate-resilient public space with a retention pond that can hold four times its original capacity as a vacant lot, mitigating stormwater flooding for surrounding lots — hence named “Good Neighbor.”

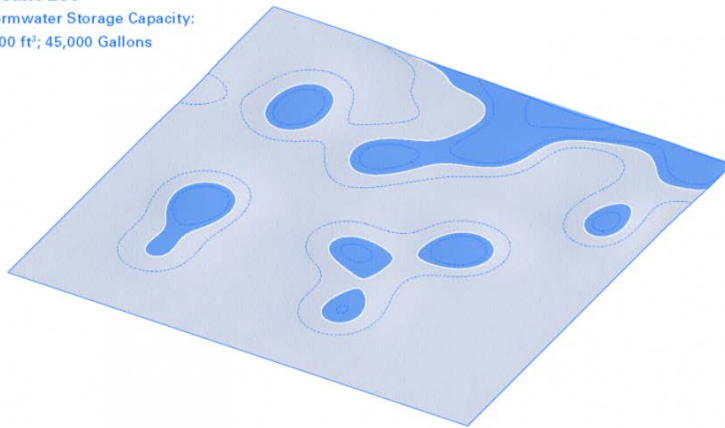
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<sup>10</sup> *Keeping Current*, VAN ALAN INST., <https://www.vanalen.org/project/keeping-current/> (last visited Dec. 16, 2021).

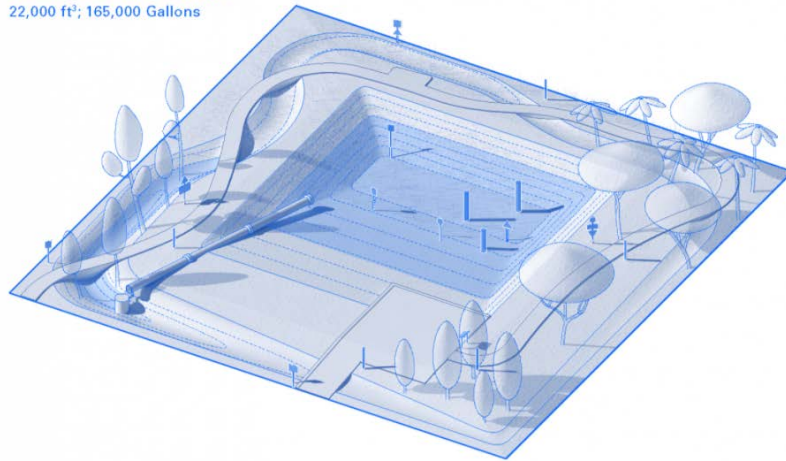
<sup>11</sup> DEPT., <https://www.dept.llc> (last visited Dec. 16, 2021).

**Vacant Lot**

Stormwater Storage Capacity:  
6,000 ft<sup>3</sup>; 45,000 Gallons

**Stormwater Park**

Stormwater Storage Capacity:  
22,000 ft<sup>3</sup>; 165,000 Gallons



The 18,000-square-foot site also now supports a diverse selection of native plants and trees in a demonstration garden of several South Florida habitats, including pine flatwoods, hardwood hammock, marsh, and cypress slough.

Planting throughout the site further increases stormwater retention and management capacity by absorbing water, improves groundwater filtration and storage, while restoring ecological function in an urban area. In addition, many native South Florida plants are tolerant of wet conditions and require little to no maintenance once the plants are established.

The Good Neighbor Stormwater Park is an opportunity for both the city and the immediate neighborhood surrounding the park to accrue many benefits. Going into this project, the city articulated three main goals to create:

1. Stormwater management solutions and earn points under the Community Rating System;
2. Valuable community spaces; and
3. Forward-looking and scalable projects beyond this single pilot.

To the first goal, NFIP employs a [Community Rating System \(CRS\)](#) which is a voluntary insurance rating program that recognizes communities for implementing floodplain management practices that exceed the federal minimum requirements of NFIP. In exchange for flood-risk-reduction practices, policyholders within CRS jurisdictions can receive lower flood insurance premiums. With the Stormwater Park, North Miami can earn points in multiple CRS activity areas, which can decrease the cost of flood insurance across the city. The city is currently a CRS Class 6. For example, CRS Activity 530 “Flood Protection” credits structure flood protection projects based on the number of buildings affected by the project.<sup>12</sup> The project demonstrates a resilience strategy that bolsters NFIP ratings, while offering a model for alternative land use of flood-prone vacant land found often in frontline communities.

To achieve the second goal, the Stormwater Park provides social benefits in an underserved area of the city. According to the U.S. Census Bureau, about one in five residents in North Miami live below the poverty line.<sup>13</sup> Many inland communities of South Florida face the impacts of coastal sea-level rise compounded by precipitation events and recurrent flooding. Moreover, these areas are often burdened with the secondary impacts of ongoing flooding, such as continued inundation of sewage and septic systems. As such, adapting to climate change goes beyond elevating individual homes, or moving out of the flood zone. Not everyone has the capacity to relocate, or the desire to as such. Adapting to these impacts requires neighborhood- or region-wide inclusive projects and planning. This has created an opportunity to transform these sites into valuable community spaces, such as the Stormwater Park, while supporting equitable climate adaptation planning and solutions.

North Miami specifically chose the location of the pilot Stormwater Park to be implemented where public health concerns began to rise from the number of septic systems being impacted. This low-income area is also where the city has a higher proportion of people of color. The Stormwater Park is already reducing flooding, making neighborhoods more livable, safe, and enjoyable for residents. The park also provides a respite or urban retreat and recreational amenity for area residents.

Lastly, the city worked with Dept. to make the third goal of scalability and replicability possible through the Repetitive Loss Master Plan.

<sup>12</sup> FED. EMERGENCY MGMT. AGENCY, NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY RATING SYSTEM COORDINATOR’S MANUAL FIA-15/2017 (2017), *available at* [https://www.fema.gov/sites/default/files/documents/fema\\_community-rating-system\\_coordinators-manual\\_2017.pdf](https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinators-manual_2017.pdf).

<sup>13</sup> *QuickFacts: North Miami City, Florida, U.S.* CENSUS BUREAU, <https://www.census.gov/quickfacts/northmiamicityflorida> (last visited Dec. 16, 2021).





*Credit: Dept.*

## Adaptation Action Areas in Miami-Dade County

Miami-Dade County has been undertaking several adaptation and resilience actions. Although the county's efforts are distinct from those in North Miami, the two are complementary. Therefore, it is worthy to highlight one example of how multiple governments can address flooding and other impacts that extend beyond jurisdictional boundaries.

Sixty-five percent of North Miami is in Arch Creek Basin, a low-lying area that naturally collects water, and in turn, many residents here experience flooding on their properties. North Miami is in Miami-Dade County, which is prioritizing the Arch Creek Basin as a pilot Adaptation Action Area (AAA), designated under Florida's Community Planning Act.<sup>14</sup> An AAA, as defined in the act, is an optional comprehensive plan designation for areas at risk of flooding from high-tide events, storm surge, flash floods, stormwater runoff, and related impacts of sea-level rise. Local governments in turn can prioritize policies and funding for coastal infrastructure and adaptation planning in these areas. "Criteria for an Adaptation Action Area may include, but need not be limited to, areas for which the land elevations are below, at, or near mean high water, which have a hydrologic connection to coastal waters, or are designated as evacuation zones for storm surge."<sup>15</sup>

The Arch Creek Basin comprises approximately 2,838 acres of Miami-Dade County, is economically diverse, includes numerous historical resources, and crosses jurisdictional boundaries for five different local governments. In 2016, the County Board of

<sup>14</sup> Georgetown Climate Ctr., *Creation of "Adaptation Action Areas" in Florida's Community Planning Act*, ADAPTATION CLEARINGHOUSE (June 2, 2011), <https://www.adaptationclearinghouse.org/resources/creation-of-adaptation-action-areas-e-in-florida-s-community-planning-act.html>.

<sup>15</sup> FLA. STAT. § 163.3177(6)(g)(10) (2021).



Commissioners adopted Resolution No. R-66-16 to design a pilot program for Adaptation Action Areas. The Arch Creek area was selected as the county's first AAA pilot project to serve as a model for future adaptation initiatives — as having vulnerabilities common to other areas in the county.<sup>16</sup>

This is part of Miami-Dade's comprehensive strategy that has the goal to improve the resilience of the entire community to climate change, in addition to mitigating repetitive losses. As described in the county's 2019 Recommendations to Protect Water, Sewer, and Road Infrastructure from Sea Level Impacts report, the Comprehensive Development Master Plan Policy CM-9H:

*Mandates that all capital projects consider sea level rise. In addition, Resolution No. R-617-17 requires that county civil infrastructure projects use the Envision Rating System, which includes climate risk criteria. The Envision Rating system is a framework that includes 64 sustainability and resilience indicators, called 'credits,' organized around five categories: Quality of Life, Leadership, Resource Allocation, Natural World, and Climate and Resilience. These collectively address the sustainability of infrastructure projects.<sup>17</sup>*

This work is noteworthy because flooding will require coordination and resilience actions at different scales. Miami-Dade is also using different, but complementary tools to North Miami's Good Neighbor Stormwater Park and Repetitive Loss Vision Plan, with AAA overlay zones, updates to the county's local comprehensive plan, and civil infrastructure guidelines. Across different levels of government, regional and local policymakers will have to consider a suite of tools for adaptation and resilience that are based on various factors, like applicable legal authorities and community needs and priorities.

## Planning

South Florida is primarily a floodplain where natural waterways have been in-filled or altered in ways that no longer allow for natural drainage basins, such as Arch Creek. Additionally, impervious surfaces prevail in urban areas which prevent stormwater infiltration and worsen flooding. Resilient floodplain management will require maximizing stormwater catchment capacity, particularly in flood-prone or repetitive loss lots.

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<sup>16</sup> ARCH CREEK STUDY AREA BRIEFING BOOK FOR ULI [URBAN LAND INSTITUTE] ADVISORY SERVICES PANEL, MAY 22–27, 2016, available at <https://www.miamidade.gov/green/library/arch-creek-briefing-book.pdf>.

<sup>17</sup> MIAMI-DADE CNTY., RECOMMENDATIONS TO PROTECT WATER, SEWER, AND ROAD INFRASTRUCTURE FROM SEA LEVEL IMPACTS, FINAL REPORT FOR RESOLUTION R-361-18 10 (Feb. 2019), available at <https://www.miamidade.gov/govaction/legistarfiles/Matters/Y2021/210608.pdf> (submitted via a Memorandum from Mayor Daniella Levine Cava, to the Board of County Commissioners, dated March 11, 2021).

The proposed Repetitive Loss Master Plan as developed by Dept. illustrates the priority strategies for flood risk reduction and resilient design across the city of North Miami.<sup>18</sup> If adopted and approved by the city (see part on Next Steps), the master plan can help the city, as desired, continue to transform flood-prone properties in North Miami.

As currently written, the plan contemplates two different planning horizons, the first for the next ten to 15 years and the second for the longer term beyond that initial period.<sup>19</sup> The first planning horizon is built around realizing the near-term hazard mitigation, CRS, social, and environmental benefits of the Good Neighbor Stormwater Park for a small watershed of homes.<sup>20</sup> The second is envisioned as having the city work towards creating a “Stormwater Network” to potentially convert more vacant and abandoned repetitive loss properties to stormwater retention sites that can expand these benefits to other parts of the city.<sup>21</sup> Longer-term goals, as described in the plan, reach a landscape-level scale in which a number of individual parks become a stormwater infrastructure network allowing for regional adaptation to sea-level rise and flooding.

In the plan, Dept. proposes six design typologies for future sites given the potential lots available within a residential district in the city.<sup>22</sup> These typologies illustrate how new stormwater parks can be adapted in these different location-specific contexts.<sup>23</sup> In selecting potential sites, the draft plan suggests that the city could determine priority areas based on project feasibility, and community flood risk, as well as urban context, zoning, elevation, and other site-specific characteristics, as funding allows.<sup>24</sup> The plan suggests that stormwater parks can be networked and grown simply by clustering sites in priority vulnerable areas and connecting them through a system of bioswales in the existing street right-of-way — rather than requiring new street construction or configurations.<sup>25</sup> As put forth by Dept., this green infrastructure network would have compounding benefits at scale, “increasing stormwater infiltration capacity, protecting the municipal water supply from saltwater intrusion, restoring the ecological function of the Arch Creek Basin, and strengthening resilience in North Miami.”<sup>26</sup> Regardless, any potential future designs and actions would be driven by community residents through engagement processes like those used for the Good Neighbor Stormwater Park.

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<sup>18</sup> DEPT., NORTH MIAMI STORMWATER PARKS: TRANSFORMING FLOODED PROPERTY INTO RESILIENT INFRASTRUCTURE (Aug. 2020), *available at* [https://issuu.com/isaacwstein/docs/rfp\\_masterplan\\_final\\_digital](https://issuu.com/isaacwstein/docs/rfp_masterplan_final_digital) (draft plan developed by Dept., but not adopted or approved by the City of North Miami, Florida as of January 2022).

<sup>19</sup> *Id.* at 13.

<sup>20</sup> *Id.* at pt. I.

<sup>21</sup> *Id.* at pt. II.

<sup>22</sup> *Id.*

<sup>23</sup> *Id.* at 54.

<sup>24</sup> *Id.* at 53.

<sup>25</sup> *Id.* 66–69.

<sup>26</sup> *Id.* at 53.

## COMMUNITY ENGAGEMENT

Along with maximizing flood mitigation potential, community engagement has been a project priority for North Miami planners from the start. The Stormwater Park lot is primarily in a Haitian and Hispanic neighborhood. The city tried to overcome barriers to engagement by including representative community members. Another local project partner, the Urban Impact Lab, spent months meeting with and hearing from hundreds of North Miami residents through events and surveys, to understand their needs for this new community space. Urban Impact Lab conducted surveys in three languages to ask residents questions like whether they were exposed to flooding risk, and about favorite hobbies that they would like to see reflected in this space — such as walking, running, reading, or spending time in nature. Ultimately the park's community-friendly design incorporates a central basin with a walking trail and bioswale around it, native vegetation supporting numerous local habitats, and integrated artistic interpretive signage.

Holistic resilient design also incorporates community education. One of Dept.'s design priorities was making the invisible visible — by showcasing stormwater flows rather than hiding them — to educate the community about flood risk and green infrastructure. The park design and retention pool make flood water visible to the community, which becomes an opportunity to increase local awareness about flooding, and how much water the area receives. Dept. collaborated with Miami-based artist Adler Guerrier for an art installation inside the retention pond that uses physical markers that rise above the water to indicate the natural fluctuations of the water table in the neighborhood.

## FUNDING

The primary funding support to design and install the Stormwater Park, as well as develop the proposed master plan for a network of such parks, came from the Van Alen Institute. The team also received a coastal resilience grant from the Florida Department of Environmental Protection for \$50,000 for materials and planning. In addition, The Nature Conservancy provided in-kind donations in the form of native plants. The park was also made possible by private donations totaling \$6,000.

## NEXT STEPS

Two weeks after the grand opening of the park, the largest recorded rainfall event occurred in the neighborhood. The park exceeded its design limits by not only capturing the stormwater from the properties as intended, it also captured the roadway runoff. In the past, during an average rain event, the road would be under water for some period of time. By the next day the flood waters had completely receded.





*The Stormwater Park Hours after a severe rain event. Credit: Debbie Love, City Planner, City of North Miami, Florida.*





*The Stormwater Park one day post-storm event. Credit: Debbie Love, City Planner, City of North Miami, Florida.*

As illustrated by this instance, the Good Neighbor Stormwater Park has already started to provide the intended flood mitigation, community, and ecological benefits it promised by trapping precipitation and runoff, improving water quality, and attracting residents. According to city staff and as seen in photo below, the vegetation has begun to grow in and green up, and wildlife has begun to return — including sightings of herons and butterflies occupying the park.





*Good Neighborhood Stormwater Park, November 2021. Credit: Debbie Love, City Planner, City of North Miami, Florida.*

In addition, the Repetitive Loss Master Plan, although finalized by Dept., will be brought before the North Miami City Council for formal approval and adoption in 2022. If approved and adopted by the city, the plan would become a part of the city's local comprehensive plan, which guides zoning and land-use decisions in North Miami, and incorporated by reference. Specifically, the plan would be used to inform future capital improvement actions, including the reuse and restoration of additional repetitive loss properties in the city.

It is important to note, however, the city's potential future use of the Repetitive Loss Master Plan would be implemented in concert with community residents, similar to how the Stormwater Park project was carried out with robust engagement. As such, the city would intend to carry out the plan with the support of residents in other neighborhoods with repetitive loss properties.

## CONSIDERATIONS AND LESSONS LEARNED

The Good Neighbor Stormwater Park project exemplifies climate-resilient landscape architecture or green infrastructure, made successful through diverse public-private partnerships adopting

equitable community engagement and support, and long-term planning. Other local governments can similarly seek opportunities to reuse and repurpose vacant, abandoned, and flood-prone lots — including repetitive loss properties — to reduce localized flooding and create community assets.

One of the most noteworthy aspects of North Miami's work is the foresight of the city to look beyond one pilot project and consider ways to scale this work to other repetitive loss properties. The Good Neighbor Stormwater Park supported the development of the Repetitive Loss Vision Plan. If approved and adopted by the city, the plan has the potential to seed flood mitigation, environmental, and social benefits throughout North Miami. This type of scalability or replicability may also position local governments to have a strategic advantage with funders interested in supporting projects that maximize larger benefits for communities.

As demonstrated in North Miami, it is critical that decision makers be mindful of community-specific needs and context, such as the climate and compound impacts facing a given area, and center residents in the process to identify and design lots. This is especially important when replicating potential pilot projects through plans like the Repetitive Loss Vision Plan. Here, the neighborhood serves as an example of how to direct local resilience investments to an underserved area of a city to enable people to stay in their homes longer in the face of increasing flood risks. Potential future applications of the plan could look very different and, for example, restore vacant lands in a post-buyout neighborhood.

Government actors should be upfront with communities about project expectations and timelines to build and maintain trust. For example, plants take time to grow in and become established, so a newly landscaped space may look stark at first, and better after a year. In turn, proactive communication with residents around a greater vision is important. Interested residents, like youth, can even be encouraged to become local stewards of parks and open spaces as they mature and change over time. The educational and ecological features in the Good Neighbor Stormwater Park further support community learning and literacy around flood resilience initiatives.

In addition to community members, this project demonstrates the value of public-private partnerships, including with landscape architects for resilient design that may be institutionalized.

This project also piloted new stormwater concepts in Miami-Dade County. As a result, the city and Dept. had to work closely with the county to evaluate how to permit stormwater infrastructure in the form of a park under a permitting system designed for traditional retention and detention ponds. This example illustrates the need for early and collaborative dialogues across different levels of government to enable novel or innovative resilience projects to be implemented.

Lastly, the Good Neighbor Stormwater Park relied on multiple, diverse sources of funding to be implemented, in addition to in-kind donations of native plants and time from volunteers. Local governments and communities interested in this type of work similarly need to be creative and prepare to obtain diverse funding sources for projects like this one.





*Good Neighborhood Stormwater Park, November 2021. Credit: Debbie Love, City Planner, City of North Miami, Florida.*

## *City of Houston, Texas*

# **Resilient Houston and Affordable Housing and Nature-Based Efforts**

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## **EXECUTIVE SUMMARY**

Houston has been battered by six federally declared flooding disasters in five years, including the record-setting Hurricane Harvey in 2017. A significant amount of Houston's existing development is located in vulnerable floodplains. These land use patterns, combined with recurrent disasters, have served as the impetus for Houston to undertake several related efforts to increase local resilience.

The city has thus begun to plan to increase its resilience against future storms. In 2018, the city responded by adding structural elevation requirements in the 500-year floodplain and increasing them for the 100-year floodplain. In addition, the city developed the Resilient Houston plan. If implemented, the proposed recommendations in Resilient Houston will promote affordable housing with access to job centers, improve community resilience through green space preservation, and enhance stormwater management through the promotion of green stormwater infrastructure. Other local governments facing similar threats from disaster events and pressures to develop in floodplains could evaluate and consider adopting some of Houston's planning and land-use actions.

## **BACKGROUND**

At 667 square miles and with nearly 2.3 million residents, Houston in Harris County is the fourth largest city in the country.<sup>1</sup> The number of people in the city has grown exponentially in recent years.<sup>2</sup> This rate of growth outpaces other major cities: Houston's population has increased 1,700 percent in the last hundred years, while Los Angeles's has increased 700 percent and New York's has increased 140 percent in the same period.<sup>3</sup> Harris County is the third largest county in the United States, adding more than 33,000 residents from July 2018 to July 2019.<sup>4</sup>

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<sup>1</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 9, 12–13 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>2</sup> *Id.* at 7.

<sup>3</sup> *Id.* at 13.

<sup>4</sup> *Most of the Counties with the Largest Population Gains Since 2010 are in Texas*, U.S. CENSUS BUREAU (Mar. 26, 2020), <https://www.census.gov/newsroom/press-releases/2020/pop-estimates-county-metro.html> (press release).

The city is coastal and sits atop 22 major watersheds that drain into 22 major bayous or waterways.<sup>5</sup>

## OVERVIEW OF RESILIENT HOUSTON

Following Hurricane Harvey, the city created its Resilient Houston plan to guide investments to make Houston more resilient to future storms and disasters. Resilient Houston is an implementation-focused plan with 18 discrete goals, supported by 62 discrete actions, prioritizing engagement, finance, policy, metrics, partnerships, and creating a “smart” city.<sup>6</sup> Some broad goals include removing habitable structures from floodways, completing 100 green stormwater infrastructure (GSI) projects by 2025, and conserving undeveloped regional lands as natural spaces.

The city maintains emergency preparedness as a priority, including delivering preparedness training to 500,000 residents by 2025 and ensuring 100 percent of residents have real-time emergency alerts by 2030.<sup>7</sup> The city is complementing those preparedness efforts by promoting resilience at the community level and the development of affordable housing outside the floodplain.

Ultimately, Houston plans to invest \$50 billion into major resilience projects over the next 20 years, including recovering from Hurricane Harvey, expanding transportation accessibility, and upgrading water and sewer systems.<sup>8</sup> As of May 2021, 56 of the actions identified in Resilient Houston are underway, five are on hold, and one (a city-wide climate impact assessment) is completed.<sup>9</sup>

This case study introduces some of the resilience efforts Houston has proposed and is undertaking. In particular, the case study summarizes initiatives to promote affordable housing, conserve a healthy environment for residents, and efficiently manage stormwater drainage. Related planning initiatives, such as an Incentives for Green Development study, the city’s Climate Action Plan, and tree-planting programs, are discussed where relevant.

## HOUSING

Houston has found that while rent burdens in the city are within affordability metrics (the median citizen spends less than 30 percent of his/her income on housing), adding transportation costs to those metrics significantly reduces the actual affordability of living in Houston.<sup>10</sup> This is exacerbated by the tendency of underserved communities to be geographically disconnected from

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<sup>5</sup> *Id.* at 11.

<sup>6</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 39 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>7</sup> *Id.* at 46.

<sup>8</sup> *Id.* at 39.

<sup>9</sup> *Id.* at 4.

<sup>10</sup> *Id.* at 31.



the city's job centers as a result of sprawl, often requiring vehicle-assisted travel.<sup>11</sup> Car-centric growth patterns have also not historically accounted for the environmental and health effects of the city's growth and development.

Increasing the affordability of housing has several direct and indirect economic benefits for the city at large. Affordable housing in safer areas can promote resilience at the community level by removing dwellings from the floodplain and connecting people to job centers. Houston has also found that affordable housing alleviates homelessness and the social and financial costs associated with it, allowing reinvestment of those savings back into communities.<sup>12</sup>

## Planning

Houston is divided into 88 “super neighborhoods,” which are the city's community planning units.<sup>13</sup> Houston will aim to work with these and smaller neighborhood units to embrace a community-minded approach to resilience. To do that, Goal 4 of Resilient Houston calls for safe, equitable, and resilient neighborhoods that have localized resilience plans tailored to their community.<sup>14</sup> The city will start by selecting pilot neighborhoods for community-focused development modeling, identify community liaisons in those neighborhoods, and expand the Houston Land Bank and Houston Community Land Trust's efforts to develop affordable homes on publicly owned lands.<sup>15</sup>

Under Goal 7 for smart growth, Houston also aims to create a comprehensive housing study and plan with neighborhood-specific recommendations that accommodates projected population growth by promoting the creation of affordable and market-priced housing.<sup>16</sup> This will involve and prioritize the use of different tools, such as GSI, to make affordable housing more resilient.

## Land Use

Houston is rapidly growing outward. For every single-family home inside Houston, four more are located in the city's extra-territorial jurisdiction, the larger metropolitan area.<sup>17</sup> Houston intends to integrate affordable accessory dwelling units or “ADUs” to address this sprawl and increase

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<sup>11</sup> *Id.* at 29–31.

<sup>12</sup> *Id.* at 64.

<sup>13</sup> *Super Neighborhoods*, CITY OF HOUSTON, TEX., <https://www.houstontx.gov/superneighborhoods/> (last visited Aug. 19, 2021).

<sup>14</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 72 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>15</sup> *Id.* at 72–76.

<sup>16</sup> *Id.* at 88.

<sup>17</sup> *Id.* at 92.

density.<sup>18</sup> This will promote the Resilient Houston’s Goal 7 to “build up, not out” by incentivizing denser urban infill.<sup>19</sup> In addition, Houston will enhance coordination of Tax Increment Reinvestment Zones with neighborhoods to incentivize community investment from future property tax growth revenues and to align those investments with community needs.<sup>20</sup>

Existing and continued development in the floodplain will exacerbate ongoing flooding threats. To reduce flooding in the weeks following Hurricane Harvey, the city extended its no-net-fill regulation to cover the entire 500-year floodplain.<sup>21</sup> No-net-fill means that when space is filled inside the floodplain for development, an equivalent amount of space must be preserved outside of the floodplain to offset the removal of floodwater storage capacity inside the floodplain. This action will support Resilient Houston Goal 8 for living safely with water and the removal of all habitable structures from the floodplain by 2030.<sup>22</sup>

## Voluntary Buyouts and Land Swaps

One of the resilience approaches embraced by both the Resilient Houston plan and Harris County is to prevent future flood damage in places where structural protections like levees and repairs are not cost-effective or beneficial. The Harris County Flood Control District (HCFCD) is doing this at the county level through a local voluntary buyout program.<sup>23</sup> Under Goal 8, Houston plans to pilot potential relocation efforts on the city level to “make room for water” to live more safely with it.<sup>24</sup> To address the flooding risks faced by underserved and low-income communities, Houston will work with partners to create a community buyout and land swap program for any homes inside

<sup>18</sup> Accessory dwelling units, or ADUs, are secondary living units built on existing single-family parcels. There are a variety of ADU types, which include attached units, such as basement and loft units, and detached units, such as a smaller home built on the same property behind the main home.

<sup>19</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 92 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>20</sup> Tax Increment Reinvestment Zones, CITY OF HOUSTON, TEX., [https://www.houstontx.gov/ecodev/tirz.html#:~:text=Tax%20Increment%20Reinvestment%20Zones%20\(TIRZs\)%20are%20special%20zones%20created%20by,development%20in%20a%20timely%20manner](https://www.houstontx.gov/ecodev/tirz.html#:~:text=Tax%20Increment%20Reinvestment%20Zones%20(TIRZs)%20are%20special%20zones%20created%20by,development%20in%20a%20timely%20manner) (last visited Aug. 16, 2021).

<sup>21</sup> Edward Clump & Mike Lee, *Houston sees ‘defining moment’ with new regulations*, POLITICO (Apr. 5, 2018), <https://subscriber.politicopro.com/article/eenews/1060078211>.

<sup>22</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 96 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>23</sup> KATIE SPIDALIERI & ISABELLE SMITH, GEORGETOWN CLIMATE CTR., MANAGING THE RETREAT FROM RISING SEAS: HARRIS COUNTY, TEXAS: FLOOD CONTROL DISTRICT LOCAL BUYOUT PROGRAM (2020), available at [https://www.georgetownclimate.org/files/MRT/GCC\\_20\\_Harris-4web.pdf](https://www.georgetownclimate.org/files/MRT/GCC_20_Harris-4web.pdf); CITY OF HOUSTON, TEX., RESILIENT HOUSTON 96 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>24</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 97–98 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

the floodway or floodplain that cannot be reasonably repaired or elevated.<sup>25</sup> This pilot would occur, in addition to buyouts led by HCFCF.

To facilitate a land swap, the city could strategically acquire vacant properties outside the floodplain or at higher elevations to enable buyout participants living in a floodway or the floodplain to relocate to safer homes. In turn, flood-prone properties acquired under the program can be returned to open space and used for flood risk reduction and public amenities.

## ENVIRONMENT

### Green Spaces

Houston's post-Harvey approach to embracing nature involves adopting nature-based approaches for flood control and resiliency purposes.<sup>26</sup> The city's bayous receive significant amounts of pollution, especially during hurricanes and other disaster events. In addition to stormwater runoff, storm surges that result from the wind created by hurricanes carry pollutants and threaten coastal stability by eroding shorelines and disrupting habitats. Goal 9 of Resilient Houston addresses these issues and embraces the role of the area's bayous by incentivizing "water-aware" development, designed to work in tandem with the natural flowing of rivers and bayous, and by employing natural systems to improve and protect surface water quality and coastal protection.<sup>27</sup>

To preserve healthy natural water flows, Houston plans to study, identify, and remove choke points and blockages in bayou systems that cause water backups under Goal 8.<sup>28</sup> These efforts and other conservation measures, such as preserving wetlands, woodlands, and prairies (like the Katy prairie) can promote the natural infiltration and treatment of stormwater to improve water quality. Houston intends to partner with academic and other entities to research and advance nature-based GSI.<sup>29</sup>

### Trees

Planting and restoring native tree cover is part of Resilient Houston's plan for community resilience and stormwater management. Trees not only reduce heat stress through shade cover and buffer floodwaters, but also improve air quality and enhance open spaces. In 2011, 24 consecutive days of 100+ degree temperatures resulted in \$5.2 billion in agricultural losses from interrupted water services and killed 301 million trees.<sup>30</sup> The city's neighborhoods have lost significant tree

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<sup>25</sup> *Id.* at 98.

<sup>26</sup> *Id.* at 25.

<sup>27</sup> *Id.* at 104.

<sup>28</sup> *Id.* at 102.

<sup>29</sup> *Id.*

<sup>30</sup> *Id.* at 27.

cover in recent decades, the ecosystem services value of which has been estimated at \$55 million per year.<sup>31</sup>

As part of the targets included in both Resilient Houston Goal 6 and the city's Climate Action Plan, Houston aims to plant 4.6 million new native trees by 2030.<sup>32</sup> Community partnerships will be used to inform a large-scale planting strategy prioritizing native trees that will replace lost tree canopy starting in the locations with greatest need.<sup>33</sup> This will entail concentrating on areas with minimal green space and areas that lack shade structures.<sup>34</sup> The city will also work to combat challenges to tree planting on streets and sidewalks and encourage private property owners to plant trees.<sup>35</sup> As of 2020, more than 700,000 trees have been planted towards achieving this goal.<sup>36</sup>

In addition to the 4.6 million trees identified in Resilient Houston and the Climate Action Plan, the Houston Parks and Recreation Department (HPARD) is aiming to invest in a legacy tree program to propagate native seedlings and also a nursery to hold 10,000 trees annually.<sup>37</sup> This includes the Linear Forest Program, which seeks to convert mowed esplanades and medians into linear forests by removing that land from the mowing cycle and allowing it to provide shade cover.<sup>38</sup> HPARD also intends to plant more than 200,000 trees as part of its Riparian Restoration Initiative, which restores forested riparian buffers.<sup>39</sup>

## Drainage and Green Infrastructure

Houston has historically addressed upstream flood control by pushing water downstream as quickly as possible. Resilient Houston Goal 11 calls for updating Houston's infrastructure design manual and adopting more comprehensive approaches like encouraging the use of GSI and on-site water capture and retention through best management practices, such as low-impact

<sup>31</sup> *Urban Ecosystem Analysis for the Houston Gulf Coast Region: Calculating the Value of Nature*, AM. FORESTS 12 (2000); CITY OF HOUSTON, TEX., RESILIENT HOUSTON 80 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>32</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 79 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>; CITY OF HOUSTON, TEX., HOUSTON CLIMATE ACTION PLAN 52 (2020), available at <http://greenhoustontx.gov/climateactionplan/CAP-April2020.pdf>.

<sup>33</sup> *Id.* at 80.

<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON, ONE YEAR REPORT 20 (2021), available at <https://www.houstontx.gov/mayor/Resilient-Houston-One-Year-Report.pdf>.

<sup>37</sup> CITY OF HOUSTON, TEX., HOUSTON CLIMATE ACTION PLAN 25 (2020), available at <http://greenhoustontx.gov/climateactionplan/CAP-April2020.pdf>.

<sup>38</sup> Houston Parks & Recreation Dep't, Linear Forest Program, available at <https://www.houstontx.gov/parks/pdfs/LinearForestProgramFN.pdf> (last visited Aug. 16, 2021) (one pager).

<sup>39</sup> Houston Parks & Recreation Dep't, Houston Parks Department Kicks Off Riparian Restoration Initiative (Feb. 6, 2020), available at <https://www.houstontx.gov/parks/pdfs/2020/RiparianRestorationInitiative.pdf> (press release).

development.<sup>40</sup> Resilient Houston outlines proposed initiatives like incorporating large-scale GSI and nature-based planning and design to expand the water detention capacity of bayou corridors. Examples of potential GSI and nature-based projects include: detention basins with permanent pools of water and wetland vegetation, natural stable channel design, riparian restoration, wetlands restoration and preservation, and prairie restoration and preservation.

The city also recommends developing a new resilience quotient points system for GSI projects to better ensure that they provide a more standard or consistent level of benefits for people throughout the city.<sup>41</sup> According to the plan:

The locations for GSI must be determined with an equity lens to ensure that all neighborhoods benefit from this infrastructure. Public GSI projects should consider stormwater management needs, but also impacts on neighborhood economic development and quality of life. A team of internal and external stakeholders will be assembled to determine the specific criteria for ranking GSI projects while hydrologic analyses will be used to understand the best locations for stormwater benefits. These evaluation criteria would then be used in the decision-making processes for GSI project selection to develop the resilience quotient for GSI housing and infrastructure projects. A higher score would indicate a higher project viability.<sup>42</sup>

In addition to promoting large projects and design changes, Resilient Houston Goal 1 aims to grow GSI beginning at both the local and individual parcel levels.<sup>43</sup> To aid these efforts, the city studied how to encourage GSI development in the Incentives for Green Development study (IGD study).<sup>44</sup> The IGD study identifies regulatory flexibility, tax abatements, award and peer-recognition programs, and expedited permitting processes as key opportunities to increase the use of GSI.<sup>45</sup> Regulatory flexibility can take the form of a parallel, GSI-focused permitting and regulatory process for development, which can harmonize parking, landscaping, open space, drainage/detention design, and stormwater quality design. As articulated in the IGD study, the city envisions a bifurcated system where developers could build under existing land-use rules or apply for development permits under a GSI-promoting process.<sup>46</sup> The GSI permitting process could incorporate ideas, such as lower minimum parking requirements.

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<sup>40</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 119 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> *Id.* at 50.

<sup>44</sup> MICHAEL F. BLOOM, JANET CLEMENTS, & ALISA VALDERRAMA, HOUSTON INCENTIVES FOR GREEN DEVELOPMENT (May 2019), available at <http://www.houstontx.gov/igd/documents/igd-report-final.pdf>.

<sup>45</sup> *Id.* at 5.

<sup>46</sup> *Id.* at 34–39.



In preparing the IGD study, stakeholders further indicated that more consistent and faster permitting would incentivize wider adoption of GSI.<sup>47</sup> This would also make GSI more economically feasible by reducing permitting costs. The IGD study cites an example from Dallas that Houston could explore.<sup>48</sup>

Borrowing from the Dallas example, the IGD study identifies broad features of a proposed program.<sup>49</sup> Through the program, developers can choose to pay the city a higher permitting application review fee to gain access to an expedited permitting process that would begin with a city project review team meeting consisting of staff from all relevant departments. The review meeting can occur as soon as a development plan is complete. If possible, all minor changes to a plan can be made during that initial review and city staff can sign off prior to the end of the meeting. If revisions cannot be completed on the spot, a follow up meeting can be scheduled. Once necessary changes are made, permits can be issued. It is important to highlight, however, that this approach will likely require training additional or hiring new city staff with specialized training, which would require an initial financial investment.

Between August 2021 and August 2022, the city is in the process of piloting an expedited permitting process for a minimum of ten projects.<sup>50</sup> Specifically, the city is working with “developers to test, evaluate and formalize the process steps necessary for an expedited review of projects that include nature-based solutions.”<sup>51</sup>

The IGD study also recommends property tax abatements to incentivize GSI.<sup>52</sup> Property tax abatements reduce an owner’s property tax by a certain amount for a specified time to encourage a public benefit.<sup>53</sup> Houston could authorize such a tax abatement through a specific GSI tax abatement or the city’s existing blanket abatement authority.<sup>54</sup> The IGD study shows how tax abatements for GSI can be a trigger point across projects of most scales, with larger tax reductions available for GSI projects that provide more benefits.<sup>55</sup> The IGD study also includes recommendations for working with developers who are working on projects that are large enough to cover the costs associated with GSI projects.<sup>56</sup>

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<sup>47</sup> *Id.* at 34.

<sup>48</sup> *Id.* at 35.

<sup>49</sup> *Id.* at 35–36.

<sup>50</sup> *Incentives for Green Development*, CITY OF HOUSTON, TEX., <http://www.houstontx.gov/igd/> (last visited Jan. 12, 2022).

<sup>51</sup> *Id.*

<sup>52</sup> MICHAEL F. BLOOM, JANET CLEMENTS, & ALISA VALDERRAMA, HOUSTON INCENTIVES FOR GREEN DEVELOPMENT 26 (May 2019), available at <http://www.houstontx.gov/igd/documents/igd-report-final.pdf>.

<sup>53</sup> *Id.*

<sup>54</sup> *Id.*

<sup>55</sup> *Id.* at 27–28.

<sup>56</sup> *Id.*

## Watershed Management Planning

In addition to the recommendations in the IGD study, Goals 8 and 18 of Resilient Houston seek to foster collaboration with other counties and regional entities, including HCFCD, to promote integrated watershed management.<sup>57</sup> Regional cooperation of this kind is consistent with Houston’s efforts under Goal 10 to create a “one water plan” that prioritizes resilient infrastructure and coordinates federal, state, and local efforts to develop a Stormwater Master Plan.<sup>58</sup> This would be in conjunction with incentives for green development to promote tailoring solutions to an area’s hydrology and geology.

Multiple goals in Resilient Houston thus seek to move away from managing flood waters at only the city level and toward conserving natural benefits through local and regional collaboration and innovation. These nature-based drainage approaches include promoting denser urban infill to relieve green spaces, leveraging flood mitigation investments with multi-functional design elements, and incentivizing GSI on private property to “mimic the natural flow of water in pre-development conditions.”<sup>59</sup>

## COMMUNITY ENGAGEMENT

Four of Resilient Houston’s 18 goals directly support “safe and equitable neighborhoods,” which are disaster-ready and supported by equity-focused, localized plans.<sup>60</sup> Noting that urban sprawl and historical land-use practices have had disproportionate negative effects on some communities, Resilient Houston Goal 6 specifically seeks to address environmental injustices.<sup>61</sup> These goals of promoting equitable community growth, a healthy environment, and nature-based stormwater drainage in Resilient Houston will be supported by robust community engagement and outreach. For example, Goal 7 of Resilient Houston seeks to support affordable housing efforts at the community level through an outreach and education campaign aiming to change negative perceptions around affordable housing.<sup>62</sup> To increase energy efficiency and emergency preparedness of homes, the city will aim to partner with energy utilities to promote home retrofit programs and other weatherization efforts.<sup>63</sup>

To promote its GSI-related goals, Resilient Houston Goal 2 is about developing a GSI workforce through partnerships, educational initiatives, and training programs.<sup>64</sup> As proposed, the workforce

<sup>57</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 97, 160 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>58</sup> *Id.* at 116.

<sup>59</sup> *Id.* at 50.

<sup>60</sup> *Id.* at 72–87.

<sup>61</sup> *Id.* at 86.

<sup>62</sup> *Id.* at 89.

<sup>63</sup> *Id.*

<sup>64</sup> *Id.* at 55.

would be supported by trained staff at multiple levels in the Public Works and General Services divisions (and by Resilience Officers in every city department), who will begin filling gaps in the workforce's knowledge and skills related to GSI.<sup>65</sup> The city can support the development of this workforce by using its procurement power to ensure resilience project coordinators hire from public program- and partner program-trained workers. Additionally, the city could partner with local universities and other hosts of potential relevant technical programs that would aid workforce education and training.<sup>66</sup>

This stakeholder input and collaboration will not just contribute to the workforce's development, but will also enable the city to better integrate equity into stormwater management. This collaboration will support efforts to localize resilience, including developing community-based plans to complement city and county plans.

## FUNDING

Resilient Houston identifies a variety of federal, state, local, and private funding opportunities that could be used to implement specific projects over time. Finance is a common theme in the plan, as Houston will need to develop new partnerships and tools to fully implement Resilient Houston.<sup>67</sup> For example, the city became the 101st in the Global Resilient Cities Network and crafted the Resilient Houston Plan with private-sector financial support from Shell.<sup>68</sup> This public-private response to Hurricane Harvey was the first time local financial support was used to develop a resilience strategy.<sup>69</sup> The remainder of that funding was dedicated to supporting implementation of the plan's goals. Houston can further encourage the use of GSI and other resilience measures across both public and private programs by leveraging federal grants to advance resilience goals.<sup>70</sup>

To promote affordable housing and healthy communities, Resilient Houston outlines a new, dedicated housing affordability fund<sup>71</sup> that could be modeled after similar programs in Denver<sup>72</sup>

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<sup>65</sup> Houston has since added two dozen departmental Resilience Officers. See CITY OF HOUSTON, RESILIENT HOUSTON, ONE YEAR REPORT 10 (2021), available at <https://www.houstontx.gov/mayor/Resilient-Houston-One-Year-Report.pdf>.

<sup>66</sup> See, e.g., *Resilience and Climate Progress in Houston*, RICE UNIV., <https://kinder.rice.edu/resilience-and-climate-progress-houston> (last visited Sept. 8, 2021).

<sup>67</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 9 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>68</sup> *Id.* at 36.

<sup>69</sup> *Id.* at 4, 36.

<sup>70</sup> *Id.* at 160.

<sup>71</sup> *Id.* at 74.

<sup>72</sup> The Denver fund was created in the fall of 2016 by a vote of the City Council. The fund is sourced by a one-time fee on new development and property tax revenues, which would raise over \$150 million by 2026 to create and preserve approximately 6,000 affordable housing units for low- to moderate-income families. *Dedicated Affordable Housing Fund*, CITY OF DENVER, COLO. <https://www.denvergov.org/content/denvergov/en/housing->

and Detroit.<sup>73</sup> The fund would promote the development of new affordable housing with access to job centers, addressing the cost and transportation barriers identified in the plan.<sup>74</sup> As envisioned, the fund could be managed through a public-private hybrid model and funding would come from public, private, and philanthropic sources.<sup>75</sup>

## CONSIDERATIONS AND LESSONS LEARNED

Local policymakers can look to Houston as an example of how to build resilience using planning and GSI incentives to reduce flood risk and provide more open space amenities.

Policymakers can enhance the efficacy of resilience measures by planning on different scales. Resilient Houston is one example of how municipalities can create a guiding framework to identify and prioritize resilience actions across different agencies, departments, and stakeholders. This can produce actions that will maximize community benefits and be more efficient with limited government resources.

In Resilient Houston, Houston recognizes the need to go beyond citywide-scale planning to also engage in community-level planning to meet the individual needs of neighborhoods.

In addition to community-level and -driven planning, policymakers can improve watershed management through regional-scale work. Regional watershed coordination can enhance flood readiness by coordinating efforts across multiple jurisdictions experiencing similar risks and challenges.

Further, as proposed in Resilient Houston, promoting the development and preservation of affordable housing in lower-risk areas can help enable voluntary transitions for residents out of the floodplain. Higher-ground infill development can relieve land-use pressures on the floodplain and directly increase community resilience to disaster events, buffer weather conditions like winds and

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[information/partner-resources/build-or-preserve-affordable-housing/denver-dedicated-housing-fund.html](https://www.houston.gov/information/partner-resources/build-or-preserve-affordable-housing/denver-dedicated-housing-fund.html) (last visited Aug. 22, 2021).

<sup>73</sup> Detroit's Strategic Neighborhood Fund is focused on supporting community-driven, neighborhood revitalization investments, such as affordable housing, commercial and mixed-use developments, streetscape improvements, and parks, in historically disinvested neighborhoods like redlined communities. The fund covers ten neighborhoods. Since its inception in 2016, the fund has received \$59 million in city funding and \$56 million in philanthropic grants. The city has been able to leverage this money to raise an additional \$113 million in private investment. *Equitable Rebuilding in Detroit Through the Strategic Neighborhood Fund*, U.S. DEP'T OF HOUS. & URBAN DEV. (July 12, 2021), <https://www.huduser.gov/portal/pdredge/pdr-edge-featd-article-071221.html>. A 2020 University of Michigan study found that residents of the locations supported with the first-round funding reported experiencing rising property values without fear of displacement. LYDIA WILEDEN & AFTON BRANCHE-WILSON, UNIV. OF MICH., DETROIT'S STRATEGIC NEIGHBORHOOD FUND: A BASELINE REPORT OF RESIDENT PERCEPTIONS (2020), available at <https://poverty.umich.edu/files/2020/12/PovertySolutions-StrategicNeighborhoodFund-PolicyReport-r6.pdf>.

<sup>74</sup> CITY OF HOUSTON, TEX., RESILIENT HOUSTON 31 (2020), available at <https://www.houstontx.gov/mayor/Resilient-Houston-20200402-single-page.pdf>.

<sup>75</sup> *Id.* at 74.



storm surge, and manage stormwater. These types of risk mitigation land-use strategies can also conserve open spaces to protect natural resources and the environmental landscapes, such as bayous in Houston, that are important to maintaining local culture and character.

Finally, code flexibility and development incentives can be created using existing municipal authorities, such as tax abatement authority, or through new ordinances to encourage investments in resilience. Other local jurisdictions can borrow ideas from Houston's Incentives for Green Development Study and innovations like the city's pilot expedited permitting process for GSI to increase the use of nature-based solutions to mitigate flood and heat risks and promote environmental and community benefits. In addition, policymakers can consider opportunities to leverage mixed funding sources from federal, state, and local government and philanthropic sources to incentivize private investments in affordable housing and the development of GSI.

# *St. John the Baptist Parish, Louisiana* **Resilient Planning, Affordable Housing, Environmental, and Funding Initiatives**

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## **EXECUTIVE SUMMARY**

St. John the Baptist Parish is one of Louisiana's oldest settled areas. The parish is water-adjacent and predominantly rural. Over the last decade, significant weather events have highlighted the flooding and other risks that come with proximity to both the Gulf of Mexico and Lake Pontchartrain, the latter of which borders the parish. The parish's location in the path of New Orleans's evacuation routes compounds the need to prepare for flooding and hurricane events.

The parish has undertaken several initiatives to adopt development trends and patterns that will guide population growth in ways that make the parish and its communities more resilient to future rainfall and flooding risks. Namely, the parish developed a Comprehensive Land Use Plan in 2014 and a Coastal Zone Management Plan in 2016.<sup>1</sup> Most recently in 2019, the parish partnered with the state and nonprofit philanthropy Foundation for Louisiana through the Louisiana Strategic Adaptations for Future Environments (LA SAFE) capital improvement process to create an Adaptation Strategy.

Collectively, the plans offer a variety of principles, goals, and policies related to the parish's growth and development. Those policies and development planning goals encompass prioritizing natural features, such as adopting green stormwater infrastructure (GSI) solutions and conserving open space, in addition to addressing the socioeconomic dynamics that come with planning for affordable housing. In general, the parish seeks to preserve low-density and conservation-oriented development trends across most of the parish, much of which is flood-prone. This approach will discourage floodplain and open space development by directing population growth and affordable housing investments toward drier, denser areas of the parish. These efforts are supported by public engagement, external partnerships, and federal and innovative funding sources.

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<sup>1</sup> Note, this list is not exhaustive of plans related to affordable housing, flood mitigation, and resilience in the parish. For example, the parish created a Recovery Plan post-Hurricane Isaac. This list is only intended to be representative of the plans discussed in this entry.

Other local policymakers working to address rural flood, population growth, and housing management issues can look to St. John the Baptist for their policies directing population growth toward denser, more urban areas. Those policies allow the parish to preserve rural and flood-prone areas and maintain parish character and reduce risk to homes and infrastructure.

## BACKGROUND

St. John the Baptist is a rural parish in Louisiana with a total population of approximately 42,000 residents.<sup>2</sup> The parish's population increased after Hurricane Katrina devastated New Orleans, though St. John itself is vulnerable to Gulf Coast hurricanes.<sup>3</sup> One of the original 19 parishes created from the Territory of Orleans, St. John the Baptist was the second permanent settlement in Louisiana.<sup>4</sup> Over a dozen parish structures are listed in the National Register of Historic Places.<sup>5</sup>

The area is 213 square miles, and the largest population center is an unincorporated, Census-designated area called LaPlace.<sup>6</sup> Median household income is slightly higher than the state average, though the proportion of people with bachelor's degrees is lower.<sup>7</sup> English is the only language in 93 percent of households, and 88 percent of workers travel alone by car to work.<sup>8</sup> Mean travel time to work is 30 minutes.<sup>9</sup> As a history-rich parish with agrarian roots, the parish's residents generally support low-density rural development and historical preservation.<sup>10</sup>

The parish's proximity to the Gulf puts it at risk of hurricane damage. As such, storms like Katrina, Isaac, and Ida have caused severe damage in southern parishes like St. John. Following the post-

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<sup>2</sup> *St. John the Baptist Parish, Louisiana*, U. S. CENSUS BUREAU, <https://data.census.gov/cedsci/profile?g=0500000US22095> (last visited Sept. 21, 2021).

<sup>3</sup> Matt Scallan, *Population in St. John, St. Charles parishes nears 100,000 mark*, NOLA (Feb. 22, 2011), [https://www.nola.com/news/politics/article\\_0f3cab98-188e-5230-a358-3a9c066e09.html](https://www.nola.com/news/politics/article_0f3cab98-188e-5230-a358-3a9c066e09.html).

<sup>4</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 83 (2019), *available at* <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

<sup>5</sup> *Id.*

<sup>6</sup> *Quick facts: St. John the Baptist Parish, Louisiana*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/stjohnthebaptistparishlouisiana/POP010220> (last visited Sept. 21, 2021).

<sup>7</sup> Median household income in the parish is \$57,000, while the state average is \$51,000. Twenty-five percent of individuals in the state have a bachelor's degree or higher, while 16 percent of the residents in St. John have a bachelor's or higher. *St. John the Baptist Parish, Louisiana*, U.S. CENSUS BUREAU, <https://data.census.gov/cedsci/profile?g=0500000US22095> (last visited Sept. 21, 2021).

<sup>8</sup> *Id.*

<sup>9</sup> *Quick facts: St. John the Baptist Parish, Louisiana*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/stjohnthebaptistparishlouisiana/POP010220> (last visited Sept. 21, 2021).

<sup>10</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 83 (2019), *available at* <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>; ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 83 (2014), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

Katrina population rise in the parish, Isaac damaged over 12,000 parish homes (nearly half the homes that existed in the parish pre-Isaac).<sup>11</sup> In 2021, Ida flooded numerous homes, resulting in stranded residents and evacuations.<sup>12</sup>

The parish also has significant relationships to several large inland bodies of water, and nearly half the parish's total area is classified as some form of wetland.<sup>13</sup> Even more of the parish (nearly 90 percent) is designated as a Special Flood Hazard Area (SFHA), which consists of the 100-year or one-percent annual chance floodplain.<sup>14</sup> The Mississippi River bifurcates the north and south halves of the parish, and its northern extension is bordered by Lake Pontchartrain to the east and Lake Maurepas to the northwest. The southern half of the parish wraps around a portion of Lac Des Allemands, another local water body. The parish is also bifurcated by Interstate 10, which runs parallel to the Mississippi River. Interstate 10, the main egress route for the New Orleans area during weather-related evacuation events, is also the main egress route for St. John in addition to St. Charles and St. James parishes.<sup>15</sup>

## OVERVIEW OF SELECT PARISH PLANNING EFFORTS

In response to impacts from repeated hurricanes and weather events, the parish has taken multiple initiatives to address these risks that come from its proximity to both rising sea levels and congestion-prone evacuation routes. The parish is a Class Seven participant in the National Flood Insurance Program (NFIP)'s Community Rating System (CRS), and is a member of a CRS user group facilitated by a regional collaborator.<sup>16</sup>

<sup>11</sup> Littice Bacon-Blood, *St. John Parish bounces back from Hurricane Isaac*, NOLA (Aug. 23, 2021), [https://www.nola.com/news/weather/article\\_2fd6be93-3472-51a6-9486-767cfa89477a.html](https://www.nola.com/news/weather/article_2fd6be93-3472-51a6-9486-767cfa89477a.html).

<sup>12</sup> Julia Jacobo, Emily Shapiro, Ivan Pereira, Morgan Winsor, & Bill Hutchinson, *Almost 800 rescued in St. John the Baptist Parish after Hurricane Ida*, ABC NEWS (Aug. 30, 2021), <https://abcnews.go.com/US/live-updates/hurricane-ida-new-orleans-live-updates/?id=79696173>.

<sup>13</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 165 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>14</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 60 (2019), available at <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

<sup>15</sup> West Shore Lake Pontchartrain, U. S. ARMY CORPS OF ENG'RS, <https://www.mvn.usace.army.mil/About/Projects/BBA-2018/West-Shore-Lake-Pontchartrain/id/1244/> (last visited Sept. 21, 2021).

<sup>16</sup> *Community Rating System Users Groups > FLOAT*, FED. EMERGENCY MGMT. AGENCY, <http://floodhelp.uno.edu/Portal.aspx?ContentID=91> (last visited Oct. 27, 2021).

The parish's 2014 Comprehensive Land Use Plan, a plan which serves as a prospective statement of policy to guide the parish's future development.<sup>17</sup> The parish code has begun to be updated to incorporate this plan.<sup>18</sup>

In addition, the parish developed both a 2016 Coastal Zone Management Plan and 2019 Parish Adaptation Strategy, to be consistent with the comprehensive plan. The Coastal Zone Management Plan aims to protect, restore, and enhance the parish's coastal environment for its natural services including wildlife habitat, flood mitigation, and commercial uses.<sup>19</sup>

The parish Adaptation Strategy was created through the Louisiana Strategic Adaptations for Future Environments or "LA SAFE" community-based, capital investment process led by the Louisiana Office of Community Development and nonprofit philanthropy Foundation for Louisiana.<sup>20</sup> The strategy serves as a community-led resilience blueprint for the parish, and is meant to inform adaptation efforts at the parish level including flood risk reduction measures and preparing for influxes of individuals from other areas.<sup>21</sup> The parish formally adopted the Adaptation Strategy by ordinance.

This summary will highlight resilience measures the parish is taking under each of these plans, in addition to zoning measures related to promoting affordable housing and green spaces. Other plans and initiatives are discussed where relevant.

## HOUSING

Development and community expansion in St. John the Baptist Parish are constrained by area: the northern part of the parish includes the Maurepas Swamp Wildlife Management Area, the portions of the parish along the Mississippi have industrial buffer zones, and much of the parish is at risk

<sup>17</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 19 (2014), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>18</sup> *See e.g.*, ST. JOHN THE BAPTIST PARISH CODE OF ORDINANCES ch. 1, art. I, § 111-1 (2019), *available at* [https://library.municode.com/la/st.\\_john\\_the\\_baptist\\_parish/codes/code\\_of\\_ordinances?nodeId=SPBLADERE\\_CH1\\_11SU\\_ARTIINGE\\_S111-1WOPHDE](https://library.municode.com/la/st._john_the_baptist_parish/codes/code_of_ordinances?nodeId=SPBLADERE_CH1_11SU_ARTIINGE_S111-1WOPHDE); *Id.* at ch. 113, art. IV, § 113-624 (2017), *available at* [https://library.municode.com/la/st.\\_john\\_the\\_baptist\\_parish/codes/code\\_of\\_ordinances?nodeId=SPBLADERE\\_CH1\\_13ZO\\_ARTVISI\\_DIV1IN\\_S113-624PUIN](https://library.municode.com/la/st._john_the_baptist_parish/codes/code_of_ordinances?nodeId=SPBLADERE_CH1_13ZO_ARTVISI_DIV1IN_S113-624PUIN); *Id.* at ch. 113, art. IV, § 113-626 (2018), *available at* [https://library.municode.com/la/st.\\_john\\_the\\_baptist\\_parish/codes/code\\_of\\_ordinances?nodeId=SPBLADERE\\_CH1\\_13ZO\\_ARTVIIPA\\_S113-676PUIN](https://library.municode.com/la/st._john_the_baptist_parish/codes/code_of_ordinances?nodeId=SPBLADERE_CH1_13ZO_ARTVIIPA_S113-676PUIN).

<sup>19</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COASTAL ZONE MANAGEMENT PLAN I-1 (2016), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/program-document-czmp.pdf>.

<sup>20</sup> Jennifer Li & Alex Love, Georgetown Climate Ctr., Managing the Retreat From Rising Seas — State of Louisiana: Louisiana Strategic Adaptations for Future Environments (LA SAFE) (2020), *available at* <https://www.adaptationclearinghouse.org/resources/managing-the-retreat-from-rising-seas-ao-state-of-louisiana-louisiana-strategic-adaptations-for-future-environments-la-safe.html>.

<sup>21</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 5 (2019), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/program-document-czmp.pdf>.



of flood hazards.<sup>22</sup> These space constraints and low-density development trends have together contributed to housing supply gaps. This has resulted in a nearly-homogenous single-family landscape that has contributed to the growth in the number of manufactured homes in the parish, which serve as the predominant type of affordable housing for many people and families.<sup>23</sup> As of 2014, manufactured homes were the second most common type of housing in the parish.<sup>24</sup> Further, the overall majority of homes in the parish are slab on grade, which exacerbates flood risk for these non-elevated structures.

The parish's 2014 Comprehensive Land Use Plan identifies a lack of housing options as a specific area of focus.<sup>25</sup> To address this issue while preserving the parish's rural nature, the parish will aim to encourage new residential subdivision development only in non-rural areas that are already served by infrastructure, or where infrastructure can be constructed more easily.<sup>26</sup> By encouraging residential infill development, this approach can reduce sprawl and therefore, alleviate some of the pressure to invest in new and expensive infrastructure.<sup>27</sup> Increasing urban development density relieves development pressure on the parish's rural areas, floodplain, and environmentally sensitive resources.<sup>28</sup> Similarly, one goal in the 2019 Adaptation Strategy is to encourage Smart Growth (such as infill development in low-risk areas) to mitigate flood risk.<sup>29</sup> This can allow the construction of cost-efficient, pedestrian-oriented housing outside the floodplain and preserve the parish's rural areas from development.

The parish Land Use Plan seeks to promote the development of affordable housing through partnership opportunities with private sector entities to provide assistance for acquiring, rehabilitating, and constructing homes for low-income, first-time buyers, and assistance for redevelopment and rehabilitation projects.<sup>30</sup> Incentives may include financial assistance to nonprofits that purchase, redevelop, and resell vacant properties to low-income residents, and promoting innovative personal financing options for homeowners. The Adaptation Plan echoes

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<sup>22</sup> *Id.* at 71.

<sup>23</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 27–28, 30, & 89 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>24</sup> *Id.* at 27–28.

<sup>25</sup> *Id.*

<sup>26</sup> *Id.* at 2, 15, & 50–51.

<sup>27</sup> *Id.* at 51 & 176.

<sup>28</sup> *Id.* at 50.

<sup>29</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 49 & 86 (2019), available at <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

<sup>30</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 96 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

this policy, recognizing that housing incentive programs can be used to promote movement into higher-density, higher-elevation areas.<sup>31</sup>

Through the Land Use Plan, the parish will aim to avoid concentrating low-income residents and families in certain parts of the parish, instead promoting mixed-income communities with improved access to transportation, job centers, education, and recreation.<sup>32</sup> Financing options like the federal Low Income Housing Tax Credit can facilitate this type of mixed-income development.<sup>33</sup> The Land Use Plan supports these efforts by encouraging the development of revitalization plans for target neighborhoods.<sup>34</sup>

## ENVIRONMENT

The residents of St. John the Baptist generally favor development patterns that preserve the parish's low-density rural character and historical features.<sup>35</sup> As a result, conservation measures including protecting wetlands, trees, and open spaces and promoting the use of GSI are consistent with the parish's priorities and aesthetic. Conservation itself comes with tangible benefits for St. John the Baptist because of the rich hunting, fishing, and other cultural, recreational, and economic assets that a biodiverse ecosystem creates.<sup>36</sup>

## Wetlands, Open Spaces, and Floodplain Management

In all three plans, wetlands protection policies reflect the importance of the parish's relationship with wetlands and water. The Comprehensive Plan seeks to limit wetlands development through innovative methods like transferring development rights from privately owned wetlands to other developable lands.<sup>37</sup> In the Coastal Plan, the parish recommends regulating development to avoid damaging wetlands and requiring development-related harms to wetlands be mitigated where they cannot be fully avoided.<sup>38</sup> Finally, the Adaptation Strategy recommends coordinating with the U.S.

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<sup>31</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 129 (2019), *available at* <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>; St. John the Baptist Ordinance 19-43, "An ordinance adopting the St. John the Baptist Parish Adaptation Strategy developed by the Louisiana Strategic Adaptations for Future Environments (LA SAFE) Program to help guide resilient development in the face of growth and environmental change for the safety and welfare of St. John Parish residents." (adopted by the St. John the Baptist Parish Council on Sept. 24, 2019).

<sup>32</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 8 & 97 (2014), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>33</sup> *Id.* at 97.

<sup>34</sup> *Id.* at 97–98.

<sup>35</sup> *Id.* at 43.

<sup>36</sup> *Id.* at 161 & 171.

<sup>37</sup> *Id.* at 158.

<sup>38</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COASTAL MANAGEMENT PLAN 5–7 (2016), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/program-document-czmp.pdf>.

Army Corps of Engineers (USACE) and the Louisiana Coastal Protection and Restoration Authority to leverage other ongoing coastal protection and restoration efforts.<sup>39</sup>

In addition to wetlands, the Comprehensive Plan similarly aims for the parish to conserve open spaces as natural assets for their ecosystem services and values. As such, the plan includes policy goals to protect the natural environment and rural spaces from overdevelopment.<sup>40</sup> These goals are consistent with land-use designations elsewhere in the Comprehensive Plan, which mark most of the 100-year floodplain for undevelopable or agricultural land uses (no distinction is made between the two due to their interspersing throughout the parish).<sup>41</sup> The Comprehensive Plan thus calls for the limited development of usable open spaces and trails, such as by incentivizing clustered development.<sup>42</sup> The parish can also promote land-use patterns that will avoid or mitigate negative impacts on the local environment, encourage a variety of open spaces, and embrace Smart Growth, such as building standards for some types of new development that consider a maximum walking distance to nearby open spaces to ensure that people can be close to places like parks.<sup>43</sup>

The parish further hopes to preserve floodplains as undeveloped open space, where minimal-impact uses like walking trails and other passive recreation can be prioritized instead of other types of development in the most flood-prone areas.<sup>44</sup> The Comprehensive Plan expressly discourages residential development in the 100-year floodplain and other environmentally sensitive areas.<sup>45</sup> This goal can be aided by the parish's policy of encouraging development in areas already served by infrastructure and the parish.<sup>46</sup> This use of infill to reduce flood risk synergizes with affordable housing development goals, as denser infill outside the floodplain reduces flood risk and distance to economic centers. The 2019 Adaptation Strategy reiterates this goal, and recommends updating the parish's zoning code to limit development in these areas while increasing the parish's use of green buffers.<sup>47</sup>

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<sup>39</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 124 (2019), *available at* <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

<sup>40</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 10 & 48 (2014), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>41</sup> *Id.* at 49.

<sup>42</sup> *See generally* the Affordable Housing segment of this text *supra*; ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 55 & 176 (2014), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>43</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 178 (2014), *available at* <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>44</sup> *Id.* at 55.

<sup>45</sup> *Id.* at 50.

<sup>46</sup> *Id.* at 2, 15, & 50–51.

<sup>47</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 49 (2019), *available at* <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

Preserving floodplain open space is consistent with the parish's goal of preserving natural hydrologic cycles for their natural benefits and resilience values.<sup>48</sup> This includes preventing damage to aquatic ecosystems as a result of development, such as restoring and/or mitigating any damages caused by development. Permeable pavement systems, rain gardens, and green infrastructure are all therefore encouraged.

## Drainage

As laid out in the plans, the parish will aim to pursue projects that promote localized drainage projects like retention ponds, provide assistance to homeowners for flood risk mitigation, and leverage grant funding to acquire and floodproof repetitive loss structures. One such example comes from the Adaptation Strategy, which recommends developing policy mechanisms to allow for shared water detention areas.<sup>49</sup> Both the Comprehensive Plan and Adaptation Plan seek to complement hazard mitigation efforts through community outreach, such as making hazard mitigation knowledge available at schools and libraries.<sup>50</sup>

## Trees

Underscoring all of these efforts is the increased planting and maintenance of trees and vegetation. The parish Comprehensive Plan recognizes the use of native and noninvasive tree and plant species as a benefit to community health and resilience.<sup>51</sup> In that plan, the parish therefore calls for incorporating those plant species into landscaping designs in greenway development and other public spaces, and using trees, vegetation, and other green buffers to reduce stormwater runoff.

## Projects and Implementation

The parish's policies for open spaces, drainage, and trees can be seen in projects that have been undertaken since the Comprehensive Plan was adopted. Two areas identified as higher-flood risk in the plan have been the subject of streetscape and stormwater management enhancements. In addition, the parish has adopted a loan program to catalyze community projects, including

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<sup>48</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 182 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>; ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COASTAL MANAGEMENT PLAN 5-3 (2016), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/program-document-czmp.pdf>.

<sup>49</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 109 (2019), available at <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

<sup>50</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 159 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>; ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 109 (2019), available at <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

<sup>51</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 179 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

refurbishing parking lots to increase green space and stormwater management potential, while improving local community aesthetics.<sup>52</sup> Lastly, the parish worked with the Army Corps of Engineers to address flood risks on the west side of Lake Pontchartrain.

Through the LA SAFE program, the state funded and supported the development of the parish's Adaptation Strategy. To aid the creation and implementation of that strategy document, the parish chose to restructure its zoning department to include a Coastal and Water Management Division, the first parish division dedicated to that purpose.

As part of that strategy, the state is funding two resilience projects prioritized by parish residents during LA SAFE's public engagement process.<sup>53</sup> The first is a complete streets project at Airline Highway and Main Street in LaPlace, the parish's largest population center.<sup>54</sup> The project, slated to be completed in May 2022, is funded through the state Office of Community Development as part of the National Disaster Resilience Competition.<sup>55</sup> The project includes green infrastructure installations to manage stormwater runoff, permeable parking, native plants, bike lanes, and sidewalks.

A second project is underway for the Belle Terre Boulevard streetscape, where complete streets will be developed to stimulate economic activity in the area while using green infrastructure to address flooding issues.<sup>56</sup> The project is an example of comprehensive design that aims to grow transit, resilience, hazard mitigation, and economic development benefits. This project is funded by the Gulf Coast Conservation Trust Fund.<sup>57</sup> This fund was established by the 2012 Revived Economies of the Gulf Coast States (RESTORE) Act to allocate penalties from the Deepwater Horizon oil spill to promote restoration, conservation, green infrastructure, and tourism in Louisiana.<sup>58</sup>

Two other projects unaffiliated with but similar to the LA SAFE projects — the Manchac Greenway and Garyville streetscape projects — are still in early stages of development.

Lastly, levees are being used to reduce storm surge risks from erosion of Lake Pontchartrain's shoreline and during severe weather events, consistent with the goals of the Coastal Management

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<sup>52</sup> *Id.* at 174.

<sup>53</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 35 (2019), *available at* <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

<sup>54</sup> *Airline and Main Complete Streets*, ST. JOHN THE BAPTIST PARISH, <https://www.sjbparish.gov/Departments/Planning-and-Zoning/Resilience-Projects#section-3> (last visited Sept. 27, 2021).

<sup>55</sup> *National Disaster Resilience*, U.S. DEP'T OF HOUSING & URBAN DEV., <https://www.hudexchange.info/programs/cdbg-dr/resilient-recovery/> (last visited Sept. 27, 2021).

<sup>56</sup> *Airline and Main Complete Streets*, ST. JOHN THE BAPTIST PARISH, <https://www.sjbparish.gov/Departments/Planning-and-Zoning/Resilience-Projects#section-5> (last visited Sept. 27, 2021).

<sup>57</sup> *Id.*

<sup>58</sup> *Id.*



Plan.<sup>59</sup> When the parish drafted its 2014 Comprehensive Master Plan, it specifically mentioned the then-proposed West Shore of Lake Pontchartrain Hurricane Protection Levee as a preventative measure that would reduce flood risk due to storm surge from the lake.<sup>60</sup> This is consistent with the parish's observations that significant flood risks exist for LaPlace, the parish proper, and the evacuation routes into and out of the parish including Interstates 10 and 55.<sup>61</sup> Using a combination of statutory funding from the Gulf of Mexico Energy Security Act of 2006 (GOMESA) and municipal bonding, the parish contributed nearly \$10 million to the levee project, which is expected to be completed in 2022.<sup>62</sup>

In addition, the parish contributed nearly \$10 million to a separate project to construct a breakwater system along the shoreline of Lake Pontchartrain as an additional line of defense from storm surge.

## Place-Based Investment Loan Program

The parish has also established a local place-based loan program, which offers no-interest loans up to \$50,000 to projects for businesses and nongovernmental organizations.<sup>63</sup> The program covers the parish's four historic overlay districts and the major corridor overlay district. The program prioritizes projects that can leverage this funding to attract private investment. Forty percent of the loan amount issued under the program is forgivable when a project is completed.<sup>64</sup> Funding comes from a post-Hurricane Isaac Community Development Block Grant for Disaster Recovery (CDBG-DR) from the U.S. Department of Housing and Community Development (HUD).

Three categories of projects are eligible for this program: replacing commercial signs, refurbishing and/or greening parking lots for better aesthetics and stormwater management, and making facade improvements for historical commercial structures. While the program is not limited to GSI, those goals are explicitly within the scope of the loan fund when applied to parking lots in historic or

<sup>59</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COASTAL MANAGEMENT PLAN 5-6 (2016), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/program-document-czmp.pdf>.

<sup>60</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 28 & 154 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>61</sup> Interstate 10 runs from east to west and serves as an egress route from New Orleans. Interstate 55 runs north to south and allows northward egress from St. John the Baptist Parish. ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 28 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbpcmpresilienceplan-8-18-14.pdf>.

<sup>62</sup> *Airline and Main Complete Streets*, ST. JOHN THE BAPTIST PARISH, <https://www.sjbparish.gov/Departments/Planning-and-Zoning/Resilience-Projects#section-5> (last visited Sept. 27, 2021).

<sup>63</sup> *Place-based Investment Loan Program Frequently Asked Questions*, ST. JOHN THE BAPTIST PARISH (July 2019), available at [https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/faqs-sjb-place-based-investment-program\\_17july-2019\\_final.pdf](https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/faqs-sjb-place-based-investment-program_17july-2019_final.pdf).

<sup>64</sup> *Place-based Investment Loan Program*, ST. JOHN THE BAPTIST PARISH, <https://www.sjbparish.gov/Departments/Planning-and-Zoning/Place-Based-Investment-Loan> (last visited Sept. 27, 2021).

corridor districts. This includes reducing the amount of impervious space in a lot, preserving green space, and other green stormwater management methods.<sup>65</sup>

## COMMUNITY ENGAGEMENT

Each of the parish's plans involves community engagement in its planning or implementation goals. The Comprehensive Land Use Plan was developed through a collaborative process, which drew input from a diverse set of entities including parish residents, government officials, and various stakeholders.<sup>66</sup> This collaboration informed parish planners about residents' desires to preserve the low-density nature of the parish.

The Coastal Management Plan calls for a coastal zone management education and outreach program that trains staff to speak at local civic and educational events, make agency educational materials, maps, and other tools available, and create volunteer opportunities.<sup>67</sup>

The LA SAFE process, which resulted in the selection of the Airline Highway and Main Street project and the development of the 2019 Adaptation Strategy, involved an extensive outreach and engagement process. Specifically, interested community members were engaged in a detailed set of workshops to input on project priorities and preferences.<sup>68</sup> The strategy's socioeconomic and resilience goals include integrating adaptation practices into all levels of government and each level of the educational system.<sup>69</sup>

## FUNDING

The Comprehensive Plan identifies multiple prospective funding sources to support the plan's initiatives and goals.<sup>70</sup> While the parish has a variety of funding sources (some for particular purposes, such as dedicated entertainment-sector funding for the Parks and Recreation Department), sources are often limited or are affected by economic conditions. In addition to general property taxes and municipal bonds, the parish describes special taxing districts,

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<sup>65</sup> *Place-based Investment Loan Program Frequently Asked Questions*, ST. JOHN THE BAPTIST PARISH (July 2019), available at [https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/faqs-sjb-place-based-investment-program\\_17july-2019\\_final.pdf](https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/faqs-sjb-place-based-investment-program_17july-2019_final.pdf).

<sup>66</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 1 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbcompresilienceplan-8-18-14.pdf>.

<sup>67</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COASTAL MANAGEMENT PLAN 5-12 (2016), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/program-document-czmp.pdf>.

<sup>68</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH ADAPTATION STRATEGY 14-35 (2019), available at <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St.+John+the+Baptist+Adaptation+Strategy.pdf>.

<sup>69</sup> *Id.* at 103.

<sup>70</sup> ST. JOHN THE BAPTIST PARISH, ST. JOHN THE BAPTIST PARISH COMPREHENSIVE LAND USE PLAN 199 (2014), available at <https://www.sjbparish.gov/files/sharedassets/public/planning-amp-zoning/sjbcompresilienceplan-8-18-14.pdf>.

recreational impact fees, state community development funds, corporate and community sponsorship, leasing of public property, and other various grant programs.<sup>71</sup>

The LA SAFE planning process was funded by the Louisiana Office of Community Development (OCD).<sup>72</sup> OCD received a CDBG–DR grant through HUD’s National Disaster Resilience Competition, which funded LA SAFE and the parish’s adaptation projects.<sup>73</sup>

Regardless, it is important to note that some of the various plan’s goals related to affordable housing and flood mitigation can be implemented without funding for example, by updating parish zoning and land-use regulations.

## NEXT STEPS

The parish has undertaken some work to downzone some of its most vulnerable conservation areas and create incentives to direct population growth into already-populated areas. However, these initiatives are still being implemented parish-wide. The parish is also working with the Center for Planning Excellence to update its zoning and subdivision code language to better incorporate resilience strategies.

The parish is also in the process of evaluating the Community Rating System Assessment developed as a part of the LA SAFE Adaptation Strategy to deepen its participation in the CRS program.<sup>74</sup> The parish updated the strategy to reflect the current CRS class and credit, and created an updated list of goals to accomplish before the 2024 CRS cycle visit in order to potentially reach a Class Five, from a Class Seven status.

## CONSIDERATIONS AND LESSONS LEARNED

Policymakers in rural Gulf areas seeking to manage population growth and flooding hazards can look to St. John the Baptist for its innovative zoning and planning practices, and the dedication of staff to coastal and floodplain management. One such initiative is the parish’s place-based loan program, which can incentivize developers and businesses to adopt GSI practices.

Policymakers may also look to St. John’s coordination of its Land Use, Coastal Management, and Adaptation Strategy plans. The parish’s plans are designed to work in tandem, thus maintaining consistent objectives across different initiatives and sectors. To date, St. John is also the only parish

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<sup>71</sup> *Id.* at 201–02.

<sup>72</sup> Jennifer Li & Alex Love, Georgetown Climate Ctr., Managing the Retreat From Rising Seas — State of Louisiana: Louisiana Strategic Adaptations for Future Environments (LA SAFE) (2020), *available at* <https://www.adaptationclearinghouse.org/resources/managing-the-retreat-from-rising-seas-eo-state-of-louisiana-louisiana-strategic-adaptations-for-future-environments-la-safe.html>.

<sup>73</sup> *Id.*

<sup>74</sup> COMMUNITY RATING SYSTEM ASSESSMENT — ST. JOHN THE BAPTIST PARISH, *available at* <https://s3.amazonaws.com/lasafe/Final+Adaptation+Strategies/St++John+Parish+Final+CRS+Report.pdf>.

of six that participated in the LA SAFE process to formally adopt its LA SAFE Adaptation Strategy. This unified approach streamlines the parish's multi-plan efforts to manage growth in ways that preserve rural and flood-prone areas from development pressure.

The parish also serves as an example of one way to overcome capacity issues. Limited staff capacity can be an implementation challenge for smaller governments. By reorganizing its zoning department to create a dedicated coastal and floodplain management division, St. John relieved some of the pressure it was facing to incorporate resilience principles into its work. Other smaller parishes may similarly evaluate options to restructure their teams to adapt to evolving priorities and needs.

# *City of Asheville, North Carolina*

## **Affordable Housing, Environmental, and Climate Resiliency Initiatives**

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### **EXECUTIVE SUMMARY**

In recent years, Asheville, North Carolina has faced population growth and affordable housing challenges compounded by climate change. Against this backdrop, Asheville also recognizes the importance of retaining its unique sense of place, culture, and character, including protecting trees and natural landscapes. As such, the city is working to ensure that it creates a healthy, livable community resilient to these and other impacts.

Over the last two decades, Asheville has released several plans, assessments, and policies related to growing the city's climate and environmental resilience and ensuring an adequate affordable housing stock. Accordingly, the city has pursued — and plans to continue pursuing — strategies that preserve the city's culture and character while making the area a safer, more affordable place. Many of these strategies are facilitated through prioritizing the environment and affordable housing in different city plans and incentives-based amendments to zoning ordinances. Asheville serves as an example for other jurisdictions seeking to integrate climate and resilience elements within local governance structures, plans, and zoning ordinances while tackling other local challenges, such as maintaining or increasing affordable housing stock or retaining a distinct local culture.

### **BACKGROUND**

Asheville, North Carolina in Buncombe County is the largest city in western North Carolina. It is located in the Blue Ridge Mountains at the confluence of two rivers. Approximately 90,000 residents live in the city, which is classified as a medium-sized, metropolitan-urban area.<sup>1</sup> Asheville's economy is driven by several industries including healthcare, travel and tourism, and many small businesses, entrepreneurs, and breweries that capitalize on the city's natural landscape, art, culture, music, and entertainment.<sup>2</sup>

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<sup>1</sup> *QuickFacts: Asheville City, North Carolina, U.S.* CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/ashevillecitynorthcarolina/POP060210> (last visited July 3, 2021).

<sup>2</sup> *Community and Economic Development*, CITY OF ASHEVILLE, <https://www.ashevillenc.gov/department/community-economic-development/> (last visited Dec. 16, 2021).



According to the U.S. Census Bureau, Asheville's population is predominantly white.<sup>3</sup> As of 2019, about 48 percent of Asheville's residents were homeowners and the median home price was \$270,400.<sup>4</sup> Approximately 14 percent of Asheville's residents fall below the national poverty line.<sup>5</sup>

The main climate-related threats facing Asheville are extreme rainfall and flood events, drought and wildfires, and temperature variability, including extreme heat events.<sup>6</sup> Despite those threats, the population of residents in the city and the surrounding metropolitan areas have grown consistently over the last four decades.<sup>7</sup> According to the U.S. Census Bureau, Buncombe County's population rose more than ten percent to more than 260,000 between 2010 and 2019.<sup>8</sup> This percentage was more than double that of the state's population growth and nearly ten times the national percentage.<sup>9</sup>

These climate and growth challenges are compounded by a fiscal one as Asheville is striving to "[support] a regional economy" beyond municipal boundaries and meet the needs of its existing residents.<sup>10</sup> According to a 2010 report commissioned by the city, Asheville must consider ways to collect more revenues (e.g., annex more land, increase property taxes) as it asks the question, "What kind of city do we want to be, and what will it take to get there?"<sup>11</sup> As such, Asheville is taking steps to combat climate change and to ensure that both current and future residents are resilient to the impacts of climate change.<sup>12</sup>

<sup>3</sup> QuickFacts: Asheville City, North Carolina, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/ashevillescitynorthcarolina/POP060210> (last visited July 3, 2021).

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> James Hrynshyn, *Asheville Makes a Plan for Climate Resilience*, U.S. CLIMATE RESILIENCE TOOLKIT (June 4, 2021, 4:45 P.M.), <https://toolkit.climate.gov/case-studies/asheville-makes-plan-climate-resilience>.

<sup>7</sup> See *Asheville, North Carolina Population 2021*, WORLD POPULATION REV., <https://worldpopulationreview.com/us-cities/asheville-nc-population> (last visited July 3, 2021); John Boyle, *Asheville population growth slumping as surrounding areas pick up pace*, CITIZEN TIMES (Sept. 11, 2019, 10:11 AM), <https://www.citizen-times.com/story/news/local/2019/09/11/asheville-population-growth-slowing-surrounding-areas-pick-up/2125401001/>.

<sup>8</sup> QuickFacts: Buncombe County, North Carolina, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/buncombecountynorthcarolina> (last visited Dec. 16, 2021); Tom Fiedler, *Come Hell or High Water, Asheville is Climate 'Winner'*, N.C. PUB. RADIO (Mar. 17, 2021, 5:53 P.M.), <https://www.wunc.org/environment/2021-03-17/come-hell-or-high-water-asheville-is-climate-winner>.

<sup>9</sup> Tom Fiedler, *Come Hell or High Water, Asheville os Climate 'Winner'*, N.C. PUB. RADIO (Mar. 17, 2021, 5:53 P.M.), <https://www.wunc.org/environment/2021-03-17/come-hell-or-high-water-asheville-is-climate-winner>.

<sup>10</sup> ASHEVILLE, NC 2010: A FINANCIAL CROSSROADS 10 (Jan. 4, 2010).

<sup>11</sup> *Id.* at 1.

<sup>12</sup> See Asheville City Council Res. No. 20-25 (2020), available at [https://drive.google.com/file/d/0B5AwblIdPA9m\\_MmFDUE5JaGwwRXBGS3VOeGctUXJCUzk1ZHNv/view?resourcekey=0-sSX\\_QpLeigwKFS4RmUPJw](https://drive.google.com/file/d/0B5AwblIdPA9m_MmFDUE5JaGwwRXBGS3VOeGctUXJCUzk1ZHNv/view?resourcekey=0-sSX_QpLeigwKFS4RmUPJw).

## OVERVIEW OF SELECT PLANS AND ZONING INITIATIVES

Since the mid-2000s, the City of Asheville has undertaken a significant number of assessment and planning efforts to ensure that Asheville will be a resilient, affordable, and attractive community. In 2018, the City Council of Asheville adopted Living Asheville: A Comprehensive Plan for Our Future. Living Asheville presents a vision for the city for the subsequent ten to 20 years with long-range goals and strategies for local governance, as well as an ambitious agenda and toolkit of ideas that can be used across the city's various departments.<sup>13</sup> Living Asheville is organized around six themes to help guide decisionmaking with respect to the key ongoing challenges and opportunities for: fostering a livable and affordable built environment; to ensure harmony with the natural environment; to grow a resilient economy; to promote interwoven equity; to ensure a healthy community; and to bolster responsible thinking at the regional scale.<sup>14</sup>

The content presented within the comprehensive plan was guided by the opinions of residents. The City Council sought different areas of Asheville to complete neighborhood-scale "Plans on a Page," which were used to gather public input to inform the development of the comprehensive plan from various neighborhoods.<sup>15</sup> These Plans on a Page aggregated localized thinking about individual neighborhood visions, strengths, challenges, and character.<sup>16</sup>

In recent years, the Asheville City Council has been focused on implementing the comprehensive plan. The comprehensive plan includes a step-by-step implementation guide for the municipal government to follow in order to prioritize and realize the numerous recommendations made within Living Asheville.<sup>17</sup> Small area plans have also been prepared by communities throughout Asheville to complement the city's comprehensive plan and to focus on specific needs in given areas.<sup>18</sup>

In addition to Living Asheville, the city has also published complementary plans including: the 2008 Affordable Housing Plan, the Asheville 2020 Housing Needs Assessment, the 2018 Asheville Climate Resilience Report, and the 2019 Climate-Resilient Personal Action Guide.

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<sup>13</sup> CITY OF ASHEVILLE, N.C., LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE 24 (2017), <https://online.flippingbook.com/view/106269/12/>.

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 53.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.* at 388.

<sup>18</sup> *Planning and Urban Design Small Area Plans*, CITY OF ASHEVILLE, N.C. (Sept. 3, 2019), <https://www.ashevillenc.gov/departments/planning-urban-design/plans/small-area-plans/>.

The subsequent sections of this entry introduce how these various plans and related zoning initiatives address affordable housing, climate resilience and justice, and the environment more specifically.

## HOUSING

### Planning

Asheville has three primary guiding plans and documents related to affordable housing: the 2018 comprehensive plan, Living Asheville, the 2008 Affordable Housing Plan, and the 2020 Housing Needs Assessment.

As the city's comprehensive plan, Living Asheville, sets the backdrop for the city's affordable housing plan and policies. In Living Asheville, Asheville explicitly acknowledges that "the future growth of the city is inevitable."<sup>19</sup> As such, a key feature of Living Asheville is a Preferred Growth Scenario to guide those "inevitable" changes already occurring in the city.<sup>20</sup> The city further elaborates that while growth "can yield positive outcomes for Asheville," it must be done in a thoughtful way that reflects the community's preferences of "how to grow and what kind of growth" is consistent with the six overarching themes articulated in Living Asheville.<sup>21</sup> This type of growth can enable greater community connectivity, create more housing opportunities, be more environmentally sustainable, and preserve local culture, among other benefits.

Overall, the Preferred Growth Scenario looks to promote future growth in three different types of areas in the city: the Downtown, Innovation or multi-use Districts, and Transit-Supportive Centers and Corridors. Generally, these already built-out areas have existing or underutilized infrastructure capacity and services that will enable the city to consolidate future growth and protect less dense, open space landscapes. Therefore, the city will not aim to "prioritize[ growth] aggressively" or equally in all parts of the city.<sup>22</sup> However, the city states that growth in each of these three areas will not look the same. For example, larger swaths of land, where available, can potentially accommodate more people and new development compared to existing denser areas where the city will have to pursue more nuanced approaches like infill development and redevelopment.<sup>23</sup>

Specific to housing, the Preferred Growth Scenario communicates the city's intention to "grow responsibly" by promoting infill development in residential and mixed-use districts that is compatible with neighborhood character.<sup>24</sup> This idea of encouraging a range of locally specific

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<sup>19</sup> CITY OF ASHEVILLE, N.C., LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE 298 (2017), <https://online.flippingbook.com/view/106269/12/>.

<sup>20</sup> See Book Three in Living Asheville.

<sup>21</sup> *Id.* at 298.

<sup>22</sup> *Id.* at 299.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* at 92, 301, & 345.

types of housing, such as townhomes, duplexes, and triplexes in addition to single-family housing and large apartment complexes, is called “missing middle housing.”<sup>25</sup> Missing middle housing can maximize positive opportunities for growth in ways that are more consistent with community character than through broad zoning mandates.

As part of the Preferred Growth Scenario, Asheville also identified five different geographies in the city to inform future planning, development, and land-use decisions in ways that are further reflective of local identity.<sup>26</sup> The plan states:

Living Asheville recognizes that effective growth cannot be successfully implemented exclusively, through a citywide lens. Consequently, the plan includes a concept referred to as “five geographies” that should be used for deeper consideration at a finer grain scale to inform small area planning after Living Asheville is implemented.<sup>27</sup>

In line with Living Asheville, the city’s Affordable Housing Plan and Housing Needs Assessment provide a deeper look at the city’s housing challenges and needs to guide planning and zoning actions more effectively. The 2008 Affordable Housing Plan identifies trends in the local housing market, population, and resident incomes and offers recommendations to remedy the city’s affordable housing crisis.<sup>28</sup> Specifically, the plan recommends matching housing resources to the populations with the greatest needs to maximize their chances of success; modifying city ordinances to remove restrictive barriers to new development; implementing new initiatives to increase the supply of affordable housing; and providing comprehensive education to stakeholders to overcome the negative myths and stereotypes endemic to affordable housing issues.<sup>29</sup>

Subsequently, in 2020, Asheville published its Housing Needs Assessment to better understand the region’s housing market, identify existing housing policies in need of modification, and expand the region’s housing market to meet future residential needs.<sup>30</sup> In the assessment, the city recommends leveraging government programs at all levels to develop and maintain affordable rental housing, addressing the needs of different populations, and exploring a range of innovative housing solutions.<sup>31</sup>

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<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

<sup>28</sup> See CITY OF ASHEVILLE, N.C., AFFORDABLE HOUSING PLAN FOR THE CITY OF ASHEVILLE (2008), <http://bonnernetnetwork.pbworks.com/f/City+Affordable+Housing+Plan+Final-2.pdf>.

<sup>29</sup> *Id.* at 12.

<sup>30</sup> PATRICK M. BOWEN, ASHEVILLE, NORTH CAROLINA REGIONAL HOUSING NEEDS ASSESSMENT 1 (2020), <https://drive.google.com/file/d/1yD7VyC7828cqBtt2oHcWjxPOs2HBo30n/view>.

<sup>31</sup> *Id.* at 20, 21, & 23.

## Land Use and Zoning

Asheville also plans to use zoning strategies to increase local affordable housing stock. Living Asheville states that the city will increase and diversify housing supply by removing administrative barriers to housing development; increasing density; expanding areas allowing high-density, mixed-use development; modifying permitted lot dimensions to facilitate additional housing; and studying potential dwelling types to identify which types should be permitted in the future.<sup>32</sup> Notably, beginning in 2016 and later in 2017, Asheville took steps to encourage neighborhood-compatible infill housing by adopting zoning amendments that allow for decreases in minimum lot size and width and approving zoning incentives for townhomes and small-scale multi-family housing.<sup>33</sup>

One year after adopting Living Asheville, the city passed a temporary moratorium on hotel construction that began a year-and-a half study to review hotel policy. The city found that hotel development was a proxy for other concerns, such as infrastructure needs, low wages, and affordable workforce housing, and that specific policy and regulatory tools could be enacted to manage hotel development.<sup>34</sup>

In February 2021, the moratorium on new construction ended.<sup>35</sup> The moratorium was simultaneously replaced with new hotel development regulations.<sup>36</sup> The goals of the amendments are threefold: (1) restrict the location of hotels and enhance zoning standards to minimize negative community impacts; (2) incentivize the adoption of priority community benefits; and (3) create a review process that promotes or preserves quality architecture and buildings and enhances a local sense of place.<sup>37</sup>

To implement the first goal, the city created a Hotel Overlay District.<sup>38</sup> Within the district, the city is carrying out its second and third goals by allowing development proposals to earn a minimum number of public benefits points to be eligible for a permit without having to go through City Council review. According to the public benefits table codified in the city's code, developers can earn points for actions like building energy efficient structures, creating new affordable housing

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<sup>32</sup> CITY OF ASHEVILLE, N.C., *LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE* 178–79 (2017), <https://online.flippingbook.com/view/106269/12/>.

<sup>33</sup> *Id.* at 300.

<sup>34</sup> Polly McDaniel, *City Council approves 1-year Asheville hotel moratorium*, CITY OF ASHEVILLE (Sept. 24, 2019), <https://www.ashevillenc.gov/news/city-council-approves-1-year-asheville-hotel-moratorium/>.

<sup>35</sup> *Hotel Development Study*, CITY OF ASHEVILLE, <https://www.ashevillenc.gov/department/planning-urban-design/planning-projects/hotel-moratorium/> (last updated Mar. 26, 2021).

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> CITY OF ASHEVILLE, N.C. CODE OF ORDINANCES art. IX, §7-9-7 (2021), *available at* [https://library.municode.com/nc/asheville/codes/code\\_of\\_ordinances?nodeId=PTIICOOR\\_CH7DE\\_ARTIXOVDI\\_S7-9-7HOOVDI](https://library.municode.com/nc/asheville/codes/code_of_ordinances?nodeId=PTIICOOR_CH7DE_ARTIXOVDI_S7-9-7HOOVDI).



units, donating money to the city's Housing Trust Fund, and creating public outdoor spaces.<sup>39</sup> Alternatively, developers can lose points for demolishing historic buildings or causing the displacement of existing businesses or housing.<sup>40</sup> Here, only the former set of actions increase resilience and are therefore rewarded with points.

As the city continues to experience new population and housing growth, the city has been mindful of promoting development and land reuse that are aligned with the city's historic charm and character. The city seeks to foster a building environment that combines quality architecture, historic preservation, and smart urban planning.<sup>41</sup> To that end, the City Council implemented form-based codes in various parts of the city and has approved zoning amendments and the use of conditional zoning to facilitate compatible infill housing on a neighborhood-by-neighborhood basis.<sup>42</sup> The city has also formed a committee to review Downtown design processes and bring them into alignment with historic preservation goals.<sup>43</sup>

The city is also considering creating design handbooks for neighborhoods that focus on major character defining elements of the city's various neighborhoods and allowing residents to select appropriate elements for their community and apply them on a voluntary basis for new construction and additions.<sup>44</sup> In addition, the city will evaluate opportunities to pursue "soft" or non-regulatory neighborhood design interventions to celebrate local identity like street sign toppers and banners.<sup>45</sup> Notably, the future development and maintenance of affordable housing will be required to blend with the character of the area.<sup>46</sup>

## Financial Incentives and Funding

The City of Asheville has both focused on maintaining existing affordable housing stock and increasing the size and variety of its affordable housing stock. Asheville has struggled to provide housing stock suitable for middle- and low-income residents, as well as renters. In 2016, residents voted to pass a \$74-million bond for public improvements with \$25 million total for affordable housing.<sup>47</sup> Of that \$25 million, \$10 million went to the city's Housing Trust Fund, the city's low-

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<sup>39</sup> CITY OF ASHEVILLE, N.C. CODE OF ORDINANCES app. 7-A, "Public Benefits Table" (2021), *available at* [https://library.municode.com/nc/asheville/codes/code\\_of\\_ordinances?nodeId=PTIICOOR\\_CH7DE\\_APX7-APUBETA](https://library.municode.com/nc/asheville/codes/code_of_ordinances?nodeId=PTIICOOR_CH7DE_APX7-APUBETA).

<sup>40</sup> *Id.*

<sup>41</sup> CITY OF ASHEVILLE, N.C., LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE 102 (2017), <https://online.flippingbook.com/view/106269/12/>.

<sup>42</sup> *Id.* at 102–03.

<sup>43</sup> *Id.* at 104–05.

<sup>44</sup> *Id.* at 153.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.* at 154.

<sup>47</sup> CITY OF ASHEVILLE, N.C., LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE 78 (2017), <https://online.flippingbook.com/view/106269/12/>.

rate loan program to encourage the development of new affordable housing.<sup>48</sup> Since 2014, the city has funded over 400 affordable housing units with the Housing Trust Fund and the HOME Investment Partnerships Program.<sup>49</sup>

The remaining \$15 million from the bond will enable Asheville to repurpose city-owned land for development that supports housing affordability.<sup>50</sup> In 2019, the city council adopted a policy for affordable housing projects on city-owned land.<sup>51</sup> Under the policy, new developments must reserve a minimum of 20 percent of new units for a period of no less than 20 years for individuals and families at 60 percent Area Median Income and accept Housing Choice Vouchers.<sup>52</sup>

The city has also expanded landlord education efforts regarding affordable housing programs, and created a Land Use Incentive Grant Program through the Community Development Office to encourage affordable housing in new developments.<sup>53</sup> The Land Use Incentive Grant program provides developers with future property tax abatements in the form of rebates in exchange for building affordable housing according to requirements set by a city policy.<sup>54</sup> Developers can obtain the property tax rebate for more years by adopting enhanced affordable housing and resiliency standards, such as increasing the minimum percentage of affordable housing units offered, locating housing within close proximity to transit and urban centers, and using solar panels.<sup>55</sup>

Lastly, the city promotes an expedited plan review process for certain developments that include affordable housing.<sup>56</sup> To be eligible for the expedited plan review process, developers must build within specified parameters. For affordable rental housing, a project proponent must dedicate 20 percent of units at or below 80 percent Area Median Income for a minimum of a 20-year

<sup>48</sup> *Affordable Housing*, CITY OF ASHEVILLE, N.C., <https://www.ashevillenc.gov/departments/community-economic-development/community-development/affordable-housing/> (last updated Nov. 19, 2021); CITY OF ASHEVILLE, N.C., HOUSING TRUST FUND POLICY GUIDELINES, available at <https://drive.google.com/file/d/1QVfzFPwByCuw2UgTJIFS395HKZxMU7D/view>.

<sup>49</sup> CITY OF ASHEVILLE, N.C., LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE 91 (2017), <https://online.flippingbook.com/view/106269/12/>.

<sup>50</sup> *Affordable Housing*, CITY OF ASHEVILLE, N.C., <https://www.ashevillenc.gov/departments/community-economic-development/community-development/affordable-housing/> (last updated Nov. 19, 2021).

<sup>51</sup> Asheville City Council Res. No. 29-229, Resolution Adopting a Policy Entitled “Policies for Implementing Affordable Housing on City-Owned Land” (Sept. 24, 2019), available at <https://drive.google.com/file/d/1XZV414t3oT4SKIYI6-BIE0cpyPXGFeii/view>.

<sup>52</sup> *Id.*

<sup>53</sup> CITY OF ASHEVILLE, N.C., LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE 178–79 (2017), <https://online.flippingbook.com/view/106269/12/>.

<sup>54</sup> CITY OF ASHEVILLE, N.C., LAND USE INCENTIVE GRANT POLICY (AS AMENDED AND UPDATED ON JUNE 22, 2021/RESOLUTION NO. 21-139), available at <https://drive.google.com/file/d/1Wadxt2vNgH7fb6aKoX7Ww-ggPGqoOCyo/view>.

<sup>55</sup> *Id.* at 2–3.

<sup>56</sup> CITY OF ASHEVILLE, N.C., AFFORDABLE HOUSING EXPEDITED PLAN REVIEW, available at [https://drive.google.com/file/d/127c\\_JM5AWq8Z4qqikg7W6FAznp6HXS4Y/view](https://drive.google.com/file/d/127c_JM5AWq8Z4qqikg7W6FAznp6HXS4Y/view).

affordability period.<sup>57</sup> The same requirements, minus the 20-year affordability period, apply for affordable homes that are sold.<sup>58</sup> According to the city, the review process can be reduced by as much as 30 percent, which can be a big time saver for developers.<sup>59</sup>

## Planning for Resilience and Climate Justice in Asheville

Beginning in 2017, the City of Asheville developed a suite of plans and resources related to climate resilience and justice. These plans were not created for the explicit purposes of aligning affordable housing or environmental considerations with climate adaptation and resilience. However, they are noteworthy for the city's attempts to integrate resilience and climate justice into citywide planning and initiatives, including Living Asheville, which can have tangential benefits for affordable housing and the local environment in the future. Other regional and local governments can evaluate ongoing actions in Asheville to discover a potential roadmap for how to similarly coordinate these types of related actions.

In 2018, the city partnered with the University of North Carolina, Asheville to lead city staff through the first phase of the climate resilience planning process identified in the U.S. Climate Resilience Toolkit.<sup>60</sup> This effort culminated in the Asheville Climate Resilience Assessment Report, which identifies the seven primary climate-related threats facing Asheville and key community assets and then evaluates each community asset for its vulnerability to each identified climate threat.<sup>61</sup> Ultimately, the report identifies approximately 100 options for resilience-building within Asheville.<sup>62</sup> These findings were integrated into the city's latest comprehensive plan, Living Asheville, to coordinate municipal actions to mitigate climate risks.

Additionally, in 2019, Asheville published a Climate-Resilient Personal Action Guide to assist residents and commercial business owners in building resilience at the individual, local level.<sup>63</sup> The Personal Action Guide divides the city into several geographic areas and identifies the most pressing climate-related threats for each area. The guide also provides personal actions that individuals and businesses can take to increase their resilience to emergencies and natural disasters. Notably, the Personal Action Guide advocates for the use of green infrastructure techniques to combat flood risk and erosion. This guide

<sup>57</sup> *Id.*

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> CITY OF ASHEVILLE, N.C., PLANNING FOR CLIMATE RESILIENCE CITY OF ASHEVILLE, NORTH CAROLINA FINAL ASSESSMENT REPORT 1 (2018), [https://drive.google.com/file/d/1X\\_Gr4eUCmkXP0zAcvyxCe-uZPkX84Byz/view](https://drive.google.com/file/d/1X_Gr4eUCmkXP0zAcvyxCe-uZPkX84Byz/view).

<sup>61</sup> *See generally id.*

<sup>62</sup> *Id.*

<sup>63</sup> CITY OF ASHEVILLE, N.C., BUILDING A CLIMATE-RESILIENT ASHEVILLE PERSONAL ACTION GUIDE (2019), <https://drive.google.com/file/d/0BzZzONRPV-VAVF9vb2pOMUtkRmFJR1AyNFluYU5ESU9rODRJ/view?resourcekey=0-ZQ80xC-a8bw4JDs7z0Neaw>.

illustrates how the city is tackling climate change on different scales from the community-to the individual-level.

To implement the Climate Resilience Assessment through an equity lens and support both societal and personal resilience, the city developed a complementary effort, the Climate Justice Initiative. The initiative stemmed from a January 2020 City Council resolution that established a local climate emergency and called for the city to create a Climate Justice Plan that will be applied to Living Asheville and other related plans.<sup>64</sup> The broader initiative, of which the Climate Justice Plan will be one part, “explores and defines Climate Equity with the City’s frontline community members, [who are] those most directly affected by climate change impacts identified in the City’s Climate Resilience Assessment.”<sup>65</sup> Specifically, the city is working with local Black, Indigenous, and People of Color (BIPOC) to shape “a locally relevant understanding of Climate Equity” to “help the city incorporate community recommendations and perspectives through a [forthcoming] Climate Justice Screening Tool to prioritize Climate Equity in city projects and initiatives.”<sup>66</sup>

As a preliminary step to the Climate Justice Screening Tool, Asheville built a Climate Justice Data Map, an online GIS map of the city that overlays climate impacts with social and economic vulnerabilities.<sup>67</sup> The map gives a quantitative “Climate Justice Index Score” showing how these compounding threats are facing each part of the city and the BIPOC members that reside in them.<sup>68</sup> The aim of this tool is to help decisionmakers better identify the disproportionate impacts facing different neighborhoods and groups of residents in Asheville to guide more resilient city planning and investments. The tool was developed with the help of a consultant, Tepeyac Consulting.<sup>69</sup>

In addition to the Climate Justice Data Map, Tepeyac Consulting has also been leading “Story Circles” to engage select communities, as informed by the map.<sup>70</sup> Through the Story Circles, the city, Tepeyac Consulting, youth, and other partners will work with local artists “to explore topics of climate change, justice, and equity and to document and record their observations through their art” in a final product expected to be released in early 2022.<sup>71</sup>

<sup>64</sup> Asheville City Council Res. No. 20-25 pts. 5 & 6 (2020), available at [https://drive.google.com/file/d/0B5AwbIdPA9m\\_MmFDUE5JaGwwRXBGS3VOeGctUXJCuzk1ZHNv/view?resourcekey=0-sSX\\_QpLeiagwkFS4RmUPJw](https://drive.google.com/file/d/0B5AwbIdPA9m_MmFDUE5JaGwwRXBGS3VOeGctUXJCuzk1ZHNv/view?resourcekey=0-sSX_QpLeiagwkFS4RmUPJw).

<sup>65</sup> *Climate Justice Initiative*, CITY OF ASHEVILLE, N.C., <https://www.ashevillenc.gov/projects/climate-justice-initiative/> (last visited Dec. 16, 2021).

<sup>66</sup> *Id.*

<sup>67</sup> CITY OF ASHEVILLE, N.C. CLIMATE JUSTICE MAP, <https://avl.maps.arcgis.com/apps/instant/lookup/index.html?appid=10e2c4ae45614b92ad4efaa61342b249> (last visited Dec. 16, 2021).

<sup>68</sup> *Id.*

<sup>69</sup> *Climate Justice Initiative*, CITY OF ASHEVILLE, N.C., <https://www.ashevillenc.gov/projects/climate-justice-initiative/> (last visited Dec. 16, 2021).

<sup>70</sup> *Id.*

<sup>71</sup> *Id.*

All of these complementary efforts will culminate in the city's development of a Climate Justice Plan in 2022.

## ENVIRONMENT

### Planning and Green Infrastructure

Through Living Asheville, Asheville is pursuing green infrastructure solutions to mitigate natural hazards and promote smart growth strategies. Asheville plans to implement green infrastructure in streets and parks to reduce stormwater impacts and the effects of high temperatures. Specifically, the city will aim to utilize rain gardens, landscaped swales, bioretention areas, increase tree canopy, and expand green infrastructure options approved for use and educate the public on the multiple benefits of these nature-based solutions.<sup>72</sup> Building on the priorities in Living Asheville, the city assembled the Asheville Stormwater Task Force to review local stormwater issues.<sup>73</sup> In 2021, the task force produced a final report with recommendations to the city including to create a Watershed Overlay Zone and prioritize the use of green infrastructure.<sup>74</sup>

In addition, Living Asheville provides that the City Council may adopt a zoning code that promotes more transit-supportive, higher-density, mixed-use development along existing transit corridors and better integrates complete streets, greenways, and sidewalks and bike lanes throughout the city to grow resilience to climate change.<sup>75</sup>

### Land Use, Zoning, Green Spaces, and Trees

Since adopting Living Asheville, the City Council passed a tree canopy preservation ordinance that requires proponents of specific types of new development to plant, preserve, or pay a fee-in-lieu-of protecting existing trees.<sup>76</sup> By enhancing standards for trees, the city can mitigate the effects of climate change like flooding and extreme heat. As a part of any resilient urban

<sup>72</sup> CITY OF ASHEVILLE, N.C., LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE 208–09 (2017), <https://online.flippingbook.com/view/106269/12/>.

<sup>73</sup> ASHEVILLE STORMWATER TASK FORCE 2020–2021, FINAL RECOMMENDATIONS AND REPORT TO THE CITY OF ASHEVILLE (July 2021), available at [https://drive.google.com/file/d/11cTi\\_qR7mUf1qHg\\_KorBuHhkcANpSP/view](https://drive.google.com/file/d/11cTi_qR7mUf1qHg_KorBuHhkcANpSP/view).

<sup>74</sup> *Id.*

<sup>75</sup> CITY OF ASHEVILLE, N.C., LIVING ASHEVILLE: A COMPREHENSIVE PLAN FOR OUR FUTURE 110–11 (2017), <https://online.flippingbook.com/view/106269/12/>.

<sup>76</sup> *Development Services Latest News*, CITY OF ASHEVILLE, N.C. (Oct. 27, 2020), <https://www.ashevillenc.gov/departments/development-services/latest-news/>; CITY OF ASHEVILLE CODE OF ORDINANCES art. XIX, “Tree Canopy Preservation” (2021), available at [https://library.municode.com/nc/asheville/codes/code\\_of\\_ordinances?nodeId=PTIICOOR\\_CH7DE\\_ARTXIXTRCA\\_PR](https://library.municode.com/nc/asheville/codes/code_of_ordinances?nodeId=PTIICOOR_CH7DE_ARTXIXTRCA_PR).



ecosystem, it is just as important to ensure a thriving and distributed tree canopy throughout the city as it is to create and protect parks and other larger green spaces.

Additionally, in 2021, the City Council established an Open Space Task Force.<sup>77</sup> Concluding its work in October 2021, the task force was charged with determining how to amend and improve the city's open space regulations to remove barriers to infill development and the provision of affordable housing.<sup>78</sup> The task force operated on a consensus-based approach to evaluate ways to better balance Asheville's population growth with environmental conservation for new development projects.<sup>79</sup> Members of the task force included representatives from the city's Planning and Zoning Commission, Affordable Housing Committee, Neighborhood Advisory Committee, Sustainable Advisory Committee on Energy and the Environment, and Urban Forestry Commission.<sup>80</sup> The operating framework and diverse composition of the task force were intended to produce well-rounded recommendations to the City Council. In early 2022, it is anticipated that the proposed zoning changes coming out of the task force will be presented to the Asheville Planning and Zoning Commission and the City Council for review and public comment.<sup>81</sup>

## CONSIDERATIONS AND LESSONS LEARNED

Asheville presents several planning and zoning ideas that other local jurisdictions can consider as they work to balance housing and environmental resilience in the face of increasing climate and growth pressures.

Living Asheville is a noteworthy example of a local comprehensive plan that attempts to ground and integrate the city's various supplemental plans, assessments, policies, and initiatives on resilience, housing, and the environment. All of these sectors are interconnected and local governments need to approach them holistically to maximize benefits for communities. In particular, local governments should evaluate opportunities to adopt more sector-specific plans into their comprehensive plans to elevate the legal significance of supplemental plans and work from a centralized platform.

Living Asheville also illustrates the need for local governments, particularly in larger urban areas, to think in terms of different geographic scales. Living Asheville devoted an entire section to outlining a Preferred Growth Scenario for the city that includes identifying three types of priority areas for new development, rather than proposing a citywide target. In addition, Living Asheville seeks to elevate and preserve the character and culture of five distinct area-based geographies as

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<sup>77</sup> *Planning and Urban Design Open Space Task Force*, CITY OF ASHEVILLE, N.C., <https://www.ashevillenc.gov/departments/planning-urban-design/planning-projects/open-space-task-force/> (last updated Dec. 30, 2021).

<sup>78</sup> *Id.*

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

<sup>81</sup> *Id.*

Asheville accommodates new development and growth. It is important for policymakers facing similar types of population transitions to think about planning and zoning on both city and neighborhood scales, as resilience is not a one-size-fits-all approach.

Other policies similarly illustrate this principle of scale. For example, the city's new tree canopy preservation ordinance shows that it is important to protect the environment both in terms of larger parks and green spaces and individual trees distributed throughout a city. Through its Climate-Resilient Personal Action Guide and Climate Justice Initiative, the city is also taking scalable actions to build resilience for individuals. Local governments should evaluate opportunities to provide education and information to allow citizens to participate in community-resilience building processes.

In implementing Living Asheville, the city is taking several consensus-based approaches to address zoning updates. This is exemplified through Asheville's recent changes to its hotel development regulations and ongoing work through the Open Space Task Force and Climate Justice Initiative. Similar processes could be replicated or scaled up in other jurisdictions to inform updates to discrete parts of or entire codes or development ordinances, respectively. This can help bring all sides of an issue to the decisionmaking table and lead to more effective and beneficial zoning laws and policies. By giving more government agencies a chance to collaborate and community stakeholders the opportunity to be heard, these types of processes can also decrease administrative inefficiencies, inequitable outcomes, and public opposition to new laws and policies.

Outside of the direct zoning process, the city is using different tools including density bonuses and financial and administrative incentives to encourage resilience and the production of affordable housing. From the city's Land Use Incentive Grant Program and expedited plan review process to the public benefits points table for new hotels, non-regulatory encouragements like these can be one way to increase the number and resiliency of affordable housing units. Incentives promote city goals while offering developers the flexibility necessary to design cost-effective projects. Incentives can be especially helpful for governments facing fiscal challenges or a lack of funding to invest in publicly owned or supported affordable housing options.

Lastly, Asheville's different plans, assessments, laws, and policies suggest the need for other local jurisdictions to consider stacking tools and approaches to achieve resilient ends. On their own, plans, zoning codes, and policy incentives may not be successful in increasing resilience and affordable housing and conserving the environment. In combining different tools, a jurisdiction can likely increase its chances of making overall progress by applying a suite of targeted actions with each aimed at addressing specific partners or challenges. This more direct and thoughtful approach can lead a city to make a larger, collective difference built on the sum of its parts — rather than relying only or primarily on one of those parts.

## City of Atlanta, Georgia

# Prioritizing Affordable Housing and Nature in the Face of New Growth

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## EXECUTIVE SUMMARY

Because income in Atlanta has not kept pace with rising costs of living amid a population surge, the city has developed several housing initiatives to increase its affordable housing stock and prevent the displacement of existing residents. In 2019, Atlanta released its One Atlanta Affordable Housing Action Plan (plan), a strategic document that includes quantitative goals and policy and program proposals related to building and preserving affordable housing across the city.

In the context of managed retreat, Atlanta's affordable housing efforts have relevance for policymakers in jurisdictions preparing for population growth due to climate change. The city is implementing a variety of programs and policies to increase the overall housing stock and increase the affordability of homeownership for current residents. These strategies focus on changes to the land-use and zoning code and various financial assistance programs for homeowners, in addition to securing additional resources for the development of affordable rental homes. The city has also engaged in different planning and zoning initiatives around increasing and maintaining green space and tree canopy in both areas targeted for conservation and new, strategic growth. This case study highlights notable initiatives in Atlanta that policymakers in other growing communities can look to when developing their own affordable housing and anti-displacement programs that are aligned with nature.

## BACKGROUND

Located in the northwest area of the state, Atlanta is the capital city of Georgia. Atlanta is a quickly growing metropolitan area, with a population of more than 500,000 in 2019.<sup>1</sup> Between 2010 and 2019, the city's population grew by nearly 20 percent.<sup>2</sup>

However, while the median income of Atlanta households increased by 48 percent between 2000 and 2017, the median rent increased by over 70 percent during the same period.<sup>3</sup> In 2016, almost half of Atlanta residents were considered housing-cost burdened by spending more than 30 percent

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<sup>1</sup> *QuickFacts: Atlanta City, Georgia, U.S.* CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/atlantacitygeorgia,GA/PST045219> (last visited Aug. 18, 2021).

<sup>2</sup> *Id.*

<sup>3</sup> OFFICE OF THE MAYOR, CITY OF ATLANTA, GA., ONE ATLANTA: HOUSING AFFORDABILITY ACTION PLAN 6 (June 2019), available at <https://www.atlantaga.gov/home/showpublisheddocument/42220/636954406698800000>.

of income on housing and utility costs.<sup>4</sup> The city has thus cited an affordable housing crisis and linked it to several major causes including: wages falling behind rising rents and new construction catering primarily to new residents, who tend to be renters with higher incomes than existing residents (also termed “legacy residents”).<sup>5</sup>

During her mayoral campaign in 2017, then-candidate Keisha Lance Bottoms pledged to invest \$1 billion in affordable housing in Atlanta. The pledge became a source of energy for public and private housing stakeholders across the city, who started working together to begin building coalitions and developing policy recommendations.

## OVERVIEW OF THE ONE ATLANTA HOUSING AFFORDABILITY ACTION PLAN

After a two-year effort, the city published the One Atlanta Housing Affordability Action Plan (plan) in 2019. The plan is Atlanta’s first stakeholder-driven interagency plan to address affordable housing city-wide. The plan is the product of collaboration between several agencies that intersect with housing, including the Atlanta Housing Authority, Invest Atlanta (the city’s Economic Development Authority), Metro Atlanta Land Bank, and Atlanta Beltline. The plan comes as part of the city’s overarching One Atlanta initiative, a broader package of strategic plans to address related, but distinct emerging needs including transportation and economic resilience.<sup>6</sup>

Atlanta’s affordable housing plan unites all of Atlanta’s housing agencies toward four long-term goals, laying out 13 policy initiatives and 45 action steps to build and preserve affordable housing. Developers of the plan relied on a 2018 Equitable Housing Assessment conducted by the city to identify current and future housing needs.<sup>7</sup> Nongovernmental stakeholders were also engaged leading up to the planning process, including local nonprofits, education partners, financial institutions, and developers who came together under the HouseATL umbrella.

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<sup>4</sup> A household that is “housing-cost burdened” generally refers to a household that spends more than 30 percent of its income on housing-related costs. These costs may refer to rent or homeownership costs such as property taxes and home repairs. OFFICE OF THE MAYOR, CITY OF ATLANTA, GA., ONE ATLANTA: HOUSING AFFORDABILITY ACTION PLAN 6 (June 2019), available at <https://www.atlantaga.gov/home/showpublisheddocument/42220/636954406698800000>.

<sup>5</sup> *Id.* at 5–6.

<sup>6</sup> CITY OF ATLANTA, GA. DEP’T OF TRANSP., ONE ATLANTA: STRATEGIC TRANSPORTATION PLAN (Nov. 2019), available at <https://www.atlantaga.gov/home/showpublisheddocument/43742/637091918730400000>; INVEST ATLANTA, ONE ATLANTA: ECONOMIC MOBILITY, RECOVERY, AND RESILIENCY PLAN (2020), available at [https://www.investatlanta.com/assets/9.16\\_updated\\_final\\_one\\_atlanta\\_plan\\_bzJWRVg.pdf](https://www.investatlanta.com/assets/9.16_updated_final_one_atlanta_plan_bzJWRVg.pdf).

<sup>7</sup> CITY OF ATLANTA, GA. EQUITABLE HOUSING ASSESSMENT (2018), available at <https://drive.google.com/file/d/11qN-vHLINeXkW7JlcWDMBC4OmfHSjLa/view>.

## HOUSING

Existing residents can be vulnerable to displacement when rising rental rates or homeownership costs threaten their ability to stay in their homes. This risk can be high in rapidly-growing areas like Atlanta, particularly where new development is disproportionately marketed toward higher-income households. This can drive up rental rates and property tax assessment values, threatening current residents with displacement.

To alleviate these pressures on residents and prepare for future growth, policymakers can employ a variety of strategies to increase affordable housing stock and mitigate the effects of or prevent displacement. In the context of climate adaptation, affordable housing initiatives in Atlanta may serve as examples for policymakers in receiving communities who want to embrace and encourage growth while also protecting current residents and neighborhoods.

The following sections highlight some elements of Atlanta's affordable housing efforts that may be of relevance to receiving communities preparing for population growth due to climate change: planning and zoning changes, anti-displacement initiatives, and coordinating housing stakeholders toward shared goals.

### Planning

In 2017, the Department of City Planning released Atlanta City Design (ACD), “a concept for design of Atlanta that provides a framework for policies and plans including” the city’s comprehensive development plan, capital improvement program, and budget.<sup>8</sup> The goal of ACD is to advance a forward-looking design framework that is informed by the ways in which Atlanta communities have been impacted by the city’s land-use and zoning history. With the first premise of the framework being that Atlanta will continue experiencing significant growth, ACD aims to guide strategies for receiving growth in a way that benefits all residents in the city, old and new.<sup>9</sup> In 2017, Atlanta revised its city charter to designate ACD as the primary design framework that will guide the city’s subsequent planning efforts.<sup>10</sup>

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<sup>8</sup> *Atlanta City Design: Aspiring to the Beloved Community*, CITY OF ATLANTA, GA. DEP’T OF CITY PLANNING, <https://www.atlcitydesign.com/city-design> (last visited Aug. 18, 2021).

<sup>9</sup> CITY OF ATLANTA, GA. DEP’T OF CITY PLANNING, ATLANTA CITY DESIGN 112 (2017), *available at* <https://online.flowpaper.com/72b006f2/ACDSecondPrintFINAL180820/#page=1>.

<sup>10</sup> ATLANTA, GA., CODE OF ORDINANCES, ch. 6 § 3-601 (2017) (“The mayor shall have a design for Atlanta to enable a sufficiently growing city so that people of all income ranges, generations, races, and educational levels can thrive as city residents. The design shall be based upon goals for population and employment growth for the City of Atlanta in the context of regional projections provided by the Atlanta Regional Commission. As a design, the Atlanta City Design is primarily a concept for the physical growth of the city to accommodate the desired population and employment. It is to be based upon the unique physical attributes of Atlanta and should accentuate these qualities for a growing city. Atlanta City Design is a concept for design of Atlanta that provides a framework for policies and plans . . .”).



The ACD document is organized into three sections — Identity, Urgency, and Design. Identity outlines and describes the city’s core values; Urgency details potential forthcoming changes to the city and the work required to leverage that change toward positive growth; and Design applies the core values and projected changes into tangible and aspirational proposals for implementation.<sup>11</sup>

ACD’s approach also outlines two primary zoning or spatial designations — growth areas and conservation areas.<sup>12</sup> Growth areas are already-developed areas deemed suitable for accommodating denser growth, including the city center and major transportation corridors.<sup>13</sup> Conservation areas are areas where preserving existing greenery, historic charm, and special uses are priorities against significant new development.<sup>14</sup> ACD identifies conservation areas as including urban, suburban, and rural single-family neighborhoods and industrial areas.<sup>15</sup> The purpose of these designations is to acknowledge the unique aspects of different areas in Atlanta and to plan for growth accordingly. In the realm of housing in particular, whether an area is seen as a growth or conservation area has implications related to density, building type, and location relative to transit and amenities.

## Land Use and Zoning

Land-use and zoning regulations govern housing development with regards to the siting and design of new structures, among other factors. Amendments to local zoning ordinances are one option policymakers can consider to encourage more affordable housing. As the following examples from Atlanta suggest, zoning changes can be implemented to allow for a greater variety of housing options catering to a wider diversity of incomes.

Atlanta City Design Housing (ACD Housing) is a more detailed sub-framework of the ACD framework focused specifically on changing land-use and zoning regulations to achieve goals set forth in the One Atlanta affordable housing plan.<sup>16</sup> Released in 2020, ACD Housing includes recommendations for specific amendments to the city’s zoning ordinance to expand affordable housing options and incentivize housing development near transit.<sup>17</sup>

To increase housing options, one major goal of Atlanta’s affordable housing plan is to increase “missing middle housing.”<sup>18</sup> Missing middle housing refers to the range of multi-unit housing

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<sup>11</sup> CITY OF ATLANTA, GA. DEP’T OF CITY PLANNING, ATLANTA CITY DESIGN XII-XIII (2017), *available at* <https://online.flowpaper.com/72b006f2/ACDSecondPrintFINAL180820/#page=1>.

<sup>12</sup> *Id.* at 244.

<sup>13</sup> *Id.* at 252.

<sup>14</sup> *Id.* at 260.

<sup>15</sup> *Id.* at 262–268.

<sup>16</sup> *Atlanta City Design Housing*, CITY OF ATLANTA, GA. DEP’T OF CITY PLANNING, <https://www.atlcitydesign.com/acdhousing> (last visited Aug. 18, 2021).

<sup>17</sup> *Id.*

<sup>18</sup> OFFICE OF THE MAYOR, CITY OF ATLANTA, GA., ONE ATLANTA: HOUSING AFFORDABILITY ACTION PLAN 15 (June 2019), *available at* <https://www.atlantaga.gov/home/showpublisheddocument/42220/636954406698800000>.

types between single-family detached homes and high-density high-rise apartments, such as duplexes and townhomes.<sup>19</sup> Missing middle housing types can include duplexes, townhomes, small apartments, and accessory dwelling units (ADUs).<sup>20</sup> These types of homes have the benefit of providing higher-density housing while remaining compatible in scale and appearance with detached single-family homes. This enables missing middle housing to be easily integrated into walkable neighborhoods and provides greater diversity in housing options.

To help implement this goal, ACD Housing contains recommendations for several zoning changes to allow and encourage missing middle housing. One major proposal involves ending single-family zoning and providing financial incentives in order to increase the city's supply of smaller apartments and ADUs.<sup>21</sup> For example, ACD Housing discusses the potential for a new zoning district that would allow for apartments with 4–12 units to be built in areas that previously did not allow multi-family development.<sup>22</sup>

Similarly, in ACD Housing, the city recommends zoning changes to increase areas of the city that allow ADUs as one way to meet the One Atlanta affordable housing plan's goals.<sup>23</sup> To incentivize multi-family building, ACD Housing includes the proposed use of density bonuses — a zoning tool that would allow developers to increase the number of units in a development in exchange for reserving a portion of units at rates affordable to low-income households.<sup>24</sup>

ACD Housing also contains other potential ideas for zoning changes to ease burdens on housing developers and increase housing options. For example, ending parking space minimums, which require a certain amount of parking to be built with housing, can meaningfully reduce the cost of development and discourage car dependency.<sup>25</sup> Additionally, the city recommends allowing

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<sup>19</sup> *Missing Middle Housing*, OPTICOS DESIGN, INC., <https://missingmiddlehousing.com> (last visited Aug. 18, 2021).

<sup>20</sup> Accessory dwelling units, or ADUs, are secondary living units built on existing single-family parcels. There are a variety of ADU types, which include attached units, such as basement and loft units, and detached units, such as a smaller home built on the same property behind the main home.

<sup>21</sup> Atlanta City Design Housing: A look into how housing policy shaped Atlanta's design, how the design impacts the city's residents, and ways to design it for everyone, CITY OF ATLANTA, GA. DEP'T OF CITY PLANNING (Mar. 15, 2021) <https://storymaps.arcgis.com/stories/e91c43ad299a4634add2bed4cf2eca9d> (last visited Aug. 18, 2021).

<sup>22</sup> CITY OF ATLANTA, GA. DEP'T OF CITY PLANNING, ATLANTA ZONING ORDINANCE UPDATE: PHASE II 9–11, *available at* <https://www.atlantaga.gov/home/showdocument?id=39209>.

<sup>23</sup> Atlanta City Design Housing: A look into how housing policy shaped Atlanta's design, how the design impacts the city's residents, and ways to design it for everyone, CITY OF ATLANTA, GA. DEP'T OF CITY PLANNING (Mar. 15, 2021) <https://storymaps.arcgis.com/stories/e91c43ad299a4634add2bed4cf2eca9d> (last visited Aug. 18, 2021).

<sup>24</sup> *Affordable Housing Near Transit*, CITY OF ATLANTA, GA. DEP'T OF CITY PLANNING, <https://www.atlcitydesign.com/small-apartments-by-marta> (last visited Aug. 20, 2021).

<sup>25</sup> Atlanta City Design Housing: A look into how housing policy shaped Atlanta's design, how the design impacts the city's residents, and ways to design it for everyone, CITY OF ATLANTA, GA. DEP'T OF CITY PLANNING (Mar. 15, 2021) <https://storymaps.arcgis.com/stories/e91c43ad299a4634add2bed4cf2eca9d> (last visited Aug. 18, 2021).

smaller apartment buildings near transit hubs as another way to meet affordable housing goals established in the One Atlanta plan.<sup>26 27</sup>

At the implementation stage, Atlanta has focused on streamlining development permitting processes and boosting capacity for developers and nonprofit partners engaged in housing-related work. For example, the Atlanta Office of Buildings created two new liaison positions to help affordable housing developers better navigate the permitting process for new housing. The city is also launching a Housing Innovation Lab to provide technical assistance for nonprofit developers, provide master planning and design services, research new affordable housing approaches, and educate residents, banks, and developers on implementation.<sup>28</sup> As of fall 2021, the city has already started interviewing staff to fill these roles.

## Anti-Displacement Initiatives

While Atlanta's affordable housing approach focuses on incentivizing development to increase the overall housing stock, the city's plan also includes measures to alleviate displacement pressures on existing or legacy residents that currently own homes in Atlanta. For areas experiencing population growth, anti-displacement policies and programs can prevent homeowners from being priced out of their neighborhoods due to new development. Preventing involuntary displacement is not only important for protecting individual households, but also the integrity and stability of community networks.

From financial assistance to community land ownership, anti-displacement programs and policies can be diverse and creative in helping current residents stay in their homes. In 2020, Mayor Bottoms established the Atlanta Anti-Displacement Program, which established an anti-displacement fund (ADF) and directed the city's development agency to begin building a comprehensive city-wide anti-displacement program.<sup>29</sup> With \$4.6 million in seed funding, the ADF will work to prevent displacement by covering property tax increases for homeowners in neighborhoods identified as experiencing a heightened risk of displacement.<sup>30</sup>

Atlanta's ADF will be modeled after the Westside Anti-Displacement Fund, a financial assistance program focused on the Westside neighborhoods of Atlanta that is managed by the philanthropy Westside Future Fund and administered by APD Urban Planning and Management (see Callout

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<sup>26</sup> *Id.*

<sup>27</sup> *Id.* at 17.

<sup>28</sup> OFFICE OF THE MAYOR, CITY OF ATLANTA, GA., ONE ATLANTA: HOUSING AFFORDABILITY ACTION PLAN 35 (June 2019), available at <https://www.atlantaga.gov/home/showpublisheddocument/42220/636954406698800000>.

<sup>29</sup> Atlanta, Ga. Admin. Order No. 2020-42 (Oct. 19, 2020), <https://citycouncil.atlantaga.gov/Home/ShowDocument?id=4658>.

<sup>30</sup> *Id.*

Box).<sup>31</sup> The Westside fund works to alleviate rising homeownership costs by covering property tax increases for qualifying homeowners for up to 20 years.<sup>32</sup>

Currently in development, the Atlanta ADF will build on the experiences and lessons of the Westside Anti-Displacement Fund and create a new program that will provide a similar type of property tax assistance program city-wide. Funding for the program arises from a development agreement struck by between the city and a private developer in 2018, in which the developer agreed to contribute \$28 million to an affordable housing trust fund as part of its contract to develop an under-utilized area of downtown Atlanta referred to as “The Gulch.”<sup>33</sup>

The plan also identifies several other potential initiatives to reduce homeownership costs related to energy efficiency, home repairs, and tax exemptions. Atlanta’s Weatherization Assistance Program helps low-income homeowners increase energy efficiency to reduce high utility costs. The city also proposes to partner with energy providers to develop clean energy improvement programs for low-income homeowners, including monthly financing and credits for providing solar power to the grid.<sup>34</sup> Atlanta has also identified a significant number of homeowners who are eligible for certain tax exemptions and mortgage-assistance programs but not taking advantage of them yet. The city can look to expand awareness and participation in these programs, which can prevent displacement by helping relieve tax burdens on homeowners.

For renters, the city plans to increase funding for short-term rental assistance programs, expand permanently affordable housing options for low- to moderate-income homebuyers via community land trusts, and increasing anti-discrimination measures.

## Westside Future Fund

Started in 2014, Westside Future Fund (WFF) is a nonprofit focused on community retention of neighborhoods around the city’s recently-built Mercedes Benz stadium. Anticipating that the stadium would increase property taxes on neighboring homes, WFF estimated that approximately 600–650 legacy homeowners would be at risk of immediate displacement after the stadium was built, with a majority being senior homeowners on fixed incomes. In 2017, WFF launched the Westside Anti-Displacement Tax Fund (fund) designed to protect these legacy residents. WFF contracts with a local planning firm, APD Urban Planning and Management, to administer the fund and conduct outreach.

<sup>31</sup> *Anti-Displacement Tax Fund*, WESTSIDE FUTURE FUND, <https://www.westsidefuturefund.org/homeonthewestside-adtfprogram/> (last visited Aug. 18, 2021).

<sup>32</sup> *Id.*

<sup>33</sup> Jonathan Raymond, *Atlanta mayor creating fund to help longtime homeowners amid rising property taxes*, 11 ALIVE (Oct. 20, 2020), <https://www.11alive.com/article/news/local/atlanta-fund-to-help-residents-property-taxes/85-c752b996-3938-40bd-be2a-4ad30fc6bdf>.

<sup>34</sup> OFFICE OF THE MAYOR, CITY OF ATLANTA, GA., ONE ATLANTA: HOUSING AFFORDABILITY ACTION PLAN 28 (June 2019), available at <https://www.atlantaga.gov/home/showpublisheddocument/42220/636954406698800000>.

The fund is one community retention strategy a part of WFF's broader Home on the Westside initiative, which also includes rental housing and homeownership opportunities and financial counseling and downpayment assistance to help those who live on the Westside of Atlanta or have ties to that community (i.e., people who work on the Westside or have children enrolled in or graduated from the schools there) thrive there. WFF and APD Urban Planning and Management's work is also guided by a 2017 strategic neighborhoods-level plan, the Westside Land Use Framework Plan.

The fund works by covering eligible homeowners' property tax increases for 20 years. The fund allows the city to receive its total tax digest to fund schools and other services, compared to tax abatement programs in which homeowners are assisted by shouldering a lower tax responsibility. Instead of applying for a refund, enrolled homeowners forward tax bills to WFF, who then pays the balance directly to the tax commissioner. This helps take an administrative burden off the homeowner and the city. As of 2021, the program provides tax assistance for approximately 130 Westside-neighborhood homeowners.

This effort was the result of a data- and resident-driven approach to strategically tell a story about community value and retention to encourage private and philanthropic donors to give money to kickstart the fund. Many donors were committed to protecting homeowners in the Westside neighborhoods from displacement, in addition to ensuring opportunities to preserve personal wealth and the succession of a family's home as an asset that can be passed down between generations.

One challenge in implementation has been increasing enrollment of eligible homeowners, some of whom have been hesitant to enroll due to a history of mistrust between the community and nonprofit organizations, particularly where enrollment requires sharing sensitive financial and personal information. Continued trust-building is a priority moving forward as WFF looks to increase enrollment. In addition, WFF foresees increased participation in the program as investment and market values of homes increase even more in the Westside neighborhoods.

## ENVIRONMENT

### Planning

"Nature" is one of five core principles established in ACD, and the framework goes beyond increasing green space to integrating landscaping and environmental features throughout urban, suburban, and rural areas in tandem with new growth.<sup>35</sup> By doing so, the city aims to provide all Atlanta residents with access to nature, which is a critical amenity with both quality-of-life and environmental benefits. Similar to ACD Housing, Atlanta City Design: Nature (ACD Nature) is a sub-plan under the ACD framework focused on enhancing the natural elements of Atlanta's built

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<sup>35</sup> CITY OF ATLANTA, GA. DEP'T OF CITY PLANNING, ATLANTA CITY DESIGN 102 (2017), *available at* <https://online.flowpaper.com/72b006f2/ACDSecondPrintFINAL180820/#page=1>.



environment.<sup>36</sup> ACD Nature also serves as a study of Atlanta’s ecological assets, including a survey of the city’s topographical features, protected areas, and wildlife species.

Between ACD and ACD Nature, the city has identified several ways to integrate nature in its growth plan, including by expanding parks, hiking and biking trails, tree canopy, and ecological features in newly developing growth areas outside the city center.<sup>37</sup> By planning to integrate natural elements as a part of the built environment, the city aims to not only encourage recreation, well-being, and connectivity, but also provide shade, fresh air, heat protection, and wildlife habitats.

## Land Use, Zoning, and Trees

In January 2021, the Atlanta City Council released a proposed updated Tree Protection Ordinance to be more consistent with the ACD Nature framework.<sup>38</sup> While still in draft and under consideration, the proposed ordinance focuses on preserving trees in conservation areas and “strategic and impactful replanting in growth areas.”<sup>39</sup> To achieve that end, the proposed ordinance contains several notable provisions including to reduce tree replanting or financial recompense requirements for developments with more than ten affordable housing units in order to avoid increasing housing costs and chances for displacement.<sup>40</sup>

The proposed ordinance also provides greater flexibility to increase the use of trees in designing green infrastructure or nature-based stormwater solutions; increase tree canopy by decreasing minimum distance or spacing requirements between new trees that are planted; and distinguish and prioritize preserving trees with a higher environmental “value.”<sup>41</sup>

The proposed ordinance demonstrates how ACD Nature is being operationalized in line with that vision, in addition to the One Atlanta plan and ACD Housing to aim for more comprehensive zoning decisions grounded in planning.

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<sup>36</sup> CITY OF ATLANTA, GA. DEP’T OF CITY PLANNING, ATLANTA CITY DESIGN: NATURE (2020), *available at* <https://www.atlantaga.gov/home/showpublisheddocument/48625/637389781069970000>.

<sup>37</sup> CITY OF ATLANTA, GA. DEP’T OF CITY PLANNING, ATLANTA CITY DESIGN 338, 344, & 362 (2017), *available at* <https://online.flowpaper.com/72b006f2/ACDSecondPrintFINAL180820/#page=1>.

<sup>38</sup> An Ordinance to Amend the Atlanta City Code Part II (General Ordinances), Chapter 158 (Vegetation), Article II (Tree Protection), to Adopt a New Tree Protection Ordinance for the City of Atlanta; and Other Purposes, *available at* <https://www.atlantaga.gov/home/showdocument?id=49588> (last visited Sept. 7, 2021).

<sup>39</sup> ATLANTA TREE PROTECTION ORDINANCE: SUMMARY OF REVISIONS 1 (Jan. 2021), *available at* <https://www.atlantaga.gov/home/showdocument?id=49610>.

<sup>40</sup> *Id.*

<sup>41</sup> *Id.* at 2–5.

## COMMUNITY ENGAGEMENT

Nonprofit and business stakeholders engaged in significant leadership in the plan's initiation and development. After Mayor Bottoms pledged to invest \$1 billion into affordable housing in 2017, the announcement mobilized housing stakeholders to create a coalition called HouseATL, including members in nonprofit organizations, education, financial institutions, government agencies, and developers. HouseATL worked to create 22 recommendations that ultimately informed the city's affordable housing plan, which was released a year and a half later.

Development of Atlanta's affordable housing goals and plans also relied in part on the Equitable Housing Assessment (assessment) conducted by the city in 2018.<sup>42</sup> In addition to drawing on prior studies, including those conducted as part of ACD, the assessment includes input from four three-hour community workshops where the assessment's results were shared with the participants who gave feedback on the housing needs and strategies to prioritize.<sup>43</sup>

## NEXT STEPS

Affordable housing solutions naturally intersect with the missions of transit, economic development, and city planning agencies. Many private and nonprofit groups also hold stakes in housing, including developers, businesses, housing advocates, and community groups. Due to the complex system of stakeholders engaged in designing and implementing the city's affordable housing plan, the Atlanta mayor's office took an intentional approach to coordination among stakeholder agencies and nongovernmental groups.

One important component of implementation has been establishing formal roles responsible for liaising between numerous stakeholder agencies. In October 2018, Mayor Bottoms created the Chief Housing Officer position to be in charge of coordinating housing goals across agencies. The office serves to organize inclusive meetings, facilitate information-sharing between partners, and orient different participating agencies toward broader housing goals.

In particular, the Atlanta Housing Affordability Tracker (tracker) has been useful for helping partner agencies understand their collective impact. The tracker is a web-based tool that the city is using to monitor and report progress on affordable housing goals identified in the affordable housing plan. Internally, the tracker involves a monthly data collection process where stakeholder agencies report investments they have made in affordable housing. With updates from agency leads down to development staff, the information supports visibility, coordination, and trust-

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<sup>42</sup> CITY OF ATLANTA, GA., *EQUITABLE HOUSING ASSESSMENT* (2018), available at <https://drive.google.com/file/d/11qN-vHLINeXkW7JlcWDMBC4OmfHSjLa/view>.

<sup>43</sup> *Id.* at 6.

building between agencies. For the public, information from the tracker is updated quarterly, including information on affordable housing that has been preserved, built, or is in the pipeline.<sup>44</sup>

## CONSIDERATIONS AND LESSONS LEARNED

Receiving communities experiencing population growth might face affordable housing and involuntary displacement challenges, especially where new development caters to higher-income residents. This can render current renters and homeowners vulnerable to displacement because new development can drive up rental rates and property taxes in the surrounding community. Atlanta's affordable housing crisis has been partly driven by rapid population growth, and its plans to address affordable housing needs may be helpful for policymakers in jurisdictions planning for similar growth due to climate or other causes. Atlanta's One Atlanta Housing Affordability Action Plan demonstrates that attention to zoning and anti-displacement initiatives can inform development such that growth remains in service of both new and legacy residents. These policies and programs can be diverse and help alleviate housing-related costs in different ways.

First, Atlanta shows the importance and necessity of comprehensive planning initiatives. The city has both broad examples of this, with ACD, and sector-specific ones with the One Atlanta housing plan and ACD Housing and ACD Nature. Tying housing together with nature, among other sectors and priorities, can better guide future growth and conservation in a changing area experiencing population growth.

As outlined in ACD and ACD Nature, preserving green space in both conservation and growth areas will especially be important to consider for jurisdictions or receiving areas dealing with increasing flooding and extreme heat threats. As part of development and growth, policymakers should plan with a mind to integrate natural elements with the built environment. Incorporating parks, greenery, and biking and walking trails throughout communities supports public health, provides heat and anti-pollution benefits, and increases ways for residents to get from place to place. Planning with a mind to environmental amenities demonstrates that growth planning can go beyond housing development to include building and enhancing an area's natural assets. At a high level, these collective efforts suggest that new development, affordable housing, and nature are supportive or not at odds with one another.

Further, incorporating ACD into the city's charter can potentially give these planning principles and goals greater legal effect and weight compared to if the ACD was a purely standalone, advisory policy. Here, the charter is effectively the city's constitution. While it is ultimately up to the

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<sup>44</sup> *Housing Affordability Tracker*, CITY OF ATLANTA, GA., <https://www.westsidefuturefund.org/homeonthewestside-adtfprogram/> (last visited Aug. 18, 2021).

Atlantic City Council whether the ACD requirement is fulfilled,<sup>45</sup> local governments can similarly adopt planning principles into charters — and also local codes and ordinances — to better ensure that land-use and zoning decisions are consistent with planning goals and objectives. This is already being illustrated in the context of carrying forward ACD Nature to the city’s proposed Tree Protection Ordinance. This kind of guiding framework can also play a role at a regional level that can be implemented and considered by individual counties/parishes and municipalities with independent zoning authorities.

In addition, policymakers can look to land-use and zoning ordinances as a tool to incentivize and facilitate an increase in the overall supply and diversity of affordable housing. Ordinances serve as significant tools. By amending ordinances to allow for more types of multi-unit housing, zoning reforms can increase affordable housing options, increase density without sacrificing community character, and incentivize development in strategic locations, such as around transit hubs.

As a part of planning processes and zoning updates, policymakers can also propose ways to grow affordable housing, for example, by creating pathways to mitigate the administrative and financial barriers around permitting processes for new affordable housing. Atlanta evaluated and recommended such strategies in the One Atlanta plan. Moreover, the city has already dedicated some staff to help developers navigate these often complex processes.

In conjunction with new housing efforts, policymakers can also employ anti-displacement initiatives to protect existing residents and their communities. As demonstrated by the Atlanta Anti-Displacement Fund, financial assistance programs can work by targeting specific homeownership costs, such as property taxes and utilities. These programs can be developed in advance of displacement risks, with studies beginning when new development is anticipated to increase neighboring property values, as with the proactive work done by Westside Future Fund and APD Urban Planning and Management. Implementation will involve efforts to maximize program awareness and partnerships with private and philanthropic organizations to facilitate and fund assistance.

As the work between Westside Future Fund and APD Urban Planning and Management demonstrates, there are several benefits to evaluating opportunities for public-private partnerships. Here, the Westside Anti-Displacement Fund led to the creation of an innovative funding scheme that is actively preventing displacement in the Westside neighborhoods of Atlanta. Public-private partnerships are also a chance to pilot projects or models that can be replicated or scaled jurisdiction-wide, as the city is now looking to the Westside Anti-Displacement Fund and the experiences of APD Urban Planning and Management to develop a new citywide Anti-Displacement Fund. The ability to leverage private funding and pilot innovative approaches to

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<sup>45</sup> The relevant language in the city’s current charter is as follows: “Following the updating and adoption of the city’s development plans, the council shall amend the city’s zoning ordinance to conform with the updated development plans.”

affordable housing and anti-displacement initiatives will be especially critical to have access to increased resources and flexibility to adapt to compounding drivers from climate change.

Lastly, Atlanta shows the necessity of coordinating and tracking agency progress with the development of coalitions like HouseATL and tools like the Housing Affordability Tracker to better ensure goals in plans like One Atlanta can be monitored and adapted, as needed, overtime. Active monitoring and adaptive approaches can make and keep plans as living documents that lead to benefits for impacted communities that are changing and transforming due to climate and other factors.



# *City of Austin, Texas*

## **Affordable Housing and Green Infrastructure Efforts**

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### **EXECUTIVE SUMMARY**

Austin's housing plan and comprehensive plan set forth a vision of the city embodied by sustainability, social equity, and economic opportunity as it prepares for continued growth.<sup>1</sup> To advance these values, Austin is taking an intentional approach to create “complete communities” — compact and connected neighborhoods where daily needs can be met close to where residents live and work.<sup>2</sup>

In the realm of affordable housing, this means increasing housing development across the city to maximize access to transit and amenities, rather than keeping affordable housing concentrated in certain areas or isolated on the city's outskirts. The city's housing planning is also informed by an environmental element: building affordable housing in compact and connected communities can also reduce air pollution and greenhouse gas emissions associated with traffic congestion and car dependency.

On the environmental side, Austin's various environmental management departments have renewed efforts to collaborate to increase the city's green infrastructure and update its watershed management plan. These initiatives recognize the need to integrate various programs and agencies in order to establish a more consolidated approach to achieving the city's environmental goals.

### **BACKGROUND**

Austin is the capital city of Texas located in the central part of the state. In 2019, Austin was the 11th most populous city in the United States with a population of approximately 980,000.<sup>3</sup> Despite its size in 2019, Austin is continuing to grow with significant population increases. Between 2010 and 2019, Austin saw a population increase of over 177,000 residents, the fifth-largest numeric increase among U.S. cities with populations of 50,000 or greater.<sup>4</sup> The city's population is

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<sup>1</sup> *Imagine Austin*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/departments/imagine-austin> (last visited Oct. 7, 2021).

<sup>2</sup> *What is a complete community?*, CITY OF AUSTIN, TEX. (Feb. 25, 2013), <http://www.austintexas.gov/blog/what-complete-community>.

<sup>3</sup> *Southern and Western Regions Experienced Rapid Growth this Decade*, U.S. CENSUS BUREAU (May 21, 2020), <https://www.census.gov/newsroom/press-releases/2020/south-west-fastest-growing.html>.

<sup>4</sup> *Id.*

projected to increase by an additional two percent annually, with the region growing at 3.4 percent annually.<sup>5</sup>

## OVERVIEW OF SELECT CITY PLANS

To improve affordable housing access for current and new residents, Austin adopted an affordable housing plan in 2017 called the Austin Affordable Housing Blueprint (Housing Blueprint). Notably, the Housing Blueprint illustrates a comprehensive approach to affordable housing that seeks to not only increase the stock of housing available at lower prices, but also to locate affordable housing across the city such that residents have easy access to transit and amenities. The Housing Blueprint was developed to be in alignment with Imagine Austin, the city's comprehensive plan, which emphasizes compactness and connectivity as central values guiding Austin's planning and development.<sup>6</sup>

Austin has also gained a reputation as a sustainable city due to its significant investments in renewable energy, building efficiency, and green space.<sup>7</sup> The city has made significant moves to protect city assets from climate risks by adopting the Climate Resilience Action Plan for City Assets and Operations in 2018.<sup>8</sup> The Climate Resilience Action Plan includes a vulnerability assessment for Austin's utility, transportation, and community infrastructure as well as resilience strategies to address vulnerabilities.<sup>9</sup>

Austin is also taking steps to invest in environmental sustainability and resilience in the broader community as it continues welcoming new residents. In its comprehensive plan, Imagine Austin, adopted in 2012, the city committed to implementing policies that would increase green infrastructure and preserve the natural elements of the built environment, including the urban tree canopy and waterways that serve public recreational uses.<sup>10</sup> To carry out these policies, Austin has

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<sup>5</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 8 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>6</sup> *About Imagine Austin*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/departments/about-imagine-austin> (last visited Oct. 7, 2021).

<sup>7</sup> *Austin, Texas: A sustainable city*, GREEN CITY TIMES, <https://www.greencitytimes.com/austin-texas-a-sustainable-city/> (last visited Oct. 1, 2021).

<sup>8</sup> CITY OF AUSTIN, TEX., CLIMATE RESILIENCE ACTION PLAN FOR CITY ASSETS AND OPERATIONS (Apr. 2017), available at [https://austintexas.gov/sites/default/files/files/Sustainability/Climate\\_Resilience\\_Action\\_Plan.compressed.pdf](https://austintexas.gov/sites/default/files/files/Sustainability/Climate_Resilience_Action_Plan.compressed.pdf).

<sup>9</sup> *Id.* at 16–35.

<sup>10</sup> CITY OF AUSTIN, TEX., IMAGINE AUSTIN COMPREHENSIVE PLAN 151–152 (June 2012), available at [ftp://ftp.ci.austin.tx.us/npzd/IACP\\_amended2016\\_web\\_sm.pdf](ftp://ftp.ci.austin.tx.us/npzd/IACP_amended2016_web_sm.pdf).

committed to developing a coordinated green infrastructure plan and updating its watershed management plan to incorporate climate change risks.<sup>11</sup>

The following sections capture some of the notable affordable housing and environmental initiatives that Austin has established to effectuate this vision.

## HOUSING

The Austin Strategic Housing Blueprint is a ten-year affordable housing plan adopted in 2017 by the city to guide its affordable housing efforts.<sup>12</sup> The planning effort was led by the Austin Department of Neighborhood Housing and Community Development (NHCD) and was informed by the 2017 Mayor's Task Force on Institutional Racism and Systemic Inequalities.<sup>13</sup> The task force officially recognized that the city's historic policies have contributed to racial segregation at the regional level and limited people of color from opportunities for upward mobility.<sup>14</sup>

The city recognizes a particular need for low- and moderate-income housing. Between 2006 and 2016, the city's median household income remained stagnant while the median rent rose by almost 100 percent and the median home price rose by over 20 percent.<sup>15</sup> However, the city's housing initiatives include the housing needs of low-, moderate-, and high-income households with the recognition that a housing shortage results in higher prices for all housing types, and thus more housing for all income levels can reduce demand pressures.<sup>16</sup>

Austin is planning and implementing several strategies to increase its housing stock for all income levels. Efforts to increase affordable housing stock focus on planning, creating development incentives, streamlining permitting processes, and updating the city's land development code.<sup>17</sup> Other policymakers in receiving areas gaining population can look to Austin's Housing Blueprint as one example of a growing jurisdiction identifying affordable housing needs and proposing strategies to meet housing goals.

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<sup>11</sup> *Green Infrastructure*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/page/green-infrastructure> (last visited Oct. 6, 2021); *Watershed Protection Strategic Plan*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/department/watershed-protection-strategic-plan> (last visited Oct. 6, 2021).

<sup>12</sup> *Austin Strategic Housing Blueprint*, CITY OF AUSTIN, TEX., <http://austintexas.gov/blueprint> (last visited Oct. 7, 2021).

<sup>13</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 2 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>14</sup> *Id.* at 2.

<sup>15</sup> *Id.* at 8.

<sup>16</sup> *Id.* at 19.

<sup>17</sup> CITY OF AUSTIN, TEX., CITY OF AUSTIN STRATEGIC HOUSING BLUEPRINT OVERVIEW 2 (2017), available at [http://austintexas.gov/sites/default/files/files/Blueprint\\_Overview.pdf](http://austintexas.gov/sites/default/files/files/Blueprint_Overview.pdf).

## Planning: Austin Strategic Housing Blueprint

The Austin Strategic Housing Blueprint sets ambitious goals to increase housing available at all income levels and includes recommendations for how to achieve these goals. As the city's first comprehensive plan to address affordable housing, the Housing Blueprint also acts as a guiding document to orient the city's multiple housing-related agencies toward affordable housing goals. Austin's affordable housing efforts aim to contribute to a broader vision of Austin as a city of "complete communities" where all residents have easy access to daily needs and enjoy a high quality of life.<sup>18</sup>

Notably, the authors of the Housing Blueprint adopted a definition of affordability that includes not only housing costs, but also utility and transportation costs.<sup>19</sup> In addition to affordable pricing, the Housing Blueprint's authors and community feedback emphasized the importance of locating affordable housing throughout the city rather than concentrating it in certain areas.<sup>20</sup> To this end, the city plans to focus affordable housing production in "high opportunity areas," defined as areas that "typically include access to jobs, transportation, education, and a healthy environment."<sup>21</sup> Developing affordable housing throughout the city can help create more integrated communities, reduce transportation costs, and enable greater access to jobs, schools, transit, and amenities.<sup>22</sup>

In the Housing Blueprint, Austin estimates a need for more than 135,000 new housing units to meet projected demand, both market-rate and below market-rate.<sup>23</sup> In particular, there is a need for units that are affordable to lower-income households; while 35 percent of Austin households earn below 60 percent median family income (MFI), only 15 percent of the city's housing stock is affordable to them.<sup>24</sup> In recent years, new development has largely been only affordable for higher-income households above the aforementioned thresholds.<sup>25</sup> As such, a major affordable housing

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<sup>18</sup> *What is a complete community?*, CITY OF AUSTIN, TEX. (Feb. 25, 2013), <http://www.austintexas.gov/blog/what-complete-community>.

<sup>19</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 4 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>20</sup> *Id.* at 4, 11.

<sup>21</sup> CITY OF AUSTIN, TEX., CITY OF AUSTIN STRATEGIC HOUSING BLUEPRINT OVERVIEW 2–3 (2017), available at [http://austintexas.gov/sites/default/files/files/Blueprint\\_Overview.pdf](http://austintexas.gov/sites/default/files/files/Blueprint_Overview.pdf); NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 47 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>22</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 11 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>23</sup> *Id.* at 8.

<sup>24</sup> *Id.* at 9.

<sup>25</sup> *Id.* at 9.

goal in the Housing Blueprint is to build 60,000 new units by 2027 that are affordable for households making less than 80 percent of MFI.<sup>26</sup>

While the Housing Blueprint does not legally prescribe any actions the city must take, it was nonetheless adopted by the City Council in 2017 as a roadmap and as a formal commitment toward addressing the affordable housing needs of Austin's growing population.<sup>27</sup> The Housing Blueprint's authors emphasize that an interdepartmental effort will be required to meet Austin's housing needs.<sup>28</sup>

The following sections detail three strategies Austin is pursuing to meet its affordable housing goals: development incentives, streamlining permitting processes, and zoning changes to allow more diverse types of housing.

## Development Incentives

A major strategy Austin is pursuing to meet housing goals is the use of development incentives to encourage more affordable housing development. Generally, development incentives are where developers can obtain waivers from permitting and project review fees or regulatory requirements in exchange for building a project that meets certain criteria. For example, a developer may be eligible to build a greater number of units than would otherwise be allowed at a site if they agree to keep a portion of the units affordable for low-income renters. Participation in incentive programs is optional and allows developers to capitalize on the overall growing demand for housing while helping meet affordable housing goals.

The City of Austin has created multiple development incentive programs to encourage the production of more quality affordable housing. The development incentives vary primarily based on eligibility requirements and location, which demonstrates the flexibility that policymakers have when designing development incentives to effectuate particular policy goals.

Austin's **Affordability Unlocked Development Bonus Program** allows qualifying developers to receive regulatory waivers for height, density, parking, design compatibility, and minimum lot requirements in exchange for reserving half of a development's units as affordable.<sup>29</sup> The

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<sup>26</sup> *Id.* at 2.

<sup>27</sup> *Austin Strategic Housing Blueprint*, CITY OF AUSTIN, TEX., <http://austintexas.gov/blueprint> (last visited Oct. 7, 2021).

<sup>28</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 2 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>29</sup> *Affordability Unlocked Development Bonus Program*, CITY OF AUSTIN, TEX., <http://www.austintexas.gov/departments/affordability-unlocked-development-bonus-program> (last visited Oct 1, 2021).



Affordability Unlocked program was adopted as an amendment to the city’s zoning code in May 2019.<sup>30</sup>

Austin’s **SMART Housing** is a development incentive program aimed specifically at producing housing that is “SMART”: safe, mixed-income, accessible for disabled residents, reasonably priced, and transit-oriented. Participating developers can qualify for fee waivers in exchange for meeting a set of minimum requirements pertaining to SMART qualities. In part, qualifying developments must include a portion of units as affordable, be within half a mile walking distance from a local public transit route, and meet certain green building standards.<sup>31,32</sup> The requirement for SMART Housing to be built close to transit reflects the city’s comprehensive approach to reducing housing-related costs.

Development incentives can apply across a jurisdiction or only in strategic areas where policymakers seek to encourage development. Austin has made **density bonus programs** available in areas where the city wants to encourage affordable housing growth, including downtown, in university neighborhoods, and near transit.<sup>33</sup> A density bonus is a type of development incentive that allows developers to construct buildings that are greater in height or size, and/or a greater number of units than otherwise allowed by a local government’s land use regulations if they opt to either reserve a portion of units as affordable or pay a fee-in-lieu.<sup>34</sup>

For example, the **Downtown Density Bonus Program (DDBP)** was established to promote affordable housing in “vibrant, dense, and pedestrian-friendly” downtown Austin.<sup>35</sup> Projects that qualify for DDBP must also achieve a minimum green building rating and provide a portion of on-site affordable housing or pay a development bonus fee into the city’s Affordable Housing Trust Fund.<sup>36</sup>

<sup>30</sup> AUSTIN, TEX. CITY CODE ch. 25-1, art. 15, div. 4, as amended by Ordinance No. 20190509-027, *available at* <https://www.austintexas.gov/edims/document.cfm?id=319975>.

<sup>31</sup> *Development Incentives and Agreements*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/page/development-incentives-and-agreements> (last visited Oct. 1, 2021).

<sup>32</sup> Green building ratings are given by Austin Energy, the local power company, and can include a variety of sustainability metrics, such as energy efficiency, rainwater management, and electric vehicle charging. *Austin Energy Green Building*, AUSTIN ENERGY (Oct. 14, 2020), <https://austinenergy.com/ae/energy-efficiency/green-building/design-build/get-started>.

<sup>33</sup> HOUS. & PLANNING DEP’T, CITY OF AUSTIN, TEX., CITY OF AUSTIN AFFORDABLE HOUSING DEVELOPMENT INCENTIVE POLICY OVERVIEW (Oct. 1, 2021), *available at* [https://austintexas.gov/sites/default/files/files/Developer%20Incentive%20Matrix\\_09292021.pdf](https://austintexas.gov/sites/default/files/files/Developer%20Incentive%20Matrix_09292021.pdf).

<sup>34</sup> A fee-in-lieu is a payment made from a developer to a local jurisdiction in exchange for a waiver or modification of a regulatory requirement. Generally, proceeds from fees-in-lieu are kept in a fund with a specific purpose, such as preserving affordable housing. These funds usually have limitations on how they can be spent.

<sup>35</sup> *Downtown Density Bonus Program*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/department/downtown-density-bonus-program> (last visited Oct. 1, 2021).

<sup>36</sup> *Id.*

Density bonuses can also be flexibly designed to preserve existing neighborhood character. For example, missing middle housing may be an option in areas where taller and larger buildings may not be aesthetically compatible with existing buildings.<sup>37</sup> Austin's Housing Blueprint suggests that for such areas, a density bonus could allow a greater number of smaller units rather than increased height or bulk.<sup>38</sup> Such a density bonus oriented toward missing middle housing could encourage the building of a greater number of units without compromising neighborhood character.

As of 2016, Austin's density bonus programs have spurred the development of 1,653 units, a majority of which are available for households earning less than 80 percent MFI.<sup>39</sup> The density bonuses have also generated \$4 million in fees-in-lieu to help subsidize affordable housing across the city.<sup>40</sup> These results show that while density bonuses are one policy tool to encourage the market to develop more affordable housing, development incentives alone may not be a viable strategy for generating a significant amount of new affordable housing.

## Streamlining Permitting Processes

During the city's engagement process to draft the Housing Blueprint, residential developers expressed a desire for more efficient permitting processes to minimize administrative and financial barriers to development. Although permitting requirements are necessary to ensure minimum standards are met, permitting can add costs and time to the development process. As developers suggested to the Housing Blueprint's authors, a more efficient permitting process could help minimize barriers to affordable housing development while ensuring development standards are met.<sup>41</sup>

For example, the authors of the plan suggest that expedited review could be used for developments that include income-restricted affordable units.<sup>42</sup> Another permitting recommendation in Austin's housing plan involves creating pre-approved, standardized building plans for infill development.<sup>43</sup> These template or standardized plans would include a range of pre-approved housing designs that already meet site conditions.<sup>44</sup> While the city would have to make an initial investment toward

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<sup>37</sup> Missing middle housing refers to the range of multi-unit housing types between single-family detached homes and high-density high-rise apartments, such as duplexes and townhomes. *Missing Middle Housing*, OPTICOS DESIGN, INC., <https://missingmiddlehousing.com> (last visited Aug. 18, 2021).

<sup>38</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 39 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>39</sup> *Id.* at 31.

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> *Id.* at 33.

<sup>44</sup> *Id.*

developing a set of high-quality designs, the availability and use of standardized plans can result in greater efficiency for both the city and developers alike.

Expedited pathways for new development can potentially increase affordable housing construction by enabling affordable housing options to be brought to market faster.

## Land Use and Zoning

In addition to development incentives and more efficient permitting processes, in the Housing Blueprint, Austin contemplates updates to the city's zoning code as another strategy to increase the city's affordable housing stock.

Recommended zoning reforms focus on increasing diverse housing types, including accessory dwelling units (ADUs), tiny homes (typically less than 700 square feet), and other “smaller homes on smaller lots.”<sup>45</sup> Accessory dwelling units, or ADUs, are secondary living units built on existing single-family parcels. There are a variety of ADU types, including “internal” or attached units (e.g., basement and loft units) and “external” or detached units (e.g., a smaller home built on the same property behind the main home).

ADUs and tiny homes may be more affordable for people to rent and purchase compared to traditional homes, and increasing overall housing options can help reduce housing prices. Additionally, these types of homes can offer an alternative source of income for homeowners at risk of displacement: homeowners who construct ADUs or tiny homes on their parcel can rent these units out to help cover rising property taxes associated with population growth. Entire planned developments of tiny homes have also been advanced as a solution to house homeless individuals and families living on the streets or in temporary shelters.

Community First! Village is one such nonprofit-led planned community of tiny homes right outside of Austin, where more than 500 homes are provided at affordable rental rates to lift people out of chronic homelessness.<sup>46</sup> Importantly, the development operates on a philosophy that “housing alone will never solve homelessness, but community will.”<sup>47</sup> As such, the development includes a variety of communal and cultural spaces that help cultivate social bonds, support personal development, and provide income opportunities.<sup>48</sup>

Several types of zoning changes can be used to effectuate more of these diverse housing types by increasing the areas where ADUs and tiny homes can lawfully be built. For example, relaxing minimum lot sizes, parking requirements, and density restrictions in the zoning code can all increase the areas where such diversified housing types can be built. Currently, ADUs in Austin must be built on lots with a minimum size of 5,750 square feet, the standard lot size for residential

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<sup>45</sup> *Id.* at 32–33.

<sup>46</sup> *Community First! Village*, MOBILE LOAVES & FISHES, <https://mlf.org/community-first/> (last visited Oct 7, 2021).

<sup>47</sup> *Frequently Asked Questions*, MOBILE LOAVES & FISHES, <https://mlf.org/faqs/> (last visited Oct 7, 2021).

<sup>48</sup> *Community Works*, MOBILE LOAVES & FISHES, <https://mlf.org/community-works/> (last visited Oct 7, 2021).

development, despite the fact that smaller lots with a primary residence are capable of supporting ADUs.<sup>49</sup> The Housing Blueprint also includes recommendations to reduce parking requirements, which would allow developers to use more space on a parcel for housing.<sup>50</sup>

However, it is important to note that ADUs and tiny homes can only serve as an affordable housing option where rental or purchase prices are truly affordable to those who would consider them a housing option. ADUs and tiny homes are not necessarily inherently affordable, and as housing prices rise in Austin and other surrounding areas, ADUs and tiny homes may not offer a scalable or truly affordable housing option.

## Anti-Displacement Efforts

As a jurisdiction experiencing significant population growth, Austin has begun preparing anti-displacement measures to ensure that current renters and homeowners are not priced out of the area. Rapid population growth can cause displacement by causing increases in rental rates and property taxes, which can make it unaffordable for current residents to stay in their homes.

In 2014, Austin created an **Anti-Displacement Task Force** (task force) to address displacement and gentrification concerns.<sup>51</sup> The task force released their recommendations in 2018, which aim to protect renters and homeowners from displacement using a diverse range of actions to address the issue from all sides. The recommendations include:

- Prioritizing displaced residents for housing that is financed by the city or generated by the city's incentive programs.
- Partnering with a nonprofit to establish a "one-stop-shop" for housing stability, which would streamline administration of the city's various housing assistance programs and engage in community outreach to ensure maximum access for eligible residents.
- Expanding tax exemption and abatement programs, which help reduce homeowners' property tax burdens.
- Establishing a low-interest loan program for low-income homeowners.

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<sup>49</sup> CodeNEXT is Austin's ongoing project to update its development code in accordance with Imagine Austin, the city's comprehensive plan adopted in 2012. CITY OF AUSTIN, TEX., DEVELOPING COMPLETE COMMUNITIES FOR ALL AUSTINITES: HOUSEHOLD AFFORDABILITY CODE PRESCRIPTION 24, available at [https://www.austintexas.gov/sites/default/files/files/Planning/CodeNEXT/2016-04-29\\_CompactAccessibleAffordable4\\_HD.pdf](https://www.austintexas.gov/sites/default/files/files/Planning/CodeNEXT/2016-04-29_CompactAccessibleAffordable4_HD.pdf).

<sup>50</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 37 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>51</sup> *Anti-Displacement Task Force*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/page/anti-displacement-task-force> (last visited Oct 1, 2021).

- Increasing affordable housing development on land owned by the city or held in community land trusts.<sup>52</sup>

The task force's anti-displacement recommendations are also reflected in the Housing Blueprint.<sup>53</sup>

The work of the task force led to the development of a Displacement Prevention Strategy and in 2021, the initiation of a new position for a Community Displacement Prevention Officer.<sup>54</sup> The Community Displacement Prevention Officer, which falls under the city's Department of Housing and Planning, will be in charge of "the department's Displacement Prevention Division, tasked with developing and leading programming and outreach to prevent the displacement of vulnerable communities, which will include \$300 million over 13 years in anti-displacement funding approved by voters in November 2020 as part of Project Connect Proposition A [see below]."<sup>55</sup>

In 2016, Austin adopted a **Tenant Relocation Assistance ordinance**, which requires developers to provide sufficient notice before tenants can be evicted.<sup>56</sup> The ordinance also directs the city's Neighborhood Housing and Community Development agency to establish a Developer Fund for Tenant Relocation Assistance, which would collect a tenant relocation fee from developers seeking to make developments that would result in displacement.<sup>57</sup> The fees would assist low-income tenants with relocation costs, including funding for the security deposit and first month's rent at replacement housing.<sup>58</sup>

However, soon after the fund was established, the Texas state legislature adopted a law banning cities from collecting fees on new construction to offset costs to tenants.<sup>59</sup> Austin's 2020 City

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<sup>52</sup> CITY OF AUSTIN, TEX. ANTI-DISPLACEMENT TASK FORCE, RECOMMENDATIONS FOR ACTION 8–20 (Nov. 2018), available at [http://www.austintexas.gov/sites/default/files/files/Housing/Anti-Displacement\\_Task\\_Force\\_Final\\_Recommendations\\_and\\_Report.pdf](http://www.austintexas.gov/sites/default/files/files/Housing/Anti-Displacement_Task_Force_Final_Recommendations_and_Report.pdf).

<sup>53</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 20–23 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf). Anti-displacement recommendations in the Housing Blueprint include property tax exemptions for legacy residents, financial assistance for retention in gentrifying areas, tracking the expirations of affordability periods for income-restricted units, promoting shared equity via community land trusts and land banking, and establishing a strike fund that would acquire and manage existing multi-family buildings for long-term affordability.

<sup>54</sup> *City of Austin hires first Community Displacement Prevention Officer*, CITY OF AUSTIN, TEX. (Apr. 14, 2021), <https://www.austintexas.gov/news/city-austin-hires-first-community-displacement-prevention-officer>.

<sup>55</sup> *Id.*

<sup>56</sup> AUSTIN, TEX. CITY CODE § 25-1-715 (2016), Ordinance No. 20160901-050 establishing the fund, available at <https://www.austintexas.gov/edims/document.cfm?id=262885>.

<sup>57</sup> AUSTIN, TEX. CITY CODE § 161-17.13 (2017); Rule 161-17.13 (adopted May 22 2017), available at [http://www.austintexas.gov/sites/default/files/files/Tenant\\_Relocation\\_Assistance\\_Final\\_Rules2017.pdf](http://www.austintexas.gov/sites/default/files/files/Tenant_Relocation_Assistance_Final_Rules2017.pdf).

<sup>58</sup> *Id.*

<sup>59</sup> TEX. H.B. No. 1449 (adopted May 29, 2017), available at <https://capitol.texas.gov/tlodocs/85R/billtext/pdf/HB01449F.pdf#navpanes=0> (amending Chapter 250, Section 250.008 of the state's Local Government Code).



Budget allocated a one-time contribution of \$500,000 to provide for tenant relocation assistance under the 2016 ordinance, but future funding to support the program will have to be identified.<sup>60</sup>

Austin is also incorporating anti-displacement work into the city's public transportation initiatives. Project Connect, Austin's comprehensive transit development plan, includes a \$300-million investment toward anti-displacement measures that include transit-oriented development and affordable housing along new routes in the transit plan.<sup>61</sup> The anti-displacement allocation came out of lessons learned from other cities that saw real estate prices increase near new transit centers.<sup>62</sup>

To inform the city's anti-displacement efforts, agencies leading Project Connect partnered with the city's Department of Housing and Planning to create a series of anti-displacement maps that outline the displacement risk of various neighborhoods along new planned transit routes.<sup>63</sup> The maps help show displacement risk geographically and are designed to inform community conversations and investment of anti-displacement funding.<sup>64</sup> The anti-displacement maps can also serve as a decisionmaking tool for other agencies involved in building out the city's transit and amenities to support expected population growth.

## ENVIRONMENT

Imagine Austin, the city's comprehensive plan, identified priorities to protect and increase green infrastructure and other environmental features as part of its growth plan.<sup>65</sup> By establishing sustainability and environmental resilience as a key value in the city's continued growth, Austin aims to protect its diverse environmental assets including parks, urban tree canopy, and natural waterways.<sup>66</sup>

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<sup>60</sup> Erica Proffer, *Forced out: What happens to tenants when developers tear down old buildings?*, KVUE (Feb. 20, 2020), <https://www.kvue.com/article/news/investigations/defenders/austin-tenant-forced-out-of-homes-by-developers/269-4f7d62be-a746-4243-9c88-f56c47aafa05>.

<sup>61</sup> *Project Connect*, CAPITAL METRO. TRANSP. AUTH., <https://www.capmetro.org/project-connect> (last visited Oct. 6, 2021); *Initial Investment*, CAPITAL METRO. TRANSP. AUTH., <https://www.capmetro.org/project-connect/initial-investment> (last visited Oct. 6, 2021);

<sup>62</sup> Benton Graham, *Project Connect officials promise equity will be at forefront of initiative*, COMMUNITY IMPACT NEWSPAPER (Aug. 18, 2021), <https://communityimpact.com/austin/central-austin/transportation/2021/08/18/project-connect-officials-promise-equity-will-be-at-forefront-of-initiative/>.

<sup>63</sup> *Project Connect Racial Equity Anti-Displacement Maps*, CITY OF AUSTIN, TEX. DEP'T OF HOUS. & PLANNING, <https://austin.maps.arcgis.com/apps/MapSeries/index.html?appid=799dbd68b43a4d9d8c0292befe8c9b34> (last visited Oct. 6, 2021).

<sup>64</sup> *Id.*

<sup>65</sup> CITY OF AUSTIN, TEX., *IMAGINE AUSTIN COMPREHENSIVE PLAN 10* (June 2012), available at [ftp://ftp.ci.austin.tx.us/npzd/IACP\\_amended2016\\_web\\_sm.pdf](ftp://ftp.ci.austin.tx.us/npzd/IACP_amended2016_web_sm.pdf).

<sup>66</sup> *Id.*

## Compact and Connected Development

Imagine Austin establishes that housing and other new development should move Austin toward a more compact and connected city with nature and green infrastructure throughout.<sup>67</sup> The plan's authors envision compact and connected communities as places that offer homes, jobs, schools, cultural amenities, and other destinations in close proximity, threaded with a strong network of public transit and infrastructure to support walking and biking.<sup>68</sup> By reducing reliance on cars, planning for compactness and connectivity can make communities greener by reducing air pollution, greenhouse gas emissions, and the need for infrastructure that would otherwise be needed to connect distanced developments.

## Green Infrastructure

Chapter 4 of the Imagine Austin plan builds on the Housing Blueprint and focuses on protecting environmentally sensitive habitats and enhancing natural elements of the urban environment, such as parks and the urban tree canopy.<sup>69</sup> Imagine Austin adopts the Conservation Fund's definition of green infrastructure as "strategically planned and managed networks of natural lands, working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to human populations."<sup>70</sup> From a "complete communities" standpoint, green infrastructure is intended to leverage ecosystem functions in addition to serving public health and recreational benefits.

One goal of Imagine Austin is to integrate these plans and create collaborations between local agencies toward increasing green infrastructure in the city. Before the Imagine Austin comprehensive plan was adopted, the city had elements of green infrastructure in various environment-related programs, including the:

- Watershed Protection Strategic Plan, which proposes numerous solutions to address water quality and flood control challenges, and prioritizes strategies, such as green infrastructure that can help implement multiple goals;<sup>71</sup>
- Our Parks, Our Future plan, the Austin Parks and Recreation Department's guiding document for park planning, which includes a goal to work with the Office of

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<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> *Id.* at 149.

<sup>70</sup> *Id.* at 151.

<sup>71</sup> CITY OF AUSTIN, TEX., WATERSHED PROTECTION MASTER PLAN 15 (Aug. 19, 2016), *available at* [https://www.austintexas.gov/watershed\\_protection/publications/document.cfm?id=261630&id2=%20](https://www.austintexas.gov/watershed_protection/publications/document.cfm?id=261630&id2=%20).

Sustainability, the Watershed Protection Department, and other agencies to protect and increase park areas that provide environmental benefits;<sup>72</sup> and

- Complete Streets Policy, which aims to create streets that are “inviting and accessible places to walk, bike, or ride for people of all ages and abilities” by including sidewalks, bike lanes, and greenery.<sup>73</sup>

In 2017, the city council passed a resolution to develop an integrated green infrastructure plan that would align relevant agencies and programs toward a shared goal of maintaining and increasing Austin’s green infrastructure as the city grows.<sup>74</sup> To this end, Austin has created an online resource that consolidates information on Austin’s plans and programs related to green infrastructure in one location.<sup>75</sup> The webpage functions to educate the public on the city’s green infrastructure initiatives and includes tabs for urban forest, water resources, parks, green streets, and environmental habitats.<sup>76</sup> The city is also enhancing public transparency by publishing green infrastructure indicators online, including performance metrics related to community gardens, park access, stream water quality, permanently preserved land, and tree canopy coverage.<sup>77</sup>

## Watershed Management Planning

Austin’s watershed management plan was most recently updated in 2016, with the original plan being adopted 20 years prior.<sup>78</sup> The updated initiative, the Watershed Protection Strategic Plan, aims to address complex challenges including climate change, population growth, and racial inequities related to how low-income communities of color in Austin have historically been underserved by the city.<sup>79</sup>

With regards to flooding, the next iteration of the plan aims to capture a more holistic version of risk that incorporates social vulnerability with technical risk data. The updates will be informed by climate projections as well as a National Weather Service rainfall study conducted for Texas in 2018 titled Atlas 14 that includes more recent flood-related data to enable the city to more

<sup>72</sup> PARKS & RECREATION, CITY OF AUSTIN, TEX., OUR PARKS, OUR FUTURE 183 (Nov. 14, 2019), *available at* [ftp://ftp.ci.austin.tx.us/PARDPlanningCIP/PARD\\_LRP\\_Attachments/20191227/2019-12-27%20Our%20Parks%20Our%20Future%20FINAL%20Plan%20-%20Small.pdf](ftp://ftp.ci.austin.tx.us/PARDPlanningCIP/PARD_LRP_Attachments/20191227/2019-12-27%20Our%20Parks%20Our%20Future%20FINAL%20Plan%20-%20Small.pdf).

<sup>73</sup> *Complete Streets*, CITY OF AUSTIN, TEX., <https://austintexas.gov/departments/completestreets> (last visited Oct. 6, 2021).

<sup>74</sup> Brian Zabcik, *Austin council approves green infrastructure resolution*, ENVIR’T TEX. (June 16, 2017), <https://environmenttexas.org/news/txe/austin-council-approves-green-infrastructure-resolution>.

<sup>75</sup> *Austin’s Green Infrastructure*, CITY OF AUSTIN, TEX., <http://www.austintexas.gov/atxgreen> (last visited Oct. 6, 2021).

<sup>76</sup> *Id.*

<sup>77</sup> 4. *Use Green Infrastructure to Protect Environmentally Sensitive Areas and Integrate Nature into the City*, CITY OF AUSTIN, TEX., <https://data.austintexas.gov/stories/s/Green-Infrastructure/ehsi-gu4h/> (last visited Oct. 6, 2021).

<sup>78</sup> *Watershed Protection Strategic Plan*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/departments/watershed-protection-strategic-plan> (last visited Oct. 6, 2021).

<sup>79</sup> *Id.*

accurately predict flood risk.<sup>80</sup> Through the watershed plan update, the city also intends to increase community engagement beyond that involved for the original 2001 plan by putting more time and effort into meeting a broad cross-section of residents through different means.

In addition, the new data and plan will inform potential amendments to the city's floodplain management regulations, including the boundary of the 100-year floodplain and where future development may occur relative to that boundary. Here, Austin is leading with data and planning to guide future regulatory changes.

## Water Conservation Incentives

In addition to affordable housing and density incentives, the city also provides incentives to mitigate the impact of impervious surface cover in the jurisdiction. Through its WaterWise program, the city's water department, Austin Water, offers different payments to residential and commercial property owners to install water conservation features.<sup>81</sup> For example, residential homeowners can earn up to \$1,750 for converting turf grass to native plantings and \$500 for retaining rainwater onsite.<sup>82</sup> By mitigating the impacts of impervious surface cover, homeowners Austin can slow water and pollution runoff into area water bodies to mitigate flood and extreme heat risks and improve water quality. Moreover, the use of native plants can restore and conserve natural habitats.

## COMMUNITY ENGAGEMENT

### Austin Strategic Housing Blueprint

The City of Austin deployed significant community outreach efforts in its development of the Austin Strategic Housing Blueprint, including holding 30 public meetings with 433 attendees, a bilingual survey with 1,572 responses, and intentional outreach to historically underrepresented populations.<sup>83</sup> The city held eight meetings in low-income and minority communities, where 119

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<sup>80</sup> *Flood Risk and Atlas 14*, CITY OF AUSTIN, TEX., <https://www.austintexas.gov/department/flood-risk-and-atlas-14> (last visited Oct. 7, 2021).

<sup>81</sup> *Rebates, Tools, & Programs*, AUSTIN WATER, <https://www.austintexas.gov/department/rebates-tools-programs> (last visited Oct 6, 2021).

<sup>82</sup> *Id.*

<sup>83</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 4 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf); CITY OF AUSTIN, TEX., CITY OF AUSTIN STRATEGIC HOUSING BLUEPRINT OVERVIEW 1 (2017), available at [http://austintexas.gov/sites/default/files/files/Blueprint\\_Overview.pdf](http://austintexas.gov/sites/default/files/files/Blueprint_Overview.pdf).

people attended and the city received 18 formal comment letters from individuals and organizations.<sup>84</sup>

After a draft of the plan was completed in June 2016, the city made requests for public feedback to stakeholders including nonprofit, housing advocacy, and neighborhood groups.<sup>85</sup> The city also created other feedback channels allowing people to comment online and at public libraries and advertised these opportunities using social media, community access television, and Spanish-language media.<sup>86</sup> To increase the plan's accessibility, Austin has also published Chinese, Korean, Vietnamese, and Spanish translations of the Blueprint Overview, a document that provides a high-level look at the plan's goals and recommendations.<sup>87</sup>

## FUNDING

### Affordable Housing

#### Housing Trust Fund

Created in 1999, Austin's Housing Trust Fund is a fund for developing, rehabilitating, and acquiring land for affordable owner-occupied and rental homes.<sup>88</sup> The fund receives 40 percent of property tax revenues from developments built on land that was previously owned by the city, as well as funding from various programs including tax increment financing and property sales.<sup>89</sup> The Housing Trust Fund has contributed to building or preserving 1,418 affordable units since its inception.<sup>90</sup>

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<sup>84</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 6 (2017), available at

[https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

<sup>87</sup> *Blueprint Overview*, CITY OF AUSTIN, TEX., <http://austintexas.gov/page/blueprint-overview> (last visited Oct. 7, 2021).

<sup>88</sup> *Housing Trust Fund*, CITY OF AUSTIN, TEX., <http://austintexas.gov/departments/housing-trust-fund> (last visited Oct. 1, 2021).

<sup>89</sup> *Id.*; NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 26 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>90</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 26 (2017), available at [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).



## Affordable Housing Bond Funding

In 2006, voters approved \$55 million in General Obligation (GO) bonds for affordable housing development.<sup>91</sup> All of this funding has been spent on building and preserving 2,593 rental units throughout the city, with 74 percent of the units affordable for households below 50 percent MFI.<sup>92</sup> Austin voters approved another \$65 million in GO bonds for affordable housing in 2013.<sup>93</sup> Additionally, in 2018, Austin voters approved \$250 million in Affordable Housing Bonds toward land acquisition for affordable housing development, rental housing development assistance, a homeownership program, and a home repair program.<sup>94</sup>

## Federal Funding

The city also plans to continue leveraging federal Low Income Housing Tax Credits (LIHTCs) and grants from the U.S. Department of Housing and Urban Development to fund the development and preservation of affordable rental housing.<sup>95</sup>

## NEXT STEPS

### Austin Strategic Housing Blueprint

The Housing Blueprint includes an implementation matrix that organizes recommended policy actions by priority, identifies implementation partners, and lists the time horizon for each recommended action item.<sup>96</sup> To coordinate implementation, the City Council directed the City Manager to create an Interdepartmental Action Team that includes the Departments of Neighborhood Housing and Community Development, Transportation, Planning and Zoning, Economic Development, Financial Services, and Law.

Austin is also publicly tracking progress on affordable housing goals. Austin's Housing and Planning Department partnered with the nonprofit HousingWorks Austin to create an annual Blueprint Scorecard (scorecard) that captures information on how many new units are built, how affordable they are, and where they are located.<sup>97</sup> The most recent scorecard from 2020 shows that

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<sup>91</sup> *Id.* at 20.

<sup>92</sup> *Id.*

<sup>93</sup> *Id.*

<sup>94</sup> CITY OF AUSTIN, TEX., PROPOSITION A: AFFORDABLE HOUSING (2018), *available at* [https://www.austintexas.gov/sites/default/files/files/Finance/CFO/2018-Bond/Prop\\_A\\_Affordable\\_Housing.pdf](https://www.austintexas.gov/sites/default/files/files/Finance/CFO/2018-Bond/Prop_A_Affordable_Housing.pdf).

<sup>95</sup> NEIGHBORHOOD HOUS. & CMTY. DEV., CITY OF AUSTIN, TEX., AUSTIN STRATEGIC HOUSING BLUEPRINT 25–26 (2017), *available at* [https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint\\_Final\\_September\\_2017.pdf](https://www.austintexas.gov/sites/default/files/files/StrategicHousingBlueprint_Final_September_2017.pdf).

<sup>96</sup> *Id.* at 40–45.

<sup>97</sup> *Reporting & Progress*, CITY OF AUSTIN, TEX., <http://austintexas.gov/page/reporting-progress> (last visited Oct. 1, 2021).

the city is short of meeting its annual housing benchmarks, but nevertheless continuing to make progress on ambitious objectives.<sup>98</sup>

Tools like the scorecard are valuable for cities and the public to track and assess progress on implementation of affordable housing initiatives. Where local governments have multiple departments working toward broader housing goals, progress tracking tools can also facilitate information-sharing between departments and provide insight on potential improvements to implementation. Tracking tools also enable accountability to stakeholders and the broader public.

## CONSIDERATIONS AND LESSONS LEARNED

For other policymakers, Austin's Housing Blueprint can serve as an example of local planning for affordable housing. In particular, the Housing Blueprint can offer a vision of housing affordability through a comprehensive quality-of-life lens, in which housing is both affordable from a rental or mortgage standpoint and proximate to transit, services, and economic opportunities.

In particular, policymakers can use development incentives to advance housing goals by making it more cost-effective for developers to build housing options with certain qualities, including affordability, accessibility, and proximity to transit. Development incentive programs can also generate revenue for the city to invest in affordable housing by providing the option for developers to pay a fee-in-lieu rather than reserve affordable units. Zoning changes can also be used to allow for more ADUs and tiny homes as less costly housing options. However, development incentives and zoning to increase ADUs and tiny homes alone may not encourage the market to produce large volumes of affordable housing.

In tandem with the city's efforts to grow affordable housing, Austin is leading with a focus on anti-displacement through its Anti-Displacement Task Force and plans to expand transportation infrastructure and accommodate new growth. As other localities similarly face population growth and community changes, it is important to learn from Austin and comprehensively undertake efforts to preserve housing and the rights of legacy residents in the face of new developments and investments.

Austin's efforts around green infrastructure and watershed management stand for the importance of collaborating across stakeholder agencies to effectively plan and implement environmental initiatives. The city's renewed efforts to integrate green infrastructure initiatives and update its watershed management plan reflect a goal for departments to work together on strategic planning and ensure the city is addressing as many community needs as possible. In pursuing zoning and growth management, other local and regional policymakers can similarly consider ways to

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<sup>98</sup> HOUSING WORKS AUSTIN, AUSTIN STRATEGIC HOUSING BLUEPRINT SCORECARD 2020 (2020), *available at* [http://austintexas.gov/sites/default/files/files/Housing\\_%26\\_Planning/Austin%20Strategic%20Housing%20Blueprint/Scorecards/2020\\_Scorecard\\_wExSumm\\_FNL.pdf](http://austintexas.gov/sites/default/files/files/Housing_%26_Planning/Austin%20Strategic%20Housing%20Blueprint/Scorecards/2020_Scorecard_wExSumm_FNL.pdf).

incorporate green spaces into the future of urban or suburban jurisdictions to leverage limited city resources, coordinate across diverse agencies, and build more equitable community resilience.

## City of Norfolk, Virginia

# PlaNorfolk 2030, Norfolk Vision 2100, and Resilience Zoning Updates

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## EXECUTIVE SUMMARY

Norfolk, Virginia is a coastal city whose history, economy, and culture are deeply tied to its location on the water. Facing new challenges of increased flooding and sea-level rise due to climate change, Norfolk has responded by developing a host of planning and zoning initiatives that are informed by these new risks and designed to increase the city's resilience against them. Norfolk's efforts are an example of how various tools, including a comprehensive plan, a long-range plan, and an updated zoning ordinance, can be used together to build an integrated strategy for local resilience.

Norfolk also serves as an example of adaptive planning, in which new needs and priorities that arise over time are integrated as appendices to the city's comprehensive plan. For example, several appendices to Norfolk's comprehensive plan were developed to assist developers with housing design challenges that were not addressed in the original comprehensive plan.

Overall, Norfolk's efforts show how developing a long-range strategy centered on the communities' priorities can inform zoning rules that implement that vision. Other jurisdictions may look to Norfolk as an example of how local governments can orient and integrate planning and zoning initiatives toward increasing long-term resilience to the impacts of flooding.

## BACKGROUND

Norfolk is a city on the southeastern coast of Virginia, with a population of over 242,000 in 2019, approximately the same as its population in 2010.<sup>1</sup> Founded as a port city at the mouth of the Chesapeake Bay, Norfolk's history in water-based industry is key to its identity as a city, with 144 miles of shoreline supporting economic, recreational, and aesthetic benefits for the city's residents and visitors.<sup>2</sup> However, increased frequency of flooding due to sea-level rise and land subsidence have posed problems in recent years, spurring new planning initiatives to respond to flooding and other climate threats.

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<sup>1</sup> QuickFacts: Norfolk City, Virginia, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/norfolkcityvirginia/PST045219> (last visited Nov. 4, 2021).

<sup>2</sup> CITY OF NORFOLK, VA., NORFOLK VISION 2100 22 (Nov. 22, 2016), available at <https://www.norfolk.gov/DocumentCenter/View/27768/Vision-2100---FINAL?bidId=>.

The following sections detail elements of Norfolk’s comprehensive plan, long-range resilience plan, and zoning ordinance that are notable as adaptive responses to the increased flooding risks facing the city.

## OVERVIEW OF PLANORFOLK 2030, NORFOLK VISION 2100, AND ZONING CODE UPDATES

Norfolk has two main strategy documents guiding its resilience efforts: plaNorfolk 2030, the city’s general comprehensive plan, and Norfolk Vision 2100, a longer-term visioning document for long-range resilience planning adopted as an addendum to the general comprehensive plan.<sup>3</sup> In 2018, elements of plaNorfolk 2030 and Norfolk Vision 2100 were incorporated into Norfolk’s updated zoning ordinance.

In 2013, Norfolk adopted plaNorfolk 2030 as its general comprehensive plan.<sup>4</sup> Among other updates, plaNorfolk 2030 incorporates the city’s increased awareness of risks caused by flooding and sea-level rise.<sup>5</sup> The plan advances a vision of Norfolk with green spaces that are “not simply protected, but enhanced” and “well-maintained housing options that are affordable and accessible to all residents.”<sup>6</sup> To this end, the plan includes a chapter each for promoting environmental sustainability and ensuring housing choices for all, as well as several appendices that expand upon these initiatives in greater detail.<sup>7</sup>

Notably, plaNorfolk 2030 includes a goal to draft a new zoning ordinance, which had last been updated in 1992. At early stages in the rezoning process, Norfolk lacked an overarching vision that city planners wanted to implement. However, the city’s subsequent participation in the 100 Resilient Cities program brought flood, economic, and neighborhood resilience to the forefront of the rezoning effort.<sup>8</sup>

Seeking to create the “most resilient ordinance in the U.S.,” Norfolk paused the zoning update to develop Norfolk Vision 2100. Norfolk Vision 2100 emphasized deep community engagement, and came to inform the final zoning ordinance update to ensure that development arising from the new zoning ordinance reflects communities’ goals and priorities.

<sup>3</sup> CITY OF NORFOLK, VA., PLANORFOLK 2030 (2013), *available at* <https://www.norfolk.gov/DocumentCenter/View/2483/plaNorfolk2030?bidId=>; CITY OF NORFOLK, VA., NORFOLK VISION 2100 (Nov. 22, 2016), *available at* <https://www.norfolk.gov/DocumentCenter/View/27768/Vision-2100---FINAL?bidId=>.

<sup>4</sup> CITY OF NORFOLK, VA., PLANORFOLK 2030 (2013), *available at* <https://www.norfolk.gov/DocumentCenter/View/2483/plaNorfolk2030?bidId=>.

<sup>5</sup> *Id.* at 1-2.

<sup>6</sup> *Id.* at 1-3.

<sup>7</sup> *plaNorfolk 2030*, CITY OF NORFOLK, VA., <https://www.norfolk.gov/1376/plaNorfolk2030> (last visited Nov 3, 2021).

<sup>8</sup> *Id.* at 2-3.



In 2016, the city adopted Norfolk Vision 2100 (Vision 2100) as an amendment to plaNorfolk 2030.<sup>9</sup> Vision 2100 was developed to guide a long-term strategy around flooding and sea-level rise due to climate change. Vision 2100 designates different areas in the city according to a four-color system, with each color representing a combination of the area's flooding vulnerability and current and future assets.<sup>10</sup> For each of the four area types, Vision 2100 provides unique goals and actions pertaining to each area's unique challenges and opportunities.<sup>11</sup> Vision 2100 also offers a set of resilience policies that would apply across area types, including improving transit connections and incentivizing more resilient and affordable housing.<sup>12</sup> While Vision 2100 is not itself a comprehensive plan, it has been formally adopted as an appendix to plaNorfolk 2030 and provides a framework to inform development-related decisions made pursuant to the comprehensive plan.

To implement its resilience goals, Norfolk then revised and adopted a new zoning code in 2018. The new zoning ordinance was informed by Vision 2100 and embraces form-based zoning to: (1) ensure that development in flood hazard zones meets minimum resilience standards; and (2) encourage new development in areas with lower flooding risk.

The following sections highlight some of the resilience features of plaNorfolk 2030 and Norfolk Vision 2100 and their implementation through the city's zoning regulations. In particular, the sections focus on Norfolk's efforts to increase resilient housing access, increase green infrastructure, and conduct area-based planning informed by flood risk projections.

## PlaNorfolk 2030

PlaNorfolk 2030 demonstrates the use of land use planning as a tool to mitigate environmental vulnerabilities, setting forth the city's environmental and development goals, strategies, and action items that will guide where and how development should occur. Action items in the plan related to resilience include:

- Evaluating the potential impact of sea-level rise when reviewing development proposals, budget preparations, and changes to development regulations;<sup>13</sup>
- Promoting growth in the least flood-prone areas and creating incentives to encourage elevating structures higher than the minimum Base Flood Elevation in flood hazard zones;<sup>14</sup>

<sup>9</sup> CITY OF NORFOLK, VA., NORFOLK VISION 2100 (Nov. 22, 2016), *available at* <https://www.norfolk.gov/DocumentCenter/View/27768/Vision-2100---FINAL?bidId=>.

<sup>10</sup> *Id.* at 22.

<sup>11</sup> *Id.* at 27–43.

<sup>12</sup> *Id.* at 23–25.

<sup>13</sup> CITY OF NORFOLK, VA., PLANORFOLK 2030 2-20, 6-15 (2013), *available at* <https://www.norfolk.gov/DocumentCenter/View/2483/plaNorfolk2030?bidId=>.

<sup>14</sup> *Id.* at 6-15–6-16.

- Ensuring that all new development in designated flood-prone areas comply with the city’s flood protection regulations;<sup>15</sup>
- Updating zoning regulations to strengthen stormwater management requirements and mitigate flooding;<sup>16</sup>
- Developing a stormwater master plan with information on water volumes and rates of discharge;<sup>17</sup> and
- Developing area-based planning approaches based on the area types identified in Norfolk Vision 2100.<sup>18</sup>

## Norfolk Vision 2100

PlaNorfolk 2030 and Norfolk Vision 2100 were developed as complementary planning instruments. The writers of Vision 2100 stress that it is not a comprehensive plan like plaNorfolk 2030 — rather, Vision 2100 is narrower in scope and was created to provide an additional longer-range vision out to the year 2100 to complement the more specific guidance in the city’s comprehensive plan.<sup>19</sup> However, Vision 2100 was formally adopted as an appendix to the comprehensive plan and will serve to inform decisions made to implement plaNorfolk 2030’s future land use map, which identifies the “best” future land use for all properties in the city.<sup>20</sup>

Norfolk Vision 2100 arose out of Norfolk’s induction into 100 Resilient Cities (100RC), a global network of cities partnering to develop strategies for incorporating climate resilience into local governance.<sup>21</sup> Norfolk adopted a whole-city approach for Vision 2100, planning not just for areas projected to face the highest risks from flooding and sea-level rise, but also for how these impacts would indirectly affect other parts of the city. For example, neighborhoods at higher elevations may rely on coastal areas for economic vitality.<sup>22</sup> In addition, underdeveloped neighborhoods may absorb future growth from lower-lying flood-prone areas if people are displaced by or choose to relocate locally due to sea-level rise.<sup>23</sup>

Vision 2100 designates different areas in the city according to a four-color system, with each color designation primarily based on two factors: flooding risk and present or future assets. Each color

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<sup>15</sup> *Id.* at 2-20, 6-15–6-16.

<sup>16</sup> *Id.* at 2-20.

<sup>17</sup> *Id.* at 6-16.

<sup>18</sup> *Id.* at 3-11.

<sup>19</sup> CITY OF NORFOLK, VA., NORFOLK VISION 2100 46–48 (Nov. 22, 2016), *available at* <https://www.norfolk.gov/DocumentCenter/View/27768/Vision-2100---FINAL?bidId=>.

<sup>20</sup> *Id.* at 47.

<sup>21</sup> *Id.* at 2.

<sup>22</sup> *Id.* at 3.

<sup>23</sup> *Id.*

corresponds to a set of adaptation and resilience strategies that should be targeted for the unique risks and opportunities that define a given area type.<sup>24</sup>

- **Red areas** are those with high flood risk and high levels of assets. In Norfolk, red areas include waterfront areas that serve as major economic engines, with built assets including downtown Norfolk, ports and shipyards, universities, and medical centers.<sup>25</sup> Because these assets are highly valuable and cannot feasibly be relocated elsewhere in the city, Norfolk’s resilience strategy for these areas emphasize investing in major flood control infrastructure and increasing density to take advantage of long-term flood protection.<sup>26</sup>
- **Yellow areas** are considered high-risk and low-asset areas. Many of these areas contain historic waterfront residential communities. As such, Norfolk’s approach in yellow areas focuses on increasing flood mitigation measures and encouraging strategic investment decisions.<sup>27</sup>
- **Green areas** are considered to have low levels of flood risk and high levels of current or future assets. Green areas are contemplated as priority areas for development and redevelopment, including for high-density housing for residents that choose to relocate from more at-risk areas of the city.<sup>28</sup>
- **Purple areas** are low-risk, low-asset areas. Purple areas are expected to become the “neighborhoods of the future,” where the city seeks to improve upon housing affordability, access to quality-of-life amenities, and general neighborhood attractiveness.<sup>29</sup>

This framework recognizes that the optimal resilience strategy will be different for different places in Norfolk, and provides a system for policymakers to prioritize the most effective strategies at the neighborhood level.

Vision 2100 also offers a set of resilience policies that apply across all of the four areas, including improving transit connections, incentivizing more resilient and affordable housing, and increasing green infrastructure for stormwater management.<sup>30</sup>

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<sup>24</sup> *Id.* at 22.

<sup>25</sup> *Id.* at 28.

<sup>26</sup> *Id.* at 28–29.

<sup>27</sup> *Id.* at 33–36.

<sup>28</sup> *Id.* at 38.

<sup>29</sup> *Id.* at 41–43.

<sup>30</sup> *Id.* at 23–25.

# HOUSING

## Resilience Programs

Norfolk has several programs to encourage resilient homes at the building level. For example, the Southeastern Tidewater Opportunity Project (STOP) Weatherization Program provides assistance with insulating and air sealing for lower-income homeowners, which can increase the energy efficiency of heating and cooling systems.<sup>31</sup> Additionally, programs such as Equity Secure and Norfolk Home Rehabilitation help residents modernize their homes by helping fund repairs and the replacement of heating, plumbing, and other systems.<sup>32</sup> For new construction, Norfolk's Green Home Choice Program offers expedited permitting for construction that meets certain energy efficient design standards.<sup>33</sup>

Norfolk is also a participant in the Community Rating System (CRS) program, a voluntary incentive program under the federal National Flood Insurance Program (NFIP).<sup>34</sup> As a Class Seven CRS community, Norfolk residents receive a 15 percent discount on their flood insurance premiums in exchange for the city implementing floodplain management practices that go above minimum NFIP requirements.<sup>35</sup> PlaNorfolk 2030 also includes action items to ensure that new development in flood-prone areas is compliant with floodplain regulations and that residents in flood-prone areas are notified of the threats to their properties.<sup>36</sup>

## Planning

Norfolk is a mature, developed city where only 3.1 percent of the city's land remains vacant.<sup>37</sup> As such, Norfolk's planning to increase affordable housing development acknowledges that new development will be limited to primarily redevelopment or infill.<sup>38</sup> The city nevertheless recognizes a need for more affordable housing and has developed some approaches to increasing local housing stock under this context. To this end, plaNorfolk 2030 contains some actions, including ensuring that the zoning ordinance permits a variety of residential densities and housing types and encouraging compatible infill housing on vacant and underutilized parcels to minimize

<sup>31</sup> CITY OF NORFOLK, VA., PLANORFOLK 2030 7-6 (2013), available at <https://www.norfolk.gov/DocumentCenter/View/2483/plaNorfolk2030?bidId=>.

<sup>32</sup> *Id.* at 7-4-7-5.

<sup>33</sup> *Id.* at 6-18, 7-6.

<sup>34</sup> *Id.* at 7-7.

<sup>35</sup> *The Community Rating System (CRS)*, VA. DEP'T OF CONSERVATION & RECREATION (June 23, 2021), <https://www.dcr.virginia.gov/dam-safety-and-floodplains/fp-crs>.

<sup>36</sup> CITY OF NORFOLK, VA., PLANORFOLK 2030 7-7 (2013), available at <https://www.norfolk.gov/DocumentCenter/View/2483/plaNorfolk2030?bidId=>.

<sup>37</sup> *Id.* at 2-2.

<sup>38</sup> *Id.*

land costs.<sup>39</sup> However, the city has added different housing-related appendices to *plaNorfolk* to adapt to changing affordable housing issues that mirror the need for increased actions to build neighborhood-level resilience.

After the 2007–2009 economic recession, the issue of affordable housing in Norfolk gained renewed attention. To address this challenge, the city began with a partnership with Olde Huntersville, a historically underserved neighborhood in Norfolk facing a lack of investment and new development. The Olde Huntersville community and the city worked together to create the *Traditional Neighborhoods Plan Book: Chapter One — Olde Huntersville (Plan Book)*, which contains free design plans for property owners and builders who want to develop or redevelop their parcels or vacant lots in Olde Huntersville.<sup>40</sup> As stated in the Plan Book:

The Olde Huntersville Civic League has already begun the work of identifying challenges to the neighborhood and has set a plan in motion with their Olde Huntersville Neighborhood Strategic Plan. In support of the neighborhood, the City embarked on this Plan Book effort to address some of the issues related to the housing stock. Specifically, some new houses compromise the character of the community with blank walls, poor proportions, and concrete front yards. In addition, there is an abundance of vacant lots, most only 25 feet in width. The overall goal is to bring new homeowners to Olde Huntersville by constructing new, affordable homes that are compatible with the neighborhood character.<sup>41</sup>

As such, the Plan Book “is intended to make it easy for potential homeowners to build their dream home in the beautiful, historic Olde Huntersville neighborhood.”<sup>42</sup> The houses in the Plan Book are customizable, market-rate designs that are compatible with the existing architectural character of the neighborhood, including three, four, and five-bedroom options for accessible bedrooms that can be used to aid people aging-in-place.<sup>43</sup>

The Plan Book is an appendix to *plaNorfolk 2030*.<sup>44</sup> It marks the city’s first effort to “give residents tools to make building affordable and well-designed houses on narrow lots possible without going through the rigorous and time-consuming Non-Standard Lot Review process or the Special Exception process.”<sup>45</sup>

Over the last several years, the Plan Book has resulted in the construction of 29 new houses in Olde Huntersville, all of which incorporated resilient design principles. This plan and technical

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<sup>39</sup> *Id.* at 7–9–7–10.

<sup>40</sup> CITY OF NORFOLK, VA., *TRADITIONAL NEIGHBORHOODS PLAN BOOK: CHAPTER ONE — OLDE HUNTERSVILLE*, available at <https://www.norfolk.gov/DocumentCenter/View/29595/Traditional-Neighborhood-Plan-Book?bidId=>.

<sup>41</sup> *Id.* at 5.

<sup>42</sup> *Id.* at 7.

<sup>43</sup> *Id.*

<sup>44</sup> *plaNorfolk 2030*, CITY OF NORFOLK, VA., <https://www.norfolk.gov/1376/plaNorfolk2030> (last visited Nov 3, 2021).

<sup>45</sup> CITY OF NORFOLK, VA., *TRADITIONAL NEIGHBORHOODS PLAN BOOK: CHAPTER ONE — OLDE HUNTERSVILLE 7*, available at <https://www.norfolk.gov/DocumentCenter/View/29595/Traditional-Neighborhood-Plan-Book?bidId=>.



assistance from the city empowered people to develop their properties while ensuring development would be compatible with existing neighborhood character.

The initial success of the Plan Book spurred Norfolk to invest in similar resources that can support the development and reuse of vacant and industrial parcels in other neighborhoods across the city. Additional housing appendices to *plaNorfolk 2030* are designed to encourage the development of housing that is resilient, higher-density, and more diverse: the Design Principles for Multifamily Development, the Missing Middle Pattern Book, and the Narrow Lot House Plan Catalog.<sup>46</sup> The appendices serve to help developers navigate some of the upfront design and permitting challenges associated with building on Norfolk’s limited stock of vacant lots. By making it easier to build multi-unit housing in Norfolk, these appendices can ultimately help increase the range and quantity of affordable housing options in the city.

Developed in 2020, the Design Principles for Multifamily Development (Design Principles), contains a set of aspirational principles to evaluate and promote high-quality multifamily housing development in various forms and available at various costs.<sup>47</sup> The Design Principles contain a recognition that suburban sprawl, automobile dependency, and the isolation of low-income families to “housing projects” were trends in recent history that eroded the stable and walkable “Traditional American neighborhood.”<sup>48</sup> As such, the goal of establishing the Design Principles is to reverse these trends by ensuring that affordable high-density housing is more equitable by integrating it into the broader community through increasing residents’ access to open space and amenities and enhancing neighborhood character.<sup>49</sup>

Adopted by the City Council in 2021, Norfolk’s Missing Middle Pattern Book (Pattern Book), further builds out this vision of multifamily housing by providing a guide for missing middle housing development.<sup>50</sup> “Missing middle” refers to a set of multifamily housing types that can offer a greater quantity of units to meet housing needs while remaining compatible in scale and form with existing single-family homes.<sup>51</sup> The Pattern Book sets forth missing middle housing as a pathway to greater housing options and affordability, allowing people to stay in their neighborhoods as their lifestyle needs change.<sup>52</sup> It can also be more cost-effective to build missing

<sup>46</sup> *plaNorfolk 2030*, CITY OF NORFOLK, VA., <https://www.norfolk.gov/1376/plaNorfolk2030> (last visited Nov 3, 2021).

<sup>47</sup> CITY OF NORFOLK, VA., BUILDING HOMES AND NEIGHBORHOODS: DESIGN PRINCIPLES FOR MULTIFAMILY DEVELOPMENT (Aug. 5, 2020), available at <https://www.norfolk.gov/DocumentCenter/View/64728/Design-Principles-for-Multifamily-Development>.

<sup>48</sup> *Id.* at 3–4.

<sup>49</sup> *Id.* at 5–11.

<sup>50</sup> WORK PROGRAM ARCHITECTS ET AL., MISSING MIDDLE PATTERN BOOK (May 21, 2021), available at <https://www.norfolk.gov/DocumentCenter/View/66555/MissingMiddlePatternBook>.

<sup>51</sup> *Missing Middle Housing*, OPTICOS DESIGN, INC., <https://missingmiddlehousing.com> (last visited Nov. 3, 2021).

<sup>52</sup> WORK PROGRAM ARCHITECTS ET AL., MISSING MIDDLE PATTERN BOOK 5 (May 21, 2021), available at <https://www.norfolk.gov/DocumentCenter/View/66555/MissingMiddlePatternBook>; WORK PROGRAM ARCHITECTS ET AL., MISSING MIDDLE PATTERN BOOK 5 (May 21, 2021), available at <https://www.norfolk.gov/DocumentCenter/View/66555/MissingMiddlePatternBook>.

middle housing types compared to large-scale developments or the same number of single-family homes.<sup>53</sup> The Pattern Book offers step-by-step instructions for developers to build missing middle housing options, numerous examples of design-ready building types and floorplans that developers can consider, and a section on Resilient Construction and Sustainable Design to help developers meet Norfolk's Resilience Point System zoning requirement (detailed in the following section).<sup>54</sup>

The city's Narrow Lot House Plan Catalog (Catalog) offers further support to developers seeking to build infill housing on narrow lots. Infill development can often pose challenges for developers related to code compliance, affordability, context sensibility, and consumer demand for certain housing types.<sup>55</sup> The Catalog was developed to provide developers with ready-made design plans that meet these challenges, offering an inventory of narrow lot house plans organized by lot width that developers can adopt.

## ENVIRONMENT

### Land Use and Zoning

As stated previously, Norfolk adopted a new zoning ordinance in 2018 aligned with Vision 2100 to enhance citywide flood resilience and direct new and more intense development to higher ground.<sup>56</sup> The revision includes several key zoning requirements that ensure greater resilience including the following:

- Resilience Quotient Points System:** The ordinance adds a new Resilience Quotient System, where developers accrue points for adopting different resilience measures related to stormwater management, risk reduction, energy efficiency, water quality and conservation, urban greenery, and healthy lifestyles.<sup>57</sup> Unless exempt (e.g., historic structures, buildings becoming LEED certified [Leadership in Environmental and Energy Design] at the gold level or above),<sup>58</sup> project proponents either have to elevate and capture the first 1.25 inches of stormwater or provide improvements equal to the required number of points based on the development type (e.g., residential, non-residential, mixed use) and development size. The ordinance includes a table of options to earn points for each type of development.<sup>59</sup> Project proponents can either choose from a pre-identified list

<sup>53</sup> *Id.*

<sup>54</sup> *Id.* at 11 for developer instructions; at 28–73 for examples; and at 69–72 for resilient design guidelines.

<sup>55</sup> *Norfolk Narrow Lot House Plan Catalog*, CITY OF NORFOLK, VA., <https://www.norfolk.gov/1093/Norfolk-Narrow-Lot-House-Plan-Catalog#one> (last visited Nov. 3, 2021).

<sup>56</sup> NORFOLK, VA., ZONING ORDINANCE (2018), available at <https://www.norfolk.gov/DocumentCenter/View/35581/Adopted-Zoning-Ordinance?bidId=>.

<sup>57</sup> *Id.* at art. 5.12 (2018).

<sup>58</sup> *Id.* at art. 5.12.1(A) (2018) (exempted development).

<sup>59</sup> *Id.* at t. 5.12.6, t. 5.12.7 (2018).

of resilience activities to achieve points or work with the city to design new actions that both meet developer- and project-specific needs and meet city requirements.

- **Overlay zones:**

- **Coastal Resilience Overlay (CRO):** The CRO is an overlay applied to areas facing higher flood risk, where new development is encouraged to actively increase resilience to sea-level risk and stormwater flooding. Development in the CRO zone includes additional requirements above the base zoning layer designation, such as the use of permeable surfaces on new parking spaces and stormwater infiltration features.<sup>60</sup>
- **Upland Resilience Overlay (URO):** URO zones are outside of flood hazard zones where Norfolk seeks to encourage new development of walkable, bikeable, and transit-rich neighborhoods. Among different options to earn points under the Resilience Quotient System, developers building in the URO zones may accrue a significant number of points in exchange for extinguishing development rights for properties in CRO zones.<sup>61</sup>

- **Freeboard:** The ordinance requires that construction in the 100-year floodplain be elevated at least three feet above the 100-year base flood elevation, and construction in the 500-year floodplain be elevated or floodproofed to 1.5 feet above the 500-year base flood elevation.<sup>62</sup>

## Planning: PlaNorfolk 2030 Green Infrastructure Plan

PlaNorfolk 2030 identifies several environmental resilience strategies that involve protecting and promoting the use of natural elements to provide myriad of benefits:

- Continuing to implement wetland design changes, such as the use of living shorelines that allow for the landward migration of wetlands for promoting community and environmental resilience to future sea-level rise;<sup>63</sup>

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<sup>60</sup> *Id.* at art. 3.9.18 (2018)

<sup>61</sup> *Id.* at art. 3.9.19 (2018). For more information about how the URO and RQS is structured in the zoning ordinance, see Georgetown Climate Ctr., *Building a Better Norfolk: A Zoning Ordinance of the 21st Century — Norfolk, Virginia*, ADAPTATION CLEARINGHOUSE (Jan. 23, 2018), <https://www.adaptationclearinghouse.org/resources/building-a-better-norfolk-a-zoning-ordinance-of-the-21st-century-norfolk-virginia.html?preview=true>.

<sup>62</sup> Areas in the 100-year floodplain are designated as Floodplain Districts (Article 3.9.2). The freeboard requirement for 100-year floodplains is codified at Article 3.9.7(J)(1), and the freeboard requirement for 500-year floodplains (designated “X Zones”), is codified at Article 3.9.7(M)(1). NORFOLK, VA., ZONING ORDINANCE art. 3.9.2, 3.9.7 (2018).

<sup>63</sup> CITY OF NORFOLK, VA., PLANORFOLK 2030 6-16 (2013), available at <https://www.norfolk.gov/DocumentCenter/View/2483/plaNorfolk2030?bidId=>.

- Promoting soil management best practices that enhance stormwater infiltration;<sup>64</sup> and
- Increasing the quantity, density, and diversity of trees to achieve a goal of 40-percent tree canopy cover through a combination city-provided trees and land-use regulation, including revising landscape regulations to require shade trees in parking lots.<sup>65</sup>

In 2018, the city adopted a Green Infrastructure Plan (GIP) as an appendix to the Norfolk 2030.<sup>66</sup> The purpose of the GIP is to increase the city's use of natural assets to improve environmental health, improve community health, and better protect built infrastructure, including roads and buildings.<sup>67</sup> Norfolk defines green infrastructure as part of the city's overall infrastructure, which includes "marshes, creeks, parks, and trees that provide habitat, filter the air and water, moderate air temperatures, and provide recreation and scenic beauty."<sup>68</sup> These elements can help filter and reduce stormwater runoff, provide shade and recreation, and add aesthetic and economic value to neighborhoods and commercial zones.<sup>69</sup>

The GIP includes comprehensive maps of the city's natural assets, which can be used to support decisionmaking to increase the prevalence of and community access to green infrastructure features.<sup>70</sup> In addition to maps, the GIP outlines specific green infrastructure objectives, initial implementation steps for the city, and timelines for implementation.<sup>71</sup>

In the GIP, the city further lays out its two-tiered approach for promoting and encouraging green space with a focus "first on conservation, then on restoration."<sup>72</sup> Specifically, Norfolk's green infrastructure approach first looks to maximizing "natural green infrastructure," including wetlands, trees, parks, meadows, trails, and creeks, before considering "constructed green infrastructure" to mitigate the impacts of impervious surfaces due to development.<sup>73</sup> The GIP prioritizes the conservation of existing natural green infrastructure because it is less expensive and can be more effective than imposing engineered solutions that attempt to replicate natural processes.<sup>74</sup>

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<sup>64</sup> *Id.* at 6-14.

<sup>65</sup> *Id.* at 6-13.

<sup>66</sup> CITY OF NORFOLK, VA., A GREEN INFRASTRUCTURE PLAN FOR NORFOLK (July 2018), *available at* <https://www.norfolk.gov/DocumentCenter/View/38067/Norfolk-Green-Infrastructure-Plan--Action-Plan-Appendix-for-Endangered-Species?bidId=>.

<sup>67</sup> *Id.* at 1.

<sup>68</sup> *Id.*

<sup>69</sup> *Id.* at 11.

<sup>70</sup> *Id.* at 12-21.

<sup>71</sup> *Id.* at 50-58.

<sup>72</sup> *Id.* at 10.

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

## Planning: Complete Streets Policy

In 2016, Norfolk also adopted the Complete Streets Policy as an appendix to its 2030 plan.<sup>75</sup> The city defines complete streets as “streets that are designed — or redesigned — and operated to allow safe access to all people, regardless of age, ability, income, ethnicity, or chosen mode of travel, including pedestrians, bicyclists, motorists and transit riders.”<sup>76</sup> Complete streets offer several advantages to traditional street designs including:

- Increasing the safety and enjoyability of walking and biking;
- Reducing vehicle pollution;
- Improving neighborhood aesthetics; and
- Offering opportunities to incorporate environmental strategies, such as green infrastructure and stormwater management features.

Norfolk’s Complete Streets Policy establishes that the city will strive to develop and maintain an integrated network of safe and accessible streets, all of which will incorporate features including sidewalks, grassy areas to assist with stormwater management, and designated travel lanes and facilities to better support bikes and transit.<sup>77</sup> The policy applies to all new construction and reconstruction of streets and street segments, including utility upgrades and resurfacing projects, but provides for flexibility for varying circumstances.<sup>78</sup> The implementation of complete streets will be informed by the best and latest design guidelines, including those developed by the National Association of City Transportation Officials and International Transportation Engineers.<sup>79</sup>

Norfolk’s Complete Streets Policy offers an example for other policymakers to integrate numerous environmental and social benefits into existing street networks. Complete street features such as universal sidewalks and tree canopies can promote public health by increasing commuter options and enjoyability, economic vitality by increasing commercial and home values, and environmental benefits by mitigating runoff from paved surfaces and reducing vehicle pollution. Because complete streets can be built using a variety of different features, policymakers also have flexibility to customize complete street implementation to the priorities and needs of different communities.

<sup>75</sup> CITY OF NORFOLK, VA., COMPLETE STREETS POLICY (2018), <https://www.norfolk.gov/DocumentCenter/View/24580/Complete-Streets-Policy-adopted?bidId=>.

<sup>76</sup> *Id.* at 1.

<sup>77</sup> *Id.*

<sup>78</sup> *Id.* at 2.

<sup>79</sup> *Id.*

# COMMUNITY ENGAGEMENT

## Vision 2100

During the process to develop Vision 2100, city planners engaged in extensive consultation with residents and other stakeholders in a three-phase process: awareness, asset mapping, and vision development.<sup>80</sup> These included staff from the departments of City Planning, Communications and Technology, and Neighborhood Development, the Resilience Office, and the City Manager's Office; members of the Norfolk City Council and Norfolk City Planning Commission; and more than 500 participants from the general public.

As part of the first phase, awareness, city staffers began sharing news of Norfolk's long-range initiative by creating an outreach campaign that included attendance at local festivals and events, appearances on local media, attending educational institutions to solicit feedback, and a social media campaign with its own hashtag.<sup>81</sup> These efforts all went toward alerting the public of the existence of the development of the plan. The first phase of awareness also involved regular meetings between city departments to ensure that all city staffers were speaking from the same script regarding Vision 2100.<sup>82</sup>

The second phase, asset mapping, involved city departments working together with community members to assess and map the city's most valued assets. The purpose of this phase was to ensure that planning enabled the enhancement and preservation of what community members valued the most. To reach as broad of an audience as possible, the city used multiple strategies that included inviting community leaders to weekend breakfast meetings, media campaigns, and workshops.<sup>83</sup>

In the third phase, vision development, city staffers held in-person and online community meetings where participants were asked to collaborate in teams to identify priorities for asset preservation and development. By asking participant teams to reach a consensus on priority assets, this phase built upon the second phase by adding the concept of limited resources.<sup>84</sup>

## PlaNorfolk Green Infrastructure Plan

Over the two-year period to create the Green Infrastructure Plan, Norfolk held ten public community meetings, consulted across various city departments, and met with local environmental

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<sup>80</sup> CITY OF NORFOLK, VA., NORFOLK VISION 2100 10–18 (Nov. 22, 2016), *available at* <https://www.norfolk.gov/DocumentCenter/View/27768/Vision-2100---FINAL?bidId=>.

<sup>81</sup> *Id.* at 10.

<sup>82</sup> *Id.*

<sup>83</sup> *Id.* at 11–12.

<sup>84</sup> *Id.* at 13–14.



and academic organizations.<sup>85</sup> These conversations revealed stakeholder desires and suggestions for additional access to green space and water recreation, historic and cultural sites for Black history, water infiltration to reduce high tide flooding, greater shade for streets and bus stops, and naturalizing landscapes to mitigate runoff.<sup>86</sup> The city also gathered input from workshops on related initiatives, including data from engagement for the Complete Streets Policy and Vision 2100.<sup>87</sup>

## NEXT STEPS

Given the recent and significant update of the city's zoning ordinance in 2018, the city is committed to an ongoing evaluation process to assess the performance and usability of provisions, like the Resilience Quotient System. For example, as of 2021, the city is partnering with a Virginia-based conservation nonprofit, Wetlands Watch, and other stakeholders to assess the potential for updates to its Resilience Quotient System and new ideas to extinguish development rights in the CRO and encourage more dense development in the URO.<sup>88</sup>

## CONSIDERATIONS AND LESSONS LEARNED

As a city with coastal activity at the core of its economy, history, and culture, Norfolk is notable for its pioneering initiatives to plan for sea-level rise and flooding risks. For other local policymakers, Norfolk offers examples of connecting planning with zoning updates and adopting resilience measures at all scales — from a long-term strategy to the site-by-site scale and all levels in between.

High-level plans that map areas based on risks, assets, and future land uses can serve as a basis for policymakers to develop tailored resilience strategies and priorities for each area type. Long-range planning can be supplemented with more detailed priority plans over time to increase resilient affordable housing, green infrastructure, and complete streets. This is what Norfolk did by starting with Vision 2100 and adding appendices to its comprehensive plan, *plaNorfolk* overtime. These types of addendums can simultaneously refine the stated goals of the comprehensive plan as cities gather new information and local priorities evolve and shift. In addition, more specific subject matter addendums can help implement and foster the achievement of community goals by providing technical assistance for developers.

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<sup>85</sup> CITY OF NORFOLK, VA., A GREEN INFRASTRUCTURE PLAN FOR NORFOLK 8 (July 2018), *available at* <https://www.norfolk.gov/DocumentCenter/View/38067/Norfolk-Green-Infrastructure-Plan--Action-Plan-Appendix-for-Endangered-Species?bidId=>.

<sup>86</sup> *Id.*

<sup>87</sup> *Id.* at 9.

<sup>88</sup> *See, e.g., Managed Retreat Planning*, WETLANDS WATCH, <https://wetlandswatch.org/managed-retreat> (last visited Nov. 6, 2021).

In tandem with tailored plans, zoning ordinances can be revised to implement different priorities for different areas.

Norfolk's planning and zoning updates also reflect one approach to work with developers to promote more resilient community housing options and environmental features through the use of non-regulatory tools. Developer-oriented technical resources, such as Norfolk's Design Principles for Multifamily Development and Narrow Lot House Plan Catalog, can help encourage resilient and affordable housing development by removing some of the administrative and cost barriers associated with these projects. Moreover, Norfolk's housing tools leverage a local asset, vacant lands, to promote holistic community resilience through the construction of new neighborhood-appropriate housing options for various types of lots and sizes. In addition, resilient zoning features such as the Resilient Quotient System can provide developers with flexibility in meeting building standards while making progress on resilient development goals.

Another key takeaway from Norfolk's resilience planning is the depth and breadth of stakeholder engagement. Because Norfolk residents were aware of and personally affected by the increasing frequency and intensity of flooding, the city framed this effort to plan for flood resilience as a local issue rather than a climate or national-level issue. This enabled a more effective and productive collaboration with community members throughout the planning process. This highlights the importance of contextualizing community and planning dialogues in the needs and challenges people are facing. Other jurisdictions seeking to replicate Norfolk's community engagement efforts may consider emphasizing the ways in which resilience can help redress the problems that community members have encountered tangibly in their lived experiences.

Engagement with the developer community was also critical to achieving broad political support. Developer buy-in for the resilient planning and zoning ordinance required numerous conversations with developers to understand and respond to their interests and concerns. The flexibility provided in the Resilient Quotient System, supported by the housing appendices' numerous design options, reflects the efforts to gain support from this key stakeholder group.

Overall, Norfolk serves as an example of channeling recognized resilience needs into tangible on-the-ground changes. Policymakers seeking to replicate resilience against flooding and sea-level rise in their own communities may look to Norfolk's process of beginning with strategic long-term planning and priority-setting, followed by supplemental topic-specific initiatives, and ultimately integration into the zoning ordinance to bring goals into reality.

# *City of Baton Rouge – Parish of East Baton Rouge, Louisiana*

## **Imagine Plank Road Plan for Equitable Development**

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### **EXECUTIVE SUMMARY**

The Imagine Plank Road: Plan for Equitable Development (plan) is an equitable transit-oriented development (TOD)<sup>1</sup> plan developed to guide revitalization of the Plank Road corridor, an area in north Baton Rouge and East Baton Rouge Parish (parish).

Released in November 2019, the plan is a response to historical disinvestment in the Plank Road corridor and addresses issues of infrastructure decay, jobs and commerce, and health and safety. The plan is anchored by a new bus rapid transit (BRT) system that will run along the corridor and connect it to other parts of Baton Rouge. There are seven new developments proposed along the corridor, each designed to provide quality of life amenities and generate tax revenue while preserving local neighborhoods' history and culture.

The Plank Road plan is notable for its goals, metrics, and recommendations for equity-focused community revitalization. At the project level, local policymakers can look to the plan for specific efforts related to urban affordable housing, community-driven development, green infrastructure, and community engagement. More broadly, the plan demonstrates how policymakers can integrate equity across various development initiatives in order to lay a foundation for long-term stability and growth.

Build Baton Rouge (BBR) is the lead agency on the plan and took an approach that emphasized community engagement and public-private partnerships in planning and implementation. The Plank Road plan will be implemented concurrently with FUTUREBR, the comprehensive master plan adopted by the parish and the City of Baton Rouge in 2011.<sup>2</sup>

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<sup>1</sup> “Transit-oriented development, or TOD, includes a mix of commercial, residential, office and entertainment centered around or located near a transit station. Dense, walkable, mixed-use development near transit attracts people and adds to vibrant, connected communities.” *Transit-Oriented Development*, FED. TRANSIT ADMIN., <https://www.transit.dot.gov/TOD> (last updated Apr. 11, 2019).

<sup>2</sup> FUTUREBR, CITY OF BATON ROUGE–PARISH OF EAST BATON ROUGE, LA., <https://www.brla.gov/662/FUTUREBR> (last visited July 28, 2021).

## BACKGROUND

The Plank Road corridor is a north-south transit corridor in Baton Rouge, the capital of Louisiana and the parish seat of East Baton Rouge Parish. The history of the Plank Road corridor underscores the drive behind the plan, which centers equity in its vision of the corridor as “a thriving, socially diverse and walkable network of neighborhoods anchored by good transit, strong local businesses, quality housing, and resilient infrastructure.”<sup>3</sup>

Under segregationist laws and policies, the corridor developed as a primarily white working-class community over the 20th century as Baton Rouge’s population grew with the local oil industry. When the U.S. Supreme Court’s 1954 decision in *Brown v. Board of Education of Topeka*<sup>4</sup> required public schools to integrate, some white families began fleeing to suburbs developing along south Baton Rouge, ultimately pulling over 7,000 students from the local public school system.<sup>5</sup>

Around the same time, local officials used federal funding to develop highways through Black communities in north Baton Rouge, fracturing social and economic networks.<sup>6</sup> Despite the corridor remaining a well-traveled route, buildings and infrastructure fell to disinvestment and disrepair.

Today, residents in the Plank Road corridor experience higher levels of poverty and lower levels of car access, educational attainment, and employment than East Baton Rouge Parish as a whole.<sup>7</sup>

After years of experiencing the effects of racist policies and disinvestment, 2016 culminated in a convergence of events that served as the impetus for the Plank Road plan. First, the Plank Road plan developed out of a 2016 study of the Plank Road and Florida Boulevard corridors conducted by the City-Parish.<sup>8</sup> The Plank Road and Florida Boulevard corridors have the highest transit ridership in Baton Rouge.<sup>9</sup> The study made recommendations related to housing, economics, connectivity, urban planning, and the relevant agencies best suited to leading these improvements. Second, in 2016, public salience around inequality in Baton Rouge was high. The police shooting of Alton Sterling and devastating flooding called attention to Baton Rouge as a “tale of two cities,” with lower-income majority-Black neighborhoods in the north and wealthier majority-white communities in the south.<sup>10</sup> Third, Sharon Weston Broome was elected as mayor after

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<sup>3</sup> BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT 18 (Nov. 2019), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Final-Report\\_2019.11.06\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Final-Report_2019.11.06_web.pdf).

<sup>4</sup> *Brown v. Bd. of Educ. of Topeka*, 347 U.S. 483 (1954).

<sup>5</sup> *Id.* at 9.

<sup>6</sup> *Id.*

<sup>7</sup> *Id.* at 28.

<sup>8</sup> City of Baton Rouge–Parish of East Baton Rouge, La., Florida and Plank Corridor Study (Dec. 2016).

<sup>9</sup> *Id.* at 23.

<sup>10</sup> See, e.g., Paul Dudley, *Five Years Later: The Alton Sterling Shooting*, 4WWL (July 5, 2021), <https://www.wwltv.com/article/news/local/5-years-later-the-alton-sterling-shooting/289-67fff16d-6476-4f99-9686-bca73bc30a97>; see, e.g., *What caused the historic August 2016 flood, and what are the odds it could happen again?*,

campaigning to address these inequities. Mayor Broome then channeled her political momentum toward putting the 2016 study's recommendations into action.

Twenty stakeholders, including state agencies, local agencies, and the Center for Planning Excellence, met in January 2018 to begin charting an equitable transit-oriented development plan for Plank Road. BBR then hired New Orleans-based planning firm Asakura Robinson with the support of a \$100,000 grant from JP Morgan Chase Partnerships for Raising Opportunity (PRO).<sup>11</sup> The final Plank Road plan was completed in November 2019. The Plank Road plan will be implemented concurrently with FUTUREBR, the comprehensive master plan adopted by the parish and the City of Baton Rouge in 2011.<sup>12</sup>

## OVERVIEW OF THE PLANK ROAD PLAN FOR EQUITABLE DEVELOPMENT

The Plank Road Plan for Equitable Development establishes five equity objectives, termed Equity Benchmarks: Cultural Expression, Commerce and Jobs, Community Wealth, Enhanced Connectivity, and Health and Safety. Each benchmark includes metrics that further define how equity objectives can be met. In addition to seven proposed catalytic developments, the plan includes recommendations for projects, programs, and policies that can help implement the plan's vision. The plan was the product of numerous public-private partnerships. In addition to collaborating with other government entities, BBR leveraged private and philanthropic funding sources and consulted with various business, academic, and nonprofit experts throughout the process. In particular, LabGov/Co-City Baton Rouge has served as a key community engagement partner to help implement and operationalize the plan in the corridor.<sup>13</sup>

Regional and local policymakers in receiving communities<sup>14</sup> or other regions and municipalities experiencing population growth can look to the Plank Road plan as a model for equitable transit-

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ADVOCATE (Aug. 5, 2017), [https://www.theadvocate.com/louisiana\\_flood\\_2016/article\\_3b7578fc-77b0-11e7-9aab-f7c07d05efcb.html](https://www.theadvocate.com/louisiana_flood_2016/article_3b7578fc-77b0-11e7-9aab-f7c07d05efcb.html) (“In August 2016, historic floods devastated parts of south Louisiana after a slow-moving system dumped more than 20 inches of rain in parts of East Baton Rouge and nearby parishes in a three-day span.”).

<sup>11</sup> *Urban Planning*, BUILD BATON ROUGE, <https://buildbatonrouge.org/our-work/urban-planning/> (last visited July 28, 2021).

<sup>12</sup> *FUTUREBR*, CITY OF BATON ROUGE–PARISH OF EAST BATON ROUGE, LA., <https://www.brla.gov/662/FUTUREBR> (last visited July 28, 2021).

<sup>13</sup> *LabGov Baton Rouge*, LABGOV GEORGETOWN, <https://labgov.georgetown.edu/active-experiments/labgov-baton-rouge/> (last visited July 28, 2021).

<sup>14</sup> “Receiving communities” or “receiving areas” are broad terms used to refer to locations experiencing population growth and transitions in response to people leaving vulnerable coastal, flood-prone, or other types of areas due to severe or chronic climate impacts. See Katie Spidaleri and Annie Bennett, *Managed Retreat Toolkit: Crosscutting Policy Considerations — Social/Equity: Receiving Communities*, GEORGETOWN CLIMATE CTR. (2020), <https://www.georgetownclimate.org/adaptation/toolkits/managed-retreat-toolkit/social-equity-receiving-communities.html>.

oriented development. Although the plan is not expressly a climate-focused plan, it has direct relevance for policymakers who seek to build capacity for new residents while preventing displacement and improving the quality of life for existing residents. The following sections highlight the plan's recommendations for affordable housing, community-driven development, and green infrastructure.

## HOUSING

In the Plank Road Plan, Benchmark 3: Community Wealth focuses on affordable housing solutions. As investment increases in the corridor, rising rent and property taxes can threaten to displace existing residents. Affordable housing recommendations include:

- Leverage tax credits to build new affordable housing;
- Establish repair programs aimed at landlords that include agreements to preserve affordable housing;
- Establish trainings and financial assistance to help new homebuyers with down payments and closing costs;
- Provide financial aid to existing homeowners to cover property tax increases and repairs;
- Freeze property tax assessment values for lower-income homeowners;
- Capture property tax increases to be reinvested in local projects; and
- Establish a community land trust to maintain long-term affordability.<sup>15</sup>

Recommendations in the plan address multiple housing needs, but focus primarily on affordable homeownership. Home ownership is seen as not only protection against displacement due to rising rents, but also as a way to encourage local investment by anchoring residents' equity in the neighborhood. For example, affordable homeownership can offer homeowners increased spending power and the ability to borrow against the equity of the home.<sup>16</sup> By increasing and protecting homeownership in the community, neighborhood stability can also support social networks and generate civic mindedness.

## Community-Led Housing and Development Initiatives

The plan includes two primary strategies to increase community leadership in local housing and development: establishing a community land trust (CLT) and land banking.<sup>17</sup> In the climate adaptation context, CLTs and land banks in receiving areas can help prevent residential

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<sup>15</sup> BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT 45 (Nov. 2019), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Final-Report\\_2019.11.06\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Final-Report_2019.11.06_web.pdf).

<sup>16</sup> *Id.* at 43.

<sup>17</sup> *Id.* at 90–94.



displacement, provide affordable housing options for incoming residents, preserve local cooperative control over developable land, and streamline processes to convert underutilized land into community-serving uses.<sup>18</sup>

A CLT is a localized nonprofit organization that maintains permanent ownership of the land on which residential structures sit while selling or leasing homes built on the land.<sup>19</sup> This allows CLTs to implement lease or resale conditions at low rates that preserve affordable housing long term.<sup>20</sup> For example, the sale price of a CLT home may be capped at a certain value and a portion of profits may go toward maintaining the land held in trust for all residents. CLT land can also be put to other community-serving uses, such as food production and commerce.<sup>21</sup> The Plank Road Corridor does not currently have an established CLT.

Land banking enables a form of cooperative land management similar to the CLT model.<sup>22</sup> In land banking, a public entity owns land-banked properties and has the responsibility to maintain and the authority to develop them.<sup>23</sup> Because the land is held by a public entity, land banking can enable greater public participation in efforts to convert underutilized or blighted properties into more productive land uses. Land banking can also reduce blight by consolidating adjudicated properties and streamlining code enforcement.<sup>24</sup>

One challenge to blight management has been the parish's backlog of tax sales with questionable validity, which makes these properties risky to redevelop.<sup>25</sup> Transferring these properties into a land bank can solidify ownership and enable their development into productive use.

BBR has a land bank established by its enabling statute. As of July 2021, BBR currently holds at least 85 adjudicated Plank Road properties that were transferred to the agency by the Parish Council.<sup>26</sup> The seven proposed catalytic developments along Plank Road are to be built on land-

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<sup>18</sup> See Jessica Grannis, *Acquisition Tools: Community Land Trusts in* Katie Spidalieri and Annie Bennett, *Managed Retreat Toolkit*, GEORGETOWN CLIMATE CTR. (2020), <https://www.georgetownclimate.org/adaptation/toolkits/managed-retreat-toolkit/conservation-land-trusts.html>.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* at 22.

<sup>25</sup> A tax sale is a sale of a real estate property that is mandated by a government entity when the owner has reached a certain point of delinquency on his/her property taxes.

<sup>26</sup> *Urban Planning*, BUILD BATON ROUGE, <https://buildbatonrouge.org/our-work/urban-planning/> (last visited July 28, 2021).

banked sites,<sup>27</sup> providing a civic center, green spaces, and mixed-use developments with housing, retail, eateries, and a grocery store.<sup>28</sup>

The challenge most often faced by CLTs is acquisition of properties for the trust, and the challenge most often faced by land banks is disposal of properties in the bank. Because CLTs and land banks share a mission to serve the community and facilitate community-led development, the plan recommends establishing a cooperative “community land bank” hybrid program under BBR in which properties in the BBR land bank would be developed and maintained in conjunction with a new community land bank governance structure. In turn, this new community land bank would benefit from reduced maintenance costs and gain ownership of land for productive development and access to BBR’s established development partners.<sup>29</sup>

## ENVIRONMENT

### Green Infrastructure and Nature-Based Solutions

Environmental resilience is a major element of the plan’s Benchmark 5: Health and Safety. The Health and Safety benchmark emphasizes solutions that integrate environmental resilience with the public health benefits of green space. There are two primary categories of recommendations: increasing green space and increasing green infrastructure.

Several neighborhoods in the Plank Road corridor do not have access to a park within a ten-minute walk.<sup>30</sup> One of the catalytic projects proposed along the corridor is an “EcoPark” to be developed on land held in the BBR land bank and to include elements that mitigate flooding and heat-related risks.<sup>31</sup> Specifically, the EcoPark will be the result of developing land bank properties in conjunction with the Recreation and Park Commission for the Parish of East Baton Rouge (BREC). It will incorporate nature-based and green infrastructure solutions for small-scale climate mitigation efforts. To support broader public health goals, the plan’s recommendations also include high quality programming to serve youth, seniors, and healthy lifestyles.

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<sup>27</sup> BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT 44 (Nov. 2019), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Final-Report\\_2019.11.06\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Final-Report_2019.11.06_web.pdf).

<sup>28</sup> The plan’s executive summary document describes the seven types of catalytic developments proposed: Food Hub; Civic Center; Build Baton Rouge Office, Childhood Learning Center, and Housing; Society of St. Vincent de Paul (the fourth and fifth types of the catalytic developments proposed); Transit Oriented Development (mixed use); and an EcoPark. BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT EXECUTIVE SUMMARY 8 (Nov. 2019), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Summary\\_2019.11.01\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Summary_2019.11.01_web.pdf).

<sup>29</sup> BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT 92 (Nov. 2019), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Final-Report\\_2019.11.06\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Final-Report_2019.11.06_web.pdf).

<sup>30</sup> *Id.* at 55.

<sup>31</sup> *Id.* at 78.

Additionally, the plan recommends incorporating natural hazard mitigation into infrastructure improvements, including increases in tree cover and permeable surfaces.<sup>32</sup> All communities in the Plank Road corridor are designated by the Federal Emergency Management Agency as being within 500-year or 100-year floodplains with areas adjacent to creeks, bayous, and channels at high risk of flooding.<sup>33</sup>

The city aims to implement the Plank Road plan in accordance with the Parish Stormwater Master Plan, which the East Baton Rouge City-Parish began developing after the area suffered historic flooding in August 2016. Scheduled to be completed in 2022, the Stormwater Master Plan will identify flood vulnerabilities in the parish and inform priority investments for flood risk mitigation.<sup>34</sup>

## COMMUNITY ENGAGEMENT

Because of the plan's equity focus, BBR invested significant resources in soliciting community input and more than \$50,000 was spent on a variety of engagement initiatives.<sup>35</sup> BBR partnered with LabGov Georgetown and New York University's Marron Institute of Urban Management to launch a new "urban regeneration" project in Baton Rouge applying LabGov's Co-City Methodology.<sup>36</sup> This methodology is grounded in and driven by community input. The project "Co-City Baton Rouge" officially launched in Baton Rouge in May 2019, but work on the collaborative effort started about six months prior. This work focuses on access to, and the governance of, shared "commons" resources — like shared community spaces and neighborhoods — and access to open spaces.

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<sup>32</sup> *Id.* at 55.

<sup>33</sup> *Id.* "Flood hazard areas identified on the Flood Insurance Rate Map are identified as a Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. Moderate flood hazard areas, labeled Zone B or Zone X (shaded) are also shown on the FIRM, and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded)." *Flood Zones*, FED. EMERGENCY MGMT. AGENCY, <https://www.fema.gov/glossary/flood-zones> (last visited July 28, 2021).

<sup>34</sup> *East Baton Rouge Stormwater Master Plan and 20-Year Stormwater Capital Improvements Plan*, CITY OF BATON ROUGE-PARISH OF EAST BATON ROUGE, LA., <https://stormwater.brla.gov> (last visited July 28, 2021). The plan is scheduled to be completed in mid-2022 and currently in Phase Two of development. *FAQs*, CITY OF BATON ROUGE AND PARISH OF EAST BATON ROUGE, <https://stormwater.brla.gov/faqs/> (last visited July 28, 2021).

<sup>35</sup> BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT EXECUTIVE SUMMARY 3 (Nov. 2019), available at [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Summary\\_2019.11.01\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Summary_2019.11.01_web.pdf); BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT 19 (Nov. 2019), available at [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Final-Report\\_2019.11.06\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Final-Report_2019.11.06_web.pdf).

<sup>36</sup> *About LabGov Georgetown*, LABGOV GEORGETOWN, [https://labgov.georgetown.edu/about\\_labgov/](https://labgov.georgetown.edu/about_labgov/) (last visited July 28, 2021).

To collect input from residents and local businesses about their needs and vision for the corridor, BBR deployed initiatives including a visioning survey, a community roundtable, mailings, and interactive programming, including an event featuring local food vendors and a street festival. BBR also assembled a steering committee of nonprofit and public agency partners, ultimately meeting with dozens of corridor stakeholders across numerous sectors throughout the planning process.<sup>37</sup>

Leveraging the area's social and cultural networks, BBR employed a team of community members who live and work in the corridor as "community ambassadors" to publicize opportunities for public input. According to BBR, existing individual and institutional networks fostered by churches, nonprofits, and commercial enterprises are "perhaps the greatest opportunity available to BBR to achieve sustained impact in the Corridor."<sup>38</sup>

As a result of dedicated engagement, BBR was able to identify several priorities that are reflected in the plan's goals and proposals. Participants commonly emphasized the need for local residents' interests to come first, calling for initiatives to:<sup>39</sup>

- Reinvest wealth in the local economy;
- Address blight affecting rental and abandoned properties;
- Build sidewalks and crosswalks to increase safety and connect businesses;
- Improve food and retail shopping options;
- Increase recreational spaces and programming for physical and creative activities, particularly for children and youth;
- Increase bus frequency and upgrade transit facilities;
- Preserve long-term quality affordable housing for residents; and
- Preserve the diverse cultures and characters of Plank Road neighborhoods.

Interactive and locally led engagement opportunities like those developed by BBR and LabGov reveal residents' priority needs, in addition to facilitating accountability in local agencies and private development partners. This commitment to community-led decisionmaking is especially important in neighborhoods like Plank Road that have experienced negative consequences in the past due to racist policies and disinvestment, such as displacement and disruption to small businesses. Inviting these types of conversations throughout a planning process can help build trust that planned projects and policies will effectuate community goals. Incorporating feedback into

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<sup>37</sup> BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT 19 (Nov. 2019), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Final-Report\\_2019.11.06\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Final-Report_2019.11.06_web.pdf).

<sup>38</sup> *Id.* at 26.

<sup>39</sup> *Id.* at 19–20.

the plan shows participants their input is valued, generating a sentiment of civic efficacy that can empower further participation and communal decisionmaking in the long term.

## FUNDING

Funding for the plan itself and for individual projects, programs, and policies recommended in the plan includes a mix of private and public sources.

To help finance the planning process, BBR secured \$225,000 in grant funding from private sources, including a \$100,000 JP Morgan Chase Partnerships for Raising Opportunity (PRO) Neighborhoods Planning Grant.<sup>40</sup> To implement the new bus rapid transit system, the City-Parish secured a \$15-million grant from the U.S. Department of Transportation's Better Utilizing Infrastructure to Leverage Development (BUILD) program.<sup>41</sup>

In addition, BBR has acquired initial money to start work on some key projects contained in the plan. In 2018, Baton Rouge voters passed a sales tax that will dedicate a portion of tax revenue to infrastructure updates throughout the parish including along the Plank Road corridor.<sup>42</sup> The program, titled MOVEBR, is expected to generate \$1 billion over 30 years toward improving traffic signals, sidewalks, and transit facilities along the Plank Road corridor.<sup>43</sup> Additionally, the Capital Area Finance Authority approved a \$865,000 line of credit in 2020 for BBR to spend on housing development across the parish.<sup>44</sup>

Although funding has not been secured for all projects proposed in the Plank Road plan, the plan includes numerous state and federal grants as well as tax revenue tools that could potentially be

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<sup>40</sup> *Urban Planning*, BUILD BATON ROUGE, <https://buildbatonrouge.org/our-work/urban-planning/> (last visited July 28, 2021).

<sup>41</sup> The U.S. Department of Transportation Better Utilizing Infrastructure to Leverage Development (BUILD) program is a competitive grant program that “funds investments in transportation infrastructure, including transit.” *See Better Utilizing Investments to Leverage Development (BUILD) Transportation Grants Program (formerly TIGER)*, FED. TRANSIT ADMIN., <https://www.transit.dot.gov/funding/grants/better-utilizing-investments-leverage-development-build-transportation-grants-program> (last visited July 28, 2020).

<sup>42</sup> “The MOVEBR Transportation and Infrastructure Improvements Program is the most significant transportation infrastructure investment in the history of East Baton Rouge Parish. The 1/2 cent sales tax proposition, which excludes food and drugs, was approved by the voters of East Baton Rouge Parish on December 8, 2018. The tax became effective on April 1, 2019 and will continue for 30 years until March 31, 2049. Proceeds of the tax can only be spent on the list of projects approved by the voters.” *MOVEBR Program Overview*, MOVEBR, <https://movebr.brla.gov/page/movebr-program-overview> (last visited July 28, 2021); *see also MOVEBR Projects*, MOVEBR, <https://movebr.brla.gov/page/project-list> (last visited July 28, 2021) (Search for “Plank Road” in the “Search” field).

<sup>43</sup> *Id.*

<sup>44</sup> Timothy Boone, Build Baton Rouge Gets \$865,000 Line of Credit, Pledge of \$300,000 from Broome, *ADVOCATE* (July 16, 2020), [https://www.theadvocate.com/baton\\_rouge/news/business/article\\_16b23f84-c7ab-11ea-8357-7746c95a6d81.html](https://www.theadvocate.com/baton_rouge/news/business/article_16b23f84-c7ab-11ea-8357-7746c95a6d81.html).

secured to fund projects.<sup>45</sup> For example, the plan includes suggestions for creating tax increment financing (TIF) districts, business improvement districts (BID), and neighborhood improvement districts (NID) to capture tax revenue for investment in local projects and services beyond the capacity of local government. Governed by local boards, BIDs and NIDs can help ensure that the benefits of revitalization are reinvested in the Plank Road community and responsive to residents' needs.

## NEXT STEPS

To guide implementation, the plan includes an Implementation Matrix that organizes all proposed projects, programs, and policies in a table.<sup>46</sup> For each strategy, the matrix lays out the type of recommendation, the relevant Equity Benchmarks, required steps, a five-year implementation timeline, the organizational lead, and partner organizations. By consolidating the strategies and breaking down their required steps, the Implementation Matrix provides a comprehensive overview of actionable items that decision-makers can use to identify priorities and partnerships.

Private development partners are expected to be key throughout implementation. One potential approach to collaboration with private developers can be facilitated through a contract called a “cooperative endeavor agreement.”<sup>47</sup> Cooperative endeavor agreements allow public entities to maintain ownership and take leadership while working with private developers to create community infrastructure improvements on public land. In contrast to publicly subsidized private development, public-private partnerships can enable greater public input in the decisionmaking process and help ensure that the benefits of development are reinvested in the community.

As of July 2021, BBR has made progress on increasing the number of properties in the land bank, securing funding for the EcoPark, establishing a revolving loan fund for small businesses, and advancing a grocery-anchored mixed-use development and a community kitchen. The agency is also continuing to work through the Co-City Baton Rouge partnership to begin building a community advisory board of corridor residents and recruiting community members to serve on the future board of the CLB, the innovative hybrid of a land bank and CLT.

## CONSIDERATIONS AND LESSONS LEARNED

Overall, the Plank Road plan serves as a noteworthy example of equity-informed planning for neighborhood growth that considers the needs of the members of that community. It has particular applicability for areas experiencing historical disinvestment and socioeconomic distress. Here, a

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<sup>45</sup> BUILD BATON ROUGE, IMAGINE PLANK ROAD: PLAN FOR EQUITABLE DEVELOPMENT 101–109 (Nov. 2019), available at [https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road\\_Final-Report\\_2019.11.06\\_web.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Imagine-Plank-Road_Final-Report_2019.11.06_web.pdf).

<sup>46</sup> *Id.* at 108–114.

<sup>47</sup> *Id.* at 60; La. Rev. Stat. § 33:7633 (2021).



convergence of data with the Plank Road and Florida Boulevard corridor studies, a moment of social reckoning, and strong executive leadership in Mayor Broome converged to contribute to an opportunity to address long-standing racism and disinvestment in the Plank Road corridor. Data-driven plans and policies and governmental support are key to getting started and maintaining momentum on development projects, especially where there is a need for sustained reinvestment in the face of population transitions and growth. Further, citizen science and lived experiences can serve as important inputs to compliment other traditional data sets.

Due to the complex and interdisciplinary nature of climate adaptation, legal and policy tools for managed retreat are not limited to direct mitigation of environmental hazards. Initiatives to improve affordable housing and public transit systems, for example, may also be priorities in a comprehensive climate adaptation plan as a part of building broader social, economic, and individual and community-wide resilience. For receiving communities experiencing population growth due to voluntary movements of people away from vulnerable or more hazardous coastal and flood-prone areas, establishing an equitable framework for development can help prevent housing displacement, support public health, and promote community engagement in the planning process.

The Plank Road plan demonstrates several equitable approaches to adapting the built environment. Housing is a key component of equitable adaptation planning, and climate resilience in the housing sector may include considerations beyond sustainable buildings to include access to quality and stable housing for people of all income levels. Because property tax costs can rise significantly with new development in the area, local policymakers can consider programs that prevent displacement by providing financial assistance for taxes and repairs. Ongoing work through Co-City Baton Rouge is showing how a community land bank can offer innovative solutions for cooperative land ownership that can preserve long-term affordability, maximize productive land use, and ensure that new development serves the local community. For infrastructure improvements, policymakers may dedicate particular attention to how streets and other public spaces can be built to simultaneously increase connectivity and public health and mitigate flooding and extreme heat.

Engagement with current residents of existing communities is also a part of comprehensive climate adaptation plans and processes, and like BBR, local policymakers should invest meaningful resources toward soliciting community members' priorities, needs, and visions for their neighborhood. A publicly engaged planning process can reveal the community's priorities, support accountability, and build trust in public and private entities designing and implementing the plan. Engagement initiatives can be entertaining, creative, and fun. Interactive events, such as street festivals, can create an attractive and low-pressure environment for valuable conversations throughout the planning process.

To conduct the technical work of creating a plan or implementing a project, policymakers should look to opportunities for financial and technical assistance from public, private, philanthropic,

nonprofit, and academic partners as with Co-City Baton Rouge. Public-private partnerships can help supplement government support and funding availability to plan for and implement complex, interdisciplinary resilience and redevelopment plans and projects, especially in the face of a changing climate and conditions.

# *City of Baton Rouge – Parish of East Baton Rouge, Louisiana*

## **Ardendale Master Plan and Guiding Principles**

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### **EXECUTIVE SUMMARY**

The Ardendale Master Plan and Guiding Principles (plan) is a planned community development in the Ardenwood area of Baton Rouge, Louisiana. Ardendale consists of 200 acres purchased in 2012 by Build Baton Rouge (BBR), the city’s redevelopment agency. The site currently includes public housing, the automotive technology campus of Baton Rouge Community College, and several acres of wetlands.

As proposed under the plan, Ardendale will become a new urbanist community that will include the following types of planned projects: mixed-income affordable housing, infrastructure, quality-of-life amenities, and cohesive landscaping.<sup>1</sup> Specifically, the new vision for Ardendale is to build amenities like housing, businesses, and green space and integrate public access across various community resources to grow socioeconomic resilience. As part of this vision, the plan also includes landscaping design rules that aim to encourage outdoor recreation and community gathering, mitigate natural hazards, and enhance neighborhood aesthetics and culture by using native plants. By balancing community needs and character, the plan demonstrates a multi-faceted and integrated approach to redevelopment that may be illustrative for local policymakers preparing for population growth due to climate change.

### **BACKGROUND**

Ardendale, formerly named Smiley Heights, is a community development project planned for a 200-acre parcel located in the Mid-City area of Baton Rouge, located in East Baton Rouge (EBR) Parish, Louisiana. The Ardendale footprint currently includes the neighborhoods of Smiley Heights, and Melrose East. The Ardendale Master Plan will guide development of the Ardendale site and was created with inter-agency collaboration as part of the BR Choice Transformation Plan,

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<sup>1</sup> ARCHITECTS SOUTHWEST, ARDENDALE MASTER PLAN AND GUIDING PRINCIPLES 4 (June 2014), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code\\_6\\_25\\_14\\_low-res.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code_6_25_14_low-res.pdf).

a broader initiative to revitalize the Smiley Heights, Melrose East, and East Fairfields neighborhoods.<sup>2</sup>

The Ardendale project began with work of the nonprofit Baton Rouge Area Foundation (BRAf) that later BBR took up.<sup>3</sup> Specifically, BBR purchased the land from several nonprofit owners in 2012 with the help of the city and the parish, which provided \$1.5 million from a disaster recovery grant and \$500,000 from an East Baton Rouge Mortgage Finance Authority grant, respectively.<sup>4</sup>

## ARDENDALE MASTER PLAN AND GUIDING PRINCIPLES

Released in June 2014, the Ardendale Master Plan and Guiding Principles is intended to guide architectural styles and spatial relationships between buildings, sidewalks, and roads in the area. The plan is unique for its implementation of new urbanism, an approach to urban planning that emphasizes walkability, mixed-income housing, and quality-of-life amenities that support education, employment, and health.<sup>5</sup> Under traditional Euclidean zoning, land is generally zoned for only one use (e.g., residential, commercial, or agricultural). Comparatively, new urbanist planning embraces diverse land uses as a way to maximize resource access for all in the community.<sup>6</sup>

At the ground level, the Ardendale plan aims to serve everyday community needs by building housing, commerce, workplaces, and public spaces in close proximity to one another. The goal of advancing these design principles is to promote social objectives by minimizing transportation barriers, providing areas for recreation, and encouraging social bonds.<sup>7</sup> Chris Tyson, Chief Executive Officer of Build Baton Rouge, described the Ardendale plan's approach to revitalization

<sup>2</sup> See BR CHOICE, <https://www.brchoice.com> (last visited July 29, 2021).

<sup>3</sup> Ardendale, BATON ROUGE AREA FOUND., <https://www.braf.org/ardendale> (last visited July 29, 2021).

<sup>4</sup> Steve Sanoski, *RDA completes purchase of 198 acres for Smile. Heights*, BUS. REPORT (Feb. 1, 2012), [https://buildbatonrouge.org/wp-content/uploads/2020/02/businessreport\\_RDA-completes-purchase-of-198-acres-for-Smiley-Heights-1.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/businessreport_RDA-completes-purchase-of-198-acres-for-Smiley-Heights-1.pdf).

<sup>5</sup> ARCHITECTS SOUTHWEST, ARDENDALE MASTER PLAN AND GUIDING PRINCIPLES 4 (June 2014), available at [https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code\\_6\\_25\\_14\\_low-res.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code_6_25_14_low-res.pdf); *The Charter of the New Urbanism*, CONGRESS FOR THE NEW URBANISM, <https://www.cnu.org/who-we-are/charter-new-urbanism> (last visited July 30, 2021).

<sup>6</sup> ARCHITECTS SOUTHWEST, ARDENDALE MASTER PLAN AND GUIDING PRINCIPLES 4 (June 2014), available at [https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code\\_6\\_25\\_14\\_low-res.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code_6_25_14_low-res.pdf); *The Charter of the New Urbanism*, CONGRESS FOR THE NEW URBANISM, <https://www.cnu.org/who-we-are/charter-new-urbanism> (last visited July 30, 2021).

<sup>7</sup> ARCHITECTS SOUTHWEST, ARDENDALE MASTER PLAN AND GUIDING PRINCIPLES 4–6 (June 2014), available at [https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code\\_6\\_25\\_14\\_low-res.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code_6_25_14_low-res.pdf).

as “not about rebuilding dated housing, but in rethinking the way we fight neighborhood poverty in the first place.”<sup>8</sup>

On a broader level, the Ardendale plan dedicates particular attention to the ways in which the built environment can facilitate and support community cohesion, highlighting the importance of placemaking and civic identity. For example, increasing the area’s walkability and green spaces can enable greater opportunities for socializing and chance encounters between residents, contributing to a mutual sense of responsibility and care for the neighborhood.<sup>9</sup> The goal of creating these social bonds is a community with stability, civic empowerment, and sustained socioeconomic growth.

As such, projects in the plan are centered around three primary goals: innovation, resilient design, and placemaking.<sup>10</sup> These principles inform the design guidelines for affordable housing and landscaping in Ardendale.

## HOUSING

One priority in the Ardendale plan is to renovate the site’s aging public housing and build new mixed-income public housing, including senior housing. The plan provides for the development of approximately 500 new mixed-income housing units.<sup>11</sup> According to J. Daniels, Chief Executive Officer of the EBR Parish Housing Authority, the mixed-income nature of new units in Ardendale is an intentional departure from the “traditional model of public housing that concentrates poverty in one place.”<sup>12</sup> Importantly, renovation of existing units will not begin before current residents are moved into a newly completed development, which will prevent current residents from being displaced.<sup>13</sup>

As part of the goal to diversify and evenly distribute different types of housing across the community — as opposed to concentrating affordable housing in discrete locations — the plan also proposes changes to the City of Baton Rouge–Parish of East Baton Rouge zoning ordinance to allow for alternative housing options, including garage apartment rentals or apartments over retail and office spaces that can serve as accessory dwelling units or “ADUs” to supplement the

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<sup>8</sup> Maggie Heyn Richardson, *Neighborhood, radically reimagined*, BATON ROUGE AREA FOUND. (Dec. 5, 2019), <https://www.braf.org/stories/2019/12/5/neighborhood-radically-reimagined>.

<sup>9</sup> ARCHITECTS SOUTHWEST, ARDENDALE MASTER PLAN AND GUIDING PRINCIPLES 6 (June 2014), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code\\_6\\_25\\_14\\_low-res.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code_6_25_14_low-res.pdf).

<sup>10</sup> Maggie Heyn Richardson, *Neighborhood, radically reimagined*, BATON ROUGE AREA FOUND. (Dec. 5, 2019), <https://www.braf.org/stories/2019/12/5/neighborhood-radically-reimagined>.

<sup>11</sup> *Urban Planning*, BUILD BATON ROUGE, <https://buildbatonrouge.org/our-work/urban-planning/> (last visited July 28, 2021).

<sup>12</sup> Maggie Heyn Richardson, *Neighborhood, radically reimagined*, BATON ROUGE AREA FOUND. (Dec. 5, 2019), <https://www.braf.org/stories/2019/12/5/neighborhood-radically-reimagined>.

<sup>13</sup> *Id.*

residential housing stock.<sup>14</sup> These changes could provide developers with greater flexibility and present unique opportunities for single-income housing.

## ENVIRONMENT

The Ardendale plan's landscaping vision encourages the use of plants and resilient designs to enhance both the area's local environment and natural resources and the values of community placemaking and also mitigate natural hazards like flooding and heat, filter water, and serve as gardens to produce food.<sup>15</sup> The plan includes green space guidelines that promote the use of native plants, street trees, rain gardens, wetlands enhancements, and community gardens.<sup>16</sup>

The Ardendale plan emphasizes ecological cohesion in its landscaping rules and promotes the use of local native plant species and green space designs that reflect the area's natural environment and history. These landscaping design rules can be integrated with infrastructure improvements to increase pedestrian walkability and neighborhood connectivity, for example, by mandating the planting of trees along all public streets.<sup>17</sup>

## COMMUNITY ENGAGEMENT

After receiving a planning grant from the U.S. Department of Housing and Urban Development in 2014, city and parish agencies met with numerous community organizations to create the development proposal that ultimately won a \$29.5-million grant in 2019 (see below). These stakeholders included organizations representing youth programs, health and wellness, arts and culture, education, and the workforce.<sup>18</sup>

To determine goals for the community members of Ardenwood and surrounding neighborhoods, agency partners deployed surveys, focus groups, and listening sessions with local residents, businesses, and nonprofits.<sup>19</sup>

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<sup>14</sup> ARCHITECTS SOUTHWEST, ARDENDALE MASTER PLAN AND GUIDING PRINCIPLES 4 (June 2014), *available at* [https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code\\_6\\_25\\_14\\_low-res.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/Ardendale-Design-Code_6_25_14_low-res.pdf).

<sup>15</sup> *Id.* at 57.

<sup>16</sup> *Id.* at 57–63.

<sup>17</sup> *Id.* at 58.

<sup>18</sup> Maggie Heyn Richardson, *Neighborhood, radically reimagined*, BATON ROUGE AREA FOUND. (Dec. 5, 2019), <https://www.braf.org/stories/2019/12/5/neighborhood-radically-reimagined>.

<sup>19</sup> *Frequently Asked Questions*, BR CHOICE, <https://www.brchoice.com/faq> (last visited July 28, 2021).



## FUNDING

Build Baton Rouge initially acquired the 200-acre area for \$2 million, with \$1.5 million coming from a disaster relief recovery grant and a \$500,000 grant from the East Baton Rouge Mortgage Finance Authority.<sup>20</sup>

In 2014, the City of Baton Rouge was awarded a \$500,000 Choice Neighborhoods Planning Grant from the U.S. Department of Housing and Urban Development (HUD).<sup>21</sup> The award catalyzed the planning process for Ardendale, centering the area's needs for greener streetscapes, better access to supermarkets, and solutions for blight, crime, and unemployment.<sup>22</sup>

Over the next four years, government, nonprofit, and business stakeholders came together to support Baton Rouge's application for a competitive HUD Choice Neighborhoods Initiative (CNI) grant.<sup>23</sup> The focus of the CNI program is to revitalize blighted public housing and make catalytic improvements to vacant property, housing, businesses, services, and schools. In 2019, Baton Rouge was awarded a \$29.5-million HUD CNI grant, which will partially support project implementation.<sup>24</sup> Consistent with the goals of the CNI program, the Ardendale plan takes an intentionally comprehensive approach to affordable housing and community development.

As part of the MOVEBR program, EBR parish will also invest \$15 million into a pedestrian-friendly thoroughfare in the Ardenwood area, including Ardendale and surrounding

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<sup>20</sup> Steve Sanoski, *RDA completes purchase of 198 acres for Smile. Heights*, BUS. REPORT (Feb. 1, 2012), [https://buildbatonrouge.org/wp-content/uploads/2020/02/businessreport\\_RDA-completes-purchase-of-198-acres-for-Smile-Heights-1.pdf](https://buildbatonrouge.org/wp-content/uploads/2020/02/businessreport_RDA-completes-purchase-of-198-acres-for-Smile-Heights-1.pdf).

<sup>21</sup> Frequently Asked Questions, BR CHOICE, <https://www.brchoice.com/faq> (last visited July 28, 2021); East Baton Rouge Parish Housing Authority Plays a Major Role in New \$30 Million HUD Grant Application, EAST BATON ROUGE PARISH HOUS. AUTH., <http://ebrpha.org/br-choice/> (last visited July 29, 2021); Maggie Heyn Richardson, *Neighborhood, radically reimagined*, BATON ROUGE AREA FOUND. (Dec. 5, 2019), <https://www.braf.org/stories/2019/12/5/neighborhood-radically-reimagined>.

<sup>22</sup> Maggie Heyn Richardson, *Neighborhood, radically reimagined*, BATON ROUGE AREA FOUND. (Dec. 5, 2019), <https://www.braf.org/stories/2019/12/5/neighborhood-radically-reimagined>.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* The CNI program emerged out of lessons learned from the first generation of federal housing projects, which has been criticized for enabling the concentration of poverty and contributing to patchworks of wealthy and impoverished neighborhoods within the same city. CNI is part of HUD's broader HOPE VI program, which focuses on revitalizing disinvested public housing projects into mixed-use developments.

neighborhoods.<sup>25 26</sup>

The Ardendale project as a whole is estimated to cost around \$200 million.<sup>27</sup>

## NEXT STEPS

The plan is intended to be implemented through four different phases. In the first phase beginning in 2020, EBR Parish Housing Authority is expected to break ground on 500 new mixed-income units.<sup>28</sup>

## CONSIDERATIONS AND LESSONS LEARNED

For local policymakers, including in receiving areas confronted with redevelopment opportunities to accommodate increasing population, Ardendale demonstrates how new urbanist design can be used in lieu of more traditional approaches to planning and zoning to promote affordable housing, green space, and neighborhood revitalization. Furthermore, the Ardendale plan shows how urban design and revitalization initiatives can be informed by both the individual and social needs of a community. Rather than concentrating public and assisted housing in certain locations, Ardendale focuses on mixed-income housing built within walking-distance to community amenities related to education, jobs, commerce, social opportunities, and outdoor recreation.

While the Ardendale plan is not expressly a climate adaptation plan, its approach to community development is integrated with strategies to grow broader socioeconomic and environmental resilience. By integrating placemaking and environmental resilience goals, the plan's design principles for green space and infrastructure also demonstrate the potential for natural hazard mitigation to be incorporated with other development goals and initiatives. Coordinating all of these policies objectives is key to promoting holistic community resilience, especially in the context of a changing climate.

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<sup>25</sup> “The MOVEBR Transportation and Infrastructure Improvements Program is the most significant transportation infrastructure investment in the history of East Baton Rouge Parish. The 1/2 cent sales tax proposition, which excludes food and drugs, was approved by the voters of East Baton Rouge Parish on December 8, 2018. The tax became effective on April 1, 2019 and will continue for 30 years until March 31, 2049. Proceeds of the tax can only be spent on the list of projects approved by the voters.” *MOVEBR Program Overview*, MOVEBR, <https://movebr.brla.gov/page/movebr-program-overview> (last visited July 28, 2021).

<sup>26</sup> Maggie Heyn Richardson, *Neighborhood, radically reimagined*, BATON ROUGE AREA FOUND. (Dec. 5, 2019), <https://www.braf.org/stories/2019/12/5/neighborhood-radically-reimagined>.

<sup>27</sup> Andrea Gallo, *Baton Rouge eyes gigantic federal grant to boost Ardendale with housing, retail*, ADVOCATE (Aug. 30, 2018), [https://www.theadvocate.com/baton-rouge/news/article\\_603947f8-ac6c-11e8-ab7b-7f2dbd39f754.html](https://www.theadvocate.com/baton-rouge/news/article_603947f8-ac6c-11e8-ab7b-7f2dbd39f754.html).

<sup>28</sup> Maggie Heyn Richardson, *Housing isn't enough*, BATON ROUGE AREA FOUND. (Dec. 2, 2020), <https://www.braf.org/stories/2020/12/2/choice-neighborhood>; *Ardendale Master Plan*, BUILD BATON ROUGE, <https://buildbatonrouge.org/our-work/urban-planning/> (last visited July 28, 2021).

# *City of Columbia, South Carolina*

## **Columbia Compass: Envision 2036 and Affordable Housing Task Force**

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### **EXECUTIVE SUMMARY**

In recent years, the City of Columbia, South Carolina has made several strides to address its affordable housing challenges. In 2020, the city updated its comprehensive plan, which includes 12 discrete recommendations for preserving and producing affordable housing in the region. Simultaneously, in 2020 the city convened a new Affordable Housing Task Force to provide housing experts and stakeholders an opportunity to help shape local housing initiatives, as well as to rethink traditional notions of “affordable housing.” Columbia serves as an example of how cities can deploy an arsenal of resources — comprehensive plans, community Task Force groups, and even examples from other cities — to address ongoing affordable housing challenges. By creating opportunities for collaborative and locally informed approaches to housing, municipalities can better understand the housing needs of its residents, as well as provide more holistic solutions for long-term housing security by bringing to the table stakeholders with diverse resources and expertise.

### **BACKGROUND**

The City of Columbia is South Carolina’s state capital and second most populous city.<sup>1</sup> The city’s population of close to 133,000 residents is very nearly equally split between renters and homeowners.<sup>2</sup> Of the homeowners, over 90 percent live in single-family detached homes.<sup>3</sup> In a city where approximately half of its residents are renters, the decline in rental affordability will require significant resources to increase the availability of adequate and affordable housing.

Like many parts of the country, Columbia faces rising housing costs, with both rent and housing prices outpacing household income. Between 1996 and 2016, the median rent increased by 59 percent, while the median home value rose by 67 percent — both outpacing the 38 percent increase in median income within the same number of years.<sup>4</sup> These trends significantly reduce both the

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<sup>1</sup> *QuickFacts: Columbia, South Carolina, U.S.* CENSUS BUREAU, <https://www.census.gov/quickfacts/columbiacitysouthcarolina> (last visited Jan. 22, 2022).

<sup>2</sup> CITY OF COLUMBIA, S.C., COLUMBIA COMPASS: ENVISION 2036 222 (2020), available at <http://www.columbiacompass.org/uploads/1/1/8/8/118862009/04-housing.pdf>.

<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at 225.

affordability of the rental market, as well as the ability of current renters to afford a down payment for future homeownership. Similar to other experiences across the country, the city has also experienced gentrification in recent decades, resulting in the displacement of historically Black neighborhoods, particularly those surrounding the University of South Carolina campus.<sup>5</sup>

Extreme weather has also threatened housing stability in Columbia, and, in recent years, even loss of life. In October 2015, South Carolina experienced record rainfall associated with Hurricane Joaquin, leading to 20 inches of rain in some areas of the state and incurring nearly \$1.5 billion in damages.<sup>6</sup> The flooding caused 19 fatalities in the region, many vehicle-related or due to drowning. In Columbia, floodwaters completely submerged homes and many residents were displaced, some permanently.<sup>7</sup>

In addition to disaster events like flooding, Columbia also faces more chronic climate-driven hazards. The city, once nicknamed with the slogan “Famously Hot” until it was rebranded in 2017, frequently experiences extreme heat days.<sup>8</sup> A 2019 study found that, across the state, residents experience an average of 14 days each year during which the heat index exceeds 100 degrees, a number that may quadruple by 2050.<sup>9</sup> Among the impacted South Carolina residents, people of color are the most chronically and severely impacted by extreme temperatures, comprising approximately 40 percent of outdoor workers (e.g., individuals who work in construction, agriculture, and occupations that are more likely to be affected by dangerous heat).<sup>10</sup>

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<sup>5</sup> Varsha Gowda, *USC is gentrifying Columbia*, DAILY GAMECOCK (Sep. 6, 2021), <https://www.dailygamecock.com/article/2021/09/column-usc-is-gentrifying-columbia-opinion-gowda>.

<sup>6</sup> U.S. DEP’T COMM. & NAT’L OCEANIC & ATMOSPHERIC ASS’N, THE HISTORIC SOUTH CAROLINA FLOODS OF 2015 (July 2016), available at [https://www.weather.gov/media/publications/assessments/SCFlooding\\_072216\\_Signed\\_Final.pdf](https://www.weather.gov/media/publications/assessments/SCFlooding_072216_Signed_Final.pdf).

<sup>7</sup> Tai Wong, *6 years later: Remembering the thousand year flood in Columbia*, WLTX.COM (Oct. 4, 2021, 7:16 PM), <https://www.wltx.com/article/news/local/flood-recovery/remembering-the-2015-flood-six-years-later/101-52d180f4-5245-4ea8-bfb9-442a4b68ed02>.

<sup>8</sup> *Columbia is ‘Famously Hot’ no more as group unveils new branding efforts*, WISTV.COM (Mar. 15, 2017, 3:12 PM), <https://www.wistv.com/story/34864413/columbia-is-famously-hot-no-more-as-group-unveils-new-branding-efforts/>.

<sup>9</sup> Carol Motsinger, *Famously hot: not just Columbia, yeah that Greenville and Anderson. Why SC may get hotter*, GREENVILLE NEWS (Sep. 23, 2019, 8:38 AM), <https://www.greenvilleonline.com/story/news/2019/09/23/sc-gets-hotter-columbia-greenville-anderson-extreme-heat-national-weather-service-forecast/2120020001/>.

<sup>10</sup> In one 2021 study, African American, Black, Hispanic, or Latino outdoor workers in South Carolina may lose as much as \$23.5 billion in annual earnings by 2050 if current climate trends persist. The average loss of income for an outdoor worker due to extreme heat will be approximately \$2,300 annually. *Extreme Heat Could Threaten \$1.1 Billion Annually in South Carolina Outdoor Worker Earnings by Midcentury*, UNION CONCERNED SCIENTISTS (Aug. 15, 2021), <https://www.ucsusa.org/about/news/extreme-heat-could-threaten-1-1-billion-annually-south-carolina-outdoor-worker-earnings>.

# OVERVIEW OF COLUMBIA COMPASS: ENVISION 2036 AND COLUMBIA AFFORDABLE HOUSING TASK FORCE

In 2020, Columbia’s City Council adopted the city’s updated comprehensive plan, referred to as Columbia Compass: Envision 2036 (Envision 2036).<sup>11</sup> Similar to the previous 2008–2018 comprehensive plan, Envision 2036 sets forth the city’s strategic planning goals under nine separate “Elements”: housing, population, natural resources, economic development, transportation, land use, community facilities, cultural resources, and priority investment. Each Element drives city priorities in key areas of housing, land use, infrastructure, and other development.

The parts that follow go into more depth on the Housing Element and Columbia’s Affordable Housing Task Force, which was created shortly after the adoption of Envision 2036 to help guide implementation of the plan and development of the city’s affordable housing priorities more generally.

## HOUSING

### Planning

Developed with input from an unspecified number of housing stakeholder and focus groups, the recommendations under the Housing Element centered around five guiding principles: (1) increasing walkability and neighborhood connectivity; (2) resourcing underserved neighborhoods; (3) preserving historical and cultural characteristics in existing communities; (4) increasing the development of “adequate and affordable housing”; and (5) diversifying the mix of housing stock and neighborhood choices for residents.<sup>12</sup>

Several of the 12 final recommendations focus on preventing neighborhood displacement, incentivizing the creation of affordable and multi-unit housing, and establishing a regional housing land trust.<sup>13</sup> While the substance of the recommendations varies, the most robust recommendations identify: the city agencies and other partners organizations responsible for implementing different recommendations; an estimated timeline for implementation; estimated cost ranges; data collection requirements; metrics for success; and cross references to other recommendations across other

<sup>11</sup> CITY OF COLUMBIA, S.C., COLUMBIA COMPASS: ENVISION 2036 (2020), <https://planninganddevelopment.columbiasc.gov/the-comprehensive-plan/>.

<sup>12</sup> CITY OF COLUMBIA, S.C., COLUMBIA COMPASS: ENVISION 2036 219 (2020), available at <http://www.columbiacompass.org/uploads/1/1/8/8/118862009/04-housing.pdf>.

<sup>13</sup> *Id.* at 228–47.

Elements. Significantly, most of the recommendations referenced case studies of other jurisdictions that have successfully implemented similar recommendations, drawing on experiences from not only other cities in the Southeast, but also as far away as the state of Washington.

Of the eight listed as a “high priority,” one of the most comprehensive recommendations was to “leverage public land and funding to develop affordable housing,” such as by working with the private sector to redevelop city-owned land for affordable housing.<sup>14</sup> Specifically, the recommendation highlighted similar measures in the City of Asheville, North Carolina, which allocated \$15 million out of a \$25 million affordable housing bond to fund the repurposing of city-owned properties for affordable housing. To deploy this strategy in Columbia, Empower 2036 recommended a collaboration between the Columbia Housing Authority and private developers to identify and make available public land that is both suitable for development and also accessible to neighborhood amenities like transit and other services.<sup>15</sup> If successfully implemented, this recommendation would help increase the acquisition of public land for affordable housing and better meet the increasing demand for more affordable units across the city.

## Affordable Housing Task Force

Columbia’s Affordable Housing Task Force is a diverse body of community representatives that was formed in early 2020 to provide input to local housing decisions and recommend affordable housing priorities for the city, including for the implementation of the Housing Element.<sup>16</sup> Established and chaired by a member of the City Council, the Task Force is represented by 23 experts from multiple sectors, including: housing (Columbia Housing Authority, Midlands Housing Trust Fund, Homeless No More); transportation (COMET, or Central Midlands Regional Transit Authority); nonprofit (United Way); and law (SC Appleseed Legal Justice).<sup>17</sup> Importantly, the Task Force is also represented by current affordable housing residents who have the lived expertise and are best positioned to understand affordable housing needs in the city.<sup>18</sup>

Since its formation, the Task Force has met regularly to discuss shared priorities for affordable housing in Columbia, as well as to better understand the housing ecosystem and potential solutions for the city’s affordable housing shortage. Activities have included meeting with city staff to

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<sup>14</sup> *Id.* at 241.

<sup>15</sup> *Id.*

<sup>16</sup> Nicholas Sullivan & Christine Bartruff, *Local organizations seeking solutions to Columbia’s affordable housing crisis*, CAROLINA NEWS & REP. (Dec. 6, 2021), <https://carolinanewsandreporter.cic.sc.edu/local-organizations-building-solutions-to-columbias-affordable-housing-shortage/>.

<sup>17</sup> Julia Kauffman, *New Columbia task force is tackling affordable housing issues*, WLTX.COM (Jul. 3, 2020, 6:38 PM), <https://www.wltx.com/article/news/local/new-columbia-task-force-tackling-affordable-housing-issues/101-8cf60f78-3008-46eb-9e95-fa2ca9b6d2bc>.

<sup>18</sup> *Id.*



discuss the development and implementation of Envision 2036, as well as learning about affordable housing measures being taken in other cities, such as the use of voter-approved housing bonds in Charlotte, North Carolina, and the adoption of inclusionary zoning ordinances in Atlanta, Georgia.

Similar to the City of Austin, Texas and other localities, Columbia's Affordable Housing Task Force has also debated a revision to the term and definition of affordable housing used by the city — specifically, to replace “affordable” with “attainable” in order to reduce any social stigma that may be attached to “affordable housing.”<sup>19</sup> While the term “affordable” was ultimately preserved, the Task Force adopted a new definition of affordable housing to help facilitate improved communication and clearer expectations for prioritizing affordable housing solutions in the city, both among city government staff, as well as within members of the affordable housing community. The revised definition now reads: “Affordable housing consists of inclusive, equitable, and safe spaces to live, for owners and renters, priced such that all Columbians can afford necessities of living and fully engage in our community.” This new definition replaced the definition used prior to August 2021, which defined affordable housing as “a continuum of equitable, inclusive, and quality rental and homeownership opportunities for people at every income level, which is critical to creating safe, complete, and thriving communities.”<sup>20</sup> Under the new definition, the Task Force placed additional emphasis on the role of affordable housing in creating “safe spaces,” and introduced the “necessities of living” and ability to “fully engage” in the community as central ideas in affordable housing.

Within six months, the Task Force developed a set of preliminary recommendations to help the City Council and other local stakeholders set priorities for affordable housing. The preliminary recommendations included using city bonds to create a housing trust fund, and advocating for the South Carolina state legislature to adopt enabling legislation that permits local governments to adopt inclusionary zoning ordinances.<sup>21</sup> Significantly, the Task Force recommendations — including the revised definition to the city's use of “affordable housing” — are advisory in nature and lack legal force absent additional measures by the Columbia City Council that can operationalize the recommendations. As of January 2022, the Task Force's recommendations still await formal adoption by the Columbia City Council.

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<sup>19</sup> *An update of Columbia's affordable housing community, including Allen Benedict Court redesign*, WLTX.COM (Aug. 11, 2021, 11:39 AM), <https://www.wltx.com/article/news/politics/columbia-southcarolina-affordable-housing-task-force-meets/101-0552a953-0934-4039-8790-6fbe69ab27e5>.

<sup>20</sup> *Id.*

<sup>21</sup> As of January 2022, a bill to enact the proposed “South Carolina Inclusionary Zoning Act” is still under review in the Judiciary Committee of the South Carolina State Senate. South Carolina Inclusionary Zoning Act, S. 0258, 124th Leg., Reg. Sess. (S.C. 2021).

## CONSIDERATIONS AND LESSONS LEARNED

Municipalities that are aiming to increase efforts to preserve and create more affordable housing could consider adopting a local comprehensive or master plan to help create the blueprint for land use and housing policies that center the preservation and creation of affordable housing as a priority. As demonstrated under Columbia's Envision 2036, the process of developing a comprehensive plan is also an opportunity to coordinate with private and nongovernmental stakeholders and adopt a common framework for identifying housing solutions that require cross-sector collaboration.

In addition to inviting public participation through the comprehensive planning process, local governments can also convene a specialized task force of housing stakeholders to provide more localized input on housing opportunities and initiatives. In doing so, the task force can help build capacity and contribute nongovernmental resources and expertise toward better implementation outcomes. To help ensure accountability, cities could consider appointing standing positions on a task force to enable greater continuity of leadership between successive political administrations, as well as to help operationalize the task force's recommendations.

Local housing stakeholders that would like to adopt a more holistic and comprehensive framework for affordable housing solutions can also consider adopting a more nuanced definition of "affordable housing." The updated definition adopted by the City of Columbia's Affordable Housing Task Force does not replace the technical definition set and commonly used by the U.S. Department of Housing and Urban Development and local housing authorities (i.e., as a percentage of income).<sup>22</sup> However, a more expansive, localized, and community-based definition of affordable housing can help housing experts clarify priorities and expectations for all stakeholders, including local government, developers, landlords, tenants, and homeowners. Importantly, a revised definition of affordable housing creates an opportunity to emphasize the other associated costs that must be considered to make housing truly affordable, for example, access to transportation, grocery stores, jobs, and schools.

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<sup>22</sup> *Glossary of Terms to Affordable Housing*, U.S. DEP'T OF HOUSING & URBAN DEV. (Aug. 18, 2011), <https://archives.hud.gov/local/nv/goodstories/2006-04-06glos.cfm#:~:text=Affordable%20Housing%3A%20Affordable%20housing%20is,Reference%3A%20www.hud.gov.>

# *City of Baton Rouge – Parish of East Baton Rouge, Louisiana*

## **Scotlandville Community Strategic Plan**

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### **EXECUTIVE SUMMARY**

Between 2019 and 2022, Southern University worked with community partners in Scotlandville, located in north Baton Rouge, to develop a blueprint for improving housing and other socioeconomic outcomes for Scotlandville’s residents. The Scotlandville Community Strategic Plan<sup>1</sup> (Community Plan) is an example of how one Louisiana community has used public participation and community planning to address housing shortages and other challenges in a chronically disinvested community. The Community Plan also helps to highlight the role that universities and other nongovernment institutions can play to develop and implement comprehensive community visions for housing and other services to help increase local resilience.

### **BACKGROUND**

Scotlandville is a community in north Baton Rouge, Louisiana, and home to approximately 10,000 residents.<sup>2</sup> Historically founded as an African-American community, Scotlandville was incorporated into the City of Baton Rouge in the 1970s, during a national recession and a time when there was limited funding and political will for urban programs that support socioeconomic development.<sup>3</sup> The disinvestment continued in the following decades, leading to chronic challenges like a shortage of affordable housing, food deserts, lack of public transportation, economic deterioration, and disparities in health outcomes between residents of different races and income strata.<sup>4</sup>

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<sup>1</sup> S.U., SCOTLANDVILLE COMMUNITY STRATEGIC PLAN (DRAFT) (NOV. 19, 2021), *available at* [https://static1.squarespace.com/static/5e8353f4ee1414582f95ad5f/t/61dc681b1f21c424f877fca2/1641834553773/ScotlandvillePlanDraft\\_for+website.pdf](https://static1.squarespace.com/static/5e8353f4ee1414582f95ad5f/t/61dc681b1f21c424f877fca2/1641834553773/ScotlandvillePlanDraft_for+website.pdf).

<sup>2</sup> *Id.* at 92.

<sup>3</sup> Yousef Danesh, The Unsuccessful Struggles of a Black Community to Incorporate: A Case Study, Scotlandville, 30 J. BLACK STUD. 184 (1999).

<sup>4</sup> S.U., SCOTLANDVILLE COMMUNITY STRATEGIC PLAN (DRAFT) 7 (NOV. 19, 2021), *available at* [https://static1.squarespace.com/static/5e8353f4ee1414582f95ad5f/t/61dc681b1f21c424f877fca2/1641834553773/ScotlandvillePlanDraft\\_for+website.pdf](https://static1.squarespace.com/static/5e8353f4ee1414582f95ad5f/t/61dc681b1f21c424f877fca2/1641834553773/ScotlandvillePlanDraft_for+website.pdf).

As a result, Scotlandville faces persistent housing challenges, including an aging and deteriorating housing stock and a shortage of housing for very low-income renters and homeowners (or households that make between 31–50 percent of Median Family Income).<sup>5</sup> Three quarters of Scotlandville’s housing stock consists of single-family homes, which severely limits options for students, young professionals, and the elderly who generally cannot afford this type of residence.<sup>6</sup> With roughly the same percentage of housing built before 1979, much of the available housing in Scotlandville is over 30 years old and in need of repairs or other updates, which can contribute to community blight and a significant number of vacancies.<sup>7</sup> Indeed, in 2019, approximately 20 percent of the housing units in Scotlandville were vacant, a relatively high number that poses challenges for attracting investments and boosting the community’s image.<sup>8</sup>

Today, Scotlandville continues to be anchored by Southern University (SU), a historically Black, land grant university that initiated a series of planning documents in 2019 to focus investments on meeting the needs of its students and the Scotlandville community at large. The foundational plan, IMAGINE 20K: 2018–2030, was drafted through a collaboration between SU and A&M College. IMAGINE 20K prioritizes ten goals to help align the university’s academic programs to the workforce needs of its students, as well to support infrastructure and other community improvements to meet the needs of Scotlandville’s residents. To support the goals identified under IMAGINE 20K, SU developed two additional plans to facilitate its implementation: (1) the SU Strategic Master Plan (Campus Plan), which focuses on physical improvements to the campus; and (2) the Scotlandville Community Strategic Plan (Community Plan), which aims to create a more vibrant, mixed-use community that supports SU’s students, faculty, staff, and other residents with housing and other services. The final version of the plan, which is anticipated to be released in 2022, is the focus of this entry.<sup>9</sup>

## OVERVIEW OF SCOTLANDVILLE COMMUNITY STRATEGIC PLAN

The Scotlandville Community Strategic Plan (Community Plan) was developed by Southern University and the Southern University System Foundation to help shape long-term development

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<sup>5</sup> *Id.* at 94–97.

<sup>6</sup> *Id.*

<sup>7</sup> *Id.* at 95.

<sup>8</sup> *Id.*

<sup>9</sup> The development of the Community Plan was initiated in 2019 to support the implementation of IMAGINE 20K. The Community Plan itself built on two previous planning efforts from 2011: the Scotlandville 2030 Comprehensive Community Development Plan (SCCDP) and the Scotlandville Gateway Community Improvement Plan. The SCCDP, which was incorporated into the East Baton Rouge Parish Comprehensive Plan and adopted by the East Baton Rouge City Parish in 2018, set the community’s priority for the next 20 years. The Community Improvement Plan was more narrowly focused on the Scotlandville Gateway community. *Id.* at 6–7.

among public and private stakeholders, including city staff, the Metro Council, Planning Community, nonprofits, businesses, and other stakeholders.<sup>10</sup>

The Community Plan reflects a multi-year community engagement process with Scotlandville's residents and other neighborhood stakeholders who provided critical input into the content of the plan (see the part below on Community Engagement). The framework of the Community Plan is organized in two sections: the first section provides the community visions and recommendations, while the second provides supporting research and background analysis.

Broadly, "Part 1" was developed through a robust public participation process and identifies Scotlandville's challenges, visions, and goals. Specifically, Part 1 proposes goals and recommendations organized under five key visions:

1. **Thriving Community:** Creating a mixed-use community where all residents can participate in Scotlandville's economic expansion.
2. **Welcoming Neighborhood:** Expanding housing types to meet the needs of different types of residents at different income levels.
3. **Community Image and Beautification:** Creating more public art and using streetscaping to improve the overall look of the community.
4. **Healthy Community:** Improving healthy equity in Scotlandville by reducing food insecurity and encouraging green development.
5. **Connecting Scotlandville, Southern University, and Beyond:** Highlighting Scotlandville's history and culture, and increasing the university's engagement with Scotlandville's broader community.<sup>11</sup>

In the second half of the Community Plan, "Part 2" provides background information to support and contextualize the recommendations under Part 1, including research on local trends in housing, economic development, transportation, and land use and zoning.

## HOUSING

One of the most prominent themes in the Community Plan is the focus on creating and preserving affordable housing for all of Scotlandville's residents. The focus on providing more affordable housing and enhancing the surrounding built environment for residents from all income levels is infused throughout four out of the five key vision areas, as captured below:

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<sup>10</sup> *Id.* at 5–7. The Community Plan was drafted by a project team consisting of the Center for Planning Excellent (CPEX), a statewide nonprofit planning organization in Louisiana; nonprofit partners (Community Against Drugs and Violence, or CADAV); and consulting groups (Sinektics, LLC; JQUAD Planning Group; Vectura and Associates).

<sup>11</sup> *Id.* at 21.

1. **Thriving Community:** In order to “increase opportunities for commercial and residential development,” the Community Plan recommends working with partners like the Baton Rouge North Economic Development District to identify potential development sites and to spur infill construction and economic development.<sup>12</sup> As part of the process, the Community Plan suggests whether zoning changes may be required to implement high-density multi-family housing. Similarly, the plan proposes working with the East Baton Rouge City–Parish to ensure clarity around zoning codes and the permitting process in order to better streamline redevelopment in the community.
2. **Welcoming Neighborhood:** The Community Plan recommends a long list of action items to achieve three primary housing goals: (1) expand the variety of housing types to accommodate residents at all income levels; (2) bring vacant properties back into the market and into productive use; and (3) assist residents with homeownership and neighborhood improvement. Common action items to achieve these goals include: (A) recommending the city–parish review and amend zoning ordinances (e.g., to allow mixed-use developments by right or create standards for infill development); (B) prioritize certain vulnerable populations, such as seniors, by developing cottage or cluster housing to enable seniors to own or rent smaller-sized homes that require less financial equity to acquire or resources to maintain; and (C) work with a broad coalition of stakeholders from the grassroots to city level — including Build Baton Rouge and the Scotlandville Community Development Corporation — to achieve multiple goals, from developing strategies to acquire vacant and blighted properties to increasing housing literacy among residents.<sup>13</sup>
3. **Community Image and Beautification:** In addition to strategies that create and preserve affordable housing, the Community Plan includes measures to enhance not only the community’s physical appearance, but also improve safety within neighborhoods.<sup>14</sup> For example, the planning team recommends implementing a beautification program along a key corridor, Harding Boulevard, through tree-planting, landscaping improvements, and adding pedestrian amenities to improve neighborhood connectivity. Under the plan, the community also interested in adopting a Crime Prevention Through Environmental Design (CPTED) approach, which focuses on improving the built environment (e.g., improving signage, adding crosswalks) to reduce crime.<sup>15</sup>
4. **Healthy Community:** The Community Plan emphasizes the role of housing security as one of several key Social Determinants of Health (SDOH) that can help shape health

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<sup>12</sup> Objectives cited in quotation marks refer to specific goals under each of the five key focus areas of the Community Plan. *Id.* at 25.

<sup>13</sup> *Id.* at 26–33. Build Baton Rouge (formerly the East Baton Rouge Redevelopment Authority). The Scotlandville Community Development Corporation is a local nonprofit that provides housing assistance to low- and moderate-income residents.

<sup>14</sup> *Id.* at 34–47.

<sup>15</sup> *Id.* at 46.



outcomes for residents across all income levels.<sup>16</sup> In order to maximize other SDOH, such as healthcare access and neighborhood and built environment, the Community Plan includes recommended strategies to address food insecurity and environmental challenges, such as stormwater runoff. For example, the plan highlights installing green infrastructure (e.g., tree canopies, permeable paving) that can help improve stormwater management and decrease flooding, and developing community gardens or community farmer's markets to help reduce food insecurity.

## COMMUNITY ENGAGEMENT

The Community Plan was developed through a multi-year public participation process that included community meetings, interviews, and online surveys, through which residents and other stakeholders were able to provide input on the content of the plan.<sup>17</sup> Specifically, the project team assembled a 27-member Stakeholder Committee that met six times between June 2020 and June 2021 to review research and other information presented by the project team, and to provide recommendations and other feedback on the creation of the Community Plan. The Stakeholder Committee reflected a diversity of community voices, including SU students and faculty, as well as Scotlandville residents, business owners, and community groups. The project team also held workshops for local high school students, who helped to identify priority issues, to better reflect the community's relatively young population.<sup>18</sup> Finally, the project team partnered with the students in Louisiana State University's Student Design Studio, who met with the Stakeholder Committee members to develop designs for several of the projects proposed under the plan.

## NEXT STEPS

As stated in the Community Plan, implementing the numerous recommendations will require significant resources.<sup>19</sup> Accordingly, the Community Plan also identifies potential partnerships and funding resources that can be leveraged to operationalize the plan's many recommendations. The Community Plan's roadmap for implementation highlights not only the opportunity for building strategic partnerships between stakeholders, but also proposes a timeline for the first two years of implementation, including conducting demonstration projects to build community support, building an inventory of buildings available for renovation or development, and working with the City-Parish Planning Commission to identify barriers to development in the zoning process.

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<sup>16</sup> *Id.* at 48–62.

<sup>17</sup> *Id.* at 14.

<sup>18</sup> In 2019, over 98 percent of Scotlandville's residents identify as Black or African American, with nearly a third of the population under 20 years old. *Id.* at 92.

<sup>19</sup> *Id.* at 80–84.

The Community Plan also includes potential funding options to implement the community's visions and recommendations. The plan's authors encourage the use of public-private partnerships between public entities and the private sector to help raise the necessary capital financing and develop the project management skills required to implement key recommendations, such as building mixed-use housing commercial developments. Additionally, the plan discusses leveraging a number of federal and state programs to help fund affordable housing projects, including:

- **New Market Housing Tax Credits (MNTC Program)**, a federal program that permits private investors to receive a tax credit in exchange for making financial investments in Community Development Entities, which facilitate the flow of private capital from an investor to qualified businesses in low-income communities;
- **Federal Opportunity Zone Program**, which encourages private investment in low-income communities by providing capital gains tax incentives in areas like Scotlandville and many parts of north Baton Rouge, which have been designated Opportunity Zones;
- **Low-Income Housing Tax Credit Program (LIHTC)**, a federal program that provides developers with tax incentives to finance the rehabilitation or construction of low-income rental housing;
- **Payment-In-Lieu of Taxes (PILOT)**, a state program under which a tax-exempt political entity (e.g., parish, city) acquires title to a property, thereby exempting the property from ad valorem taxes, in exchange for the property owner negotiating a separate form payment with the political entity; and
- **State Historic Rehabilitation Tax Credits**, which provide a 20 percent state commercial tax credit for the rehabilitation of income-generating historic buildings located in the Scotlandville Cultural District through 2025.

## CONSIDERATIONS AND LESSONS LEARNED

Scotlandville's Community Strategic Plan demonstrates the value of centering community nonprofit partners in conversations with residents and other stakeholders about community visions, goals, and recommendations. The development of the Community Plan was spearheaded by Southern University, which assembled a diverse team of stakeholders under the Scotlandville Strategic Plan Committee. The committee was able to harness its strengths in community engagement and its preexisting relationships with members of the Scotlandville community to draw out the voices of residents and other stakeholders who might not have otherwise been heard. Importantly, the planning process also demonstrated the value of incorporating voices from students and younger residents, who not only participated via community workshops, but also helped to provide architectural design concepts within the plan.

Unlike many planning documents in which proposed housing initiatives are contained within a discrete section, the Community Plan elevates affordable housing as a priority by incorporating goals and recommendations across all but one of the key issue areas. In doing so, the residents and project team recognize the centrality of housing to successful outcomes in all community goals, including neighborhood beautification and reducing food insecurity. Other communities can look to comprehensive plans like the Scotlandville Community Plan in order to integrate housing and other concepts to build both individual and community resilience.

Finally, the Community Plan reinforces the importance of providing pathways to operationalize the plan's numerous recommendations. The community planning process is not only a platform to identify common visions and priorities, but also an opportunity to identify specific actors from all sectors and their potential roles in turning the plan into action. The Community Plan was developed specifically to help implement a broader community vision under IMAGINE 20K, and therefore provided more detailed guidance on actions, stakeholders, funding sources, and potential partners to help execute the community's visions and priorities. Other local governments and communities can consider developing neighborhood-specific strategies to carry out broader ones like local comprehensive plans. As such, it is important to think about planning at both scales.

# City of Charlotte, North Carolina

## Pilot Naturally Occurring Affordable Housing (NOAH) Subsidy Program

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### EXECUTIVE SUMMARY

The City of Charlotte, North Carolina is one of the fastest growing metropolitan areas in the country, and where the price of housing has increased exponentially in recent years. Like many large urban centers, Charlotte faces challenges in meeting the demands for affordable and available housing. In 2020, the Charlotte City Council adopted the Pilot Naturally Occurring Affordable Housing (NOAH) Rental Subsidy Program (“Pilot NOAH Program”) to help preserve some of the city’s over 20,000 units of housing that are considered naturally affordable, i.e., without the assistance of government subsidies.<sup>1</sup> Under the Pilot NOAH Program, the city provides financial assistance to private developers who agree to keep the units affordable rather than rebuild them or raise rent, which may lead to the displacement of current residents. Working in tandem with private investors who help subsidize the initial acquisition of NOAH properties, the Pilot NOAH Program has been created to help preserve the city’s affordable housing stock. The preservation of NOAH housing is one component of Charlotte’s broader strategy for preserving and creating affordable housing for low-and moderate-income residents, and can be illustrative for cities that seek to leverage additional public-private partnerships to improve housing affordability and availability in their jurisdictions.

### BACKGROUND

Charlotte is located in North Carolina’s Piedmont Region and situated close to the South Carolina border. A banking hub and the nation’s second largest financial center, Charlotte is also one of the fastest growing regions in the country.<sup>2</sup> Under the 2020 Census, Charlotte surpassed San Francisco to become the 15th largest U.S. city by population.<sup>3</sup> The city’s rapid growth did not abate with the

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<sup>1</sup> Nate Berg, *Charlotte May Have Cracked the Code on Affordable Housing. Here’s How*, FAST CO. (Jan. 25, 2021), <https://www.fastcompany.com/90597128/charlotte-may-have-cracked-the-code-on-affordable-housing-heres-how>.

<sup>2</sup> Carolyn Duren & Armughan Khawaja, *Charlotte, NC outpacing nationwide growth in banking, set for further expansion*, S&P GLOBAL (May 16, 2019), <https://www.spglobal.com/marketintelligence/en/news-insights/trending/kdZchEwDkYSXozJJ7Z8gQA2>.

<sup>3</sup> *Best Places to Retire 2021: Charlotte, NC*, FORBES (May 2021), <https://www.forbes.com/places/nc/charlotte/?sh=6fe0ff0052e6>; Danielle Chemtob & Gavin Off, *Charlotte growth pushes it past San Francisco to become 15th biggest city in the US*, WBTV.COM (May 21, 2020, 2:08 PM), <https://www.wbtv.com/2020/05/21/charlotte-growth-pushes-it-past-san-francisco-become-th-biggest-city-us/>.

coronavirus (COVID-19) pandemic. As the pandemic drove residents away from larger urban centers, Charlotte saw an influx of residents attracted to the city's mild weather and lower costs of living.<sup>4</sup>

The economic growth has not been felt evenly across Charlotte's nearly 900,000 residents.<sup>5</sup> According to a 2014 study on 50 of the country's largest metro areas, Charlotte ranked last in social and economic mobility.<sup>6</sup> With tens of thousands of residents relocating each year to the Charlotte metro area and surrounding Mecklenburg County, the city's housing supply and affordability is not meeting demand.<sup>7</sup> In the last ten years, the city's need for affordable housing has doubled to 34,000 units.<sup>8</sup> On top of the need for additional units, there is also growing demand for increased affordability within the existing housing stock, with rent rising 45 percent in the last decade.<sup>9</sup> In 2019, 46,000 of Charlotte's renters were considered housing cost-burdened, or, in other words, spending more than 30 percent of their monthly income on housing costs.<sup>10</sup> Meanwhile, the City of Charlotte receives fewer housing vouchers through the Department of Housing and Urban Development (HUD) than other cities of comparable, or even smaller, size.<sup>11</sup> Even before the COVID-19 pandemic, 13,000 people were on a waitlist for the Section 8 Housing Choice

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<sup>4</sup> Rachel Lundberg, *Charlotte remains one of the fastest-growing cities amid COVID-19 pandemic*, WCNC.COM (Dec. 18, 2020, 5:38 PM), <https://www.wncn.com/article/news/local/covid19-pandemic-covid-moving-relocating-stayathome-workfromhome-home-city-newyork-austin-charlotte-california/275-2c705aa0-137e-4219-b215-ed317df03300>; Katie Peralta Soloff, *Could coronavirus actually speed up Charlotte's growth?*, AXIOS CHARLOTTE (May 28, 2020), <https://charlotte.axios.com/218931/could-coronavirus-actually-speed-up-charlottes-growth/>.

<sup>5</sup> QuickFacts: Charlotte City, North Carolina, C.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/charlottecitynorthcarolina> (last visited Jan. 2022).

<sup>6</sup> Raj Chetty et al., *Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States*, Q. J. ECON. (June 2014), available at [http://www.equality-of-opportunity.org/assets/documents/mobility\\_geo.pdf](http://www.equality-of-opportunity.org/assets/documents/mobility_geo.pdf); see also OPPORTUNITY INSIGHTS, CHARLOTTE OPPORTUNITY INITIATIVE (2020), available at <https://opportunityinsights.org/wp-content/uploads/2020/11/OI-CharlotteReport.pdf>.

<sup>7</sup> UNC-CHARLOTTE & CHILDRESS KLEIN CTR. FOR REAL EST., *THE 2021 STATE OF HOUSING IN CHARLOTTE REPORT* (2021), available at [https://issuu.com/belkcollege/docs/2021\\_11\\_11\\_stateofhousingreport2021.docx](https://issuu.com/belkcollege/docs/2021_11_11_stateofhousingreport2021.docx); Jenna Martin, *Charlotte metro's population keeps climbing, new Census figures show*, CHARLOTTE BUS. J. (Mar. 26, 2020, 8:00 AM), <https://www.bizjournals.com/charlotte/news/2020/03/26/charlotte-metros-population-keeps-climbing-new.html#:~:text=The%20Charlotte%2DConcord%2DGastonia%20Metropolitan,the%20nation%27s%20384%20metro%20areas>.

<sup>8</sup> Katie Peralta Soloff, *Could coronavirus actually speed up Charlotte's growth?*, AXIOS CHARLOTTE (May 28, 2020), <https://charlotte.axios.com/218931/could-coronavirus-actually-speed-up-charlottes-growth/>.

<sup>9</sup> *I can't afford to live here: An in-depth look at Charlotte's affordable housing crisis*, WCNC.COM (Sep. 30, 2019, 10:19 PM), <https://www.wncn.com/article/money/markets/real-estate/affordable-housing-crisis/charlottes-affordable-housing-crisis/275-061d2e3f-2a1c-4536-8ce8-a568e604f03c>.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

Voucher Program.<sup>12</sup> These persistent housing challenges have spurred a renewed push for affordable housing solutions across the city.

## OVERVIEW OF THE PILOT NATURALLY OCCURRING AFFORDABLE HOUSING (NOAH) RENTAL SUBSIDY PROGRAM

In November 2020, the Charlotte City Council adopted a pilot program to help address the city's shortage in tenant-based housing vouchers and to increase the affordability of market-rate housing for low-to moderate-income (LMI) households. The Pilot Naturally Occurring Affordable Housing (NOAH) Rental Subsidy Program was passed with unanimous bipartisan support from Charlotte's City Council.<sup>13</sup> Under the Pilot NOAH Program, the City of Charlotte has pledged to work with developers of NOAH properties to preserve long-term affordability for renters earning between 30 and 80 percent Area Median Income (AMI), or roughly \$25,250 annually for a family of four in Charlotte.<sup>14</sup>

While there is no uniform definition for NOAH properties within the housing industry, “naturally occurring affordable housing” is typically used to describe privately owned, existing residential properties (e.g., single-family homes or apartment complexes) that are rented at affordable rates without the use of a government subsidy. As such, NOAH is sometimes referred to as “non-subsidized affordable rental housing.” Common features of NOAH properties include:

- **At least 15-years-old.** NOAH buildings are de facto affordable in part due to the age of the building stock. Most NOAH properties were built between 1940 and 1990.
- **Classified as Class B or C rental buildings or complexes with over 50 units.** Class B and C properties are commonly understood within the industry to refer to buildings with four or more rental units (i.e., a commercial property that generates income). Class B and C properties fall on the middle and lower ends of the spectrum, respectively, in terms of

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<sup>12</sup> *Id.* The Section 8 Housing Choice Voucher Program is a housing assistance program funded by the U.S. Department of Housing and Urban Development and administered by local public housing agencies (PHAs). Under the voucher program, PHAs pay a housing subsidy directly to the landlord, such that the low-income residents and other qualifying participants need only pay the unsubsidized portion of the rent. *Housing Choice Vouchers Fact Sheet*, U.S. DEP'T OF HOUS. & URB. DEV., [https://www.hud.gov/topics/housing\\_choice\\_voucher\\_program\\_section\\_8#hcv01](https://www.hud.gov/topics/housing_choice_voucher_program_section_8#hcv01) (last visited Jan. 18, 2022).

<sup>13</sup> Sarafina Wright, *City Council votes yes to rental subsidy program for low-income families*, QCITY METRO (Nov. 9, 2021), <https://digitalbranch.cmlibrary.org/charlotte-journalism-collaborative/city-council-votes-yes-to-rental-subsidy-program-for-low-income-families/>.

<sup>14</sup> Britt Clampitt, *New subsidy program to help low-income households rent existing affordable housing*, CHARLOTTENC.GOV (Nov. 18, 2021), <https://charlottenc.gov/newsroom/cityhighlights/Pages/Rental-Subsidies.aspx>.



age, rent, location, amenities, and other attributes.<sup>15</sup> By comparison, Class A buildings tend to be more recently constructed, charge higher rent, and include amenities, such as pools and fitness centers.

- **Do not receive subsidies.** NOAH properties can be rented at lower rates due to the physical characteristics of Class B and C buildings. Therefore, what keeps NOAH properties affordable are their below-market-rate features rather than a reliance on government subsidy programs, such as the federal Low-Income Housing Tax Credits (LIHTC) program. While many residents of NOAH housing hold tenant-based housing vouchers and may therefore receive the benefits of both types of programs, the units themselves are not directly subsidized by any government program.<sup>16</sup>
- **Intended for low-and moderate-income households.** NOAH units are more affordable for LMI households, whose income range between 30 to 95 percent AMI.<sup>17</sup> By comparison, NOAH properties would be prohibitively expensive for extremely low-income (ELI) households, or those with incomes under 30 percent AMI.<sup>18</sup>

NOAHs are currently the most common type of affordable housing in the United States.<sup>19</sup> Given their prevalence, and the fact that the preservation of existing affordable housing remains more time and cost-efficient than constructing new affordable housing, the preservation of NOAHs is critical for keeping low-to moderate-income renters from being displaced.<sup>20</sup>

However, NOAH properties are also susceptible to market speculation and can lose their affordability over time, for example, when onsite renovations increase the value of a property, or when the physical condition of a building deteriorates.<sup>21</sup> Therefore, the preservation of NOAH

<sup>15</sup> *What is a Class A, Class B, or Class C property?*, REALTY MOGUL, <https://www.realtymogul.com/knowledge-center/article/what-is-class-a-class-b-or-class-c-property> (last visited Jan. 18, 2022).

<sup>16</sup> Lauren Lindstrom, *Here's how Charlotte could help turn property taxes into rent help*, CHARLOTTE OBSERVER (Nov. 2, 2021, 4:35 PM), <https://www.charlotteobserver.com/news/local/article255472911.html>.

<sup>17</sup> *Glossary*, U.S. DEP'T OF HOUS. & URB. DEV., <https://archives.huduser.gov/portal/glossary/glossary.html> (last visited Jan. 18, 2022).

<sup>18</sup> *Naturally Occurring Affordable Housing Benefits Moderate Income Households, But Not the Poor*, NAT'L LOW INCOME HOUS. COAL. (Nov. 7, 2016), <https://nlihc.org/resource/naturally-occurring-affordable-housing-benefits-moderate-income-households-not-poor>.

<sup>19</sup> The exact number of NOAH housing is unknown. However, according to 2016 estimates by the real estate and analytics firm CoStar, at least 5.5 million rental units (or 63 percent of the affordable housing stock) across cities in the United States meet the definition of NOAH. *Naturally Occurring Affordable Housing*, COSTAR (Oct. 11, 2016), available at [https://2os2f877tnl1dvtmc3wy0aq1-wpengine.netdna-ssl.com/wp-content/uploads/ULI-Documents/ULI\\_NAAHL\\_Presentation.pdf](https://2os2f877tnl1dvtmc3wy0aq1-wpengine.netdna-ssl.com/wp-content/uploads/ULI-Documents/ULI_NAAHL_Presentation.pdf).

<sup>20</sup> *What is preservation?*, NAT'L HOUS. TR., <https://www.nationalhousingtrust.org/what-preservation> (last visited Jan. 19, 2022).

<sup>21</sup> Matt Schreiber, Joint Ctr. for Hous. Studies Harv. U. & NeighborWorks America, *Proactive Preservation of Unsubsidized Affordable Housing in Emerging Markets: Lessons from Atlanta, Cleveland, and Philadelphia* (2018),

properties requires the commitment of mission-driven developers who are willing to accept a smaller return on investment, and who have the financial means to compete against better-capitalized, real estate investment firms and developers who may place residents at risk of displacement, either by demolishing and rebuilding the property, or raising the rent after making capital improvements. Accordingly, preserving NOAH properties requires dedicated sources of financing, and, as Charlotte's Pilot NOAH Program demonstrates, sustainable partnerships between the private sector and local government.

## HOUSING

### Pilot Naturally Occurring Housing Affordable Housing (NOAH) Subsidy Program

Charlotte's focus on the preservation of NOAH properties began in 2018, when the City Council adopted the Housing Charlotte Framework, which recommended prioritizing resources and partnering with developers to acquire and preserve at-risk NOAH properties to ensure long-term affordability for current and future residents.<sup>22</sup> In December 2020, the City Council formally approved the Pilot NOAH Rental Subsidy Program, which assists private developers with acquiring and preserving NOAH properties, and creates a pathway for LMI renters to live in market-rate housing.

Under the Pilot NOAH Program, the city helps developers acquire and preserve NOAH properties by providing them with an annual rental subsidy for a minimum of 20 years — or the duration of a deed restriction — at an amount not to exceed the city's annual property tax bill. The subsidy is then used to cover the difference between what an LMI household can afford and the rent on the unit. In exchange, participating developers and owners (if a separate entity from the developer) agree to affordability restrictions to limit rent growth, and to make units affordable to residents at specific income levels as the units become available through natural turnover.

Additionally, property owners must meet the program's target residential AMI levels:<sup>23</sup>

- 80 percent of units occupied by households earning at or below 80 percent AMI;

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available at [https://www.jchs.harvard.edu/sites/default/files/media/imp/harvard\\_jchs\\_schreiber\\_gramlich\\_2018.pdf](https://www.jchs.harvard.edu/sites/default/files/media/imp/harvard_jchs_schreiber_gramlich_2018.pdf); John Huson, *Opinion: Why Saving NOAH Won't Solve Our Housing Crisis*, U.N.C. Charlotte Urb. Inst. (Aug. 5, 2020), <https://ui.charlotte.edu/story/opinion-why-saving-noah-won%E2%80%99t-solve-our-housing-crisis>.

<sup>22</sup> Charlotte Dep't Hous. & Neighborhood Servs., Enterprise Cmty. Partners, *Housing Charlotte: A Framework for Building and Expanding Access to Opportunity Through Housing Investment* (2018), available at <https://www.charlottenc.gov/HNS/Housing/Strategy/Documents/Housing%20Charlotte%20Framework.pdf>.

<sup>23</sup> Britt Clappitt, *New subsidy program to help low-income households rent existing affordable housing*, CHARLOTTENC.GOV (Nov. 18, 2021), <https://charlottenc.gov/newsroom/cityhighlights/Pages/Rental-Subsidies.aspx>.

- 20 percent of units occupied by households earning at or below 30 percent AMI, using the NOAH rental subsidy program or other subsidy source (e.g., housing choice vouchers); and
- 10 percent of units occupied by households at or below 30 percent AMI, subsidized entirely through the NOAH rental subsidy program.

Further, qualifying properties must be at least 15 years old, well-maintained, and listed on municipal property tax rolls. In addition to focusing on areas that are at specific risk of conversion of higher rents, developers must also demonstrate a strong financial, management, and maintenance history.<sup>24</sup> The program is administered on behalf of the city by a third-party, nonprofit housing services provider in Charlotte, Socialserve, which helps to identify potential tenants for the program.<sup>25</sup>

In 2020, the city's Pilot NOAH Program was first launched at Lake Mist Apartments, a rental complex in South Charlotte that houses approximately 95 percent Latino residents. As of early 2022, the Pilot NOAH Program has been used to help convert more than 500 units in the city to NOAH housing through the acquisition of six rental properties, each operating under a 20-year deed restriction that dedicates all units to households earning between 30 to 80 percent AMI.<sup>26</sup>

## FUNDING

The acquisition of properties under the Pilot NOAH Program is a joint effort by the city (through the Housing Trust Fund), a developer (Ascent Housing), and private investors (through the Housing Impact Fund).

In 2018, voters in Charlotte approved to dramatically increase the city's Housing Trust Fund from \$15 million to \$50 in order to commit additional resources to the preservation and creation of affordable housing across the city. The Housing Trust Fund, which is a tax-funded, voter-approved bond established to help finance housing projects, has been used to help support the Pilot NOAH Program by partially financing the acquisition of the NOAH properties.<sup>27</sup> For example, during the

<sup>24</sup> Naturally Occurring Affordable Housing City-wide Rental Subsidy Program, CITY OF CHARLOTTE (Aug. 18, 2021), available at [https://charlottenc.gov/CityCouncil/Committees/Neighborhood%20docs/NOAH%20Rental%20Subsidy%20Program\\_Aug%2018%202021.pdf](https://charlottenc.gov/CityCouncil/Committees/Neighborhood%20docs/NOAH%20Rental%20Subsidy%20Program_Aug%2018%202021.pdf).

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> Lauren Lindstrom, *Beyond apartments, Charlotte affordable housing fund may support for-sale homes*, CHARLOTTE OBSERVER (Sep. 14, 2021, 5:54 PM), <https://www.charlotteobserver.com/news/business/development/article254218633.html>; CITY OF CHARLOTTE, NATURALLY OCCURRING AFFORDABLE HOUSING CITY-WIDE RENTAL SUBSIDY PROGRAM (Aug. 18, 2021), available at

acquisition of Lake Mist Apartments, the city contributed approximately \$2.4 million for the \$18.5 million acquisition, while the remainder was financed through the Housing Impact Fund (HIF), a for-profit, social impact equity fund.<sup>28</sup>

Launched by a coalition of private investors in 2020, the HIF was created for the express purpose of acquiring and preserving 1,500 units of NOAH housing in Charlotte by 2022. The HIF was capitalized through:<sup>29</sup>

- \$38 million from local investors, including Truist Financial Corporation (\$15 million); Atrium Health; Lending Tree; Movement Mortgage; real estate development firms; and other investors; and
- \$20 million from Charlotte Housing Opportunity Investment Fund (CHOIF), a private sector housing investment fund launched by the Foundation for the Carolinas and managed by the Local Initiatives Support Corporation (LISC).

Importantly, in order to help maintain future affordability after the expiration of the 20-year deed restriction, investors in the HIF agreed to allocate 60 percent of funds from future sales of properties acquired through the HIF to a separate fund dedicated to preserving long-term affordability.<sup>30</sup>

## CONSIDERATIONS AND LESSONS LEARNED

Charlotte's Pilot NOAH Program provides an example of a partnership model between local governments and developers with mission-driven affordable housing goals. The city's experimentation with using public-private partnerships to preserve NOAH housing can serve as a model in other localities that seek to build a bridge between market-rate housing and what low- and moderate-income renters can afford.

Due to the prevalence of NOAH homes compared to government-subsidized housing, cities can prioritize resources to preserve existing NOAH properties to help prevent the displacement of many existing residents, particularly as the building stock ages. Rather than leave older buildings to the speculative market — where they could be demolished and rebuilt, or rented at higher rates

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[https://charlottenc.gov/CityCouncil/Committees/Neighborhood%20docs/NOAH%20Rental%20Subsidy%20Program\\_Aug%2018%202021.pdf](https://charlottenc.gov/CityCouncil/Committees/Neighborhood%20docs/NOAH%20Rental%20Subsidy%20Program_Aug%2018%202021.pdf).

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*; see also Ryan Pitkin, *Housing Impact Fund Announces Large Affordable Housing Purchase*, QUEEN CITY NERVE (Dec. 21, 2021), <https://qcnerve.com/shamrock-gardens-affordable-housing/>; Ashley Fahey, *\$58M fund launches to preserve affordable housing in Charlotte, with local corporate players among investors*, CHARLOTTE BUS. J. (Nov. 3, 2020), <https://www.bizjournals.com/charlotte/news/2020/11/03/naturally-occurring-affordable-housing-fund.html?s=print>.

<sup>30</sup> Nate Berg, *Charlotte May Have Cracked the Code on Affordable Housing. Here's How*, FAST CO. (Jan. 25, 2021), <https://www.fastcompany.com/90597128/charlotte-may-have-cracked-the-code-on-affordable-housing-heres-how>.

— cities can work with private developers to subsidize the acquisition of NOAH properties to maintain affordability and mitigate the risk of displacing current residents.<sup>31</sup> In return, developers can agree to a deed restriction to maintain affordability for existing and future residents. Other cities could work with mission-oriented developers who are interested in obtaining below-market but positive rates of return, while helping to provide affordable housing to residents.

In particular, cities with a significant population of low-to moderate-income residents could prioritize the preservation of existing NOAH properties to help meet the needs of LMI residents and households. Many LMI residents do not have access to tenant-based housing vouchers, either because they do not meet eligibility requirements, or because they live in a city that has a shortage of vouchers. The preservation of NOAH housing is especially critical in cities facing a growing population, and where housing demand may not meet supply, placing existing residents who pay below-market-rate rent at risk of displacement.

To help finance NOAH preservation, local governments should leverage public-private partnerships to help diversify sources of money to acquire NOAH properties. In Charlotte, the properties acquired through the Pilot NOAH Program have been financed primarily through the private Housing Impact Fund. While the HIF investors were able to contribute \$58 million through a single year of fundraising, the reach of the HIF alone would have been insufficient without additional financial equity. Partnering with cities that have affordable housing bond programs can help bridge and stretch the equity needed to make the initial investment in NOAH properties. Even if a city provides only a percentage of the required financing, it may be sufficient to incentivize developers to raise the remaining amount once the city's commitment is demonstrated, as seen in Charlotte.

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<sup>31</sup> Satana Deberry, *Housing Matters: Finding NOAH*, N.C. HOUS. COAL. (Sep. 2017), <https://nchousing.org/housing-matters-finding-noah/>.

*City of Richmond, Virginia*

# Maggie Walker Community Land Trust and Richmond Land Bank

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## EXECUTIVE SUMMARY

The Maggie Walker Community Land Trust (MWCLT) in Richmond, Virginia, is the first community land trust (CLT) in the nation to be designated a land bank, the Richmond Land Bank. In creating the Richmond Land Bank in 2018 — via a formal Memorandum of Agreement with MWCLT — the City of Richmond merged two separate yet complementary mechanisms for expanding affordable home ownership opportunities for low-and-moderate income residents: a land bank, which acquires and sells vacant, abandoned, and deteriorated properties; and a CLT, which conveys permanently affordable housing to residents in need.<sup>1</sup>

As of spring 2022, the Richmond Land Bank is the only formalized land bank and CLT partnership in the country.<sup>2</sup> The land bank, which operates as a program under MWCLT, is one of three MWCLT initiatives working to produce permanently affordable housing in the Richmond metropolitan area. The Richmond Land Bank illustrates an emerging approach of combining two existing types of mechanisms to produce additional affordable housing options for low-and-moderate income residents, preserving community control over developable land, and collaborating with local stakeholders to integrate environmental and adaptation benefits in affordable housing development.

## BACKGROUND

The City of Richmond currently faces two parallel challenges in developing property that is affordable and available: a high number of tax delinquent properties that need to be converted into productive use, and escalating gentrification that has displaced Black and low-income residents. The distribution and uses of land in Richmond have been shaped by several historic forces: redlining and housing discrimination, urban renewal and highways that have disrupted the city's minority neighborhoods, and the housing crash in the late 2000s that led to high rates of vacant,

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<sup>1</sup> *Land Banks and Community Land Trusts: Partnering to Provide Equitable Housing Opportunities Now and for Future Generations*, CTR. FOR CMTY. PROGRESS (2021), <https://communityprogress.org/publications/land-banks-and-community-land-trusts/>.

<sup>2</sup> MAGGIE WALKER CMTY. LAND TR., <https://maggiewalkerclt.org/> (last visited Jan. 17, 2022).



abandoned, and deteriorated (VAD) properties in the city's lower-income neighborhoods.<sup>3</sup> Even while many areas of the city record significant numbers of abandoned properties and lower property values, Richmond's rebounding housing market and the rise in housing demand has displaced residents in its historically working-class, Black neighborhoods, particularly in the downtown neighborhood of Church Hill, where average home prices increased by 30 percent between 2012 to 2016 alone.<sup>4</sup>

In Richmond, disproportionate access to affordable housing and the threat of displacement for many long-term residents is heightened by growing climate hazards, such as extreme urban heat.<sup>5</sup> For example, a 2020 report documenting the long-term, environmental impacts of discriminatory practices like redlining found a positive correlation between the hottest areas of Richmond and the neighborhoods that had been historically redlined (or designated by lenders and other housing finance institutions as high risk because residents were Black).<sup>6</sup> By comparison, the same study found that neighborhoods that had not experienced redlining and are majority-white were anywhere between five to 20 degrees Fahrenheit cooler.

Like many other redlined communities in the county, Richmond's historically Black neighborhoods are characterized by a lack of tree canopies that can provide shade and an excess of heat-trapping pavement. These disparities underscore the need to combine efforts around environmental and climate equity with inclusive housing practices and affordable housing.

## OVERVIEW OF THE MAGGIE WALKER COMMUNITY LAND TRUST (MWCLT)

Established in 2016, the Maggie Walker Community Land Trust is a nonprofit organization that provides stewardship services to support the creation and maintenance of permanently affordable homes for low-and-moderate income residents in the Richmond area. Like most CLTs, MWCLT acquires and stewards land that is held in trust for the benefit of low-income communities, and which can be put toward a variety of uses, including homeownership or rental housing. CLTs secure permanent affordability by separating ownership of the land from the buildings on top of the land, reducing the overall price of the property. Low-income buyers are then able to purchase the homes built on the land at below-market rate. In turn, residents pay a nominal annual fee under a 99-year ground lease, and agree to formula-based resale restrictions that keep the property

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<sup>3</sup> MAGGIE WALKER CMTY. LAND TRUST, THE RICHMOND LAND BANK: ANNUAL PLAN JULY 2018–JUNE 2019 12–17 (2018), available at [https://maggiewalkerclt.org/wp-content/uploads/2018/09/MWCLT-LB\\_AnnualPlan\\_2018-2019-1.pdf](https://maggiewalkerclt.org/wp-content/uploads/2018/09/MWCLT-LB_AnnualPlan_2018-2019-1.pdf).

<sup>4</sup> *Id.* at 18–19.

<sup>5</sup> CITY OF RICHMOND: RVA GREEN, <https://www.rvagreen2050.com/> (last visited Jan. 18, 2022).

<sup>6</sup> Brad Plummer and Nadia Popovich, *How Decades of Racist Housing Policy Left Neighborhoods Sweltering*, N.Y. TIMES (Aug. 24, 2020), <https://www.nytimes.com/interactive/2020/08/24/climate/racism-redlining-cities-global-warming.html>.

affordable in perpetuity. Importantly, CLTs like MWCLT provide ongoing assistance to residents after they buy a home, such as education workshops on homeownership and maintenance and other services that help residents thrive and stay in the community.<sup>7</sup>

The MWCLT is governed by a tripartite board of directors consisting of residents, community representatives, and individuals with technical expertise in affordable housing. As part of its operations, CLT staff members provide technical assistance that include workshops and other training about homeownership and different forms of housing assistance, maintenance, and other stewardship services to support its low-to-moderate income residents.

In addition to its CLT operations, MWCLT also manages three land banks in the region — one located in the City of Richmond, and two in the neighboring suburbs of Henrico and Chesterfield counties. Land banks are public entities, usually created via state-enabling legislation, that acquire and convert VAD properties into productive uses according to community goals.<sup>8</sup> The following parts of this entry summarize programs under two of those land banks, the Richmond Land Bank and the Chesterfield County Agrihood, and explores how each one furthers affordable housing and environmental resilience goals, respectively.

## MAGGIE WALKER COMMUNITY LAND TRUSTS AND LAND BANKS

Established in 2018, the Richmond Land Bank is the first land bank in the country to be operated by a CLT. Under the 2016 Land Bank Entities Act, the Virginia General Assembly approved the creation of land banks across the state.<sup>9</sup> The Richmond Land Bank was created two years later by ordinance, adopted by the Richmond City Council, which officially designated MWCLT as a land bank for the city.<sup>10</sup>

The collaboration between MWCLT and the Richmond Land Bank demonstrates a natural synergy between CLTs and land banks. As public entities that hold government powers, land banks are able to more efficiently acquire and convey VAD properties than government or nonprofit entities alone. And while the development of VAD properties is not always prioritized around affordable housing developments, CLTs provide an available — and affordable-housing focused — market for the disposition of land bank property. In the case of the Richmond Land Bank, MWCLT plans

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<sup>7</sup> Ruoniu Wang et. al., Tracking Growth and Evaluating Performance of Shared Equity Homeownership Programs During Housing Market Fluctuations, LINCOLN INST. OF LAND POL'Y (Apr. 2019), available at <https://www.lincolninst.edu/publications/working-papers/tracking-growth-evaluating-performance-shared-equity-homeownership>.

<sup>8</sup> *Land Banks and Community Land Trusts: Partnering to Provide Equitable Housing Opportunities Now and for Future Generations*, CTR. COMM. PROGRESS (2021), <https://communityprogress.org/publications/land-banks-and-community-land-trusts/>.

<sup>9</sup> VA. CODE ANN. § 15.2–7501 (2016).

<sup>10</sup> City of Richmond, Va., Ordinance 2017–196 (Feb. 26, 2018).

to set aside at least 25 percent of acquired properties to be developed by MWCLT, with the remaining property to be developed by other nonprofit affordable housing developers.

The partnership between MWCLT and Richmond Land Bank was formalized in a memorandum of agreement (MOA) that set forth the terms of the partnership between MWCLT and the City of Richmond.<sup>11</sup> Specifically, the MOA provides terms for:

- **Creation of affordable housing:** MWCLT will convert eligible properties (vacant, abandoned, and tax delinquent) into permanently affordable housing for households earning between 50 to 115 percent AMI, subject to a 99-year ground lease.<sup>12</sup>
- **Acquisition and disposition of properties:** The MAO details administrative and procedural requirements for conveying eligible properties to MWCLT, including working with the office of the city's Chief Administrative Officer to report to the City Council about policies and procedures for conveying land bank properties, in addition to benchmarks for using the land bank to meet affordable housing goals and address gentrification and displacement of low-and-moderate income households, among other priorities.<sup>13</sup>
- **Community involvement:** The MOA called for the creation of a nine-member Citizens' Advisory Panel (CAP) to serve an advisory role and make recommendations about the disposition of all properties received by MWCLT from the city (see the part on community engagement below).<sup>14</sup>
- **Reporting requirements:** MWCLT is required to provide the city with an annual plan (Annual Plan) that specifies future goals and objectives, as well as updated criteria for selecting communities to prioritize for development.<sup>15</sup>

## ENVIRONMENT

Given the climate risks in the Richmond metropolitan areas, MWCLT has turned increasing attention to making its homes and properties more resilient. In 2021, MWCLT launched a pilot environmental initiative to create the region's first agrihood, a residential development that creates neighborhood gardens and food production in the community in order to improve environmental, social, employment, and health outcomes, among other benefits.<sup>16</sup>

<sup>11</sup> MAGGIE WALKER CMTY. LAND TRUST, MWCLT RICHMOND LAND BANK: ANNUAL PLAN JULY 2021–JUNE 2022 (2021), available at [https://5ebcb6df-9e06-4c5a-81f3-912da6c62e06.filesusr.com/ugd/19392a\\_802edc0e4c764c49b4b41d3c76b15320.pdf](https://5ebcb6df-9e06-4c5a-81f3-912da6c62e06.filesusr.com/ugd/19392a_802edc0e4c764c49b4b41d3c76b15320.pdf).

<sup>12</sup> City of Richmond, Va., Ordinance 2017–196 (Feb. 26, 2018).

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Agrihoods: Cultivating Best Practices*, URB. LAND INST. (2018), available at <https://americas.uli.org/wp-content/uploads/ULI-Documents/Agrihoods-Final.pdf>.

In 2021, in recognition of the need for comprehensive, holistic solutions to increase both climate and neighborhood resilience, MWCLT partnered with two local, Black-led nonprofit organizations: Girls for a Change (GFAC), a nonprofit youth development organization aimed at empowering Black girls through training in leadership, financial literacy, community engagement, and other skills; and Happily Natural Day (HND), an annual cultural festival led by a local expert on food systems and urban agriculture.<sup>17</sup> Under the pilot agrihood program, the partnership of MWCLT, GFAC, and HND will connect ecological and agricultural amenities with permanent affordable housing, targeting historically underinvested neighborhoods along central Virginia's Route 1 corridor. The partnership was formed with several key goals in mind:

- Creating homeownership and wealth-building opportunities for Black women;
- Expanding food access to neighborhoods that do not have grocery stores within walking distance; and
- Providing job training and career development opportunities through training and apprenticeship programs, and promoting entrepreneurship.

Specifically, MWCLT will support the initiative by building 10 permanently affordable homes in the Bensley community of Chesterfield, a seven-acre, undeveloped parcel flanked by dozens of mobile home parks. The affordable homes will be marketed to young Black women, who will be selected through GFAC's network. Meanwhile, HND will provide training on agricultural education, with GFAC in the lead for providing job training, to create an agrihood community where, in lieu of paying a Home Owners Association fee, agrihood residents pay a monthly fee to ensure the availability of locally grown produce and other food products. In recognition of the correlations between housing stability and healthy food access, the agrihood will tie community, ecological, and agricultural amenities together to create new opportunities for workforce development and housing affordability.

## COMMUNITY ENGAGEMENT

Per the terms of the MOA with the City of Richmond, MWCLT has created a Citizens' Advisory Panel (CAP) tasked with making recommendations about and approving the disposition or transfer of property received through the land bank, with focus on organizations and entities actively involved in the neighborhoods prioritized under the Annual Plan. The nine members of the CAP are appointed by the MWCLT Board, as well as members appointed by the city's Chief Administrative Officer, Richmond City Council, and the mayor.

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<sup>17</sup> *The Making of an Agrihood*, FARM TO TABLE (Nov. 16, 2021), <https://storymaps.arcgis.com/stories/b8107b1888304f1eb11ecce28947cc8c>; *Our Mission*, GIRLS FOR CHANGE, <https://girlsforachange.org/about-us/our-mission/> (last visited Dec. 16, 2021); *About Us*, HAPPILY NATURAL, <https://thenaturalfestival.com/> (last visited Dec. 16, 2021).

The disposition or transfer of land bank property is largely at the discretion of the CAP, which can only be overridden by a two-thirds vote of the MWCLT Board. CAP members use a variety of selection criteria to approve the disposition of land, including:

- Organizational criteria
  - Commitment to providing affordable homes
  - Previous relevant experience with project/property development
  - Financial ability to carry out proposed plan
- Project-specific criteria
  - Potential for positive impact on community
  - Thorough, feasible plan for land use
  - Alignment with goals and objectives in land bank annual plan

## CONSIDERATIONS AND LESSONS LEARNED

Jurisdictions interested in creating a land bank may consider adopting state-enabling legislation, which allows for land banks to operate more independently from other government entities and better meet local community and equity goals, such as direct the land bank's focus specifically toward affordable housing and prioritizing the best outcome in lieu of the highest offer. In general, state-enabling legislation can also help land banks more efficiently acquire properties, for example acquire tax delinquent properties at lower cost, existing liens, get title, and hold property in a tax-exempt status while it remains on the market.<sup>18</sup> State-enabling legislation could also identify sources of dedicated funding and financing to provide for land bank operations (e.g., property taxes, contributions from government programs, private donors). In Virginia, the Land Bank Entities Act identified multiple sources of funding and financing (e.g., government grants and loans, private sources, and direct payments from land bank services), such as lease payments and income from investments, that can be used to create land banks in the state.<sup>19</sup>

Stakeholders in a CLT-land bank partnership could also formalize the partnership by drafting a memorandum of understanding or agreement. A CLT-land bank collaboration could take several forms. Under a more information collaboration, the land bank and CLT could engage through property transfers or other transactions, but the CLT does not receive preference or a discount for property purchased from the land bank. Under a more formalized partnership, the governing bodies of both the land bank (i.e., local legislative body) and the CLT (i.e., Board of Directors) could agree to a MOA that identifies mutual goals and provides resources or incentives to ensure the success of the partnership. Under the MOA between MWCLT and the City of Richmond, MWCLT

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<sup>18</sup> *Land Banks and Community Land Trusts: Partnering to Provide Equitable Housing Opportunities Now and for Future Generations*, CTR. FOR CMTY. PROGRESS (2021), <https://communityprogress.org/publications/land-banks-and-community-land-trusts/>.

<sup>19</sup> VA. CODE ANN. § 15.2-7501 (2016).

negotiated with the City Council to create an agreement that identified affordable housing goals. The agreement also detailed the process of property acquisition and disposition, the role of community stakeholders, and reporting requirements — all of which encourages transparency and accountability by MWCLT, the land bank, and the city.

CLT-land bank entities should also consider creating a community advisory group to help center community voices throughout the process of land acquisition and disposition. Community ownership is core to the mission of CLTs. In order to retain community ownership of CLT operations, including in its management of land banks, CLT-land bank entities could consider establishing an advisory group that represents community stakeholders. The Community Advisory Panel (CAP) was created under the Richmond Land Bank's MOA, which identified both membership criteria, as well as duties and responsibilities of the CAP (guidance and recommendations for the acquisition and disposition of all land bank property). Importantly, the membership criteria and roles of any advisory group should be clearly delineated in order to avoid potential conflicts of interest with the CLT's own Board of Directors.



## *City of Boulder, Colorado*

# **Affordable Housing, Manufactured Housing, and Environmental Plans and Initiatives**

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## **EXECUTIVE SUMMARY**

The City of Boulder, Colorado is experiencing the joint pressures of rapid regional population growth and climate change — challenges which are not unique to this city alone. Boulder has addressed these challenges in the Boulder Valley Comprehensive Plan, a plan jointly adopted by the City and County of Boulder to direct decisions on land use, natural and built environments, and climate. The Boulder Valley Comprehensive Plan is a strong example of a planning document that places an emphasis on housing and the environment. More specifically, this plan is notable for the following reasons:

- Developing affordable housing goals and plans for multiple income levels including low-income, moderate-income, and middle-income households to ensure housing security for Boulder’s residents.
- Developing specific and actionable master plans, such as the Boulder Manufactured Housing Strategy and Action Plan, to address the nuances of the policies highlighted in the Boulder Valley Comprehensive Plan.
- Developing policies to identify and preserve the rural-urban divide between the City of Boulder and surrounding areas by creating opportunities for sustainable population growth without threatening the rural character and valuable ecosystems of the Boulder Valley.

The Boulder Valley Comprehensive Plan and associated master plans and strategies can serve as examples for other local and regional policymakers seeking to tackle the compounding challenges of population growth, affordable housing, and resilience.

## **BACKGROUND**

The city of Boulder, Colorado is located in Boulder County, northwest of Denver and at the foothills of the Rocky Mountains. In 2019, the estimated population of Boulder was over 105,000 people, 80 percent of which were white, while Hispanics or Latinos made up roughly 10 percent

of the population.<sup>1</sup> In 2019, the median household income was \$69,520, and over 20 percent of the population was living in poverty.<sup>2</sup> Between 2015 and 2019, the median gross rent totaled \$1,554.<sup>3</sup>

## OVERVIEW OF THE BOULDER VALLEY COMPREHENSIVE PLAN, THE MANUFACTURED HOUSING STRATEGY AND ACTION PLAN, AND OTHER RELEVANT PLANS

In 1977, the City of Boulder and Boulder County jointly adopted the first Boulder Valley Comprehensive Plan “to protect the natural environment of the Boulder Valley while fostering a livable, vibrant and sustainable community,” addressing urban development and the preservation of the rural character of the valley.<sup>4</sup> The core values of this plan include sustainability, diversity, compact and infill development, open space preservation, economic activity, all-mode transportation, and housing diversity.<sup>5</sup> In the plan, the city and county make specific commitments to support community housing needs in terms of affordable and manufactured housing, while employing sustainability as a unifying framework to meet environmental, social, and economic goals.<sup>6</sup> Unless otherwise specified, the City of Boulder will be referenced as the primary actor in this report, however acknowledging the role that Boulder County plays in the Boulder Valley Comprehensive Plan.

Based on the Boulder Valley Comprehensive Plan Policy 7.08: *Preservation and Development of Manufactured Housing*, the City of Boulder established the Manufactured Housing Strategy and 2019–2021 Action Plan.<sup>7</sup> This policy encourages the city to preserve and expand Manufactured Housing Communities in Boulder and resident ownership of those communities, and tackle health and safety issues, while minimizing resident displacement.<sup>8</sup>

<sup>1</sup> QuickFacts: Boulder City, Colorado, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/bouldercitycolorado> (last visited Jan. 4, 2022).

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> CITY OF BOULDER & BOULDER COUNTY, BOULDER VALLEY COMPREHENSIVE PLAN: 2020 MID-TERM UPDATE 4 (2021), available at <https://bouldercolorado.gov/media/3350/download?inline>.

<sup>5</sup> *Id.* at 2.

<sup>6</sup> *Id.* at 10, 82

<sup>7</sup> *Manufactured Housing Strategy*, CITY OF BOULDER, COLO., <https://bouldercolorado.gov/projects/manufactured-housing-strategy> (last visited Jan. 4, 2022). Note, in Boulder’s comprehensive plan, this policy is listed at 7.09.

<sup>8</sup> CITY OF BOULDER, COLO., MANUFACTURED HOUSING STRATEGY & 2019–2021 ACTION PLAN 1 (2019), available at <https://bouldercolorado.gov/sites/default/files/2021-05/manufacturedhousingstrategyandactionplan.pdf>.

Additionally, Boulder City Council adopted the city's first Racial Equity Plan in 2021. This plan was developed as a "living road map that will guide the City of Boulder government through the process of prioritizing goals, specifying details, and assigning resources to achieve meaningful change."<sup>9</sup> This plan is especially notable as it references the Boulder Valley Comprehensive Plan, striving to integrate the two plans to foster inclusive and diverse communities, housing, transportation, and public space policies that serve underserved communities, and general sustainability.<sup>10</sup>

Beyond equity, Boulder is also integrating resilience into its local actions. In 2016, the city released the City of Boulder Resilience Strategy. This strategy provides an overview of current and future initiatives and strategies to cultivate resilience in the face of a changing climate, economy, and society.<sup>11</sup> Among its recommendations, the strategy presents Boulder's City Resilience Framework.<sup>12</sup>

The Resilience Strategy is mentioned and cross-referenced in both the Boulder Valley Comprehensive Plan and the Racial Equity Plan. For instance, the Boulder Valley Comprehensive Plan highlights the need to use the Resilience Framework to support a broad spectrum of human needs, as well as support overarching sustainability goals.<sup>13</sup>

The content below goes into more depth about some of the affordable housing, manufactured housing, and environmental priorities in the comprehensive plan and related initiatives.

## HOUSING

### Planning

In Boulder, housing is considered baseline affordable when housing costs are less than 30 percent of a household's total income — both for home rentals and ownership.<sup>14</sup> Affordable housing in Boulder is further broken down into three income categories; low-, moderate-, and middle-incomes relative to the Area Median Income (AMI) (\$102,300 in 2019).<sup>15</sup>

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<sup>9</sup> *Racial Equity*, CITY OF BOULDER, COLO., <https://bouldercolorado.gov/services/racial-equity> (last visited Jan. 4, 2022).

<sup>10</sup> CITY OF BOULDER, COLO., RACIAL EQUITY PLAN 8 (2021), *available at* <https://bouldercolorado.gov/media/4167/download?inline>.

<sup>11</sup> CITY OF BOULDER, COLO., CITY OF BOULDER RESILIENCE STRATEGY 2 (2016).

<sup>12</sup> *Id.* at 24.

<sup>13</sup> CITY OF BOULDER & BOULDER COUNTY, COLO., BOULDER VALLEY COMPREHENSIVE PLAN: 2020 MID-TERM UPDATE 9, 88 (2021), *available at* <https://bouldercolorado.gov/media/3350/download?inline>.

<sup>14</sup> *Affordable Housing in Boulder*, CITY OF BOULDER, COLO., <https://bouldercolorado.gov/guide/affordable-housing-boulder> (last visited Jan. 4, 2022).

<sup>15</sup> *Id.*

Income Bracket	Percentage Area Median Income	Income Range for Three-Person Household
Low Income	0–60% AMI	\$0– \$61,380
Moderate Income	61–79% AMI	\$62,000–\$81,000
Middle Income	80–120% AMI	\$82,000–\$123,000

As of 2020, there were 3,767 affordable housing units, constituting 8.4 percent of the city’s total housing stock.<sup>16</sup>

The Boulder Valley Comprehensive Plan cites community housing trends, such as rising property values, an aging population, diminished diversity of housing types and price ranges, and anticipated student growth at the University of Colorado.<sup>17</sup> To address these trends, the city outlines priority housing policies for the city and the county in the plan under the themes of Supporting Community Housing Needs; Preserving and Enhancing Housing Choices; and Integrating Growth and Community Housing Goals.<sup>18</sup>

As recommended in the Boulder Valley Comprehensive Plan, the city revised its local affordable housing regulations in 2020 to increase the total proportion of permanently affordable housing units among low- to middle-income households from 10 to 15 percent.<sup>19,20</sup> Of that 15 percent, 1,000 units will be for middle-income households.<sup>21</sup> This goal aligns with the City of Boulder’s Middle Income Housing Strategy for 2016–2030. The primary goal of this strategy is to build or preserve 3,500 middle-income homes by 2030; 2,500 of which will be market-rate middle-income, and 1,000 of which will be deed restricted, permanently affordable.<sup>22</sup> This strategy and commitment demonstrates the city’s aim to ensure adequate housing diversity and supply for residents of all income brackets.

<sup>16</sup> *Id.*

<sup>17</sup> CITY OF BOULDER & BOULDER COUNTY, COLO., BOULDER VALLEY COMPREHENSIVE PLAN: 2020 MID-TERM UPDATE (2021), available at <https://bouldercolorado.gov/media/3350/download?inline>.

<sup>18</sup> *Id.* at 81.

<sup>19</sup> *Affordable Housing in Boulder*, CITY OF BOULDER, COLO., <https://bouldercolorado.gov/guide/affordable-housing-boulder> (last visited Jan. 4, 2022).

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> CITY OF BOULDER, COLO., MIDDLE INCOME HOUSING STRATEGY 3 (2016), available at <https://bouldercolorado.gov/media/5758/download?inline>.

The city has also created an interactive Affordable Housing Dashboard to track the city’s progress towards reaching the goal of 15 percent affordable housing, as well as additional metrics on affordable housing type, location, and resident demographics.<sup>23</sup> The creation of this tool signals Boulder’s commitment to internal coordination and external transparency as the city works towards its affordable housing goals.

## Regional Planning and Coordination

Boulder is a member of the Boulder County Regional Housing Partnership, a cross-jurisdictional working group formed in 2016 to address housing affordability and development needs in Boulder County.<sup>24</sup> Through this effort, the partners developed a regional strategy that helped to establish the organization Home Wanted, and included goals of securing a total of 18,000 affordable housing units — 12 percent of total housing units — within the county by 2035.<sup>25</sup> Home Wanted is a collaboration of nine jurisdictions in Boulder County, Colorado and aims to use community expertise to co-create strategies and policies and secure adequate funding for safe, affordable housing for low- and middle- income residents.<sup>26</sup>

## Manufactured Housing Communities

Manufactured Housing Communities (MHC) — often referred to as “Mobile Home Parks” or “Trailer Parks” — are communities of five or more factory-built housing units that are constructed according to the federal manufactured home construction safety standards.<sup>27</sup> Manufactured homes are one of the largest unsubsidized forms of affordable housing in America.<sup>28</sup>

Within the city of Boulder, there are five MHC, which encompass over 1,300 households.<sup>29</sup> The majority of manufactured homes in Boulder are owner-occupied and have an annual household income of less than \$40,000.<sup>30</sup> MHC also have a higher proportion of residents with children under the age of 18 or residents over the age of 60, those who collect Social Security income, and/or are

<sup>23</sup> *Affordable Housing in the City of Boulder*, CITY OF BOULDER, COLO., <https://bouldercolorado.gov/boulder-measures/affordable-housing-boulder> (last visited Jan. 4, 2022).

<sup>24</sup> *About Home Wanted*, HOME WANTED, <https://homewanted.org/about/> (last visited Jan. 4, 2022).

<sup>25</sup> *Regional Housing Plan*, HOME WANTED, <https://homewanted.org/issue/plan-goals/> (last visited Jan. 4, 2022).

<sup>26</sup> *About Home Wanted*, HOME WANTED, <https://homewanted.org/about/> (last visited Jan. 4, 2022).

<sup>27</sup> CITY OF BOULDER, COLO., MANUFACTURED HOUSING COMMUNITIES HANDBOOK FOR BOULDER HOMEOWNERS (2018).

<sup>28</sup> Lesli Gooch, *Manufactured housing: Elevating housing innovation and expanding attainable homeownership*, THE NAT’L HOUS. CONFERENCE (Oct. 4, 2020), <https://nhc.org/manufactured-housing-elevating-housing-innovation-and-expanding-attainable-homeownership/>.

<sup>29</sup> *Manufactured Housing Strategy*, CITY OF BOULDER, COLO., <https://bouldercolorado.gov/projects/manufactured-housing-strategy> (last visited Jan. 4, 2022).

<sup>30</sup> CITY OF BOULDER, COLO., MANUFACTURED HOUSING STRATEGY AND 2019–2021 ACTION PLAN 6 (2019), available at <https://bouldercolorado.gov/sites/default/files/2021-05/manufacturedhousingstrategyandactionplan.pdf>.

Latinx, as compared to Boulder at large.<sup>31</sup> As overall housing prices and property values increase in Boulder, the affordable nature of these communities for low- to moderate-income residents may be jeopardized by rising pad rent costs.

MHC are especially vulnerable to natural disasters and the impacts of climate change. Many MHC were developed in response to rapid population growth and housing shortages. This, combined with historic discrimination and zoning inequities, has led many MHC to be disproportionately located in “less desirable” areas that are more vulnerable to disasters events, such as flooding, hurricanes, and tornadoes.<sup>32</sup> In the Boulder area, flooding and other disasters have impacted MHC considerably. In 2013, for example, a flooding event destroyed over 270 manufactured homes in Colorado.<sup>33</sup>

In 2019, the City of Boulder adopted the Manufactured Housing Strategy and 2019–2021 Action Plan, which include four guiding principles for decisionmaking — Accountability, Affordability, Community, and Viability<sup>34</sup> — and a prioritized list of actions that align with Policy 7.08 in the Boulder Valley Comprehensive Plan:

- Encouraging preservation of existing MHC.
- Encouraging development of new MHC.
- Increasing opportunities for Resident Owned Communities (ROC).
- Reducing or eliminating health and safety issues.
- Rehousing displaced households.

This is an example of strong city planning tailored to the needs of MHC.

The 2019–2021 Action Plan details action items within the categories of infrastructure, pad rent stabilization, local enforcement, energy efficiency, and land use.<sup>35</sup> Proposed infrastructure actions include the creation of local water and sewer performance standards, a survey of code constraints limiting infrastructure replacement, utility bill notice requirements, and requirements for MHC owners to develop infrastructure plans and to pay for lodging costs during prolonged service disruption.<sup>36</sup>

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<sup>31</sup> *Id.*

<sup>32</sup> Crystal Launder, *Preserving Manufactured Home Communities*, AMERICAN PLANNING ASS’N PLANNING ADVISORY SERV. (Oct./Nov. 2020), available at <https://mhccv.org/wp-content/uploads/2020/10/pas-memo-2020-09-10rev-au.pdf>.

<sup>33</sup> *Id.* at 3.

<sup>34</sup> CITY OF BOULDER, COLO., MANUFACTURED HOUSING STRATEGY AND 2019–2021 ACTION PLAN 2 (2019), available at <https://bouldercolorado.gov/sites/default/files/2021-05/manufacturedhousingstrategyandactionplan.pdf>.

<sup>35</sup> *Id.* at 22–24.

<sup>36</sup> *Id.* at 22.



Pad rent stabilization actions include exploring legal pathways for enforcing this pad rent stabilization and potential voluntary pad rent agreement. The plan acknowledges that because of the state's statute banning rent control,<sup>37</sup> Mapleton is the only community that is legally able to enforce rent stabilization as they are owned by Thistle Communities, an affordable housing nonprofit and Community Housing Development Organization.<sup>38</sup>

Local enforcement actions encourage the development and distribution of a "Resident Navigation Guide" and other resources, while also analyzing staffing needs to effectively serve MHC-related workloads and new MHC ordinances.<sup>39</sup> Energy efficiency actions explore partnerships to create zero energy modular homes, to expand the Ponderosa solar garden pilot to other MHC, and to explore Energy Impact Offset Fund investments to benefit manufactured home owners.<sup>40</sup> The city suggests a land use analysis could identify any feasible locations for new MHC.<sup>41</sup>

This housing strategy and action plan are important to address the unique challenges faced by MHC. As the time period for the plan ends in 2021, the city intends to evaluate its results and effectiveness. The city will consider future action items identified in the Action Plan, which include forming partnerships to replace utility systems, developing pad rent stabilization ordinances, applying racial equity tools and principles to planning efforts, and updating the city's Mobile Home overlay zone.<sup>42</sup>

## Preserving Affordable Housing Options: City-Owned Manufactured Housing Communities

While rare, Boulder purchased two MHC as a way to address failing infrastructure and safety issues. In these instances, the city did not intend to become the permanent owner of the MHC, but instead used city resources to preserve and improve the parks before eventually selling or transferring the parks to new, long-term owners, specifically affordable housing nonprofits or housing authorities.

### **Ponderosa Community**

Following damage to the Ponderosa Mobile Home Park sewer and water infrastructure from a 2013 flood, Boulder purchased the park in 2017, using funds from the U.S. Department of Housing and Urban Development's Community Development Block Grant program for Disaster Recovery. In doing so, the city signed Resolution No. 1217 to

<sup>37</sup> COLO. REV. STAT. § 38-12-301 (2021).

<sup>38</sup> CITY OF BOULDER, COLO., MANUFACTURED HOUSING STRATEGY AND 2019–2021 ACTION PLAN 12 (2019), available at <https://boulder.colorado.gov/sites/default/files/2021-05/manufacturedhousingstrategyandactionplan.pdf>.

<sup>39</sup> *Id.* at 22–23.

<sup>40</sup> *Id.* at 23.

<sup>41</sup> *Id.*

<sup>42</sup> *Id.* at 25.

protect resident health and safety, “enable permanent affordability, promote sustainability and resiliency, and ensure minimal resident displacement.”<sup>43</sup> This resolution launched the Ponderosa Community Stabilization Project with the goals of having the land eventually owned by a nonprofit housing provider, offering residents the option to move from existing mobile homes to new, permanently affordable, fixed-foundation, energy-efficient homes, and creating park amenities, such as gardens, play areas, green spaces, and a community house with a resilience center.<sup>44</sup>

Infrastructure improvements include replacing sewer, water, electric and gas infrastructure, paving roads, increasing the number of fire hydrants, introducing storm sewers and stormwater detention ponds, increasing green spaces and the tree canopy, and moving the main community access out of conveyance and high hazard flood zones. Infrastructure construction began in 2020.<sup>45</sup>

Since 2015, the city has been undertaking extensive community engagement efforts to support these projects, working with community residents, the park owner, city staff, and council members to develop the Goals and Drivers for the Ponderosa Community Stabilization Project.<sup>46</sup>

### **Mapleton Mobile Home Park**

In 1996, Boulder purchased the Mapleton Mobile Home Park with funding from the Stormwater and Flood Control Utility Fund.<sup>47</sup> The goal of this park purchase was to improve infrastructure and safety for the community without jeopardizing the future of the park. Specifically, the city aimed to facilitate planned flood improvements to Goose Creek, resident ownership of the park, and permanent affordability for 120 out of the total 135 home sites.<sup>48</sup>

In 2004, Mapleton was sold to Thistle Communities, a nonprofit housing organization, which leases the land to the resident nonprofit Mapleton Home Association (MHA). The MHA governs the park community and contracts property management to a third-party company. Since the initial purchase of Mapleton, infrastructure replacement and flood prevention have been ongoing.<sup>49</sup>

<sup>43</sup> City of Boulder, Colo., Resolution 1217: A Resolution for the Purpose of Ensuring the Long-Term Sustainability, Resilience and Permanent Affordability of the Ponderosa Mobile Home Park (Oct. 17, 2017).

<sup>44</sup> *Ponderosa Community Stabilization Project*, CITY OF BOULDER, COLO., <https://bouldercolorado.gov/projects/ponderosa-community-stabilization-project> (last visited Jan. 4, 2022).

<sup>45</sup> *Id.*

<sup>46</sup> CITY OF BOULDER, COLO., MANUFACTURED HOUSING STRATEGY AND 2019–2021 ACTION PLAN 16 (2019), available at <https://bouldercolorado.gov/sites/default/files/2021-05/manufacturedhousingstrategyandactionplan.pdf>.

<sup>47</sup> *Id.* at 14.

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

## Anti-Displacement

Additionally, the 2015 update to the Boulder Valley Comprehensive Plan seeks to address climate-related challenges and incorporates policies that foster community resilience. For example, newer policies are proposed to “improve community capacity and self-reliance, address preparedness, response, and recovery to disruptions such as floods, fires, or economic downturns, and improve community connectivity and communication about such disruptions,” while also reducing Boulder’s contributions to climate change.<sup>50</sup>

The comprehensive plan highlights the need to minimize resident displacement in Policy 7.16 by evaluating existing policies and regulations and continuing to offer relocation assistance to displaced, low-income households.<sup>51</sup> As the effects of climate change worsen, coupled with rising housing prices, it is likely that more residents will face displacement pressures, and preparation for these scenarios is necessary to mitigate the incidence of displacement while creating the opportunity for relocation when necessary.

The comprehensive plan also addresses economic displacement of businesses and customers in Section 5 on the Economy, highlighting strategies to reduce this type of displacement as the community is revitalized.<sup>52</sup> These strategies include “area planning with community input, infrastructure improvements, shared parking strategies, transit options and hubs and changes to zoning or development standards and incentives (e.g., financial incentives, development potential or urban renewal authority).”<sup>53</sup>

## ENVIRONMENT

Section 3 of the Boulder Valley Comprehensive Plan is dedicated to the natural environment, including both urban and rural areas. This section includes policies that fall into four broad environmental goals set by the city and county:

- Protecting Native Ecosystems and Biodiversity;
- Enhancing Urban Environmental Quality;
- Protecting Geologic Resources and Reducing Risks from Natural Hazards; and
- Sustaining and Improving Water and Air Quality.

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<sup>50</sup> *Id.* at 13.

<sup>51</sup> CITY OF BOULDER & BOULDER COUNTY, COLO., BOULDER VALLEY COMPREHENSIVE PLAN: 2020 MID-TERM UPDATE 86 (2021), available at <https://bouldercolorado.gov/media/3350/download?inline>.

<sup>52</sup> *Id.* at 68.

<sup>53</sup> *Id.* at 69.

Select notable policies include provisions for enhancing and maintaining ecosystem connections and buffers; maintaining and restoring natural ecological processes that reduce threats, such as wildfires and flooding; and having a no-net loss of wetlands and riparian areas.<sup>54</sup>

In the plan, Policy 3.10 details the following climate-specific mitigation, adaptation, and resilience strategies for the natural environment:

1. Analyze the effects of climate change on local ecosystems and identify strategies to support ecological functions of natural systems under a changing climate;
2. Identify and monitor ecosystems most vulnerable to climate;
3. Protect large reserves of open space land to support the long-term viability of native plants and animals;
4. Restore degraded environments and manage natural ecosystems to enhance their resilience in the presence of climate change;
5. Address the wildland-urban interface environments to improve management natural resources and to reduce the potential for catastrophic wildfire; and
6. Include specific management guidance and direction regarding climate change mitigation, adaptation, and resilience in the preparation of city and county master plans.<sup>55</sup>

Adopted in 2011, the City of Boulder Greenways Master Plan is another related planning document designed to preserve and increase the resilience of the natural environment. This stewardship plan for Boulder Creek and its tributaries creates management objectives for riparian areas, seeks to implement green infrastructure and flood mitigation projects, and coordinates the policies of other related city plans — including the Boulder Valley Comprehensive Plan — to ensure strategic and effective action.

## Urban Environments and Green Spaces

The Boulder Valley Comprehensive Plan highlights policies to promote and enhance urban environmental quality.<sup>56</sup> These policies include developing community-wide programs and standards to reduce the environmental impact of new development and redevelopment projects in urban areas. Additionally, policies to manage and promote the expansion of urban forests in Boulder are highlighted, as urban tree canopy is an important piece to reduce the effects of climate change through carbon sequestration and extreme heat. The plan also lists water conservation measures through implementing water quality protection, public education, monitoring, and

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<sup>54</sup> *Id.* at 55–57.

<sup>55</sup> *Id.* at 57.

<sup>56</sup> *Id.* at 58.

efficient water usage strategies and programs, highlighting Boulder’s commitments to minimizing water waste.

Chapter 7 of the Boulder Valley Comprehensive Plan discusses overarching policies and standards for public services provided in urban areas.<sup>57</sup> Within this chapter, the plan provides specific guidance for developed urban parks including directives on funding, staffing, and infrastructure, as well as specific criteria for park location and facilities, as detailed below.<sup>58</sup>

1. Provide neighborhood parks of a minimum of five acres in size within one half mile of the population to be served.
2. Provide community parks of a minimum of 50 acres in size within three-and-one-half miles of the population to be served.
3. Provide playground facilities for toddlers, preschoolers, and school-age children up through age 12 within one-quarter to one-half mile of residents
4. Provide other park and recreational facilities accessible to the public and in quantities sufficient to address public demand. Ensure availability of parks and recreation services to all economic segments of the community.
5. Schedule existing developed facilities for redevelopment as conditions and use dictate.<sup>59</sup>

These commitments are an important component to incorporating green spaces equitably in urban areas in Boulder.

## Land Use and Rural Preservation

The Boulder Valley Comprehensive Plan Land Use Map depicts desired land use patterns in Boulder Valley and sets forth a basic framework and guide for future land use, transportation, and zoning decisions.<sup>60</sup> Land use is divided into residential, industrial, business, open space, and other categories. Residential categories range from very low to very high density, while also including a designated category for manufactured housing.

Rural lands and open space preservation are important components of the Boulder Valley Comprehensive Plan’s land use strategy. In an effort to preserve the rural character of the areas surrounding the city of Boulder, the plan states that a clear boundary will be maintained between urban and rural areas, when possible. Rural lands are designated for preservation based on

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<sup>57</sup> *Id.* at 142.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.* at 150.

<sup>60</sup> CITY OF BOULDER, COLO., BOULDER VALLEY COMPREHENSIVE PLAN LAND USE DESIGNATION MAP (2021).

environmentally sensitive areas, hazard areas, agriculturally significant lands, vistas, significant historic resources, and established, existing rural residential areas.<sup>61</sup>

The city also identifies opportunities to conserve open spaces through mechanisms like having the city and county purchase priority lands, accepting voluntary donations of fee simple interests from property owners, and promoting the use of conservation easements.<sup>62</sup> Open space plans and policies in the city apply to public lands acquired and managed as natural, agricultural, recreational, cultural, and habitat conservation areas.<sup>63</sup> Currently, 63 percent of the Boulder Valley is protected as open space by the city and county.<sup>64</sup>

## COMMUNITY ENGAGEMENT

Section 10 of the Boulder Valley Comprehensive Plan covers Local Governance and Community Engagement. In this section, policies are listed to increase and improve community and youth engagement, communication between the local government and residents, and to encourage volunteerism.<sup>65</sup>

In addition, considerable community engagement and action has and continues to take place around the city's MHC strategy. Several prominent community organizations, such as the Colorado Coalition of Manufactured Homeowners (CoCoMHO), are particularly involved in the protection of manufactured housing residents. CoCoMHO was founded by MHC residents in 2017 to provide yearly forums, resources, and mechanisms for action for MHC residents in Colorado.<sup>66</sup>

Further, in 2017, the city adopted a strategic framework for engagement, which was developed by a Public Participation Working Group.<sup>67</sup> The working group highlighted two overarching recommendations in its preliminary report: change the culture of public engagement and utilize a comprehensive decisionmaking process. The resulting framework covers the why, how, what, who, and results of successful engagement. This framework is intended to be used in all public processes between the city and the residents, ranging from information sharing, to consultation, to involvement, and to collaboration on projects.<sup>68</sup>

<sup>61</sup> CITY OF BOULDER & BOULDER COUNTY, COLO., BOULDER VALLEY COMPREHENSIVE PLAN: 2020 MID-TERM UPDATE 39 (2021), available at <https://bouldercolorado.gov/media/3350/download?inline>.

<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

<sup>64</sup> *Id.* at 54.

<sup>65</sup> *Id.* at 101.

<sup>66</sup> *About Us*, COLO. COAL. OF MANUFACTURED HOME OWNERS, <https://www.cocomho.org/about-us> (last visited Jan. 4, 2022).

<sup>67</sup> CITY OF BOULDER, COLO., ENGAGEMENT STRATEGIC FRAMEWORK: PROPOSAL TO BOULDER CITY COUNCIL (2017), available at <https://bouldercolorado.gov/sites/default/files/2021-05/boulder-engagement-strategic-framework.pdf>.

<sup>68</sup> *Id.* at 7.



## CONSIDERATIONS AND LESSONS LEARNED

The Boulder Valley Comprehensive Plan is a strong example of a municipal comprehensive plan that incorporates affordable housing, MHC, and anti-displacement provisions, as well as environmental and land-use considerations across the urban-rural spectrum. This plan can serve as an example of how a local government can holistically approach all of these different sectors in a diverse jurisdiction with a range of housing and environmental needs.

Moreover, the Boulder Valley Comprehensive Plan is an interesting example of a city and county policy designed to acknowledge the rural-urban divide and preserve the rural character of the surrounding areas. In addition, protecting natural resources and open spaces is especially important in places like Boulder that are facing increasing threats from flooding, extreme heat, and disaster events.

Notably, the city acknowledges the need for residents to be able to afford to live in their homes across different income levels through its low-, moderate-, and middle-income designations. Other local governments could similarly think about examining the demographics and economic makeup of their communities to support the development of an affordable housing approach that aims to address housing affordability for all.

Within this broader context, the city has applied focused attention to its MHC as one, but not the only affordable housing option. With its Manufactured Housing Strategy and Action Plan, Boulder developed a specific approach to address some of the priority issues facing one type of affordable housing in its jurisdiction. Similarly, the city followed suit with its Middle-Income Housing Strategy. Local governments also facing housing challenges can think about applying a specialized approach like Boulder's under an overarching comprehensive planning and housing framework.

In addition, the city is taking steps to implement and track its progress under the Manufactured Housing Strategy and Action Plan. For example, the city helped to preserve MHC — a goal under the Manufactured Housing Strategy — by purchasing the Ponderosa and Mapleton communities. These actions show the need to align plans with local actions to ensure that they are more achievable.

# *City of Denham Springs, Louisiana*

## **Denham Strong Long-Term Community Recovery Plan**

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### **EXECUTIVE SUMMARY**

In August 2016, a historic flooding event severely impacted the infrastructure and people in the City of Denham Springs in Louisiana. In response to the flooding, the city worked with its residents to create a long-term recovery plan called Denham Strong. The goal of the plan to increase community resilience in the aftermath of the disaster. The plan lists various affordable housing and mitigation recovery projects under three main categories: (1) Flood Recovery; (2) Disaster Resilience; and (3) Community Development.

Denham Strong is a guiding document with the ability to adapt to future changed circumstances in Denham Springs. Denham Strong is a noteworthy example of a recovery plan that encompasses community input, provides examples of projects for stormwater management, includes resilient affordable housing considerations, and keeps the community updated as projects are implemented. Other local governments impacted by disaster events can consider similar opportunities to supplement local comprehensive plans and engage residents with proactive thinking about building long-term resilience.

### **BACKGROUND**

The City of Denham Springs is located in Livingston Parish in Louisiana. As of 2019, almost 10,000 people resided in the city with 84.5 percent of the population being white.<sup>1</sup> Denham Springs is considered to be the banking and commercial center of Livingston Parish.<sup>2</sup> In 1999, Denham Springs's Historic District became a certified [Main Street District](#).<sup>3</sup>

The Amite River and Comite River intersect in the city and Denham Springs has many low-lying areas.<sup>4</sup> This geography and elevation has caused the city to face major repetitive flooding events for decades. In August 2016, 24.75 inches of rain fell in the city causing great damage to the city's

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<sup>1</sup> *QuickFacts Denham Springs city, Louisiana, U.S.* CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/denhamcitylouisiana/PST045219> (last visited Dec. 20, 2021).

<sup>2</sup> DENHAM SPRINGS, LA., DENHAM STRONG: STRATEGY FOR THE FUTURE: LONG-TERM COMMUNITY RECOVERY PLAN 9, available at <https://denhamstrong.com/wp-content/uploads/2017/12/Denham-Springs-Recovery-Plan-121217-Final.pdf>.

<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at 10.

infrastructure.<sup>5</sup> Although there were no reported casualties as result of the flood, the impact on the community was nonetheless profound.<sup>6</sup> In response to the August 2016 historic flooding event, the city initiated Denham Strong with a goal of creating a more resilient community.<sup>7</sup>

## OVERVIEW OF DENHAM STRONG

In 2017, Denham Springs partnered with the Federal Emergency Management Agency to implement the National Disaster Recovery Framework, which became known as Denham Strong.<sup>8</sup> Public meetings were held for community input. Through these meetings, the city and engaged residents developed a collective community vision for the future and projects that support that vision.<sup>9</sup> The plan has been officially adopted by the Denham Springs City Council.<sup>10</sup>

Denham Strong is a long-term recovery strategy that addresses three main types of projects: (1) Flood Recovery; (2) Disaster Resilience; and (3) Community Development.<sup>11</sup> The plan is a guiding document with the ability to adapt to future changed circumstances.<sup>12</sup> It is intended to be used to inform “critical decisions about next steps, funding sources and resource allocation during the implementation phase of the recovery process.”<sup>13</sup> The plan includes a list of projects, and for each project, steps for implementation, costs, potential funding sources, and a timeline for implementation. Denham Springs explains that the ability for the projects to succeed depends on the city’s and community’s ongoing commitment, project champions, funding, and collaboration.

During the community engagement process, residents identified projects with great community support. Projects were then ranked and implemented from highest priority to lowest priority based

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<sup>5</sup> *Id.* at 10, 13.

<sup>6</sup> *Id.* at 13.

<sup>7</sup> *About Denham Strong*, DENHAM STRONG, <https://denhamstrong.com/> (last visited Dec. 15, 2021).

<sup>8</sup> *About Denham Strong*, DENHAM STRONG, <https://denhamstrong.com/> (last visited Dec. 15, 2021); *See National Disaster Recovery Framework*, FEMA,

<https://www.fema.gov/emergency-managers/national-preparedness/frameworks/recovery> (last visited Dec. 22, 2021) (“The National Disaster Recovery Framework (NDRF) enables effective recovery support to disaster-impacted states, tribes, territorial and local jurisdictions. It provides a flexible structure that enables disaster recovery managers to operate in a unified and collaborative manner. The NDRF focuses on how best to restore, redevelop and revitalize the health, social, economic, natural and environmental fabric of the community and build a more resilient nation.”).

<sup>9</sup> DENHAM SPRINGS, LA., DENHAM STRONG: STRATEGY FOR THE FUTURE: LONG-TERM COMMUNITY RECOVERY PLAN 7, available at <https://denhamstrong.com/wp-content/uploads/2017/12/Denham-Springs-Recovery-Plan-121217-Final.pdf>; *About Denham Strong*, DENHAM STRONG, <https://denhamstrong.com/> (last visited Dec. 15, 2021).

<sup>10</sup> *Master Recovery Plan Adopted!*, DENHAM STRONG, <https://denhamstrong.com/plan/> (last visited Dec. 15, 2021).

<sup>11</sup> DENHAM SPRINGS, LA., DENHAM STRONG: STRATEGY FOR THE FUTURE: LONG-TERM COMMUNITY RECOVERY PLAN 1, available at <https://denhamstrong.com/wp-content/uploads/2017/12/Denham-Springs-Recovery-Plan-121217-Final.pdf>.

<sup>12</sup> *Id.* at 7.

<sup>13</sup> *Id.*

on various factors.<sup>14</sup> The affordable housing and environment/flood mitigation aspects of the plan are highlighted in the following parts.

## HOUSING

The plan includes affordable housing considerations for projects under the Flood Recovery category. Denham Springs hopes to improve neighborhoods by using blighted properties to build more affordable housing options.<sup>15</sup> The plan explains that blighted properties raise social, health, and economic issues for the city. Some economic impacts include lower value for uninsured buildings, increased property sales to investors, and less available rental housing resulting in higher rent. Social impacts include increased mental health and drug usage issues, and lower school attendance due to displaced families. Thus, by improving blighted properties, the ability to develop affordable housing in neighborhoods increases.

The plan's most prominent affordable housing considerations fall under the Disaster Resilience category. One project identified under this category is to increase opportunities for affordable housing in Denham Springs that have an accessible design.<sup>16</sup> The plan describes this project as follows:

**DESCRIPTION:** This project is intended to increase affordable and accessible housing stock and provide education for current and potential homeowners, with topics such as first-time homeowner education, purchasing flood insurance and how to add flood mitigation measures.

**DESIRED OUTCOME:** Attractive, affordable and accessible housing will be incorporated throughout the city, offering housing options for all ages, abilities and income levels. As flood recovery progresses, residents will be able to maintain and improve housing affordability and aesthetics.<sup>17</sup>

In Denham Springs, 21 percent of residents live in poverty.<sup>18</sup> However, the 2016 floods placed additional economic burdens on more families that are now in need of affordable housing.<sup>19</sup> For this project, the city will aim to partner with affordable housing organizations and determine which parts of the city can accommodate compactly designed homes that are energy efficient, have an accessible design, and are resilient to future hazards and disaster events. Concurrently, the city may have to consider whether zoning updates are required to make this work possible.

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<sup>14</sup> *Id.* at 24.

<sup>15</sup> *Id.* at 29.

<sup>16</sup> *Id.* at 43.

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

The city also suggested creating an educational workshop series for affordable housing and how to maintain a home in Denham Springs. Educating future homeowners about homeownership can create long-term community capacity to build individual and neighborhood-wide resilience and disaster preparedness.

One project under the plan's Community Development category includes redeveloping its centrally located Triangle Business District. The current plan is "to create a mixed-use business and housing district that supports a variety of entrepreneurial ventures."<sup>20</sup> The desired outcome for this project is to "provide affordable, accessible housing, business entrepreneurship and healthy restaurants" and "attract developers to create a new economic center in Denham Springs."<sup>21</sup>

Denham Springs notes that the area currently houses many low- and moderate-income families. Thus, the plan states that as redevelopment measures begin for the Triangle Business District, the city should maintain the affordability and accessible design of housing.<sup>22</sup> Revitalization efforts are key for economic growth and maintaining local culture. However, it is important to maintain affordability of housing to avoid the displacement of residents.

## ENVIRONMENT

The plan includes environmental considerations for projects under the Flood Recovery category. Here, the community identified stormwater management, building resilience for utility systems, and protecting critical facilities as priority projects.<sup>23</sup>

Stormwater is rainwater that flows off of impervious surfaces (e.g., streets and rooftops).<sup>24</sup> For stormwater management, Denham Springs hopes to "improve the city's infrastructure to better regulate stormwater effects, by reducing the threat to life and/or property through management of existing infrastructure, stormwater planning and improvements to the drainage systems."<sup>25</sup> The desired outcome for this project is for Denham Springs to "have well-planned and maintained stormwater infrastructure and regulate future development and redevelopment to ensure that changes to the built environment will not create flooding hazards" as well as "actively participate in regional stormwater solutions."<sup>26</sup>

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<sup>20</sup> *Id.* at 53.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

<sup>23</sup> *Id.* at 25.

<sup>24</sup> *National Pollutant Discharge Elimination System (NPDES)*, EPA, <https://www.epa.gov/npdes/npdes-stormwater-program> (last visited Dec. 20, 2021); *EPA Facility Stormwater Management*, EPA, <https://www.epa.gov/greeningepa/epa-facility-stormwater-management> (last visited Dec. 20, 2021).

<sup>25</sup> DENHAM SPRINGS, LA., DENHAM STRONG: STRATEGY FOR THE FUTURE: LONG-TERM COMMUNITY RECOVERY PLAN 26, available at <https://denhamstrong.com/wp-content/uploads/2017/12/Denham-Springs-Recovery-Plan-121217-Final.pdf>.

<sup>26</sup> *Id.*

Sub-projects/programs for improving stormwater management include: updating stormwater regulations; creating a drainage master plan/stormwater master plan; providing support for regional efforts; developing a maintenance program; and constructing and incentivizing green stormwater infrastructure.<sup>27</sup> Regarding stormwater management, the U.S. Environmental Protection Agency describes green infrastructure as “approaches and technologies to infiltrate, evapotranspire, capture and reuse stormwater to maintain or restore natural hydrologies.”<sup>28</sup> For each of these stormwater management sub-projects/programs, the plan includes a more detailed description as well as estimated timelines and costs for implementation.<sup>29</sup> As mentioned, Denham Springs expresses that they will continue to support regional and state flood resilience efforts, but the city plans to create their own stormwater plan to better prepare the local community.

In addition to improving stormwater management systems and promoting the use of green infrastructure and nature-based solutions, several other projects in the plan focus on the proper siting of utilities and critical facilities in lower-risk areas to protect environmentally and community beneficial floodplains.

For utility resilience, Denham Springs recognizes that due to the city’s low-lying topography, utility systems (i.e., water, sewer, and natural gas) face challenges when extreme weather events like flooding occur.<sup>30</sup> The city aims to increase the reliability of these systems, which includes flood-proofing the utility systems. The city hopes that building the resilience of these systems will allow residents to “have reliable utilities during flood conditions, enabling them to stay in their homes.”<sup>31</sup> Bettering these systems will reduce a flooding event’s overall impact to infrastructure and enable citizens to recover more quickly. Reducing displacement during a storm is vital to community resilience.

For protecting critical facilities (e.g., hospitals, fire stations, police stations, and critical storage units), the city wants to make sure that most critical facilities are not located in flood-prone areas.<sup>32</sup> Protecting critical facilities will allow communities to receive help and resources when disaster events occur.

Under the Community Development category, one project is the revitalization of the Antique District, which is a certified [Louisiana Main Street District](#).<sup>33</sup> Revitalization efforts may include restoring a park, beautifying streets, planting trees, and building green infrastructure that can help

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<sup>27</sup> *Id.*

<sup>28</sup> *EPA Facility Stormwater Management*, EPA, <https://www.epa.gov/greeningepa/epa-facility-stormwater-management> (last visited Dec. 20, 2021).

<sup>29</sup> DENHAM SPRINGS, LA., DENHAM STRONG: STRATEGY FOR THE FUTURE: LONG-TERM COMMUNITY RECOVERY PLAN 27–28, available at <https://denhamstrong.com/wp-content/uploads/2017/12/Denham-Springs-Recovery-Plan-121217-Final.pdf>.

<sup>30</sup> *Id.* at 32.

<sup>31</sup> *Id.*

<sup>32</sup> *Id.* at 34.

<sup>33</sup> *Id.* at 48.



improve drainage in the city. Revitalization efforts that prioritize building green infrastructure with hazard mitigation in mind can help build community resilience and preparedness to future flooding events.

The city also includes a park enhancement and beautification project.<sup>34</sup> The city hopes to enhance the city's parks as well as build new ones. Through these efforts, the city wants to increase parks and open space while working with the city's Hazard Mitigation Program to improve stormwater drainage.

## COMMUNITY ENGAGEMENT

The plan was developed with community “input on flood recovery issues, a vision for the future and projects to increase the resilience of the city.”<sup>35</sup> There were three community meetings, 84 subcommittee and steering committee meetings, meetings with various stakeholders, and media outreach.<sup>36</sup> The Denham Strong website provided information to the public about the planning process and feedback from community meetings was posted to the website.<sup>37</sup> Now, the Denham Strong website posts plan updates and the status of projects. The success of some Denham Strong projects may rely on volunteers, so updates and transparency may be one way to motivate residents to support project implementation.

## NEXT STEPS

Project implementation began right after the planning process concluded in 2017.<sup>38</sup> The city explains that because of the long-term nature of the projects, implementation will take years.

Projects that are currently taking place include those related to stormwater management, blighted properties, utility reliability, and critical facilities.<sup>39</sup>

The rest of the plan's projects will be implemented in three phases. Phase one projects include those that are identified as a high community priority and have significant volunteer support. Phase two projects include those that are a lower community priority and have less volunteer support. Of note, phase two projects include increasing affordable housing. Phase three projects include those that need planning and other actions to take place before they can be implemented. Regardless, the

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<sup>34</sup> *Id.* at 50.

<sup>35</sup> *Id.* at 20.

<sup>36</sup> *Id.*

<sup>37</sup> *About Denham Strong*, DENHAM STRONG, <https://denhamstrong.com/> (last visited Dec. 15, 2021).

<sup>38</sup> DENHAM SPRINGS, LA., DENHAM STRONG: STRATEGY FOR THE FUTURE: LONG-TERM COMMUNITY RECOVERY PLAN 55, available at <https://denhamstrong.com/wp-content/uploads/2017/12/Denham-Springs-Recovery-Plan-121217-Final.pdf>.

<sup>39</sup> *Id.* at 56.

project implementation schedule is subject to change and will be modified as priorities shift and grant opportunities become available, among other things.<sup>40</sup>

## CONSIDERATIONS AND LESSONS LEARNED

Denham Strong is a notable example of a disaster recovery plan that comprehensively addresses both housing and flooding considerations. Disaster recovery plans can be tailored to the specific needs of a community and aligned with and adapted to fit changing circumstances, for example, to target the availability and amount of future federal post-disaster funding opportunities. Other jurisdictions can use Denham Strong as a model when they consider developing their own disaster recovery plan. Denham Strong can also help fill in gaps and details for project implementation where other existing plans, like local comprehensive plans, may not suffice.

Denham Strong includes several important housing considerations for other local governments. For example, one project in the plan is improving blighted properties. Addressing blighted properties is one opportunity a community can use to develop affordable housing with accessible designs in neighborhoods. The plan also suggests that Denham Springs should implement zoning updates to accommodate compactly designed housing. Compactly designed housing allows a city to fit more housing units for residents in one area in comparison to traditional housing. Additionally, compactly designed housing units are more energy efficient.

The plan highlights that affordable housing should also be built with hazard mitigation in mind. This is important in the context of growing overall community resilience to extreme weather events like flooding. If housing proactively takes hazard mitigation into account, there is a higher chance of a community being better prepared for the next disaster. The plan also promotes affordable housing homeowner maintenance efforts and includes a plan to host workshop series addressing homeownership. Educating future homeowners on homeownership can create long-term community capacity to build individual and neighborhood-wide resilience and disaster preparedness.

Denham Springs acknowledges that redevelopment and revitalization affect the affordability of housing in the project area. This is something that other jurisdictions should take note of when creating their own disaster recovery plan or starting a redevelopment or revitalization effort. These types of efforts can promote economic growth and maintain local culture. However, local jurisdictions should proactively establish a way to maintain the affordability and accessible designs of housing for low- and moderate-income families in project areas to avoid displacing residents.

Regarding the environment, Denham Strong emphasizes flood and stormwater mitigation as one way to plan for future flooding events. Creating regulations and a stormwater master plan on a city level are important for disaster preparedness. In Denham Strong, the city indicates its intention to

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<sup>40</sup> *Id.* at 55.

support regional flood resilience efforts. However, the city also emphasizes that it is also vital that cities develop their own localized plans. Denham Strong also includes the plan to incentivize green stormwater infrastructure. This is another action jurisdictions may take to increase resilience to future extreme flooding events.

The process used to develop Denham Strong is illustrative of significant community engagement. The city engaged with the community before drafting Denham Strong and included community input in the final version of the plan. As such, the plan reflects community priorities and needs to guide future government actions. Furthermore, the city even updates the public on the Denham Strong initiative via a website. This can help build and maintain trust between city officials and residents. For example, project news can reassure community members who provided input on the plan's development and may reassure those individuals that this was a valuable use of their time. Additionally, the success of some Denham Strong projects may rely on volunteers. As such, consistent updates and transparency may be one way to motivate residents to support city efforts. It is important for policymakers at all levels to meaningfully involve residents throughout all stages of planning and project implementation and design.

Denham Strong includes implementation timelines, potential funding sources, and actionable steps for each project. The plan also prioritizes projects into three implementation phases, as informed by community input and the potential level of volunteer support. Local governments could similarly consider developing plans with an eye towards implementation to make sure that these are living documents that have a greater chance of leading to projects on the ground. Further, organizing projects by community support is another way to develop trust with residents.

## *City of Donaldsonville, Louisiana*

# **Donaldsonville Strategic Plan 2020 – 2025**

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## **EXECUTIVE SUMMARY**

The City of Donaldsonville, Louisiana has developed a strategic plan for 2020–2025, which identifies eight strategic priorities to revitalize the city by fostering business development and increasing the city’s standard of living. Among other strategic priorities, the plan addresses: (1) Economic Development; (2) Workforce Development, Job Creation, and Training; (7) Housing, RV Parks, Campgrounds, Mobile or Manufactured Homes; and (8) Infrastructure Revitalization and New Development. Noteworthy recommendations include updating zoning ordinances, launching the Donaldson FIRST program for workforce development, updating aging infrastructure, enhancing mobility and resident’s connectivity to city centers and amenities, and growing green space.

The plan was developed through a robust community engagement process that leveraged external support to supplement and expand limited government staff and resources.

This plan can serve as an example of how regional and local planners and policymakers in smaller or rural jurisdictions can set and then implement an overarching vision across multiple sectors to address local challenges and increase overall social resilience in a coordinated way. Due to the intersectional nature of this plan, the recommended objectives also have implications on affordable housing and green space efforts, which are especially highlighted.

## **BACKGROUND**

The City of Donaldsonville is located in Ascension Parish along the west bank of the Mississippi River, between New Orleans and Baton Rouge. Donaldsonville is a historic city, known as the first incorporated city in the United States to elect an African-American citizen, Pierre Caliste Landry, to serve as mayor.<sup>1</sup> The city prides itself on its historic origins and works to keep this legacy alive through historic preservation that supports a tourism industry.

In 2019, Donaldsonville had a population of roughly 8,200 residents and the average age is 39.8.<sup>2</sup> According to the U.S. Census Bureau in 2019, the median household income was \$25,551 with

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<sup>1</sup> *Discover Donaldsonville*, CITY OF DONALDSONVILLE, LA., <https://www.donaldsonville-la.gov/discover-donaldsonville> (last visited Jan. 4, 2022).

<sup>2</sup> *Donaldsonville, LA*, DATA USA, <https://datausa.io/profile/geo/donaldsonville-la> (last visited Jan. 4, 2022).

38.5 percent of the population living in poverty.<sup>3</sup> In 2019, 3,000 people were employed within Donaldsonville, and the primary industries were retail trade, health care and social assistance, manufacturing, and transportation.<sup>4</sup> Approximately 75 percent of the population is Black, 21 percent is white, and 1.6 percent is Hispanic or Latinx.<sup>5</sup>

Some of the city's ongoing challenges include a high rate of poverty, aging infrastructure, and low business growth and development.

## OVERVIEW OF DONALDSONVILLE STRATEGIC PLAN 2020–2025

The 2020–2025 Donaldsonville Strategic Plan was created with the goal of increasing business development, addressing current infrastructure issues, and decreasing the city's poverty level. While this plan includes priorities dedicated to city-wide growth and development, it also includes components necessary to address individual- and community-scale resilience through economic and workforce development, housing, and infrastructure revitalization.

The city developed previous types and iterations of plans; however, few addressed the city's infrastructure challenges or conducted adequate stakeholder engagement and were ultimately too aspirational to be implemented in full. By comparison, this 2020–2025 Strategic Plan aims to identify more realistic and immediate priorities and initiatives to effectively revitalize the city.

The development of the Strategic Plan began in 2018 with the completion of a core needs assessment in collaboration with community stakeholders, governing bodies, and regulatory authorities. This assessment reported on the city's Economic Scorecard performance indicators and on the city's completed, ongoing, and planned projects. Upon completion, the results of the assessment were brought before a steering committee for review and condensed into strategic priorities for further community input and feedback. The following eight strategic priorities were chosen:

1. Economic Development
2. Workforce Development, Job Creation, and Training
3. Health, Wellness, and Recreation
4. Safety, Security, Social, and Criminal Justice

<sup>3</sup> *QuickFacts: Donaldsonville City, Louisiana, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/donaldsonvillecitylouisiana>* (last visited Jan. 4, 2022).

<sup>4</sup> *Donaldsonville, LA, DATA USA, <https://datausa.io/profile/geo/donaldsonville-la>* (last visited Jan. 4, 2022).

<sup>5</sup> *QuickFacts: Donaldsonville City, Louisiana, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/donaldsonvillecitylouisiana>* (last visited Jan. 4, 2022).

5. Blighted and Abandoned Properties
6. Education, Co- and Extracurricular Activities
7. Housing, RV Parks, Campgrounds, Mobile, or Manufactured Homes
8. Infrastructure Revitalization and New Development

Under each strategic priority is a list of 15–30 achievable and quantifiable objectives.<sup>6</sup> A committee of community stakeholders has been formed for each of the eight strategic priorities and are accepting volunteers to take part in the oversight, planning, and execution of the objectives within each strategic priority.

In order to address the plan's implications on affordable housing and climate change adaptation and resilience, the rest of this entry explores strategic priorities 1, 2, 7, and 8 in more depth.

## ECONOMIC DEVELOPMENT

Strategic Priority 1 on Economic Development includes 25 objectives that seek to increase economic activity in Donaldsonville by attracting new businesses, protecting existing businesses, and supporting workers, community members, and the environment.<sup>7</sup> These specific recommendations cover creating jobs, eliminating service deserts, and developing commercial zoning ordinances, establishing financial assistance for development and disaster recovery, ensuring the protection of homeowner interests, green spaces, and flood zones, and supporting local organizations and nonprofit tourism partners.

The city recommends conducting an annual business survey,<sup>8</sup> a land-use survey, and an analysis of current zoning ordinances to better understand the scope of economic and service needs in Donaldsonville. Specific metrics for economic development include creating five new businesses each year, increasing sales tax dollars by 45 percent annually, retaining 85 percent of current small businesses, helping five people graduate annually from small business and entrepreneurship training courses, and reducing unemployment by two percent each year.<sup>9</sup>

In recent years, several new business strips have been developed to increase economic activity in Donaldsonville; however, the issue of greater community connectivity remains. As there is no public transportation and little pedestrian or bicycle infrastructure in Donaldsonville, access between residential and commercial districts is extremely limited for residents without personal

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<sup>6</sup> CITY OF DONALDSONVILLE, LA., 2020–2024 STRATEGIC PLAN (2020), available at [https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021\\_2025\\_strategic\\_plan\\_0.pdf](https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021_2025_strategic_plan_0.pdf).

<sup>7</sup> *Id.* at 1.

<sup>8</sup> *Annual Business Survey*, CITY OF DONALDSONVILLE, LA., <https://www.donaldsonville-la.gov/economic-development/webforms/annual-business-survey> (last visited Jan. 4, 2022).

<sup>9</sup> CITY OF DONALDSONVILLE, LA., 2020–2024 STRATEGIC PLAN 1 (2020), available at [https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021\\_2025\\_strategic\\_plan\\_0.pdf](https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021_2025_strategic_plan_0.pdf).



vehicles, hindering job opportunities and economic activity. As such, an important economic development priority for the City of Donaldsonville is to increase physical access to healthcare, jobs, food, services, and housing, especially for pedestrians, cyclists, and underserved communities. Several strategies to increase connectivity include building new and improved sidewalks, dedicated bike lanes, and promoting mixed-use development.

## WORKFORCE DEVELOPMENT, JOB CREATION, AND TRAINING

Strategic Priority 2 on Workforce Development, Job Creation, and Training includes 19 objectives with the goals of reducing unemployment and increasing apprenticeship, internship, and job placement programs, centered around the launch of the Donaldsonville FIRST (Family, Innovation, Resources, Sustainability, Together) Program.<sup>10</sup> The FIRST program is a multiple pathway “community hub” pilot program with the goals of:

- Improving family lives by increasing basic literacy skills and physical and mental health through organized activities (such as the existing summer enrichment program)
- Providing access and referrals to families for:
  - Food
  - Housing
  - Mental health counseling
  - Teen pregnancy prevention
  - Drug abuse and domestic violence prevention
  - Chronic health problems
- Improving workforce readiness through:
  - Career fairs
  - Mentoring
  - Internship
  - Expungement assistance

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<sup>10</sup> *Donaldsonville First Program*, CITY OF DONALDSONVILLE, LA., <https://www.donaldsonville-la.gov/donaldsonville-first-program> (last visited Jan. 4, 2022); CITY OF DONALDSONVILLE, LA., 2020–2024 STRATEGIC PLAN 5 (2020), available at [https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021\\_2025\\_strategic\\_plan\\_0.pdf](https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021_2025_strategic_plan_0.pdf).

- Job placement assistance
- Offering youth opportunities for success and innovation through:
  - Community service and leadership projects
  - College test preparation assistance
  - Financial aid counseling assistance
  - College application assistance (guided by the existing Mayor’s Youth Advisory Council)

This strategic priority places a strong emphasis on partnership building with local organizations, businesses, and community colleges, public and private schools through the Donaldsonville FIRST program.

Other workforce development priorities not covered in the Donaldsonville FIRST Program include objectives such as writing grants to improve wireless and broadband connectivity and hot spots throughout the city, to reduce total unemployment by two percent, and increase job placement opportunities by 30 percent.

These efforts to foster workforce development and job creation and training are important and relevant as they increase capacity for individual and community resilience. Increased resilience helps to mitigate the impacts from climate change-related disasters such as hurricanes and other financial and social catalysts.

## HOUSING, RV PARKS, CAMPGROUNDS, MOBILE OR MANUFACTURED HOMES

Strategic Priority 7 on Housing includes 18 specific objectives to review appropriate zoning and ordinances for mobile and manufactured housing, and to implement regulations for affordable, subsidized, and rental housing.<sup>11</sup> These objectives include clarifying existing zoning regulations; developing new ordinances for mobile and manufactured homes to improve maintenance and code enforcement, and regulations on short-term and commercial rentals in residentially zoned structures; creating “tourism-based” RV parks and campgrounds; and ensuring community participation in decisions on mobile home or RV park setback and spacing requirements.

These recommended housing initiatives can strive to increase housing security, overall structural safety, economic activity, and mechanisms to foster resilience without displacing current residents. By developing and enforcing codes specific to mobile and manufactured homes, a better system of accountability is created, ensuring that all homes and residents are safe in the face of climate

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<sup>11</sup> CITY OF DONALDSONVILLE, LA., 2020–2024 STRATEGIC PLAN 17 (2020), available at [https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021\\_2025\\_strategic\\_plan\\_0.pdf](https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021_2025_strategic_plan_0.pdf).

change impacts. Mobile and manufactured homes are often stigmatized or face different permitting and enforcement barriers in communities compared to traditional “stick built” housing options. Regulations for short-term rentals and affordable housing combat resident displacement as the city undergoes economic changes, and fostering tourism in RV parks and campgrounds increases economic activity to support community capacity and resilience to the effects of climate change.

Several new affordable housing complexes are being planned and developed in Donaldsonville, providing units for low-, moderate-, and middle-income households. One example is the reuse of the B. Lemann & Brothers Inc. building in downtown Donaldsonville. This building was constructed in the 1870s and designated as a historic building by the National Parks Service in the 1980s.<sup>12</sup> This building is being redeveloped to include 42 units of artist-preferred housing and 7,600 square feet of commercial space.<sup>13</sup> Construction is expected to be completed in early summer 2022.<sup>14</sup>

Finally, the city is also making an effort to increase the amount of housing available to specifically middle-income households, senior living, and promoting more duplex communities. Securing adequate, affordable, and safe housing for all residents is one step towards building greater community resilience.

The need for affordable housing opportunities across all income levels may become particularly acute in the future if Donaldsonville experiences population growth and transitions in response to flooding in other areas of Ascension Parish and southwest Louisiana. As Louisiana faces more frequent and intense disaster and flooding events, increased water and damage exacerbated by climate may cause some people to move voluntarily — and force others — to move to safer areas, like Donaldsonville.

## INFRASTRUCTURE REVITALIZATION, NEW DEVELOPMENT

Strategic Priority 8 on Infrastructure and Development includes 28 objectives that cover projects such as developing a funding strategy for a new natural gas system, implementing the city Sanitary Sewer Revitalization Plan, updating city transportation infrastructure, supporting first responders

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<sup>12</sup> U.S. Dep’t of the Interior Heritage Conservation & Recreation Serv., National Register of Historic Places Inventory—Nomination Form (1982), *available at* <https://npgallery.nps.gov/GetAsset/6067c863-38d6-44f9-a110-9c621a2ddca0>.

<sup>13</sup> Donaldsonville’s historic Lemann building redevelopment underway, DONALDSONVILLE CHIEF (Apr. 14, 2021), <https://www.donaldsonvillechief.com/story/news/2021/04/14/redevelopment-project-begins-lemann-building-donaldsonville/7203380002/>.

<sup>14</sup> *Id.*

and firefighting capacity, increasing general city-wide accessibility, and increasing accessible green spaces.<sup>15</sup>

Within these broader objectives, specific recommendations include implementing the city's Sanitary Sewer Revitalization Plan, while also creating a new Expansion Program to incorporate new development and annexed residential and commercial spaces. Additionally, through the plan, the city recommends investing in a new road improvement project to identify and repair roadways, shoulders, and culverts, while also developing a walk and bike path to improve community connectivity. The city recommends forming collaborative partnerships with statewide and regional government organizations and joining the Metropolitan Planning Organization for Transportation Planning and MOVE 2046 Inclusion to better provide safe and improved drainage, utility, transportation, and other municipal infrastructure.

Continued and planned maintenance on existing infrastructure is necessary to respond to the effects of flooding and heat, while also expanding and collaborating to develop and implement new resilient infrastructure. The city also recommends purchasing new equipment to better meet the changing needs of the landscape and upkeep of streets and parks.

Green space creation and revitalization combine opportunities for recreation and fitness with environmental protection and nature-based climate resilience solutions. Donaldsonville City parks are managed by Ascension Parish. In recent years, several parks, including the Crescent Park, have been renovated for musical and cultural events. A river walk and a walking tour have been established. In 2018, the City of Donaldsonville received a grant from Prevoist Memorial Hospital to join the National Fitness Campaign and construct an outdoor fitness court to encourage the use of green spaces and improve resident health.

Flooding is not a significant threat in Donaldsonville as the city is located on the west bank of the Mississippi in an area that typically and historically has not experienced large-scale flooding. In the event of heavy precipitation, however, the downtown area may flood due to aging stormwater drainage infrastructure.

## COMMUNITY ENGAGEMENT

This plan has been and continues to be informed by significant community engagement. During the initial outreach and planning process in 2019, the City of Donaldsonville began holding community meetings in each of the city's voting districts and disseminated surveys. Little feedback was received from these efforts as they did not adequately establish trust between many residents and the city government. In addition, many residents did not fully understand what subjects were going to be discussed at these meetings and surveys.

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<sup>15</sup> CITY OF DONALDSONVILLE, LA., 2020–2024 STRATEGIC PLAN 21 (2020), available at [https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021\\_2025\\_strategic\\_plan\\_0.pdf](https://www.donaldsonville-la.gov/sites/g/files/vyhlf491/f/uploads/2021_2025_strategic_plan_0.pdf).

Recognizing these barriers to participation, the City of Donaldsonville switched engagement tactics, instead holding face-to-face community charrettes to workshop and analyze the plan's strengths, weaknesses, opportunities, and threats. These charrettes were held in public and community-based locations such as churches, public libraries, and government housing authorities — never in government-owned facilities — and were considerably more successful and constructive, drawing crowds of 25–30 residents at each meeting.

While the coronavirus or COVID-19 pandemic impacted progress on the strategic plan, it did not stop the city's efforts. Community review and feedback sessions are now being conducted through community presentations, town halls, partner stakeholder meetings, and media promotion to solicit further input from community members, leaders, and collaborative partners to develop strategies for plan implementation and to evaluate outcomes. In addition, the city is identifying and coordinating with community ambassadors and strategic priority-specific stakeholder groups composed of governmental organizations and outside partners — such as the school board, the fire department, and local organizations — to develop implementation plans and track progress.

The city's plan recommendations emphasize partnerships with local organizations, schools, businesses, and neighboring communities as a way to tailor the plan's objectives to the needs of the community and to benefit from shared knowledge and collaboration. The city frequently delivers updates about the status of the plan online and at city council meetings.

## FUNDING

Historic preservation tax credits have contributed funding to the downtown revitalization efforts in Donaldsonville, as many buildings dating back to the nineteenth century are now being converted into mixed-use commercial and residential developments.

Donaldsonville is a participating city in [Main Street America](#) and the state chapter [Louisiana Main Street](#), an organization and movement dedicated to “preservation-based economic development and community revitalization across the country.”<sup>16</sup> This organization has been integral in funding and assisting the revitalization of Donaldsonville.

Over time, the city will evaluate other sources of public and private funding to implement specific projects identified in the strategic plan.

## NEXT STEPS

While stakeholder groups for each strategic priority are already gathering to set implementation plans and track the plan's progress, several initiatives have already been accomplished since they

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<sup>16</sup> See MAIN ST. AMERICA, <https://www.mainstreet.org/mainstreetamerica/themovement> (last visited Jan. 4, 2022); LOUISIANA MAIN ST., <https://www.crt.state.la.us/cultural-development/historic-preservation/main-street/> (last visited Jan. 4, 2022).

fell under operational plans and actions the city was already undertaking. These initiatives include efforts to increase the affordable housing stock, total economic activity, and green space in the city of Donaldsonville. As the plan moves forward, some priority next steps may include:

- Rebuilding the city's recreation center downtown;
- Including fitness features in the Donaldsonville walking tour;
- Incorporating green space into all city initiatives;
- Increase economic development downtown;
- Increase bike and pedestrian connectivity between residential and commercial districts; and
- Continue to develop affordable housing units for low-, moderate-, and middle- income households.

## CONSIDERATIONS AND LESSONS LEARNED

The Donaldsonville Strategic Plan is an example of a proactive, comprehensive planning approach that cuts across many different sectors and indirectly contemplates holistic resilience from many different directions. A strategic or non-legally required plan, like Donaldsonville's, that complements and helps to implement other local or legally mandated plans, like comprehensive plans, can be used to refine and act on community priorities and needs. This is particularly important in places considering significant revitalization efforts and the need for new investments in key assets like housing and infrastructure.

In the plan, the city explicitly identifies housing, and green space as priorities for Donaldsonville. However, these strategic priorities are centered in a more cohesive vision that underscores multiple human needs around workforce and economic development, infrastructure revitalization, and resident health and wellness — all of which are needed to build both individual and community-level resilience.

Further, this plan is an example of how a small rural community was capable of developing a plan with limited staff by leveraging the time and support of external volunteers. The plan is a strong example of a public, transparent, and robust engagement strategy to develop, implement, and continually improve the plan.

In addition, it is very important for community engagement to take place in public and community-based locations in which residents are comfortable and are able to understand government officials. This plan is a good example of how local governments can change community engagement tactics in response to little or negative feedback from residents to produce more community-driven and meaningful outcomes.

Participation in state and national programs, such as [Louisiana Main Street and Main Street America](#), was integral in implementing parts of the strategic plan because of the technical support,



connections, and resources that the program provided the City of Donaldsonville.<sup>17</sup> Other local policymakers in rural areas or with historic downtowns might similarly consider evaluating the Main Street America program — or state analogs. This can enable local governments to capitalize on different opportunities to revitalize downtown areas and give them new life as community centers that promote mixed-use development and options for resident connectivity.

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<sup>17</sup> *Main Street America*, MAIN ST. AMERICA, <https://www.mainstreet.org/home> (last visited Jan. 4, 2022).

## *Town of Warrenton, Virginia*

# Fauquier Habitat for Humanity Haiti Street Neighborhood Revitalization

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## EXECUTIVE SUMMARY

Fauquier County is a rural county located in the northern area of Virginia at the foothills of the Blue Ridge Mountains.<sup>1</sup> Fauquier County is close to the Washington, D.C. metropolitan area where many residents commute for work.

Fauquier Habitat for Humanity serves Fauquier County.<sup>2</sup> Fauquier Habitat builds new houses for low-income families and operates a neighborhood revitalization program.<sup>3</sup> One of its neighborhood revitalization projects includes working with the historic Haiti (pronounced “Hay-ti”) Street neighborhood in Warrenton, Virginia.<sup>4</sup> In 2019, Fauquier Habitat acquired multiple properties in the Haiti Street neighborhood for this revitalization initiative.

Currently, Fauquier Habitat is constructing about three homes a year in the Haiti Street neighborhood and helping to preserve the neighborhood’s historic culture through these builds. Fauquier Habitat is also preparing families for homeownership and placing families in their Haiti Street homes. Fauquier Habitat has partnered with various local entities for this work and engaged with the community from the start of the project. Fauquier Habitat’s work with Haiti Street serves as an example for other jurisdictions seeking to create permanent affordable housing in rural areas by involving the community and local organizations, as well as setting up future homeowners for success.

## BACKGROUND

Fauquier County is a rural county in Virginia located about 40 miles southwest of Washington, D.C.<sup>5</sup> Within the county, there are eight designated service districts, which comprise less than 10

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<sup>1</sup> *About Fauquier*, FAUQUIER CNTY., VA, <http://www.fauquiertourism.com/about-fauquier> (last visited Nov. 29, 2021).

<sup>2</sup> *Mission & History*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/who-we-are/> (last visited Oct. 25, 2021).

<sup>3</sup> *Neighborhood revitalization*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/what-we-do/programs/neighborhood-revitalization.html> (last visited Oct. 25, 2021).

<sup>4</sup> *Id.*

<sup>5</sup> *Demographics*, FAUQUIER CNTY., VA, <https://www.fauquiercounty.gov/government/departments-a-g/community-development/planning/long-range-planning/demographics> (last visited Nov. 29, 2021).

percent of the county's land.<sup>6</sup> As of 2019, more than 71,000 individuals resided in Fauquier County with 87 percent of this population being white.<sup>7</sup>

In the Fauquier County comprehensive plan, the county states that there is a disconnect between Fauquier County's population and its housing stock.<sup>8</sup> Specifically, 83 percent of the units in the county are single-family detached homes, but only 24 percent of households in the county have families with two adults and children.<sup>9</sup> The county has proposed new actions to address this disconnect by building more diverse types of housing.<sup>10</sup> Regarding affordable housing, one of the county's goals is to provide "housing opportunities for all income levels."<sup>11</sup> The county predicts that between 2015 and 2040, about 400 new housing units will be needed each year to accommodate future growth, which is about a 36 percent increase in the county's housing stock.<sup>12</sup> Many housing challenges in Fauquier County are being largely driven by people commuting to the Washington D.C. area.

In addition to Fauquier County's comprehensive plan, the county is also involved in examining housing on a regional scale. In 2019, the Rappahannock-Rapidan Regional Commission received a community impact grant from Virginia Housing to conduct a regional housing study for the Virginia counties of Culpeper, Fauquier, Madison, Orange, and Rappahannock, and the towns of Culpeper, Gordonsville, Madison, Orange, Remington, Plains, Warrenton, and Washington.<sup>13</sup> The goals of the study were to: (1) provide data to understand housing challenges in the region; (2) analyze regional land-use practices and zoning ordinances; and (3) provide recommendations.<sup>14</sup>

The housing study balances the need to advance a regional housing strategy, while also understanding the specific challenges, needs, and history in each county and municipality. To the former, the counties, which include Fauquier County, tackle affordable housing on a regional scale.

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<sup>6</sup> *Id.*

<sup>7</sup> *QuickFacts Fauquier County, Virginia, U.S. CENSUS BUREAU*, <https://www.census.gov/quickfacts/fact/table/fauquiercountyvirginia/PST045219> (last visited Nov. 29, 2021).

<sup>8</sup> Fauquier Cnty. Bd. of Supervisors, Housing: Chapter 3B 8 (2021), *available at* <https://www.fauquiercounty.gov/home/showpublisheddocument/33332/637625515345200000>.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* at 8–9.

<sup>12</sup> *Id.*

<sup>13</sup> RAPPAHANNOCK-REG'L COMM'N. WORKING GRP., RAPPAHANNOCK -RAPIDAN REGIONAL HOUSING STUDY 4 (2020), *available at* [https://cms9files.revize.com/rappahannock/Document\\_Center/Program%20Areas/Housing/Regional%20Housing%20Study/Final/Regional%20Housing%20Study%20Report.RRRC.pdf](https://cms9files.revize.com/rappahannock/Document_Center/Program%20Areas/Housing/Regional%20Housing%20Study/Final/Regional%20Housing%20Study%20Report.RRRC.pdf); *Regional Housing Study*, RAPPAHANNOCK-REG'L COMM'N. WORKING GRP., [https://www.rregion.org/program\\_areas/housing/regional\\_housing\\_study.php](https://www.rregion.org/program_areas/housing/regional_housing_study.php) (last visited Dec. 2, 2021).

<sup>14</sup> RAPPAHANNOCK-REG'L COMM'N. WORKING GRP., RAPPAHANNOCK-RAPIDAN REGIONAL HOUSING STUDY 5 (2020), *available at* [https://cms9files.revize.com/rappahannock/Document\\_Center/Program%20Areas/Housing/Regional%20Housing%20Study/Final/Regional%20Housing%20Study%20Report.RRRC.pdf](https://cms9files.revize.com/rappahannock/Document_Center/Program%20Areas/Housing/Regional%20Housing%20Study/Final/Regional%20Housing%20Study%20Report.RRRC.pdf).

In the study, the Rappahannock-Rapidan Regional Commission uses the term “attainable housing” instead of affordable housing to avoid negative implications that often surround the term “affordable housing.” The Rappahannock-Rapidan Regional Commission explains that changing the terminology “can assist in the education of who in the region needs housing and their role in shaping the overall economy.”<sup>15</sup>

The Rappahannock-Rapidan Regional Commission states that attainable housing is needed to: “(1) better enable businesses to attract and retain workers; (2) ensure there are residents to support school enrollment, local volunteer organizations, and community group membership; (3) establish a larger customer base of year-round residents for local businesses; and (4) create a stronger sense of place that is attractive to both current and potential residents.”<sup>16</sup> In the study, two county recommendations are to increase and maintain attainable housing stock and address negative perceptions around attainable housing.<sup>17</sup> Lastly, the Rappahannock-Rapidan Regional Commission conducted a zoning ordinance review for best practices that encourage attainable housing and concluded that both Fauquier County and the Town of Warrenton have “amenable zoning practices to encourage attainable housing.”<sup>18</sup>

## OVERVIEW OF THE FAUQUIER HABITAT HAITI STREET NEIGHBORHOOD PROJECT

### Habitat for Humanity International

Habitat for Humanity is an organization that partners with people in communities in the United States and around the world to build and improve the places individuals call home.<sup>19</sup> The organization advocates for affordable housing and supports sustainable and transformative development.

A central feature of Habitat’s model is working in partnership with the people the organization serves. Specifically, volunteers work with the individuals and families who will own the homes being built.<sup>20</sup> For a one-adult family, future homeowners build alongside volunteers for about 250 hours.<sup>21</sup> For families with two or more adults, the future homeowners provide about 500 hours.<sup>22</sup>

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<sup>15</sup> *Id.* at 6.

<sup>16</sup> *Id.* at 5.

<sup>17</sup> *Id.* at 11.

<sup>18</sup> *Id.*

<sup>19</sup> Our Mission, Vision, and Principles, HABITAT FOR HUMANITY, <https://www.habitat.org/about/mission-and-vision> (last visited Oct. 25, 2021).

<sup>20</sup> *Mission and History*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/who-we-are/> (last visited Oct. 25, 2021).

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

In addition, all attend homeownership classes, which cover topics, such as finance and home repair.<sup>23</sup>

Habitat for Humanity's efforts also include neighborhood revitalization.<sup>24</sup> The organization uses an asset-based community development model for this work.<sup>25</sup> For this model, residents in a particular neighborhood are the primary stakeholders and create "a collective vision for an improved quality of life in their neighborhood."<sup>26</sup> For neighborhood revitalization, Habitat for Humanity works with local residents, community leaders, and organizations to address the unique issues and concerns of a particular neighborhood.<sup>27</sup> Habitat for Humanity chooses to use this model for neighborhood revitalization because the organization believes that "building houses alone does not fix the systemic, generational problems that plague underserved communities." Moreover, the organization believes that without working with the community and understanding local issues, any work will be "unsuccessful as there is no sense of ownership or agency on the part of residents and other stakeholders."<sup>28</sup>

## Fauquier Habitat for Humanity

The Fauquier Habitat affiliate was created in 1991 and serves both Fauquier and Rappahannock counties in Virginia.<sup>29</sup> Fauquier Habitat uses the Habitat International partnership housing model to serve as the general contractor to build new houses and rehabilitate and revitalize the existing housing stock in these counties. Fauquier Habitat also has a neighborhood revitalization program and uses the Habitat International asset-based community development model for those projects.<sup>30</sup>

Fauquier Habitat emphasizes that its work is "a hand up, not a hand out to low-income families."<sup>31</sup> For example, families have to show their ability to pay a mortgage.<sup>32</sup> Additionally, potential homeowners must take classes and complete certain tasks before they can submit an application

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<sup>23</sup> *Id.*

<sup>24</sup> *Neighborhood revitalization*, HABITAT FOR HUMANITY, <https://www.habitat.org/our-work/neighborhood-revitalization> (last visited Oct. 25, 2021).

<sup>25</sup> *Neighborhood revitalization*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/what-we-do/programs/neighborhood-revitalization.html> (last visited Oct. 25, 2021).

<sup>26</sup> *Id.*

<sup>27</sup> *Neighborhood revitalization*, HABITAT FOR HUMANITY, <https://www.habitat.org/our-work/neighborhood-revitalization> (last visited Oct. 25, 2021).

<sup>28</sup> *Neighborhood revitalization*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/what-we-do/programs/neighborhood-revitalization.html> (last visited Oct. 25, 2021).

<sup>29</sup> *Mission & History*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/who-we-are/> (last visited Oct. 25, 2021).

<sup>30</sup> *Neighborhood revitalization*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/what-we-do/programs/neighborhood-revitalization.html> (last visited Oct. 25, 2021).

<sup>31</sup> *Mission and History*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/who-we-are/> (last visited Oct. 25, 2021).

<sup>32</sup> *Newsroom*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/news-events/> (last visited Oct. 25, 2021).

for a home through Habitat. By doing this, Fauquier Habitat works to give people not only a house, but also the tools to be an effective homeowner.

## Haiti Street Neighborhood Project

Among its neighborhood revitalization projects, Fauquier Habitat is currently working with a neighborhood in Fauquier County that is located both on and adjacent to Haiti Street/Eva Walker Park (pronounced “Hay-ti”) in Warrenton, Virginia.<sup>33</sup> The first homes in the area were built in 1869.<sup>34</sup> It is a historically Black neighborhood.<sup>35</sup> The Eva Walker Park was named after local resident Eva Walker who was both an entrepreneur and civil rights activist.

In 2017, Fauquier Habitat launched the Haiti Neighborhood Revitalization Initiative. This initiative addresses quality of life and housing issues for the Haiti Street area.<sup>36</sup> The goal of the initiative is to “preserve Haiti Street history while ensuring quality affordable housing.”<sup>37</sup>

The affordable housing and environmental foci of the project are discussed in more detail in subsequent sections.

## HOUSING

In July 2019, the PATH Foundation awarded Fauquier Habitat \$82,718.89 for projects that improve the quality of life in the Haiti Street/Eva Walker Park neighborhood. The PATH Foundation is an organization that provides grants to nonprofits and governmental agencies who are bettering the health and vitality of Fauquier, Rappahannock, and Culpeper counties in Virginia.<sup>38</sup> Prior to receiving this grant, Fauquier Habitat had already been working in this neighborhood to learn more about residents’ needs, build relationships, and establish trust.

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<sup>33</sup> *Neighborhood Revitalization*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/what-we-do/programs/neighborhood-revitalization.html> (last visited Oct. 25, 2021).

<sup>34</sup> *Newsroom*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/news-events/> (last visited Oct. 25, 2021).

<sup>35</sup> *Neighborhood Revitalization*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/what-we-do/programs/neighborhood-revitalization.html> (last visited Oct. 25, 2021).

<sup>36</sup> Fauquier Habitat Launches Haiti Street Revitalization, FAUQUIER NOW (Mar. 23, 2017), [https://www.fauquiernow.com/fauquier\\_news/entry/fauquier-habitat-launches-neighborhood-revitalization-initiative-2017](https://www.fauquiernow.com/fauquier_news/entry/fauquier-habitat-launches-neighborhood-revitalization-initiative-2017).

<sup>37</sup> *Newsroom*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/news-events/> (last visited Oct. 25, 2021).

<sup>38</sup> PATH FOUNDATION, <https://pathforyou.org/> (last visited Oct. 25, 2021); PATH FOUNDATION, [https://pathforyou.org/grant/?\\_sft\\_grant\\_year=2019](https://pathforyou.org/grant/?_sft_grant_year=2019) (last visited Oct. 25, 2021); *PATH Foundation announces more than \$755,000 in program and planning grants*, FAUQUIER TIMES (July 16, 2019), [https://www.fauquier.com/news/path-foundation-announces-more-than-755-000-in-program-and-planning-grants/article\\_a41fab34-a760-11e9-a462-df5dec95fc31.html](https://www.fauquier.com/news/path-foundation-announces-more-than-755-000-in-program-and-planning-grants/article_a41fab34-a760-11e9-a462-df5dec95fc31.html).



In September 2019, the PATH Foundation awarded Fauquier Habitat an additional \$1,050,000 for the Haiti Neighborhood Revitalization Initiative.<sup>39</sup> This second grant was allocated to acquire and renovate a large part of the Haiti Street area to create affordable housing and neighborhood stability.<sup>40</sup>

With the help of PATH Foundation grants, in 2019, Fauquier Habitat bought five properties on Haiti Street consisting of nine living spaces.<sup>41</sup> With this purchase, Fauquier Habitat then owned a total of 11 properties comprising 19 housing units.<sup>42</sup> Fauquier Habitat had a sense of urgency for the acquisition of these properties since Haiti Street is located near the Warrenton downtown and is adjacent to a historic area that would have driven gentrification. Fauquier Habitat's Executive Director noted that the acquisition allowed the organization to beat "potential gentrification of the neighborhood, which most often means displacement of people, further escalation of housing prices, and the economic erosion of affordability in the county."<sup>43</sup> By March 2022, Fauquier Habitat will have built 13 homes on Haiti Street. Of these homes, three homes represent a new generation of construction.

Since the acquisition, Fauquier Habitat has been working with the Haiti Street neighborhood to maintain trust. At the end of 2021, Fauquier Habitat was in the process of building single-family homes in the neighborhood with the goal of zero-household displacement. Two families were placed in these homes, and three more families will likely be placed in homes by the end of 2022. Fauquier Habitat anticipates being done with construction by the end of 2024/early 2025.

In the future, Fauquier Habitat intends to place the homes in a new state land trust, which includes a shared equity model.<sup>44</sup> The Virginia Statewide Community Land Trust (VSCLT) is a nonprofit

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<sup>39</sup> PATH FOUNDATION, [https://pathforyou.org/grant/?\\_sft\\_grant\\_year=2019](https://pathforyou.org/grant/?_sft_grant_year=2019) (last visited Oct. 25, 2021).

<sup>40</sup> *Id.*

<sup>41</sup> *Newsroom*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/news-events/> (last visited Oct. 25, 2021); *With PATH grant, Habitat for Humanity buys five Haiti Street properties*, FAUQUIER TIMES (Nov. 8, 2019), [https://www.fauquier.com/news/with-path-grant-habitat-for-humanity-buys-five-haiti-street-properties/article\\_edee31d4-0261-11ea-be48-33521302e86f.html](https://www.fauquier.com/news/with-path-grant-habitat-for-humanity-buys-five-haiti-street-properties/article_edee31d4-0261-11ea-be48-33521302e86f.html); *Habitat buys 9 Haiti St. dwellings for \$778,000*, FAUQUIER NOW (Nov. 12, 2019), [https://www.fauquiernow.com/fauquier\\_news/article/fauquier-habitat-buys-9-haiti-st-dwellings-for-778000-2019](https://www.fauquiernow.com/fauquier_news/article/fauquier-habitat-buys-9-haiti-st-dwellings-for-778000-2019).

<sup>42</sup> *With PATH grant, Habitat for Humanity buys five Haiti Street properties*, FAUQUIER TIMES (Nov. 8, 2019), [https://www.fauquier.com/news/with-path-grant-habitat-for-humanity-buys-five-haiti-street-properties/article\\_edee31d4-0261-11ea-be48-33521302e86f.html](https://www.fauquier.com/news/with-path-grant-habitat-for-humanity-buys-five-haiti-street-properties/article_edee31d4-0261-11ea-be48-33521302e86f.html). Note, another news article states that 20 housing units were encompassed by this purchase. *Habitat buys 9 Haiti St. dwellings for \$778,000*, FAUQUIER NOW (Nov. 12, 2019), [https://www.fauquiernow.com/fauquier\\_news/article/fauquier-habitat-buys-9-haiti-st-dwellings-for-778000-2019](https://www.fauquiernow.com/fauquier_news/article/fauquier-habitat-buys-9-haiti-st-dwellings-for-778000-2019). Regardless, the total number of housing units in 2019 was either 19 or 20.

<sup>43</sup> *Newsroom*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/news-events/> (last visited Oct. 25, 2021); *With PATH grant, Habitat for Humanity buys five Haiti Street properties*, FAUQUIER TIMES (Nov. 8, 2019), [https://www.fauquier.com/news/with-path-grant-habitat-for-humanity-buys-five-haiti-street-properties/article\\_edee31d4-0261-11ea-be48-33521302e86f.html](https://www.fauquier.com/news/with-path-grant-habitat-for-humanity-buys-five-haiti-street-properties/article_edee31d4-0261-11ea-be48-33521302e86f.html).

<sup>44</sup> PATH FOUNDATION, [https://pathforyou.org/grant/?\\_sft\\_grant\\_year=2019](https://pathforyou.org/grant/?_sft_grant_year=2019) (last visited Oct. 25, 2021).

organization created in 2021 “that seeks to develop and maintain permanently affordable homeownership opportunities for low and moderate-income households.”<sup>45</sup> The VSCLT serves the entire state of Virginia and every Habitat affiliate in Virginia can participate in the VSCLT.<sup>46</sup>

Fauquier Habitat is interested in considering how to transition the Haiti Street homes and future homes it acquires into the VSCLT to make homes permanently affordable. Doing this would also allow Fauquier Habitat to invest more money into the quality and construction of the homes, rather than in the purchase and ownership of land. Housing upgrades help reduce overall housing and maintenance costs as well as avoiding worries about gentrification and displacement.

## ENVIRONMENT

Fauquier Habitat partnered with Piedmont Environmental Council, a consistent supporter of Fauquier Habitat’s work, to help with the Haiti Neighborhood Revitalization Initiative.<sup>47</sup> Piedmont Environmental Council is a Virginia-based nonprofit that focuses on protecting and promoting the rural economy, natural resources, history, and beauty of the Virginia Piedmont area.<sup>48</sup> Fauquier Habitat requested the Piedmont Environmental Council’s support with the landscaping for one home being built in the Haiti neighborhood. This particular home was a two-level house located at 116 Haiti Street. The Piedmont Environmental Council notes that this home “represents Habitat’s new focus on building structures that pay homage to traditional architecture in the community.”<sup>49</sup> The partnership resulted in Piedmont Environmental Council designing the landscape and transforming the “home’s small yard into vibrant, low-maintenance landscape with 217 native plants.”<sup>50</sup> Additionally, the Piedmont Environmental Council also helped build a community garden for the neighborhood.<sup>51</sup>

Another environmental consideration Fauquier Habitat makes is building energy efficient homes as a way for the communities they work with to be resilient to climate change. Fauquier Habitat also promotes energy efficiency as a way of reducing homeownership costs for homeowners.

<sup>45</sup> *About*, VA STATEWIDE CMTY. LAND TRUST, <https://www.vsclt.org/about/> (last visited Nov. 29, 2021).

<sup>46</sup> *Habitat Affiliates*, VA STATEWIDE CMTY. LAND TRUST, <https://www.vsclt.org/habitat-affiliates/> (last visited Nov. 29, 2021).

<sup>47</sup> *Fauquier Habitat Goes Native Around Haiti House*, PIEDMONT ENV’T. COUNCIL (Dec. 16, 2020), <https://www.pecva.org/resources/publications/piedmont-view/fauquier-habitat-goes-native-around-haiti-house/>.

<sup>48</sup> PIEDMONT ENVTL. COUNCIL, <https://www.pecva.org> (last visited Dec. 6, 2021).

<sup>49</sup> *Fauquier Habitat Goes Native Around Haiti House*, PIEDMONT ENV’T. COUNCIL (Dec. 16, 2020), <https://www.pecva.org/resources/publications/piedmont-view/fauquier-habitat-goes-native-around-haiti-house/>.

<sup>50</sup> *Id.*

<sup>51</sup> Alisa Booze Troetschel, *Fauquier Habitat makes a difference in Warrenton neighborhood*, FAUQUIER TIMES (Aug. 17, 2021), [https://www.fauquier.com/news/fauquier-habitat-makes-a-difference-in-warrenton-neighborhood/article\\_2168a15c-f105-11e9-b278-c3dfc6cf04ae.html](https://www.fauquier.com/news/fauquier-habitat-makes-a-difference-in-warrenton-neighborhood/article_2168a15c-f105-11e9-b278-c3dfc6cf04ae.html).

## COMMUNITY ENGAGEMENT

After Fauquier Habitat acquired the homes in 2019, it started a strategic planning process.<sup>52</sup> This process was initiated to help identify the ways to best use the properties and to allow neighborhood residents, Fauquier Habitat, local officials, architects, consultants, Virginia Housing, Virginia Community Development Corporation, and others to work together to decide next steps.

Since 2017, Fauquier Habitat has also worked with the community to identify goals for the Haiti Street neighborhood.<sup>53</sup> As a result of those community meetings, Habitat created training courses for the community that tackle leadership, organization, communication, and advocacy skills.<sup>54</sup> Additionally, cleanup days was one goal identified by the community. Fauquier Habitat currently hosts community meetings for residents twice a month.<sup>55</sup>

## FUNDING

In July 2019, the PATH Foundation awarded Fauquier Habitat \$82,718.89 for projects that improve the quality of life in the Haiti Street neighborhood, and in September 2019, the PATH Foundation awarded Fauquier Habitat \$1,050,000 for the Haiti Neighborhood Revitalization Initiative. The PATH Foundation is a health legacy foundation. It was created through the sale of Fauquier Health System, the local nonprofit health system, to LifePoint, a for-profit national health entity. PATH partnered with LifePoint and held a public charity status for five years, but now has a private foundation status. PATH's primary service areas are Fauquier, Culpeper, and Rappahannock counties and has a goal of improving the health of these communities.

In addition, in 2019, Fauquier Habitat received a community impact grant from Virginia Housing. Fauquier Habitat received \$100,000 and will use the money to determine what housing options are best for the neighborhood. Community impact grants provide "local governments resources towards community revitalization and encourages the development of mixed-use/mixed-income properties, which often anchor community development efforts and spur economic growth."<sup>56</sup>

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<sup>52</sup> *Newsroom*, FAUQUIER HABITAT FOR HUMANITY, <https://www.fauquierhabitat.org/news-events/> (last visited Oct. 25, 2021).

<sup>53</sup> Alisa Booze Troetschel, *Fauquier Habitat makes a difference in Warrenton neighborhood*, FAUQUIER TIMES (Aug. 17, 2021), [https://www.fauquier.com/news/fauquier-habitat-makes-a-difference-in-warrenton-neighborhood/article\\_2168a15c-f105-11e9-b278-c3dfc6cf04ae.html](https://www.fauquier.com/news/fauquier-habitat-makes-a-difference-in-warrenton-neighborhood/article_2168a15c-f105-11e9-b278-c3dfc6cf04ae.html).

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> *Grant Program Areas*, VA HOUSING, <https://www.vhda.com/BusinessPartners/GovandNon-Profits/CommunityOutreach/Pages/Grant-Program-Areas.aspx> (last visited Nov. 29, 2021).

## NEXT STEPS

As of 2022, families are in the process of being placed in homes on Haiti Street. Fauquier Habitat's goal is zero-displacement. Currently, Fauquier Habitat is constructing about three homes a year with the hope to scale up that number in the future. Fauquier Habitat anticipates being done with construction by the end of 2024/early 2025.

Fauquier Habitat's commitment is to the Haiti Street neighborhood and supporting residents as much as possible. However, Fauquier Habitat acknowledges that every problem cannot be solved by only providing housing support to a community. Partnerships with other social organizations are also necessary to address other local issues, such as poverty and crime.

Currently, the homes on Haiti Street are all single-family homes. With the community impact grant, Fauquier Habitat collaborated with an architect to create housing design standards that are compatible with the historic character of the neighborhood.<sup>57</sup> Additionally, Fauquier Habitat will be analyzing whether the community wants more rental units and/or homeownership opportunities.

Overall, Fauquier Habitat hopes to build a model that can be replicated in other communities in Virginia and emphasizes that it starts with buy-in from residents and having everyone be mutually accountable to one another.

## CONSIDERATIONS AND LESSONS LEARNED

Fauquier Habitat's work with the Haiti Street neighborhood is a good example of how to create lasting affordable housing, building trust and engaging with communities, and preparing future homeowners for successful home ownership.

To achieve equitable housing, supportive planning and zoning actions are needed at the local level. As of January 2022, there are ongoing discussions with the Town of Warrenton about increasing the density in the Haiti Street neighborhood in order to make this new development possible. Regardless, the town's comprehensive plan already recognizes the need for such a density increase in its land use maps, potentially paving the way for this zoning update.<sup>58</sup>

However, the work in Haiti Street could not have been accomplished without funding from the PATH Foundation and Fauquier Habitat purchasing the land in the neighborhood, constructing the

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<sup>57</sup> Alisa Booze Troetschel, *Fauquier Habitat makes a difference in Warrenton neighborhood*, FAUQUIER TIMES (Aug. 17, 2021), [https://www.fauquier.com/news/fauquier-habitat-makes-a-difference-in-warrenton-neighborhood/article\\_2168a15c-f105-11e9-b278-c3dfc6cf04ae.html](https://www.fauquier.com/news/fauquier-habitat-makes-a-difference-in-warrenton-neighborhood/article_2168a15c-f105-11e9-b278-c3dfc6cf04ae.html).

<sup>58</sup> See TOWN OF WARRENTON, VA., PLAN WARRENTON 2040 (Apr. 13, 2021), available at <https://www.warrentonva.gov/DocumentCenter/View/200/April-13-2021-Adopted-Comprehensive-Plan-PDF?bidId=>; TOWN OF WARRENTON, V.A., TOWN OF WARRENTON FUTURE LAND USE (Apr. 3, 2008), available at <https://www.warrentonva.gov/DocumentCenter/View/204/Future-Land-Use-Map-PDF?bidId=>.

new homes, and building and maintaining trust with community members. As this example shows, a variety of government and nongovernmental entities should be brought to the table to implement different parts of a project. Creating public-private-nonprofit partnerships has been key to many parts of Fauquier Habitat's work.

Community engagement and buy-in is also critical to achieving true equitable housing. Nonetheless, it is important to recognize that all priority needs in a community will not be solved by providing housing alone. Therefore, partnerships with other social organizations are also key to address other social and economic issues a community faces.

Moreover, though individual strategies and models must be founded in grassroots efforts, those models can be scaled up to also function across different service areas and regions. In Warrenton, Fauquier Habitat is starting small in the Haiti Street neighborhood. The hope is that Fauquier Habitat can work in other counties in Virginia — with the support of additional regional Habitat organizations and other partners — to influence more efforts to increase affordable housing options and revitalize underserved communities elsewhere.

The Rappahannock-Rapidan Regional Housing Study, of which Fauquier Habitat was a part, is another example of replicating work to address “attainable housing” on a regional scale. Other jurisdictions, especially those dealing with regional commuters for work — like in the District of Columbia-Maryland-Virginia or “DMV” area — can consider similar regional-scale work and planning opportunities.

Further, the scalability of Fauquier Habitat's work may be positively influenced by the new statewide community land trust established in Virginia. Community land trusts are an innovative way to create permanent affordable housing in communities. Fauquier Habitat's involvement with the VSCLT is a good example of a way to invest more money into the quality and construction of affordable housing and minimizing worries about gentrification and displacement.

Lastly, by requiring potential homeowners to take classes and complete certain tasks before they can submit an application for a home, Fauquier Habitat not only provides homes, but prepares the community for effective, long-term homeownership. Efforts like this can create long-term community capacity to build individual and neighborhood-wide resilience.

# City of Gonzales, Louisiana

## Gonzales Comprehensive Plan

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### EXECUTIVE SUMMARY

The City of Gonzales, Louisiana is located in the eastern part of Ascension Parish and centrally located between Baton Rouge and New Orleans.<sup>1</sup> Facing increasing retail and commercial development, the city updated its local comprehensive plan to accommodate rapid growth.

The Gonzales Comprehensive Plan was created in collaboration with Gonzales's residents, city staff, various stakeholders, and Gonzales's elected officials.<sup>2</sup> In the plan, the city presents a clear strategic framework for the future growth of Gonzales.<sup>3</sup> The city addresses Gonzales's land use and urban design, mobility and transportation, housing, economy, quality of life and city services, and redevelopment of its downtown area.<sup>4</sup> The plan's affordable housing considerations include diversifying the options and affordability of the housing stock in Gonzales. The plan's environmental considerations include emphasizing the city's green spaces and community amenities and benefits, and reducing future flood risk/building overall community resilience.

The plan is an example of a local comprehensive plan that addresses growth, while also balancing community needs and environmental conservation in an increasingly suburban area that is experiencing high demands for new development.

### BACKGROUND

The City of Gonzales is located in the eastern part of Ascension Parish.<sup>5</sup> Gonzales is a relatively small city with about 10,957 people residing there as of 2019 and has a majority of Black

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<sup>1</sup> Ctr. for Planning Excellence et al., Gonzales Comprehensive Plan 24 (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf); *Gonzales Comprehensive Plan*, CTR. FOR PLANNING EXCELLENCE, <https://www.cpex.org/gonzales> (last visited Sept. 27, 2021).

<sup>2</sup> *Gonzales Comprehensive Plan*, CTR. FOR PLANNING EXCELLENCE, <https://www.cpex.org/gonzales> (last visited Sept. 27, 2021).

<sup>3</sup> Ctr. for Planning Excellence et al., Gonzales Comprehensive Plan 9, 14 (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf).

<sup>4</sup> Ctr. for Planning Excellence et al., Gonzales Comprehensive Plan 5 (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf); *Gonzales Comprehensive Plan*, CTR. FOR PLANNING EXCELLENCE, <https://www.cpex.org/gonzales> (last visited Sept. 27, 2021).

<sup>5</sup> Ctr. for Planning Excellence et al., Gonzales Comprehensive Plan 24 (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf).



residents.<sup>6</sup> Gonzales has 2,157 acres of developed land.<sup>7</sup> About half of the city's developed land is used for residential purposes (a majority single-family housing), while the other half is used for commercial and industrial purposes.<sup>8</sup>

Ascension Parish is rapidly developing and Gonzales itself is located between Baton Rouge and New Orleans.<sup>9</sup> Thus, the city has had to plan to confront this growth, especially to balance residential and commercial growth with environmental conservation.<sup>10</sup>

## OVERVIEW OF THE GONZALES COMPREHENSIVE PLAN

The Gonzales Comprehensive Plan presents a strategic framework for the future development of Gonzales.<sup>11</sup> It encompasses a vision of Gonzales articulated by many of its citizens and provides the city with comprehensive guidelines for development.<sup>12</sup>

The plan was developed for the City of Gonzales. Specifically, it was prepared by the Center for Planning Excellence (CPEX), with support from DRW Planning Studio and ECONorthwest.<sup>13</sup> The plan was officially released in August 2015, and both the City of Gonzales Planning and Zoning Commission and the Gonzales City Council adopted the plan that same month.<sup>14</sup>

The city's previous comprehensive plan was released in 1997 and did not take into consideration the rapid development that has taken place since then, in addition to future development in Gonzales.<sup>15</sup> The 2015 plan includes various predictions of population growth in Gonzales, which are based on demographics and local trends. The city predicts that Gonzales could have an annual average growth rate of three percent.<sup>16</sup> This means that there would be about 8,728 new residents by 2035 and about 3,583 new households will be needed by this time.<sup>17</sup> To compare, from 2000

<sup>6</sup> *Gonzales City, Louisiana, U.S. CENSUS BUREAU* (July 1, 2019), <https://www.census.gov/quickfacts/gonzalescitylouisiana>.

<sup>7</sup> Ctr. for Planning Excellence et al., *Gonzales Comprehensive Plan 44* (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf).

<sup>8</sup> *Id.*

<sup>9</sup> *Gonzales Comprehensive Plan*, CTR. FOR PLANNING EXCELLENCE, <https://www.cplex.org/gonzales> (last visited Sept. 27, 2021).

<sup>10</sup> *Id.*

<sup>11</sup> Ctr. for Planning Excellence et al., *Gonzales Comprehensive Plan 20* (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf).

<sup>12</sup> *Id.*

<sup>13</sup> Ctr. for Planning Excellence et al., *Gonzales Comprehensive Plan* (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 9, 14.

<sup>16</sup> *Id.* at 36.

<sup>17</sup> *Id.*

and 2013, Gonzales's annual average growth rate was only at about 1.8 percent.<sup>18</sup> For future growth, the city hopes to preserve its local character and culture while also offering a high quality of life to its current and future residents.<sup>19</sup> Notably, the plan includes a "Vision Map" to illustrate what the Gonzales of the future can look like in terms of where the city will direct future land use in the face of anticipated population growth.<sup>20</sup>

At the start of the plan, guiding principles that represent the core values of Gonzales residents and stakeholders are listed.<sup>21</sup> The principles generally have a focus on equity and preserving local character in the face of growth and new development (e.g., "Provide a range of housing types for people of all income levels from high-end to affordable" and "Ensure quality new development that is balanced to provide a healthy community").<sup>22</sup> The plan's guidelines are then organized into five sections: (1) Land Use and Community Character; (2) Downtown: The Heart of Gonzales; (3) Transportation; (4) Housing and Neighborhoods; and (5) Prosperous Economy.

Each section is further broken down into more discrete outcomes, goals, and actions. Outcomes are defined as "the big ideas that support the citizen's vision. They capture big picture changes that must occur to implement the plan."<sup>23</sup> Goals are defined as those used to "establish specific, measurable, attainable and realistic objectives that guide plan implementation by ensuring that stakeholders are clear about what must happen to move Gonzales toward the vision."<sup>24</sup> Lastly, actions are defined as those that "delineate the steps needed to achieve the goals."<sup>25</sup> Overall, the plan has 19 outcomes, 54 goals, and 155 actions.

The plan features an emphasis on affordable housing and environmental considerations across all five sections reflecting an interdisciplinary look at future development to guide comprehensive decisionmaking in the face of continued growth in an increasingly suburbanized area.

Regarding affordable housing, the plan has one outcome, two goals, and five action items. The outcome, goals, and actions recognize that Gonzales needs more affordable housing and presents steps for breaking down the barriers to creating affordable housing in Gonzales.

Regarding the environment, the plan has five goals and 12 action items. The goals and actions recognize that Gonzales has many environmental amenities. The plan outlines ways the city can develop in floodplains while minimizing flood risk and environmental consequences, capturing stormwater, and maintaining and increasing access to open and natural areas.

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<sup>18</sup> *Id.*

<sup>19</sup> *Id.* at 9.

<sup>20</sup> *Id.* at 8.

<sup>21</sup> *Id.* at 5.

<sup>22</sup> *Id.*

<sup>23</sup> *Id.* at 56, 82, 102, 120, 136.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

The affordable housing and environmental foci of the plan are discussed in more detail in subsequent parts.

## HOUSING

Even prior to accounting for new growth, the city begins its housing characterization in the plan by explicitly acknowledging ongoing challenges. The plan provides that there is a lack of affordable and rental housing in Gonzales.<sup>26</sup> Specifically, around 70 percent of rental households are cost burdened.<sup>27</sup> In other words, these households pay 30 percent or more of their overall income to housing. Additionally, around one-fourth of households earn less than \$25,000 per year. This means that these households cannot afford fair market rent (i.e., \$752 for a two-bedroom dwelling).

In the plan, the city emphasizes the deficit in the amount of land that is appropriately zoned for future multifamily housing development, in addition to a lack of opportunity for the development of diverse housing options.<sup>28</sup> The city explains that Gonzales needs more affordable housing options of all kinds to address the housing crisis, and this need will only increase with time.<sup>29</sup> The plan suggests that high-density housing developments allow for more housing units and lower cost to taxpayers.<sup>30</sup> Furthermore, it “spreads out the cost of land among more homes” while creating more affordable housing options.<sup>31</sup>

With that background, one relevant guiding principle in the plan is to “[p]rovide a range of housing types for people of all income levels from high-end to affordable.”<sup>32</sup> Building on this guiding principle in the Land Use and Community Character section, the following action items for affordable housing are listed, which fall under different outcomes and goals:

1. *Provide more housing choices, such as townhomes, smaller units, and affordable housing for youth, retail workers, and the aging population;*<sup>33</sup>
2. *Identify barriers to multifamily and affordable housing development in the development code;*<sup>34</sup> and

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<sup>26</sup> *Id.* at 114.

<sup>27</sup> *Id.* at 37.

<sup>28</sup> *Id.* at 114.

<sup>29</sup> *Id.* at 115.

<sup>30</sup> *Id.* at 118.

<sup>31</sup> *Id.*

<sup>32</sup> *Id.* at 5.

<sup>33</sup> *Id.* at 56.

<sup>34</sup> *Id.* at 57.

3. *Identify and implement programs to encourage affordable home ownership and owner occupancy in areas with high concentrations of rental single-family housing.*<sup>35</sup>

In addition, in the Housing section of the plan, the city provides for similar and related goals around affordable housing:

1. *Identify barriers to multifamily and affordable housing development in the zoning and subdivision ordinances.*<sup>36</sup>

To achieve this first goal, the city's action items include that Gonzales should analyze the obstacles to developing multifamily and affordable housing in the city's development code.<sup>37</sup> In order to do this, Gonzales should look at building height limits and parking requirements, among other things, and reduce or remove obstacles that exist for this kind of development. Lastly, Gonzales should look into different partnerships that would promote mixed-income housing.

2. *Work with for-profit and non-profit developers to encourage new mixed-income developments across the city.*<sup>38</sup>

To achieve the second goal, the city's action item is that Gonzales should promote development of diverse housing options, which include multifamily units and townhomes.<sup>39</sup> Compared to single family homes, the city explains that these types of units have lower energy use per unit.

## ENVIRONMENT

Gonzales wants to retain and build on its environmental amenities.<sup>40</sup> Gonzales has many parks and lots of natural and open space land. The plan emphasizes that the city wants to maintain its “environmentally sensitive areas” and guarantee its residents access to natural amenities.

To achieve this vision and promote environmental conservation and community spaces, two relevant guiding principles are to “[e]nsure quality new development that is balanced to provide a healthy community” and to minimize “potential flood risks.”<sup>41</sup> Building on these principles, in the Land Use and Community Character section, the city provides five goals:

1. *Sensitive areas such as wetlands are protected and best practices are used when developing in floodplain areas.*<sup>42</sup>

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<sup>35</sup> *Id.* at 59.

<sup>36</sup> *Id.* at 123.

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> *Id.* at 132.

<sup>41</sup> *Id.* at 5.

<sup>42</sup> *Id.* at 59.

To achieve the first goal, the city's action items include Gonzales prioritizing using "undeveloped floodplain areas . . . for storm water conveyance and retention," and for development within these areas, only using management practices that minimize development impacts.<sup>43</sup> The plan also states that Gonzales should improve its floodplain regulations so that they implement the coastal best practices. Lastly, on developed land, the city suggests that using cluster development techniques or higher densities can preserve open floodplain areas.

2. *Capture stormwater through landscape design, green infrastructure practices, and other environmentally-friendly techniques.*<sup>44</sup>

To achieve the second goal, the city's action items are that Gonzales should work "with businesses and property owners to implement innovative stormwater solutions as demonstration projects" (e.g., a project that creates additional capacity for the city's sewer system) as well as create "stormwater management standards that address stormwater quality treatment and stormwater conveyance/detention."<sup>45</sup> For the stormwater management standards, the city says that the standards should target "retaining natural site drainage and reducing impervious pavement coverage;" "[i]mplement[ing] a green infrastructure improvements program to reduce runoff in areas with drainage issues;" creating "landscaping standards to appropriately manage runoff created by impervious surfaces;" encouraging "low impact development strategies and designs" for "manag[ing] stormwater runoff," which include but are not limited to using "vegetated swales, biofilters, eco-roofs, green streets, pervious pavement;" and "[d]evelop[ing] alternative street designs and standards that allow for greater filtration and more appropriate stormwater conveyance."<sup>46</sup>

3. *Protect open space and natural and sensitive areas.*<sup>47</sup>

To achieve the third goal, the city's action items are that Gonzales should preserve open spaces and sensitive areas as natural recreation areas.<sup>48</sup> The city outlines that Gonzales should create a plan for this and also partner with the private sector to create passive parks, trails, and natural areas.

4. *Provide easily accessible parks and open space in neighborhoods.*<sup>49</sup>

To achieve the fourth goal, the city's action items are that Gonzales should expand the amount of trails in the city, access to trails, and maintain already existing trails.<sup>50</sup>

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<sup>43</sup> *Id.*

<sup>44</sup> *Id.*

<sup>45</sup> *Id.* at 59–60.

<sup>46</sup> *Id.* at 60.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*

5. *Develop public-private partnerships to maintain and expand parks and recreational facilities throughout Gonzales.*<sup>51</sup>

To achieve the fifth goal, the city's action items are that Gonzales should develop an adopt-a-park program.<sup>52</sup> This program would involve local organizations and school groups who would help maintain the city's parks and encourage civic pride. The city also suggests that they could host neighborhood work days, which support community caretaking of the parks.

Overall, the plan's environmental considerations include an emphasis on green spaces and community amenities and benefits, reducing future flood risk, and building overall community resilience, which will be especially important as climate change increases different types of flooding events in the future.

### Silverleaf Neighborhood Buyout Program

The Silverleaf neighborhood in Gonzales is an example of a neighborhood that was affected by rising waters and increased flooding events in Louisiana. Gonzales worked with the neighborhood to implement the city's first buyout to address these threats, relocate residents to a safer area, and restore natural wetlands for their community, environmental, and risk-reduction benefits. This presents how Gonzales used one flood mitigation tool to implement some of the goals in its comprehensive plan.

The Silverleaf neighborhood was built in 1988. Soon after, homeowners faced repetitive and frequent flooding events that damaged their homes. The low-lying neighborhood experienced "runoff pouring into streets and homes" during flooding.<sup>53</sup> Although Gonzales is located about 60 miles from the coast, rising waters still impacted the Silverleaf neighborhood. After a major storm hit the area in 2016 — also referred to throughout much of Louisiana as the "Great Floods of 2016" — residents attended a city public meeting and expressed concern that their neighborhood was constantly flooding even after more moderate storms.<sup>54</sup>

Initially, the city conducted studies to analyze whether there were tools or strategies that were both cost-effective and could reduce flooding; however, solutions like levees and pump installations were too expensive and would have had negative effects on nearby

<sup>51</sup> *Id.* at 61.

<sup>52</sup> *Id.*

<sup>53</sup> Jennifer Kay, *High Water Routs Inland Towns in Sign of Climate Change to Come*, BLOOMBERG LAW (Nov. 12, 2019, 6:01 AM), <https://news.bloomberglaw.com/environment-and-energy/high-water-routs-inland-towns-in-sign-of-climate-change-to-come>.

<sup>54</sup> Ellyn Couvillion, *Flooding nightmare over for residents of Silverleaf Street in Gonzales after federal buyout*, THE ADVOCATE (Oct. 10, 2020, 10:00 PM), [https://www.theadvocate.com/baton\\_rouge/news/communities/ascension/article\\_f7c31692-07fc-11eb-b8bf-e33ff1e41f38.html](https://www.theadvocate.com/baton_rouge/news/communities/ascension/article_f7c31692-07fc-11eb-b8bf-e33ff1e41f38.html).



communities.<sup>55</sup> Many of the Silverleaf residents also faced “debt from previous flood repairs, at a cost of roughly \$5 million.”<sup>56</sup> Ultimately, Gonzales officials and community residents identified buyouts as the preferred flood mitigation option. In general, a buyout is when a government or other entity purchases a property from a willing seller, demolishes existing structures on the property, and prohibits future development and allows the property to naturally revert to open space in perpetuity.<sup>57</sup>

The city worked directly with the Louisiana Office of Community Development (OCD) and the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS) to implement the buyouts in the Silverleaf neighborhood. Together, OCD and NRCS provided almost \$20 million for this program. OCD contributed U.S. Housing and Urban Development’s Community Development Block Grant Mitigation funds.<sup>58</sup> The NRCS money was from a program dedicated to acquiring easements to protect wetlands on inland properties for rural conservation purposes. Such an easement restricts the land from being used for anything other than wetlands.

In addition, the state provided funding from the Restore Louisiana disaster recovery program to better enable residents to move to a safe, comparable new home.<sup>59</sup> Buyout participants usually receive the appraised pre-storm or -flood fair market value for their home. In Gonzales, Silverleaf property values increased between the time of the 2016 floods and when the homeowners accepted a buyout from the city in 2019. The state agreed to provide homeowners with a relocation payment above the fair market value of their homes that totaled the difference between the 2016 and 2019 appraised value of their homes. This supplemental money helped ease some of the financial burdens associated with the buyout process.

<sup>55</sup> Jennifer Kay, *High Water Routs Inland Towns in Sign of Climate Change to Come*, BLOOMBERG LAW (Nov. 12, 2019, 6:01 AM), <https://news.bloomberglaw.com/environment-and-energy/high-water-routs-inland-towns-in-sign-of-climate-change-to-come>.

<sup>56</sup> *Id.*

<sup>57</sup> See Katie Spidaliere & Annie Bennett, Georgetown Climate Ctr., *Voluntary Buyouts>Acquisition Tools*, MANAGED RETREAT TOOLKIT, <https://www.georgetownclimate.org/adaptation/toolkits/managed-retreat-toolkit/voluntary-buyouts.html> (last visited Nov. 17, 2021).

<sup>58</sup> See generally *Community Development Block Grant Mitigation Program*, HUD EXCHANGE, <https://www.hudexchange.info/programs/cdbg-mit/> (last visited Nov. 19, 2021) (“The Community Development Block Grant Mitigation (CDBG-MIT) Program is a unique and significant opportunity for eligible grantees to use this assistance in areas impacted by recent disasters to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses. Congress appropriated \$12 billion in CDBG funds in February 2018 specifically for mitigation activities for qualifying disasters in 2015, 2016, and 2017, and HUD was able to allocate an additional \$3.9 billion, bringing the amount available for mitigation to nearly \$16 billion.”); see also RESTORE LA., <https://www.restore.la.gov> (last visited Nov. 19, 2021).

<sup>59</sup> See generally RESTORE LA., <https://www.restore.la.gov> (last visited Nov. 19, 2021).

After more than three years, in 2020, the Silverleaf buyout program was completed and 41 property owners moved out of the neighborhood.<sup>60</sup> Most owners relocated to places in Gonzales and Ascension Parish. Since Silverleaf residents relocated in 2020, the former neighborhood has flooded at least five times. This underscores the significant need that existed to get people out of harm's way.

Post buyout, the demolition of structures and environmental restoration work is 100 percent completed as well. Over 2,000 native Louisiana trees have been planted on the now city-owned land and project closeout is finished.

Administratively, the process to relocate an entire neighborhood consisting of 41 homeowners would be challenging for any local government, let alone a city undertaking its first buyout program. This can be compounded by limited capacity at the municipal level, where staff often wear multiple hats. Some of the keys to success in Gonzales revolved around having a local champion and partners. Here, one city staff member, who largely led the entire buyout process on behalf of the city, was committed to providing flood-prone residents with a way out of their present circumstances. In addition, like with the local comprehensive plan, Gonzales once again sought support from the Center of Planning Excellence to handle the homeowner intake forms.

Another takeaway that enabled 100 percent of residents to participate in the buyout was the shared experiences between residents and the city. Many, if not all residents, were able to understand the devastation that flooding and disaster events can wreak on people individually and as a community. The staff lead in Gonzales, who did not live in the Silverleaf neighborhood, was able to establish and maintain trust with the residents due to shared experiences reflecting on the aftermath of Hurricane Katrina in 2005. When engaging people over what can be a challenging and often traumatic process, it is critical that those considering buyouts trust the government officials supporting them.

## COMMUNITY ENGAGEMENT

The city developed the plan's guiding principles through citizen engagement that then shaped the action items identified.<sup>61</sup>

<sup>60</sup> Ellyn Couvillion, *Flooding nightmare over for residents of Silverleaf Street in Gonzales after federal buyout*, THE ADVOCATE (Oct. 10, 2020, 10:00 PM), [https://www.theadvocate.com/baton\\_rouge/news/communities/ascension/article\\_f7c31692-07fc-11eb-b8bf-e33ff1e41f38.html](https://www.theadvocate.com/baton_rouge/news/communities/ascension/article_f7c31692-07fc-11eb-b8bf-e33ff1e41f38.html).

<sup>61</sup> Ctr. for Planning Excellence et al., *Gonzales Comprehensive Plan 4* (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf).

The city started by assembling a stakeholder committee composed of 19 Gonzales residents.<sup>62</sup> Each resident on the committee had a different background and expertise. The committee met monthly starting in 2014 to learn about the issues, like affordable housing and flood risks in Gonzales, and used that information to review drafts of the plan and provide opinions and feedback. The committee also participated and publicized public meetings. The committee was one way to connect stakeholder groups with the CPEX consultant team.

In addition to the committee, the plan's CPEX consultant team met with a diverse group of stakeholders, including Gonzales City staff, elected officials, school board members, and real estate and development professionals.<sup>63</sup> The purpose of these meetings was to talk with people who would be directly impacted by the plan. The meetings were used to help create the plan's guiding principles.

Beyond individual interviews, the consultant team also publicized and hosted three separate public meetings.<sup>64</sup> The three meetings included a visioning workshop, a downtown workshop, and an open house. The consultant team used outreach methods that they believed would get the highest amount of public participation for each of these meetings.

At the visioning workshop, attendees were asked to reflect on things they wanted for Gonzales, rather than what they assume will happen to the city in the future.<sup>65</sup> Attendees were divided into groups of ten with a facilitator. Each group was given maps of the Gonzales, markers, and colored paper that represented various types of development. With these materials, each group wrote down "their goals for the city's land use, development, housing and transportation." They also "outlined areas for preservation and revitalization, drew in new transportation infrastructure, and used chips to show where future development was desired in the following categories: civic, employment, open space and parks, mixed use, commercial, and residential." All groups showed their vision to the entire workshop and the maps were digitized post-workshop. The most common themes from each map were determined and the digitized formats of the maps were merged into one large Vision Map.

At the downtown workshop, attendees were asked to focus on the issue of revitalizing Gonzales's downtown area.<sup>66</sup> Participants were divided into groups of eight with a facilitator and were provided with large maps of the downtown area. Similar to the visioning workshop, all maps were digitized post-workshop, and the most common themes were determined. The digitized formats of the maps helped create the basis for the city's findings and recommendations for downtown revitalization, which are listed in the plan.

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<sup>62</sup> *Id.* at 15.

<sup>63</sup> *Id.*

<sup>64</sup> *Id.*

<sup>65</sup> *Id.* at 16.

<sup>66</sup> *Id.* at 18.

For the open house, to garner participation, a draft of the plan was sent out through email, put on the Gonzales city website, and provided at both Gonzales City Hall and the Gonzales section of the Ascension Parish Library.<sup>67</sup>

## NEXT STEPS

On August 3 and 24, 2015, the City Planning and Zoning Commission and City Council adopted the plan, respectively.<sup>68</sup> The plan is intended to be used as a guiding document for future development and is not regulatory in nature.<sup>69</sup>

Post-adoption, through the plan, the city created accountability measures for itself and the community to make the plan a living document that will guide future city actions. For example, one accountability measure is that the Planning and Zoning Commission and City Council will consider the plan before approving laws, ordinances, and regulations.<sup>70</sup> Furthermore, for future land use and development decisions, the city intends to present and cite to goals and actions in the plan that either do or do not support its decisions. Lastly, the city hopes that business owners, development and real estate professionals, and current and future Gonzales residents also refer to the plan. The aim is for the plan to provide these individuals with greater “predictability” for the city’s development decisions, in addition to encouraging higher quality development projects.<sup>71</sup>

In 2016, Gonzales updated Chapter 22 of the city’s municipal code as a direct result of the comprehensive plan’s implementation.<sup>72</sup> The chapter now states that the “zoning code is adopted for the purpose of guiding development in accordance with the City of Gonzales’s comprehensive plan and existing and future needs of the City of Gonzales in order to protect, promote and improve the public health, safety, morals, convenience, order, appearance, prosperity and general welfare.”<sup>73</sup>

## CONSIDERATIONS AND LESSONS LEARNED

For local policymakers, this is an example of designing a local comprehensive plan to address growth, while balancing community needs and environmental conservation in a rural area experiencing new demands for development. The Gonzales plan addresses community needs

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<sup>67</sup> *Id.* at 15.

<sup>68</sup> *Id.* at 4.

<sup>69</sup> Ctr. for Planning Excellence et al., Gonzales Comprehensive Plan (2015), available at [https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales\\_Comprehensive\\_Plan\\_08.24.15\\_web.pdf](https://gonzalesla.com/wp-content/uploads/2015/09/Gonzales_Comprehensive_Plan_08.24.15_web.pdf).

<sup>70</sup> *Id.* at 4.

<sup>71</sup> *Id.*

<sup>72</sup> CITY OF GONZALES, LA. CODE OF ORDINANCES § 33:4721(22-1)(a)(5), available at [https://library.municode.com/la/gonzales/codes/code\\_of\\_ordinances?nodeId=COOR\\_CH22ZO\\_APXBPLUNDEPU](https://library.municode.com/la/gonzales/codes/code_of_ordinances?nodeId=COOR_CH22ZO_APXBPLUNDEPU).

<sup>73</sup> *Id.*

comprehensively and grounded them in community feedback and needs through the community engagement process and guiding principles.

The plan incorporates affordable housing considerations, in particular diversifying the options and affordability of the housing stock in Gonzales to meet local character and needs. The Gonzales plan also incorporates environmental considerations, with an emphasis on green spaces, community amenities and benefits, and reducing future flood risk while building overall community resilience. This is especially important as flooding and disaster events change in frequency and intensity. The Silverleaf buyout program is one example of how Gonzales is actively helping residents to adapt to increased levels of flooding.

Lastly, the Gonzales plan was created with the intention of being a living document and having accountability measures in place for the city to implement the plan. The plan is an example of how a city successfully aligned both a plan and zoning code updates to carry forward the community's vision for Gonzales through new development and redevelopment.

# City of New Orleans, Louisiana

## Resilient Housing Prototype in the Seventh Ward

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### EXECUTIVE SUMMARY

In the Seventh Ward of New Orleans, Louisiana, a local project team is planning to construct a resilient housing prototype that can adapt to changing conditions in a flood-prone neighborhood.

Spearheaded by J.B. Holton and Associates and in partnership with Healthy Community Services and others, the prototype will create two affordable housing units in a duplex specifically dedicated for low- to moderate-income community members. The two single-family homes will be elevated above base flood heights and use hemp-based materials for insulation as a sustainable building material that is more resistant to moisture and pests than traditional insulation. The site will also be landscaped with green stormwater infrastructure features. Overall, this pilot project can be a model for other home developers and communities of what homes in Louisiana can look like to overcome negative stigmas around affordable housing and inspire future actions to increase local resilience in the face of flooding and economic challenges.

### BACKGROUND

The Seventh Ward in New Orleans, Louisiana is one of the city's 17 wards. The Seventh Ward is bordered by a small part of the Mississippi River and a significant portion of Lake Pontchartrain's coastline. The Seventh Ward is home to Claiborne Avenue, which "has been at the heart of the New Orleans' African-American cultural, commercial and political experience for over 200 years."<sup>1</sup>

About 11,000 individuals reside in the Seventh Ward, with about 76 percent of this population being Black.<sup>2</sup> The average household income for the Seventh Ward is \$34,425 with 39.4 percent of residents living in poverty.<sup>3</sup> In comparison, the overall average household income for New Orleans is \$71,938 with 23.7 percent of residents living in poverty.<sup>4</sup> In the Seventh Ward, about 37 percent of homeowners and about 74 percent of renters are paying 30 percent or more of their

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<sup>1</sup> Greg A. Beaman, A "Holiday for the Disfranchised" on North Claiborne Avenue: Two Profiles, THE NEW ORLEANS TRIBUNE, <https://theneworleanstribune.com/the-claiborne-avenue-history-project/> (last visited Jan. 10, 2022).

<sup>2</sup> Seventh Ward Statistical Area, THE DATA CTR. (Feb. 24, 2021), <https://www.datacenterresearch.org/data-resources/neighborhood-data/district-4/seventh-ward/>.

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*



income on housing.<sup>5</sup> For New Orleans, about 31 percent of homeowners and 61 percent of renters are paying 30 percent or more of their income on housing.<sup>6</sup> This creates affordability challenges for people when such a large portion of their income is spent on mortgages or rent on top of other costs associated with housing like utilities. These additional costs compound total affordability problems.

In 2005, Hurricane Katrina's wreaked havoc on New Orleans and "damage was the most extensive in the region's African American neighborhoods."<sup>7</sup> The Seventh Ward was one of the communities disproportionately impacted by the hurricane. Hurricane Katrina caused the London Avenue Canal to breach. This breach resulted in flooding that devastated the majority of the Ward and the surrounding area.

## OVERVIEW OF THIS WORK

In 2016, Joel B. Holton bought the property located on 3012 Pauger Street in the Seventh Ward of New Orleans. On this 31 by 130-foot lot, J.B. Holton and Associates, LLC — in partnership with Healthy Community Services and others listed below — is planning to build a resilient housing prototype that is intended to be a model for the Seventh Ward and other communities throughout New Orleans and Louisiana.

J.B. Holton and Associates, LLC is a company that provides water restoration and environmental services to promote safe buildings.<sup>8</sup>

Led by Angela Chalk, Healthy Community Services is a New Orleans-based nonprofit that approaches climate issues locally by building stronger, more resilient communities with a focus on coastal issues, urban agriculture, and green infrastructure with nature-based interventions.<sup>9</sup>

Additional local team members collaborating on this project include the following development partners and community organizations that will make this project a reality:

- Troy Verrett of Insite Developments: Architect and design consultant.
- Frank Johnson of Johnson Brothers Construction: General contractor and project management.
- Dana Brown of Dana Brown and Associates: Landscape architect and green infrastructure design.

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<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> Thomas Frank, *Flooding Disproportionately Harms Black Neighborhoods*, SCI. AM. (June 2, 2020), <https://www.scientificamerican.com/article/flooding-disproportionately-harms-black-neighborhoods/>.

<sup>8</sup> J.B. HOLTON & ASSOCIATES., LLC, <https://jbholton.com> (last visited Dec. 15, 2021).

<sup>9</sup> *About*, HEALTHY CMTY. SERV., <https://www.hcsnola.org/about> (last visited Dec. 8, 2021).

- Greg and Nicole Nixon of Ubuntu Construction: Green infrastructure and stormwater management general contractor.
- John Cato III of Darby Organics, LLC: Sustainable building materials consultant and site remediation services.
- Cameron McIntosh of Americhanvre: Hemp lime insulation application and installation consultant.
- Isaiah Byrd of Healthy Herbal Living Sustainable Building Materials Research and Development Consultant.

Overall, the project lead, J.B Holton, wanted to assemble a team that is representative of the community in the Seventh Ward and reflects its concerns and needs. Approximately 90 percent of the firms and businesses on the team are BIPOC (Black, Indigenous, and People of Color) or women owned. This demonstrates how the project lead is being both thoughtful and intentional about how he is approaching this work.

## HOUSING

As envisioned, the property will be a duplex that has two affordable housing units reserved for low- to moderate-income community members. Each unit will have two bedrooms and two bathrooms. The insulation for the duplex will be industrial hemp with the goal of building a healthier indoor environment for the local individuals or families living there. The team is also focusing on using hemp-based products for flooring materials and cabinetry. For future projects, the team can expand into using hemp for window decorations, OSB pressboards, and structural framing.

The Seventh Ward neighborhood is prone to flooding. As such, the project team wants to create proper infrastructure that addresses flooding, but also makes the building more resilient in general. Flooding events have had serious impacts on the local housing stock. Every hurricane and major flood can create serious issues for homes, such as mold and pests, by causing moisture to become trapped inside the walls. Industrial hemp-based products are more resilient to water, which can foster a housing environment that can better adapt to these types of events and eliminate or reduce issues with mold and pests. Hemp-based insulation has also been associated with lower heating and cooling costs.

In addition, the duplex will be elevated about 6–8 inches above base flood level to avoid damage from future hurricanes and precipitation-based flooding. Further, the project team will include solar features and Energy Star appliances, which will lower monthly utility costs for tenants — thereby reducing total housing costs and making the unit more affordable.

## Hemp

Hemp is a crop that can be used as a source material for construction products. When compared to traditional building materials, it is a more sustainable alternative that can be employed in a variety of ways for construction including insulation, structural blocks, panels, concrete, and more.<sup>10</sup> Hemp is “nontoxic, fireproof, carbon-capturing, mold- and pest-resistant” and “adaptable to any climate.”<sup>11</sup> Hemp is carbon negative, so it creates a healthier indoor environment for residents.<sup>12</sup> Additionally, the ambient temperature remains the same. Europe has been using hemp-based products for about 25 years with success.<sup>13</sup>

During the construction of a home, a developer can decide which parts of the home will consist of hemp-based materials. For example, a developer can choose to use hemp for insulation, the exterior walls, and the interior walls. This decision could replace materials like fiberglass, foam, concrete, or wood, which are much less sustainable.<sup>14</sup>

Despite the emerging benefits of hemp, it is important to note that the federal and state legal landscape around hemp is evolving. As industrial hemp has continued to emerge as a potential building material, there have been actions at both the federal (e.g., 2018 Farm Bill) and state levels (e.g., Act 164 of the 2018 Louisiana Regular Legislative Session) that may make industrial hemp scaleable for builders to use in the United States.<sup>15</sup> Moreover, each state may have different requirements governing the growing, marketing, and use of hemp. Hence, developers considering hemp for home construction should first consult with their relevant government authorities and a legal expert.

<sup>10</sup> Bob Woods, *Building your dream home could send you to the hemp dealer*, CNBC (Apr. 20, 2018, 9:34 AM), <https://www.cnbc.com/2018/04/20/building-your-dream-home-could-send-you-to-the-hemp-dealer.html>.

<sup>11</sup> Bob Woods, *Building your dream home could send you to the hemp dealer*, CNBC (Apr. 20, 2018, 9:34 AM), <https://www.cnbc.com/2018/04/20/building-your-dream-home-could-send-you-to-the-hemp-dealer.html>.

<sup>12</sup> *Hemp production in the EU*, EUROPEAN COMM’N, [https://ec.europa.eu/info/food-farming-fisheries/plants-and-plant-products/plant-products/hemp\\_en](https://ec.europa.eu/info/food-farming-fisheries/plants-and-plant-products/plant-products/hemp_en) (last visited Dec. 8, 2021); Global Hemp Group, *Sustainability Advantages to Building with Hempcrete*, HEMPBUILD MAGAZINE (July 9, 2021), <https://www.hempbuildmag.com/home/sustainability-advantages-to-building-with-hempcrete> (“Hempcrete walls provide superior breathability, allowing moisture to be absorbed and released when ambient moisture varies. This is highly desirable from a health point of view. The porous nature of the hempcrete wall ensures low thermal conductivity.”).

<sup>13</sup> *Hemp production in the EU*, EUROPEAN COMM’N, [https://ec.europa.eu/info/food-farming-fisheries/plants-and-plant-products/plant-products/hemp\\_en](https://ec.europa.eu/info/food-farming-fisheries/plants-and-plant-products/plant-products/hemp_en) (last visited Dec. 8, 2021).

<sup>14</sup> Bob Woods, *Building your dream home could send you to the hemp dealer*, CNBC (Apr. 20, 2018, 9:34 AM), <https://www.cnbc.com/2018/04/20/building-your-dream-home-could-send-you-to-the-hemp-dealer.html>.

<sup>15</sup> See, e.g., *Hemp and Farm Programs*, U.S. DEP’T AGRIC., <https://www.farmers.gov/your-business/row-crops/hemp> (last visited Dec. 8, 2021); *Industrial Hemp*, LA. DEP’T AGRIC. & FORESTRY, <https://www.ldaf.state.la.us/industrial-hemp/> (last visited Dec. 8, 2021).

## ENVIRONMENT

The landscaping around the property will also include green infrastructure and resilient design features. First, the property will be landscaped with native plants and other nature-based features that will help to mitigate future flood risks, improve water quality, and integrate natural features in an urban area. Using green infrastructure will support a healthier environment for residents in comparison to typical affordable housing.

Second, the team's landscape architects led by Dana Brown and Associates plan to use other high-quality, permeable, and eco-friendly materials for the property. The proposed design is anticipated to include green infrastructure features like permeable paver systems for the driveway and walkway, and French drains with non-woven geotextile fabric. These features improve stormwater runoff and drainage at the property.<sup>16</sup>

The use of hemp for the construction of the house, nature-based features for landscaping, and permeable pavers and French drains for the driveway and walkway represents an overall holistic and thoughtful use of materials for these affordable housing units. The intentional decision to use these materials will only increase the property's resilience to future extreme weather events and represents what well-built affordable housing can actually look like.

Healthy Community Services is based in the same community where the prototype is being built. The organization plans to use this project to bring increased knowledge about the benefits of natural stormwater management to residents and how nature-based solutions can manage water onsite. Through this project, Healthy Community Services seeks to provide tangible opportunities for Seventh Ward residents and other New Orleanians to learn about the different types of flooding in Louisiana and show how people can take steps to adapt to these risks.

## COMMUNITY ENGAGEMENT

The project team will use a “work and learn” approach for engagement with the surrounding community. The team will allow community members to be on site during construction and see the housing as it is being built. Then, the team will invite those residents to come back to the housing site after construction has finished to see the property in its completed state. Currently, the team is preparing educational materials to share with the community about this project so they can observe a more resilient way to build homes.

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<sup>16</sup> *A Greener Choice: Advantages of Permeable Paving*, UNILOCK, <https://unilock.com/paver-technology/a-greener-choice-advantages-of-permeable-paving/> (last visited Jan. 28, 2022); *What's the Best Landscape Fabric for Draining Water?*, EASTGATE SUPPLY, <https://www.eastgatesupply.com/blogs/articles/what-s-the-best-geotextile-landscape-fabric-for-draining-water-1> (last visited Jan. 28, 2022) (“Non-woven geotextile fabric is the best choice for drainage applications where water flow through (permeability) is the main concern.”).

## FUNDING

Because of the current lack of a domestic supply chain for hemp, using hemp-based materials does not necessarily make the overall project cost cheaper. However, if a regional supply chain is created, that may lower costs and hemp may become 10–15 percent cheaper than traditional building components.

For this project, the developer and property owner, Joel B. Holton himself has chosen to absorb the upfront costs associated with the purchase and construction of the duplex. Specifically, he believes that the long-term benefits of using the hemp products and providing affordable housing options for low- to moderate-income residents in his community will outweigh those expenditures. As the property owner, he will also be able to manage rental rates to keep the two units in the duplex affordable.

## NEXT STEPS

As of early 2022, the project team is entering the local permitting process with the City of New Orleans–Orleans Parish. The team anticipates the permitting process to take about one to two months. If permitting is completed on schedule, construction could begin as early as the first quarter of 2022 and last about four to six months.

Once the two single-family dwellings in the duplex are built and the housing units are rented out to individuals or families, the project team intends to monitor the resilience investments made in the home to evaluate their long-term costs and efficacy. For example, the team wants to track whether the hemp insulation actually lowers total housing costs and improves the home's indoor air quality. The team will aim to share this information with other community organizations and home developers to inspire future resilient construction in New Orleans and beyond.

## CONSIDERATIONS AND LESSONS LEARNED

In the near term, the completed project can provide immediate benefits for future renters of the duplex. Sustainable construction materials will both contribute to a healthier living environment and support lower housing costs that will preserve long-term affordability.

Over the longer term, this project can also be a model for what new quality homes can look like, especially for low- to moderate-income people already facing a lack of safe and quality affordable housing options and also housing located in the Gulf (i.e., a region that has high humidity for long periods of the year). In particular, the use of industrial hemp for home construction can build resilience for individuals and communities. The unique characteristics of hemp can also help people better adapt to the effects of climate change, such as increased flooding events.

Although this project is an example of how industrial hemp can be used to build a new home, hemp can also be included as a part of retrofits in existing homes (i.e., for home repairs and additions). This is especially valuable in Louisiana where homes have been repeatedly devastated by hurricanes and flooding events and repairs are unfortunately frequently needed. In the future, states

and local governments that are facing repetitive loss events could incentivize or provide opportunities to use sustainable or alternative building materials that allow homes to be more resistant to water damage.

Notably, the project team has a proactive vision and commitment to resilience in the Seventh Ward and beyond. Specifically, the duplex and green infrastructure will serve as a demonstration site or “proof of concept” that can educate home developers and builders about resilient design options. This can help to mainstream these concepts into future home construction and retrofits and dismantle negative stigmas often associated with affordable housing. This is a necessary and important investment to show what is possible compared to examples of poorly designed and cheaply built examples of affordable housing, which are common. Other developers and property owners can similarly think about ways to create more resilient home designs that include more environmentally friendly building materials and nature-based features.

Further, regional and local policymakers can make professional commitments to learn about sustainable building materials and the implementation of pilot projects like this one. As such, policymakers can serve as an important government resource and bridge to the development community to encourage the uptake of these ideas in their jurisdictions.

Lastly, the project team’s commitment to overall resilience in the Seventh Ward is an important takeaway. From assembling a project team that is 90-percent composed of BIPOC- and women-owned firms and businesses to using the property as a community learning site for green infrastructure, the characteristics of this project show how diverse partners can work towards inclusive resilience solutions. Here, the housing prototype will add to economic, social, and environmental, in addition to climate and flooding resilience. This is one model other private, government, and nongovernmental project managers alike can emulate in practice.



# *City of Portland, Oregon*

## **Planning and Zoning for Manufactured Housing Communities**

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### **EXECUTIVE SUMMARY**

In recent years, Portland, Oregon has experienced rapid population growth and demographic shifts, resulting in changing housing dynamics — most notably, a decrease in affordable housing. Manufactured Housing Communities (MHC) or manufactured homes, known also as “mobile homes” or “trailers” are a valuable source of unsubsidized affordable housing for thousands of households in Portland. This form of housing is, however, threatened by the effects of climate change and development pressures.

In order to preserve MHC across the city, a campaign to change Portland’s comprehensive plan and zoning laws, led by the community-based organization Living Cully, resulted in amendments to the City of Portland’s comprehensive plan and the creation of the Manufactured Dwelling Park Zone in 2018. The Manufactured Dwelling Park Zone is a new base district that covers all existing MHC in Portland, precluding any other commercial or residential use on the properties and effectively protecting these communities and their residents from park closures. Portland has become a leader in MHC policy and can serve as an example for other cities looking to expand and protect their affordable housing options.

### **BACKGROUND**

Portland, Oregon, is the state’s largest city, located in Multnomah County in the northwestern part of the state. In 2019, the city’s population was estimated at 654,741 and was approximately 77 percent white.<sup>1</sup>

In 2019, the median household income was \$71,005, and 13.7 percent of the population was living in poverty.<sup>2</sup> In 2018, the median income for renter households was \$42,659, while the median income of homeowners was \$92,205 — more than double that of renter households.<sup>3</sup>

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<sup>1</sup> *QuickFacts: Portland City, Oregon*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/portlandcityoregon> (last visited Nov. 20, 2021).

<sup>2</sup> *Id.*

<sup>3</sup> PORTLAND HOUSING BUREAU, 2020 STATE OF HOUSING IN PORTLAND 24 (2020), *available at* <https://www.portland.gov/sites/default/files/2021/2020-state-of-housing-in-portland-report.pdf>.

Over the last decade, housing prices in Portland have increased significantly, leading to decreased availability of affordable housing for low-, moderate-, and middle-income households.

## OVERVIEW OF PORTLAND AFFORDABLE AND MANUFACTURED HOUSING PLANS AND POLICIES

The City of Portland's 2035 Comprehensive Plan was adopted in 2016.<sup>4</sup> Chapter 5 of the Comprehensive Plan is dedicated to housing, outlining the city's intentions to:

- Ensure adequate access to housing for a socially and economically diverse population.
- Support fair, equitable, healthy, resource efficient, and physically accessible housing.
- Establish ways to mitigate gentrification and displacement.
- Concentrate new housing in and around centers and corridors near transit and services to reduce the housing/transportation cost burden.
- Maintain and promote a supply of permanently affordable housing for Portland's most vulnerable residents.<sup>5</sup>

Specific goals within this chapter include providing a diverse and expanding housing supply, increasing equitable access to housing, promoting a healthy and connected city, preserving affordable housing, and increasing access to resource-efficient and high-performance housing.<sup>6</sup> The plan then details 54 distinct and actionable policies to meet these goals, ranging from housing safety to creating land banks. Of particular interest are the plan's policies on affordable housing, gentrification and displacement, and manufactured housing.

## HOUSING

### Anti-Displacement and Gentrification

In the comprehensive plan, Policies 5.10–5.19 address housing access, discriminatory barriers to fair and equitable housing, and the impact of gentrification and displacement in Portland.<sup>7</sup> These

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<sup>4</sup> 2035 Comprehensive Plan and Supporting Documents, CITY OF PORTLAND, OR., <https://www.portland.gov/bps/comp-plan/2035-comprehensive-plan-and-supporting-documents> (last visited Dec. 21, 2021).

<sup>5</sup> CITY OF PORTLAND, OR., 2035 COMPREHENSIVE PLAN, CHAPTER 5: HOUSING 1 (2020), available at <https://www.portland.gov/sites/default/files/2019-08/05housing.pdf>.

<sup>6</sup> *Id.* at 5.

<sup>7</sup> *Id.* at 8.

policies promote preserving communities through the restoration of socioeconomic diversity and cultural stability (5.14); evaluating existing policies' impacts on housing access, gentrification, and displacement (5.12, 5.15); and limiting the involuntary displacement of underserved and underrepresented communities through the use of public investments and coordination with nonprofit housing organizations (5.16). When involuntary displacement occurs, the city will aim to make plans and investments that can be coordinated with programs that enable displaced communities to maintain social and cultural connections (5.18).<sup>8</sup>

Building upon these comprehensive plan policies is the Portland Anti-Displacement Action Plan, a report published in April 2021 to “better understand the City’s policy framework; analytical tools; and regulatory and programmatic efforts to further anti-displacement and equitable community development work.”<sup>9</sup> This Action Plan addresses many forms of displacement, including direct, economic, cultural, and climate displacement and also examines the role of gentrification in Portland.<sup>10</sup>

## Manufactured Housing Communities

Manufactured housing, which is generally cheaper to rent and purchase than traditionally built “brick and mortar” or “stick built” housing, is a vital source of unsubsidized affordable housing in Portland. The city defines manufactured housing as “a dwelling unit constructed off of the site which can be moved on the public roadways. Manufactured dwellings include residential trailers, mobile homes, and manufactured homes.”<sup>11</sup> Manufactured Housing Communities<sup>12</sup> (MHC) — also referred to as “mobile home parks” or “trailer parks” — are a collection of four or more manufactured homes on a single site.<sup>13</sup> In Portland, there are currently 57 MHC consisting of over 3,000 households.<sup>14</sup> While the size and location of MHC vary across Portland, the average MHC was built in 1970 on 4.8 acres of land and with 55 spots for dwelling units.<sup>15</sup>

Across the country, MHC are threatened by a range of economic and environmental pressures. Historically located in “less desirable” areas, MHCs are often more prone to disaster events and climate change — the effects of which are often compounded by failing infrastructure and other

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<sup>8</sup> *Id.*

<sup>9</sup> PORTLAND BUREAU OF PLANNING & SUSTAINABILITY, ANTI-DISPLACEMENT ACTION PLAN FOUNDATION REPORT 1 (2021), available at [https://www.portland.gov/sites/default/files/2021/final\\_foundationreport\\_main.pdf](https://www.portland.gov/sites/default/files/2021/final_foundationreport_main.pdf).

<sup>10</sup> *Id.* at 3.

<sup>11</sup> PORTLAND BUREAU OF PLANNING & SUSTAINABILITY, MANUFACTURED DWELLING PARKS 5 (2018), available at [https://www.portland.gov/sites/default/files/2020-02/manufacturedpark\\_asadopted\\_082218.pdf](https://www.portland.gov/sites/default/files/2020-02/manufacturedpark_asadopted_082218.pdf).

<sup>12</sup> The Portland code refers to these types of homes as “manufactured dwelling parks.” However, the more commonly used term “Manufactured Housing Communities” will be used throughout this case study, unless otherwise specified.

<sup>13</sup> PORTLAND BUREAU OF PLANNING & SUSTAINABILITY, MANUFACTURED DWELLING PARKS 5 (2018), available at [https://www.portland.gov/sites/default/files/2020-02/manufacturedpark\\_asadopted\\_082218.pdf](https://www.portland.gov/sites/default/files/2020-02/manufacturedpark_asadopted_082218.pdf).

<sup>14</sup> *Id.* at 6.

<sup>15</sup> *Id.*

socioeconomic vulnerabilities. Furthermore, as demographics and housing prices shift across the country and within Portland, MHC managers and land owners generally face societal and economic pressures to sell their land to have it redeveloped at a higher density or for another land use. All of these scenarios threaten to displace current MHC residents.

Policy 5.37 of the Portland comprehensive plan established the importance of mobile home parks (or MHC) as an affordable housing option, encouraging the city to evaluate redevelopment pressures on parks and measures to preserve this low- and moderate-income housing option.<sup>16</sup> This policy, in concert with MHC organizing and activism, enabled the creation of the Portland Manufactured Dwelling Parks Comprehensive Plan and Zoning Amendments in 2018.<sup>17</sup>

## Planning, Land Use, and Zoning

In 2016, the Oak Leaf Mobile Home Park in the Cully neighborhood of Portland was threatened with closure and sale to a residential developer that planned to evict all residents.<sup>18</sup> This project to develop new residences on the property would have displaced almost 30 households.<sup>19</sup> The Cully neighborhood, where this MHC is located, is of particular importance as it is one of the most racially and ethnically diverse and lowest-income neighborhoods in Portland.<sup>20</sup> The Cully neighborhood also suffers from poor infrastructure, a lack of walkability, and transit and greenspace access.<sup>21</sup> The threat to the Oak Leaf Mobile Home Park mobilized the Cully neighborhood to act to protect not only the mobile home parks in this neighborhood, but all MHC in Portland.

As a result of this campaign to protect MHC, in 2018, Portland amended the city's comprehensive plan and zoning code to adopt a new base zoning district, called the Manufactured Dwelling Park Zone.<sup>22</sup> This zone applies to all 57 MHC in Portland and requires that this land only be used for these types of communities and cannot be used for any other type of residential or commercial purpose.<sup>23</sup> This new zoning amendment consolidates all MHC into one base zone to "create consistent land use regulation . . . with development standards to address the unique nature of

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<sup>16</sup> CITY OF PORTLAND, OR., 2035 COMPREHENSIVE PLAN, CHAPTER 5: HOUSING 11 (2020), *available at* <https://www.portland.gov/sites/default/files/2019-08/05housing.pdf>.

<sup>17</sup> PORTLAND BUREAU OF PLANNING & SUSTAINABILITY, MANUFACTURED DWELLING PARKS 6 (2018), *available at* [https://www.portland.gov/sites/default/files/2020-02/manufacturedpark\\_asadopted\\_082218.pdf](https://www.portland.gov/sites/default/files/2020-02/manufacturedpark_asadopted_082218.pdf).

<sup>18</sup> *Manufactured Housing Parks Zoning Proposal*, LIVING CULLY, <http://www.livingcully.org/zoning/> (last visited Nov. 20, 2021).

<sup>19</sup> *Id.*

<sup>20</sup> *Cully Neighborhood*, LIVING CULLY, <http://www.livingcully.org/about-living-cully/cully-neighborhood/> (last visited Nov. 20, 2021).

<sup>21</sup> *Id.*

<sup>22</sup> PORTLAND BUREAU OF PLANNING & SUSTAINABILITY, MANUFACTURED DWELLING PARKS (2018), *available at* [https://www.portland.gov/sites/default/files/2020-02/manufacturedpark\\_asadopted\\_082218.pdf](https://www.portland.gov/sites/default/files/2020-02/manufacturedpark_asadopted_082218.pdf).

<sup>23</sup> *Id.*

[Manufactured Dwelling Parks or MHC] in terms of density, access, setbacks, and landscaping requirements.”<sup>24</sup>

Of note, the city included provisions in its zoning ordinance to increase the allowed density of most MHC sites.<sup>25</sup> Due to spatial restrictions, some MHC may not be able to use all of the additional density granted. To counter this, any unused density can be sold to developers in other areas of the city, creating an economic commodity for MHC landowners.

These provisions — which resemble a Transfer of Development Rights program<sup>26</sup> — are intended to preempt potential legal challenges. Such a challenge could result if manufactured park owners asserted a constitutional takings claim arguing that the city deprived them of their private property rights by precluding other land uses or a greater number of manufactured homes in the Manufactured Dwelling Park Zone.

In addition, these provisions can protect residents from being evicted if park owners increase rent to make way for more densely packed manufactured home communities. The financial advantages of this off-site density structure help to overcome these concerns.

As of 2021, no legal challenges have been brought in court against the new zoning ordinance. However, it is not clear whether there have been any transactions initiated involving the additional density.

## COMMUNITY ENGAGEMENT

Community mobilization, organizing, and activism were integral to amending Portland’s comprehensive plan and zoning code and protecting MHC in the city.

One of the primary driving forces behind these changes was Living Cully, a coalition of four community development organizations with the goal of improving the quality of life for people of color and low-income people in Portland’s Cully neighborhood.<sup>27</sup> Living Cully works to encourage community-led projects and organize people of color and low-income people to fight back against gentrification and displacement.<sup>28</sup> When the Oak Leaf Mobile Home Park was originally threatened, Living Cully subsequently sprung into action to protect the park and its residents, developing a campaign to change Portland’s comprehensive plan and zoning laws.

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<sup>24</sup> *Id.* at 4.

<sup>25</sup> *Id.* at 9.

<sup>26</sup> For more information about Transfer of Development Rights programs, see the Georgetown Climate Center’s Managed Retreat Toolkit at <https://www.georgetownclimate.org/adaptation/toolkits/managed-retreat-toolkit/transfer-of-development-rights.html>.

<sup>27</sup> *About Living Cully*, LIVING CULLY, <http://www.livingcully.org/about-living-cully/> (last visited Nov. 20, 2021).

<sup>28</sup> *Id.*

As part of this campaign, MHC residents from Cully conducted outreach to other MHC around the city to inform the people who would be impacted by the zoning changes and garner support across the city. Living Cully also organized direct interactions between MHC residents and Portland political officials. Residents from the Oak Leaf Mobile Home Park and other MHC around Portland gave testimony in front of the city's Planning Commission. The aim of this testimony was to educate Planning Commissioners about these communities and personally combat negative stereotypes of MHC and their residents.

One common misconception held by city officials broadly was that MHC are simply an undesirable housing option of last resort for most people. Public testimonies from MHC residents worked to show the city otherwise. Specifically, many residents spoke about how they choose to and enjoy living in MHC, as they are an affordable housing option that offers strong community ties, autonomy over personal space and property, and options for aging in place. Finally, members of Living Cully and MHC invited city staff and officials to visit Portland's MHC and interact with the residents one-on-one in an effort to underscore the importance of these communities and this type of affordable housing.

In August 2018, after months of planning and coordinating, the Portland City Council voted unanimously to adopt the proposed updates to the city's comprehensive plan and zoning code.<sup>29</sup>

## CONSIDERATIONS AND LESSONS LEARNED

This update to the Portland comprehensive plan and zoning ordinance is a strong example of how city planning and zoning can be used to protect MHC and their residents from displacement and development pressures. As cities like Portland experience population growth and expansion, similar measures can be taken to preserve MHC and support a more resilient housing stock.

As this example also demonstrates, it is necessary to work collaboratively with MHC residents throughout the entirety of decisionmaking processes. Ultimately, they will be the people most affected by MHC-related legal and policy changes and have historically been left out of these processes. Policymakers must include them to create locally appropriate and effective laws and policies.

In addition, this example of policymaking to preserve MHC illustrates the value of working with political officials and city staff to provide them with tangible opportunities to directly engage with MHC residents. Here, city officials and staff heard from residents at public hearings and visited MHC sites in-person. Collectively, these community-driven efforts worked to overcome the negative stigmas often associated with MHC to successfully pass inclusive and equitable legal updates. Jurisdictions with diverse housing and community needs should seek to partner with

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<sup>29</sup> *Manufactured Housing Parks Zoning Proposal*, LIVING CULLY, <http://www.livingcully.org/zoning/> (last visited Nov. 20, 2021).



nongovernmental organizations and residents to actively listen and learn about the issues before them before making any legal or policy changes. In turn, nongovernmental organizations and residents can strive to initiate similar types of actions on their end. Notably, Living Cully served as a central community hub and organizer bringing people together and mobilizing MHC residents for action. Consolidated support can often have greater force.

Finally, preserving existing MHC and other housing and community types helps to foster both individual- and community-level resiliency. This is especially important for frontline communities including traditionally low-income, BIPOC (Black, Indigenous, and People of Color), and historically marginalized groups and the elderly. By protecting community ties, culture, and existing support systems, residents will be less vulnerable to outside shocks and stressors, such as flooding, natural disasters, and other effects of climate change.

# *Town of Washington, Virginia*

## **Rush River Commons Mixed-Use Development**

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### **EXECUTIVE SUMMARY**

The Town of Washington, Virginia is a small rural town that largely benefits from the service and tourism industries. Initially funded by private citizen Chuck Akre, Rush River Commons is a project of the Sherwood Fund, the Akre family's operating foundation. Rush River Commons is a proposed mixed-use development project for the Town of Washington. The project prioritizes the historic character of the Washington community and respects the surrounding natural environment. The proposed plan includes building a community center, office space for nonprofits, and affordable rental housing on a nine-acre property located in the town. The project also includes a plan for restoring the land's natural wetlands and amenities. Construction of Rush River Commons is set to begin in early 2022.

The Rush River Commons project shows how mixed-use development can be designed in a way that is compatible with rural communities. It is also a good example of how local policymakers can help create comprehensive plans and ordinances that support both public and private affordable housing ventures.

### **BACKGROUND**

The Town of Washington, Virginia is a small rural town that sits in the foothills of the Blue Ridge Mountains.<sup>1</sup> It is located in Rappahannock County and serves as the county seat with around 100 residents and a majority white population.<sup>2</sup> Most of the land in Washington is used for agriculture or is open space.<sup>3</sup>

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<sup>1</sup> THE TOWN OF WASHINGTON, VA. <https://washingtonva.gov/> (last visited Nov. 1, 2021).

<sup>2</sup> Washington, DATA COMMONS, <https://datacommons.org/place/geoId/5183248> (last visited Nov. 1, 2021); Washington, DATA COMMONS, <https://datacommons.org/place/geoId/5183248?topic=Demographics#Population-by-race> (last visited Nov. 1, 2021);

<sup>3</sup> RUSH RIVER COMMONS, RUSH RIVER COMMON SPECIAL USE PERMIT NARRATIVE 15 (Apr. 23, 2021), available at <https://rushrivercommons.com/wp-content/uploads/2021/06/Rush-River-Commons-SUP-Narrative-23APR2021-compressed.pdf>.

Washington's economy is based in the service and tourism industries. The town also serves as the community and cultural center of Rappahannock County.<sup>4</sup> Washington lacks a range of employment opportunities and revenue generation, and tourism demands change.<sup>5</sup> Washington's population has been decreasing and there is a "need to provide community services to its residents and space for public services."<sup>6</sup>

## OVERVIEW OF RUSH RIVER COMMONS

Rush River Commons is a nine-acre property located in Washington.<sup>7</sup> The property used to house the Black Kettle Motel and Restaurant over half a century ago.<sup>8</sup> Rush River Commons is a proposed mixed-development project that meets Washington's current and future community goals while supporting population growth.<sup>9</sup>

It is designed to honor the historic character and culture of the Washington community as well as respecting the surrounding natural environment. It is also Washington's first mixed-use development project.<sup>10</sup> The project's special use permit was approved in September 2021 and the plan is for construction to begin in early 2022.<sup>11</sup>

At large, the proposed plan includes building a community center, office space for nonprofits, and affordable rental housing.<sup>12</sup> All of these new spaces will be connected by elevated bridges and walkways over the wetlands and streams.<sup>13</sup> These spaces will be divided into a commercial community cluster and a residential cluster.<sup>14</sup>

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<sup>4</sup> *Id.* at 2.

<sup>5</sup> *Id.* at 14.

<sup>6</sup> RUSH RIVER COMMONS, RUSH RIVER COMMON SPECIAL USE PERMIT NARRATIVE 2 (Apr. 23, 2021), available at <https://rushrivercommons.com/wp-content/uploads/2021/06/Rush-River-Commons-SUP-Narrative-23APR2021-compressed.pdf>; TOWN OF WASHINGTON, VA., TOWN OF WASHINGTON COMPREHENSIVE PLAN 7 (Sept. 11, 2017), available at <https://washingtonva.gov/ordinances/Comprehensive%20Plan%2020170911.pdf>.

<sup>7</sup> *The Land*, RUSH RIVER COMMONS, <https://rushrivercommons.com/#the-land> (last visited Nov. 1, 2021).

<sup>8</sup> *History*, RUSH RIVER COMMONS, <https://rushrivercommons.com/#history> (last visited Nov. 1, 2021).

<sup>9</sup> RUSH RIVER COMMONS, RUSH RIVER COMMON SPECIAL USE PERMIT NARRATIVE 2 (Apr. 23, 2021), available at <https://rushrivercommons.com/wp-content/uploads/2021/06/Rush-River-Commons-SUP-Narrative-23APR2021-compressed.pdf>.

<sup>10</sup> Ben Peters, *Town Council approves Rush River Commons*, RAPPAHANNOCK NEWS (Sept. 22, 2021), [https://www.rappnews.com/news/landuse/town-council-approves-rush-river-commons/article\\_10ccf932-1512-11ec-aff5-2b5c2a7d8b7f.html](https://www.rappnews.com/news/landuse/town-council-approves-rush-river-commons/article_10ccf932-1512-11ec-aff5-2b5c2a7d8b7f.html).

<sup>11</sup> *Id.*

<sup>12</sup> *The Vision*, RUSH RIVER COMMONS, <https://rushrivercommons.com/#the-vision> (last visited Nov. 1, 2021).

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

The commercial cluster will include office and retail space as well as a new modern space and location for the Rappahannock Food Pantry.<sup>15</sup> The office space is intended for nonprofits, health providers, and other service agencies.

For the residential cluster, the project team and town are looking at several different housing groupings that will include townhouses, referred to as village homes, and stacked housing, referred to as villas and will include three main structures situated around a central green park space.<sup>16</sup> The residential and commercial clusters will be connected by a paved pathway, which will also connect to the Town of Washington's pedestrian trail system.<sup>17</sup> The goal is that the new residential area will provide attractive and affordable housing options for county residents and support modest population growth in the town.

The Town of Washington has a Planned Unit Development (PUD) Ordinance, which allows PUD “to increase residential population in the Town . . . [by permitting] zoning flexibility and flexibility in the design of new residential uses and mixed uses . . .” in a way that was “not [previously] available under strict application of the zoning ordinance” before 2019.<sup>18</sup> In the special use permit issued for this work, the project team expressed that “for greater flexibility, creativity, responsiveness to site conditions, and the mixed-use nature of the development, the [Rush River Commons] project requests the use of the recently enacted” PUD ordinance.<sup>19</sup> The PUD ordinance was a major contributor to Rush River Commons project's ability to move forward as a project.

Additionally, both Rappahannock County and the Town of Washington's comprehensive plans support affordable housing and diversity, which helped set the Rush River Commons project up for success.

Rappahannock County's comprehensive plan was adopted on December 7, 2020.<sup>20</sup> The plan includes land use goals, principles, and policies. One principle is to “Encourage residential

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<sup>15</sup> RUSH RIVER COMMONS, RUSH RIVER COMMON SPECIAL USE PERMIT NARRATIVE 2 (Apr. 23, 2021), *available at* <https://rushrivercommons.com/wp-content/uploads/2021/06/Rush-River-Commons-SUP-Narrative-23APR2021-compressed.pdf>.

<sup>16</sup> *Id.* at 7.

<sup>17</sup> *Id.*

<sup>18</sup> Town of Washington, Va., An Amendment to the Zoning Ordinance of the Town of Washington to Permit Planned Unit Development (2019), *available at* <https://washingtonva.gov/ordinances/PUDOrdinance2019.pdf>.

<sup>19</sup> RUSH RIVER COMMONS, RUSH RIVER COMMON SPECIAL USE PERMIT NARRATIVE 16 (Apr. 23, 2021), *available at* <https://rushrivercommons.com/wp-content/uploads/2021/06/Rush-River-Commons-SUP-Narrative-23APR2021-compressed.pdf>.

<sup>20</sup> RAPPAHANNOCK CNTY. BD. OF SUPERVISORS, RAPPAHANNOCK COUNTY COMPREHENSIVE PLAN (Dec. 7, 2020), *available at* [https://cms9files.revize.com/rappahannockva/201207%20ADOPTED%20Rappahannock%20County%20Amended%20Comprehensive%20Plan\\_clean.pdf](https://cms9files.revize.com/rappahannockva/201207%20ADOPTED%20Rappahannock%20County%20Amended%20Comprehensive%20Plan_clean.pdf).

development in designated growth areas and recognize the importance of affordable housing.”<sup>21</sup> Policies to implement this principle are:

1. Encourage residential development within the designated village areas, infill development to be preferred; allow for the broadest possible range of housing opportunities, styles, configurations, and affordability within the context of a rural, agricultural community;
2. Discourage residential strip development along public roadways that might create traffic hazards and detract from the overall scenic value of the county;
3. Encourage and foster a sense of community within designated village areas through support of community facilities and events; and
4. Consider affordable housing needs, particularly for seniors and the disabled, and explore aging-in-place opportunities.<sup>22</sup>

The Town of Washington’s comprehensive plan was adopted on September 12, 2017.<sup>23</sup> The plan’s housing goal is to “Create a Town with a strong sense of community built on diverse housing costs, mixed income levels and a welcoming residential population.”<sup>24</sup>

## HOUSING

The Rush River Commons project is grounded in the notion that part of what makes a resilient community is providing diverse housing options. The residential cluster of Rush River Commons is designed to “provide attractive and affordable housing options for the community” that will support population growth in Washington.<sup>25</sup> It is located next to the commercial cluster, which will provide residents of the affordable housing units access to important community services. In the residential cluster, there will potentially be between 18 and 20 housing units, the majority of which are guaranteed to be affordable housing units.

One issue Rappahannock County faces is having a decreasing and aging population. There are older residents in substandard housing and others who cannot find affordable housing options. This has created an impediment to develop a healthy mix of residents in the county. Through the

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<sup>21</sup> *Id.* at 88.

<sup>22</sup> *Id.*

<sup>23</sup> *Comprehensive Plan*, TOWN OF WASHINGTON, VA., <https://washingtonva.gov/planning-commission/> (last visited Dec. 6, 2021).

<sup>24</sup> TOWN OF WASHINGTON, VA., TOWN OF WASHINGTON COMPREHENSIVE PLAN 37 (Sept. 12, 2017), *available at* <https://washingtonva.gov/ordinances/Comprehensive%20Plan%2020170911.pdf>.

<sup>25</sup> RUSH RIVER COMMONS, RUSH RIVER COMMON SPECIAL USE PERMIT NARRATIVE 2 (Apr. 23, 2021), *available at* <https://rushrivercommons.com/wp-content/uploads/2021/06/Rush-River-Commons-SUP-Narrative-23APR2021-compressed.pdf>.

Rush River Commons project, the hope is that these affordable housing units will help residents to think more broadly and positively about what affordable housing means and looks like in their community. A goal of the project is to provide tangible housing options residents can see and visit themselves, which will break down negative stereotypes about affordable housing.

## ENVIRONMENT

The project has the goal of supporting and adding to the historic culture of Washington while respecting the surrounding natural environment and “its potential impact on its neighbors.”<sup>26</sup>

Wetlands encompass over 30 percent of the property.<sup>27</sup> Rush River Commons intends to restore the existing wetlands by removing invasive vegetation and planting native species that will support restoration and biodiversity.<sup>28</sup>

Additionally, a stream corridor runs north to south through the center of the Rush River Commons’s location.<sup>29</sup> There are also many trees at the location. The project aims to preserve both of these natural amenities.

Lastly, Rush River Commons is being designed to use the Town of Washington’s water and wastewater services and therefore will not rely on well or septic systems.<sup>30</sup>

## COMMUNITY ENGAGEMENT

Though the Rush River Commons project is a privately funded venture, the goal is to have a profound and positive impact on the community the Akre family calls home. Thus, the team leading the project engaged with the public during the initial planning and design stages. For example, they hosted a “listening tour” and met individually with community members. Over the course of a few months, the team interviewed about 60 individuals, which comprised almost half of the town’s population at the time. The team met with both those who supported and were not in favor of — or had questions about — the project. The team then incorporated the feedback they received into the project’s overall design.

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<sup>26</sup> *Id.*

<sup>27</sup> *The Land*, RUSH RIVER COMMONS, <https://rushrivercommons.com/#the-land> (last visited Nov. 1, 2021).

<sup>28</sup> *Id.*

<sup>29</sup> RUSH RIVER COMMONS, RUSH RIVER COMMON SPECIAL USE PERMIT NARRATIVE 15 (Apr. 23, 2021), *available at* <https://rushrivercommons.com/wp-content/uploads/2021/06/Rush-River-Commons-SUP-Narrative-23APR2021-compressed.pdf>.

<sup>30</sup> *Id.*



Additionally, as of January 2022, the team had about nine public meetings with the Washington Town Council, Washington Planning Commission, and the Washington Architectural Review Board and will likely have more public meetings as the project progresses.

## FUNDING

In 2019, Chuck Akre, a Rappahannock County resident and money manager, purchased the property to preserve and restore the land's natural wetlands and to develop a space that supports the local community.<sup>31</sup> The Akre family is financing this entire project and has stated that this is Chuck Akre's "gift to the community of Rappahannock."<sup>32</sup>

As of 2022, the Rush River Commons project has been transitioned to the Sherwood Fund, the Akre family's operating foundation.

## NEXT STEPS

In September 2021, the Washington Town Council approved a special use permit for Rush River Commons which allows for construction to begin.<sup>33</sup>

As construction starts, project proponents are proactively thinking about different questions that can maximize the social, economic, and environmental benefits of this work. For example, one such question is how to best preserve the long-term affordability of the housing units at Rush River Commons.

## CONSIDERATIONS AND LESSONS LEARNED

The Rush River Commons project serves as an example of how mixed-use development can occur in rural areas. While often thought of as a more urban or suburban land-use concept, the design of this work balances community needs for housing, commercial services, green space, and environmental restoration in a way that is compatible with local character. Other rural areas can

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<sup>31</sup> Tim Carrington, *Chuck Akre: Who is the investment manager making waves in Rappahannock County?*, RAPPAHANNOCK NEWS (July 16, 2021), [https://www.rappnews.com/news/environment/chuck-akre-who-is-the-investment-manager-making-waves-in-rappahannock-county/article\\_09120844-e674-11eb-9cbc-7785ac20392a.html](https://www.rappnews.com/news/environment/chuck-akre-who-is-the-investment-manager-making-waves-in-rappahannock-county/article_09120844-e674-11eb-9cbc-7785ac20392a.html); *The Land*, RUSH RIVER COMMONS, <https://rushrivercommons.com/#the-land> (last visited Nov. 1, 2021).

<sup>32</sup> Rachel Needham, *Rush River Commons proposes residential, commercial buildings — will Washington approve?*, RAPPAHANNOCK NEWS (May 21, 2021), [https://www.rappnews.com/news/realestate/rush-river-commons-proposes-residential-commercial-buildings-will-washington-approve/article\\_2e9da9a4-ba61-11eb-8b33-935bc2ada578.html](https://www.rappnews.com/news/realestate/rush-river-commons-proposes-residential-commercial-buildings-will-washington-approve/article_2e9da9a4-ba61-11eb-8b33-935bc2ada578.html).

<sup>33</sup> Ben Peters, *Town Council approves Rush River Commons*, RAPPAHANNOCK NEWS (Sept. 22, 2021), [https://www.rappnews.com/news/landuse/town-council-approves-rush-river-commons/article\\_10ccf932-1512-11ec-aff5-2b5c2a7d8b7f.html](https://www.rappnews.com/news/landuse/town-council-approves-rush-river-commons/article_10ccf932-1512-11ec-aff5-2b5c2a7d8b7f.html).

think about adapting mixed-use development in ways that similarly support social and environmental resilience.

A project like Rush River Commons can also help planners and policymakers demonstrate the benefits of affordable housing to dismantle negative stereotypes. Affordable housing is often stigmatized and faces “Not in My Backyard” or “NIMBYism” barriers to being constructed in many communities. By building tangible housing developments that are affordable for a range of residents, neighbors can see what this looks like on the ground and experience the benefits that can be derived from promoting inclusive rural growth.

Regardless, it is important to acknowledge that the significant amount of private funding behind the Rush River Commons project makes it quite unique and likely difficult to replicate directly in other rural communities without a comparable financial mechanism or backing. However, the project’s team highlights that the Rush River Commons project could not have happened without the passing of the town’s PUD ordinance. Additionally, the Town of Washington’s comprehensive plan supports affordable housing and diversity, which also helped set the project up for success. Thus, policymakers can pass this type of ordinance and comprehensive plan updates to make these public-private partnerships possible.