



Miami-Dade Board of County Commissioners
Office of the Commission Auditor

**Affordable Housing in Miami-Dade County:
Assessing the Use of Twin Homes**

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Research project produced by the Office of the Commission Auditor.

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The Office of the Commission Auditor (OCA) was established in September 2002 by Ordinance 03-2 to provide support and professional analysis of the policy, service, budgetary, and operational issues before the Miami-Dade Board of County Commissioners. The Commission Auditor's duties include reporting to the Board of County Commissioners (BCC) on the fiscal operations of County departments, as well as whether or not the fiscal and legislative policy directions of the Commission are being efficiently and effectively implemented.

This report, prepared in collaboration with the Miami Dade County departments and external contributors as subject matter experts, is substantially less detailed in scope than an audit in accordance with the Generally Accepted Auditing Standards (GAAS). The Office of the Commission Auditor plans and performs the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives; accordingly, OCA does not express an opinion on the data gathered by the subject matter expert.

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I. Introduction

a. Purpose

The Office of the Commission Auditor (OCA) produced this report in response to a request from District 1 Commissioner Barbara J. Jordan to conduct research on the use of twin homes as an affordable housing alternative across jurisdictions of comparable size to Miami-Dade County, with the goal of assessing the viability of the County implementing twin homes as an affordable housing model.

b. Scope

The scope of OCA's research is primarily focused on:

1. The applicability of twin homes as a micro concept within the broader topic of affordable housing as a macro concept;
2. The use of twin homes in the United States and internationally as a housing concept, particularly as a form of affordable housing; and
3. The feasibility of implementing twin homes and other alternative housing types in Miami-Dade County as affordable or public housing.

c. Methodology

OCA conducted qualitative academic research by examining the affordable housing crisis in Miami-Dade County and nationally. Additionally, OCA consulted with various jurisdictions across the United States and Canada that have utilized the concept of twin homes with other types of housing alternatives. More specifically, OCA contacted several jurisdictions that have implemented twin homes as a form of affordable or public housing inquiring whether the twin home concept is economically viable as a sustainable, affordable housing strategy. OCA interviewed executives at the U.S. Department of Housing and Urban Development (HUD) and Miami-Dade County's Public Housing and Community Development Department (PHCD) soliciting feedback concerning the suitability of using twin homes as an affordable or public housing solution. Lastly, OCA reviewed several scholarly and legal journals focused on public entity legislation and programs relating to the inclusion of twin homes as a form of affordable and public housing.

II. Affordable Housing Crisis in Miami-Dade County

Miami-Dade County, like many jurisdictions across the United States, faces intense challenges with affordable housing and homelessness. According to a 2019 Miami Herald report, South Florida's housing costs have far outstripped wages during the past decade.¹ Workers such as teachers, firefighters, wait staff, nurses, custodial workers, police officers, and many others struggle to find housing commensurate with their annual salaries and budget. In the decade spanning 2007 to 2017, Miami-Dade's median wage rose 14 percent – to \$17.20 – while home values skyrocketed 66 percent.²

Miami ranks first in the nation with the number of renters paying more than 30 percent of their income on rent.³ According to Harvard University's 2019 State of the Nation's Housing report, the stock of low-rent

¹ Rene Rodriguez, *Miami is in dire need of housing that's affordable. These new solutions could help.*, MIAMI HERALD (last visited July 14, 2019), <https://www.miamiherald.com/news/business/real-estate-news/article231551978.html>

² *Id.*

³ The State of the Nation's Housing 2019, Joint Center for Housing Studies of Harvard University, (last visited August 18, 2019) <https://www.jchs.harvard.edu/state-nations-housing-2019>

units priced under \$800 in South Florida's tri-county (Miami-Dade, Broward and Palm Beach) region shrank 39 percent between 2011 and 2017, while the number of low-income renters dipped only 2 percent. The result, according to Florida International University's Metropolitan Center, is a shortage of 134,295 homes, rented or owned, to meet the demand by Miami-Dade residents earning less than \$40,000, or 80 percent of the County's median household income of \$49,930.⁴ Furthermore, a Miami-Herald article dated October 4, 2019, states that the number of severely cost-burdened renter households in Miami-Dade County has increased 13 percent or 16,203 households since 2012.⁵ Cost-burdened is defined as a household with 30 percent or more of its monthly gross income dedicated to housing.⁶

Employment projections for 2018 to 2026 from the Florida Department of Economic Opportunity show an increase in 144,493 jobs, most in low-wage employment.⁷ This would result in additional demand for an estimated 40,000 low-income renters over the next eight years.⁸ A recent report by City Lab showed that when adjusting for housing and living costs, workers in smaller metropolitan areas (those with fewer than 1 million people) fare better than those who reside in the top 10 metropolitan areas.⁹ Jed Kolko, a chief economist at Indeed, pointed out that unadjusted salaries are 7 percent higher in metropolitan areas with at least two million people than in areas with fewer than 250,000 people; however, once the cost of living adjustments are taken into consideration, those same metropolitan area salaries are 9 percent lower.¹⁰

Figure 1 below shows metropolitan areas where adjusted salaries are the lowest in terms of adjusted and unadjusted rates for the cost of living. The tri-county metro area of Miami-Fort Lauderdale-West Palm Beach ranked No. 3 in the top 10 areas with the lowest adjusted salaries.¹¹

Figure 1 Adjusted Versus Un-adjusted Salaries Table

| Metro Area | Adjusted | Unadjusted |
|---|----------|------------|
| Urban Honolulu, HI | \$56,100 | \$70,000 |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | \$57,800 | \$53,100 |
| Miami-Fort Lauderdale-West Palm Beach, FL | \$61,500 | \$66,600 |
| Bridgeport-Stamford-Norwalk, CT | \$61,900 | \$73,700 |
| New York-Newark-Jersey City, NY-NJ-PA | \$62,000 | \$75,800 |
| Oxnard-Thousand Oaks-Ventura, CA | \$62,100 | \$72,800 |
| Trenton, NJ | \$62,700 | \$70,000 |
| New Haven-Milford, CT | \$63,100 | \$70,000 |
| Orlando-Kissimmee-Sanford, FL | \$64,000 | \$63,000 |
| Vallejo-Fairfield, CA | \$64,100 | \$77,000 |

⁴ Supra note 1.

⁵ Supra note 1.

⁶ *Affordable Housing*, U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, (last visited Aug. 1, 2019, 10:04am) https://www.hud.gov/program_offices/comm_planning/affordablehousing/

⁷ Florida Department of Economic Opportunity, *Employment Projections for 2018 to 2026*, <http://www.floridajobs.org/workforce-statistics/data-center/statistical-programs/employment-projections>

⁸ Supra note 1.

⁹ Richard Florida, *Where is the Best City to Live, Based on Salaries and Cost of Living?* City Lab (last visited Sept. 5, 2019, 9:19am), <https://www.citylab.com/life/2019/09/cost-of-living-best-worst-cities-housing-adjusted-salaries/597376/>

¹⁰ *Id.*

¹¹ *Id.*

Figure 2 below depicts the cost of living using utilities, internet, gas, rent and food, in municipalities across the United States from least expensive to most expensive with Miami-Dade County included.¹²

Figure 2 Cost of Living Table

| U.S. Cities | Utilities | Internet | Gas | Rent | Food | Average Cost of Living |
|----------------------|-----------|----------|----------|------------|----------|------------------------|
| Jacksonville, FL | \$164.07 | \$64.80 | \$129.03 | \$1,026.11 | \$293.72 | \$1,677.73 |
| Colorado Springs, CO | \$132.50 | \$61.66 | \$133.62 | \$1,071.67 | \$319.70 | \$1,719.15 |
| Columbus, OH | \$170.83 | \$57.40 | \$130.56 | \$1,060.74 | \$302.97 | \$1,722.50 |
| Kansas City, MO | \$229.01 | \$58.59 | \$129.54 | \$1,017.32 | \$292.67 | \$1,727.13 |
| Cleveland, OH | \$171.52 | \$68.33 | \$129.03 | \$1,084.38 | \$298.48 | \$1,751.74 |
| San Antonio, TX | \$172.96 | \$58.30 | \$118.32 | \$1,122.56 | \$313.69 | \$1,785.83 |
| Indianapolis, IN | \$155.40 | \$54.25 | \$134.64 | \$1,148.65 | \$320.78 | \$1,813.72 |
| Pittsburgh, PA | \$171.52 | \$75.33 | \$158.10 | \$1,117.48 | \$328.07 | \$1,850.50 |
| Phoenix, AZ | \$161.49 | \$74.02 | \$147.39 | \$1,197.11 | \$289.96 | \$1,869.97 |
| Detroit, MI | \$171.09 | \$64.10 | \$138.21 | \$1,201.11 | \$309.01 | \$1,883.52 |
| Raleigh, NC | \$127.21 | \$55.79 | \$133.11 | \$1,214.35 | \$388.12 | \$1,918.58 |
| Houston, TX | \$132.97 | \$60.77 | \$122.91 | \$1,340.68 | \$261.61 | \$1,918.94 |
| St. Paul, MN | \$144.18 | \$59.00 | \$132.60 | \$1,272.22 | \$326.11 | \$1,934.11 |
| Dallas, TX | \$140.82 | \$62.72 | \$127.50 | \$1,372.75 | \$288.19 | \$1,991.98 |
| Tampa, FL | \$150.82 | \$60.03 | \$133.62 | \$1,357.25 | \$328.64 | \$2,030.36 |
| Orlando, FL | \$136.97 | \$61.47 | \$136.68 | \$1,379.47 | \$319.15 | \$2,033.74 |
| New Orleans, LA | \$138.07 | \$68.33 | \$117.30 | \$1,373.87 | \$340.39 | \$2,037.96 |
| Baltimore, MD | \$151.44 | \$72.14 | \$138.72 | \$1,352.67 | \$351.51 | \$2,066.48 |
| Newark, NJ | \$233.33 | \$52.50 | \$134.64 | \$1,356.25 | \$309.29 | \$2,086.01 |
| Minneapolis, MN | \$144.18 | \$55.88 | \$137.70 | \$1,435.28 | \$331.65 | \$2,104.69 |
| Atlanta, GA | \$151.66 | \$64.57 | \$139.23 | \$1,473.98 | \$312.65 | \$2,142.09 |
| Charlotte, NC | \$167.16 | \$58.54 | \$130.56 | \$1,425.53 | \$368.37 | \$2,150.16 |
| Philadelphia, PA | \$145.61 | \$67.50 | \$151.98 | \$1,501.57 | \$424.84 | \$2,291.50 |
| Portland, OR | \$172.72 | \$63.27 | \$166.26 | \$1,554.28 | \$370.14 | \$2,326.67 |
| Chicago, IL | \$132.10 | \$61.03 | \$157.59 | \$1,803.75 | \$341.31 | \$2,495.78 |
| Miami, FL | \$115.37 | \$60.38 | \$142.29 | \$1,836.71 | \$358.70 | \$2,513.45 |
| Seattle, WA | \$153.50 | \$65.17 | \$174.42 | \$1,993.53 | \$399.76 | \$2,786.38 |
| Los Angeles, CA | \$145.61 | \$60.00 | \$190.23 | \$2,159.31 | \$343.95 | \$2,899.10 |
| Washington, DC | \$123.57 | \$67.58 | \$149.43 | \$2,263.02 | \$451.43 | \$3,055.03 |
| Jersey City, NJ | \$178.95 | \$65.36 | \$135.66 | \$2,374.27 | \$345.26 | \$3,099.50 |
| Boston, MA | \$147.15 | \$62.97 | \$145.35 | \$2,420.26 | \$435.78 | \$3,211.51 |
| New York, NY | \$142.84 | \$62.77 | \$155.55 | \$3,126.35 | \$468.60 | \$3,956.11 |

¹² Time Gallen, *How Boston compares on cost of living with biggest U.S. Cities*, BIZJOURNALS (last visited Sept. 2019, 3:00pm), <https://www.bizjournals.com/boston/news/2019/09/02/how-boston-compares-on-cost-of-living-with-biggest.html#g/457868/3>

The government, private sector, and nonprofits are partnering to address the County's affordable housing crisis. To address the increasing number of cost-burdened households in Miami-Dade County, city governments and county agencies partner with universities, advocacy groups and developers to identify vacant public land, amend or adopt zoning codes, design new tax incentives and create new funding streams for affordable housing. University of Miami's Office of Civic and Community Engagement (UMOCCE) recently launched a real-time mapping tool that revealed 500 million square feet of vacant or underused land in Miami-Dade County that is either publicly or institutionally owned.¹³ Miami-Dade County, the City of Miami and Miami-Dade County School Board are the largest landowners in several neighborhoods across Miami. For example, Miami-Dade County is the single largest landowner in Little Haiti with 120 lots. Similarly, the County alone owns more than 300 vacant or underused properties in Liberty City. These properties could be leased or sold to a developer with a covenant to build new affordable housing.

University of Miami's Office of Civic and Community Engagement's real-time mapping tool supports developers and community advocates by readily identifying potential land acquisition for affordable housing opportunities.¹⁴ UMOCCE suggests creating a cross locality partnership focused on public land as a local solution to the affordable housing crisis. More specifically, a cross-city partnership could be formed to help facilitate parcel aggregation and land swaps across Miami's 34 municipalities. The partnership would lead to regular, cross-municipality, and inter-agency assessments of publicly owned property identifying potential mixed income affordable housing development opportunities located at inaccessible, high-value locations.¹⁵ For years, government response to the affordable housing crisis has been to enter into public-private partnerships that marries the expertise of private developers with tax incentives. These ventures often make the projects an attractive business prospect for investors.

Affordable housing is distinctly different from public housing financed and overseen by HUD. Residents who live in public housing must meet strict eligibility criteria favoring extremely low-income households earning 30 percent or less of a county's median income. In Miami-Dade County, that means less than \$15,000. Public housing comes in all sizes and types, from single-family houses to high-rise apartments.

On the other hand, affordable housing is designed for households earning between 60 and 120 percent of the area median income, i.e., between \$30,000 and \$60,000 in Miami-Dade County. Affordable housing is a strategy in which the occupant is paying no more than 30 percent of their gross income for housing costs, including utilities.¹⁶ Policymakers consider households who spend more than 30 percent of income on housing costs to be housing cost-burdened.¹⁷ The challenge is to construct housing both profitable for developers and affordable for the housing cost-burdened.

The City of Miami is working with Florida International University's Metropolitan Center to draft an Affordable Housing Master Plan that will serve as a 10-year blueprint to increase the quality and quantity of affordable housing. The master plan forecasts a 50,000 unit affordable housing shortage in the City of Miami by the end of 2019. For Miami-Dade County, the use of HUD's Rental Assistance Demonstration (RAD) Program to transfer ownership of existing public housing to third-party owners is being explored as an avenue to provide more affordable housing opportunities. Those developers could profit by increasing

¹³ Supra note 1.

¹⁴ University of Miami Office of Civic and Community Engagement, *Mapping Tool*, (last visited December 1, 2019, 10:04am) <http://cdn.miami.edu/wda/cce/Documents/Miami-Housing-Solutions-Lab/PolicyToolkit/subpages-folder/public.html>

¹⁵ *Id.*

¹⁶ U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, *Glossary of Terms to Affordable Housing*, (last visited October 23, 2019, 11:45am) <https://archives.hud.gov/local/nv/goodstories/2006-04-06glos.cfm>

¹⁷ Email correspondence with PHCD dated August 22, 2019.

density and converting the properties into mixed-income communities. The County would share revenues with the private owners.¹⁸

To further address the affordable housing issue, the County's Public Housing and Community Development (PHCD) Department in conjunction with Commission District 9, Commissioner Dennis C. Moss and Commission District 3, Chairwoman Audrey M. Edmonson hosted the "Closing in on 10,000 – A Housing Summit" on October 7, 2019. The summit gathered community leaders, housing advocates, developers, affordable housing financing entities and government decision-makers who delved into the affordable and workforce housing situation and discussed various relevant projects throughout the County. The goal is to identify at least 10,000 new affordable and workforce housing units integrated into current County projects. Specific projects may encompass transit-oriented developments, elderly housing, rental assistance demonstration, accessory dwelling units and building housing on land owned by the school board. As discussed in the Housing Summit, the County created the "Workforce Housing Development Program" section 33-193.4 of the County code, establishing a combination of density bonuses, flexible design criteria and other incentives. The workforce housing program will help alleviate the existing housing shortage by making it more feasible for the private for-profit development community to create and deliver a greater number of housing units affordable to the workforce target income group.¹⁹

As a way to assist low-income County residents pursue homeownership, the County created the Infill Housing Initiative Program. The program's purpose is to increase the availability of affordable homes for very low, low and moderate-income persons, maintain a stock of affordable housing, redevelop urban neighborhoods by eliminating the blight of vacant lots and dilapidated or abandoned properties, to equitably distribute homeownership opportunities within the Infill Target Areas and generate payment of ad valorem taxes.

The Infill Program defines "affordable" where the rental payments or mortgage payments, including taxes and insurance, does not exceed 30 percent of the median annual gross income for very low, low and moderate-income households. However, it is not the intent to limit an individual household's ability to devote more than 30 percent of its income for housing. Those households devoting more than 30 percent of its income shall be deemed affordable if the first institutional mortgage lender is satisfied that the household can afford mortgage payments exceeding the 30 percent benchmark.²⁰

The type of structures erected on parcels designated for the Infill Program can vary and several planning and design standards such as occupancy and maximization of urban density are considered. The program currently limits the sales price of an infill home to a maximum of \$215,000.

III. Defining Housing Types: Twin Homes, Townhouses, Row Homes and Duplexes

Twin home is defined as an attached residential dwelling of two single-family units on individual, fee simple ownership lots.²¹ Twin homes are joined vertically by a party wall at the common property line.

¹⁸ Supra note 1.

¹⁹ CODE OF MIAMI-DADE COUNTY, FLORIDA, Article XHIA, Workforce Housing Development Program, available at https://library.municode.com/fl/miami-dade-county/codes/code_of_ordinances?nodeId=PTIICOOR_CH33ZO_ARTXHIAWOHODEPR_S33-193.4LEINFIPU

²⁰ CODE OF MIAMI-DADE COUNTY, FLORIDA, Article VII, Infill Housing Initiative, available at https://library.municode.com/fl/miami-dade-county/codes/code_of_ordinances?nodeId=PTIICOOR_CH17HO_ARTVIIINHGIN

²¹ Unified Development Ordinance, City of Valparaiso, Indiana, Article I, Jurisdiction and Zoning Districts, (last visited on May 30, 2019) <http://online.encodeplus.com/regs/valparaiso-in/acc/doc-view.aspx?ajax=0&tocid=003>

Each unit has its own front and rear entrances, front and rear yards, and a side yard on one side of the lots.²² A twin home is considered a one-unit structure and in the same category of fully detached, semi-detached (semi-attached, side-by-side), row homes, and townhouses.²³ In Canada and the United Kingdom, these structures are referred to as “semi-detached” structures.

Twin homes are seen interchangeably or in the same structural category as other types of attached residential dwellings, such as row homes, town houses and duplexes. A row home is typically one of a series of houses connected by common sidewalls forming a continuous group.²⁴

A townhouse is a single family dwelling unit consisting of a group of three or more units separated by a firewall per the County code.²⁵ County code also authorizes up to 10 percent of the total number of units on any individual site plan may be developed in two-unit groupings.²⁶ Townhouse owners purchase a fee simple ownership of real property without ownership of common areas. Townhouses are attached dwelling units connected and separated from each other by a common wall without doors, windows, or other ingress or egress.²⁷ Some condominiums have been popularly classified as townhouses. However, County code defines condominiums as units owned by one or more persons, and which there is, appurtenant to each unit, an undivided share in common areas.²⁸

Duplexes are two single-family structures, sharing a common wall, on a single lot, owned by a sole owner.²⁹ The County Code defines a duplex as a residential building designed for and used as the separate residences of two (2) separate and distinct families, but having the appearance of a single-family dwelling.³⁰ Each unit in the duplex must comply with the definition for a one-family dwelling.³¹

²² Randy Haynes, *Action Form Bryan City Council*, City of Bryan, (last visited Jun. 19, 2019) http://cityofbryantx.granicus.com/MetaViewer.php?view_id=2&clip_id=327&meta_id=26821

²³ Email correspondence with HUD dated August 23, 2019.

²⁴ “Row house,” *The Merriam-Webster.com Dictionary*, 2019, (last visited Dec. 9, 2019) <https://www.merriam-webster.com/dictionary/row%20house>

²⁵ CODE OF MIAMI-DADE COUNTY, FLORIDA, Article XVA § 33-202.2, RU-TH, Townhouse District: Definition, available at https://library.municode.com/fl/miami_-_dade_county/codes/code_of_ordinances?nodeId=PTIICOOR_CH33ZO_ARTXVATODI_S33-202.2DE

²⁶ *Id.*

²⁷ “Townhouse” *Law and Legal Definition*, US LEGAL, (last visited Dec. 9, 2019), <https://definitions.uslegal.com/t/townhouse/>




²⁸ CODE OF MIAMI-DADE COUNTY, FLORIDA, Article IX, Workforce Development Program Administration, available at https://library.municode.com/fl/miami_-_dade_county/codes/code_of_ordinances?nodeId=PTIICOOR_CH17HO_ARTIXWOHODEPRAD_S17-140DE

²⁹ *Duplex vs. Twin Home*, THE DUPLEX DOCTORS, (last visited May 18, 2019) <https://www.theduplexdoctors.com/blog/duplex-vs-twin-home>

³⁰ CODE OF MIAMI-DADE COUNTY, FLORIDA, Chapter 18A- Miami-Dade County Landscaping Ordinance, Sec 18A-3, available at https://library.municode.com/fl/miami_-_dade_county/codes/code_of_ordinances?nodeId=PTIICOOR_CH18AMIDECOLAOR_S18A-3DE

³¹ *Id.*

Figure 3 Illustrates Home Type and Legal Description.

| | HOMETYPE | LEGAL DESCRIPTION | DIVIDED BY ADJOINING WALL | ZONING DESIGNATION |
|---|-----------------------------|--|---------------------------|--------------------|
|  | TOWNHOME | ONE LOT WITH ONE OWNER | YES | RU-TH |
|  | ROWHOME | ONE LOT WITH ONE OWNER ² | YES | RU-RH |
|  | TWIN HOME | TWO SEPARATE LOTS WITH SEPARATE OWNERSHIP | YES | RU-2 |
|  | DUPLEX | ONE LOT WITH ONE OWNER (TWO UNITS) | YES | RU-2 |
|  | TRIPLEX | ONE LOT WITH ONE OWNER (THREE UNITS) | YES | RU-3 |
|  | QUAD PLEX | ONE LOT WITH ONE OWNER (FOUR UNITS) | YES | RU-4 |
|  | CONDOMINIUM | OWN LIVING SPACE BUT NOT A PARTICULAR LOT ³ | YES ⁴ | RU-4A |
|  | DETACHED SINGLE FAMILY HOME | ONE LOT WITH ONE OWNER | NO | RU-1 |

IV. Analysis of Twin Homes and other Home Styles Constructed in Vancouver, Canada

Commissioner Jordan requested that OCA examine Vancouver, Canada and its use of twin homes as a form of affordable housing. OCA attempted multiple times to contact the British Columbia, Vancouver Housing Authority, to discuss its use of twin homes. No response has been received as of this report's publication date. Additionally, OCA conducted a broad, systematic online search of Vancouver and various other jurisdictions in Canada and did not locate any twin home construction initiatives for affordable housing.

V. Analysis of Twin Home Construction and Usage in the United States

a. National Jurisdictions Analyzed

OCA conducted a nationwide search and surveyed several jurisdictions using twin homes. Five jurisdictions, City of Miami, Florida; Chester City, Pennsylvania; Stearn County, Minnesota; Hillsboro, Kansas and Sioux Falls, South Dakota, acknowledged using public funds subsidizing twin homes creating a mechanism for affordable housing. The table below illustrates the cost per twin home unit and compares the costs of similar housing such as townhouses and duplexes. OCA's analysis showed no comparative advantage in terms of cost per square foot (sf) for the construction of twin homes. However, the Chester City, and Sioux Falls case studies reported more marketability of twin homes when compared to townhouses within their jurisdictions. Marketability for the purpose of this report is defined as the attractiveness potential clients have based on lot size, housing style concept and housing location.³²

Figure 4 below depicts various jurisdictions analyzed by OCA as of August 19, 2019:

Figure 4: Jurisdictions Table

| Location | Population ³³ | Twin home sf. | Twin home Unit Costs* | Average Cost of (townhouse, duplex) | Applied as Affordable or Low Cost Housing | Comments (what drives the cost of building twin homes) |
|--|--------------------------|----------------------|-----------------------|-------------------------------------|---|--|
| Chester City, Pennsylvania³⁴ | 33,909 | 1,400 sf - 1,500 sf. | \$350,000 | \$270,000 | Yes | Twin homes are generally more expensive where land values are high. Twin homes reported as generally more marketable than townhouses. Total development cost with prevailing wage and other governmental subsidy requirements for 4 units. |
| City of Miami, Florida³⁵ | 470,914 | 2041 sf. | \$375,000 | \$150,000 | Yes | The variability of building materials and labor costs affect the cost effectiveness of twin homes. |

³² *Marketability*, Defining Marketability (December 17, 2019) <https://marketbusinessnews.com/financial-glossary/marketability-definition-meaning/>

³³ U.S. Census Bureau, (2019) <https://www.census.gov/quickfacts/fact/table/stearnscountyminnesota,siouxfallscitysouthdakota,miamicityflorida,chestercitypennsylvania,US/PST045218>

³⁴ Email correspondence with Chester City, Pennsylvania dated August 20, 2019.

³⁵ Email correspondence with the Southeast Overtown/Park West Community Redevelopment Agency dated September 25, 2019.

| Location | Population ³³ | Twin home sf. | Twin home Unit Costs* | Average Cost of (townhouse, duplex) | Applied as Affordable or Low Cost Housing | Comments (what drives the cost of building twin homes) |
|---|--------------------------|----------------------|-----------------------|-------------------------------------|---|---|
| Sioux Falls, South Dakota ³⁶ | 181,883 | No sf. provided | \$169,500 | \$209,000 | Yes | Twin homes cost less in the long term due to high demand and being more marketable than townhouses in Sioux Falls. This can also be due to the attractive location where the twin homes were built. |
| Stearns County, Minnesota ³⁷ | 159,256 | 1,150 sf - 1,543 sf. | \$86,178 | \$175,045 | Yes. | Today building twin homes is cost prohibitive. |

*The information in this chart has not been adjusted for the time value of money.

A positive finding from twin home construction is that developers maximize the use of space by yielding two units with individual ownership as opposed to the larger footprint of a single-family home. Stearn County, Minnesota, utilized an Affordable Deferred Loan from HUD, restricting income and rental prices for twin home renters. Hillsboro, Kansas, combined the twin home concept and a rental assistance program to increase affordability. The city utilized 15 years' worth of tax credits to offset the low rental costs for tenants below or at a targeted area median income (AMI). After 15 years, if the same tenants remained on the property and is willing to buy it, the home was sold to the renter family at a discounted price. Rental payments are applied toward the purchase of the home. Hillsboro, Kansas was not added to the chart above due to its population being under 3,000.

b. HUD Interview with the Deputy Assistant Secretary for Economic Affairs

The 2017 American Housing Survey (AHS) data shows that from existing homes, attached dwellings represent 7.4 percent of the overall housing stock, 6.1 percent of owner-occupied housing, and 9.6 percent of renter-occupied housing. These percentages overestimate twin home construction because many attached homes may not be semi-attached. HUD reports there is no separate category for twin homes in the U.S.³⁸ According to HUD's AHS, twin homes are interchangeably represented on the list below within the broader category of single-family attached housing.³⁹ The AHS report is produced every two years, with the next report available in 2020.

Figure 5 below lists the units by structure type as provided by AHS⁴⁰

Figure 5 Units by Structure Type Table

| Units in Structure | Total Unit | Percent | Owner Units | Percent | Renter Units | Percent |
|---|------------|---------|-------------|---------|--------------|---------|
| 1 detached (single family home) | 76,830 | 63.2 | 64,380 | 83.0 | 12,450 | 28.3 |
| 1 attached (attached or semi-detached home) | 8,958 | 7.4 | 4,735 | 6.1 | 4,223 | 9.6 |
| 2 to 4 (duplex-quadplex) | 8,363 | 6.9 | 1,120 | 1.4 | 7,243 | 16.5 |
| 5 to 9 (condominium) | 5,780 | 4.8 | 528 | 0.7 | 5,253 | 11.9 |

³⁶ *Four new affordable housing projects planned*, SIOUXFALLS.BUSINESS, <https://siouxfalls.business/four-new-affordable-housing-projects-planned/>

³⁷ Email correspondence with Stearn County Housing & Redevelopment Authority dated October 1, 2019,

³⁸ Email from HUD, Kurt G. Usowski, Ph.D. Deputy Assistant Secretary for Economic Affairs, U.S. Department of Housing and Urban Development received on August 23, 2019.

³⁹ *Id.*

⁴⁰ *Id.*

| | | | | | | |
|--------------------------|----------------|--------------|---------------|-------------|---------------|-------------|
| 10 to 19 (condominium) | 5,282 | 4.3 | 413 | 0.5 | 4,869 | 11.1 |
| 20 to 49 (condominium) | 4,116 | 3.4 | 459 | 0.6 | 3,657 | 8.3 |
| 50 or more (condominium) | 5,427 | 4.5 | 887 | 1.1 | 4,539 | 10.3 |
| Total | 121,600 | 100.0 | 77,570 | 63.8 | 43,990 | 36.2 |

U.S. Census building permit data does not provide specific information on twin home building activity. Nonetheless, data on low-density multifamily housing construction serves as an imperfect projection for the twin home concept. According to the U.S. Census, only 1.5 percent of new units permitted between 2013 and 2018 were for two-unit structures. The South Florida metro areas comprised of Miami-Dade, Broward and Palm Beach Counties, reported only 1.2 percent of permits processed were for two-unit structures.⁴¹

There are a variety of reasons why twin homes and duplexes are not common in South Florida. Local zoning regulations requiring a minimum lot size, minimum lot line setback distances or explicit prohibition to attached homes make construction a challenge. Market conditions also play a role in the type of housing ultimately constructed. The owner occupied market may be driven by homebuyers willing to pay a premium to avoid sharing a wall with a neighbor. Multifamily housing developers in many urban areas may find that, given land costs, it is more profitable to build apartment buildings or condominiums with more than two units per structure. Building permits in South Florida for structures with five units or more reached 60.9 percent of total units permitted in 2018.⁴²

Building a twin home could be an appropriate strategy to advance the creation of affordable housing in areas of intermediate density, such as suburbs in growing metropolitan areas. According to the American Housing Survey 2017, renters and owners occupy a similar number of attached homes. This suggests that there could be a demand for twin homes in housing sub-markets of intermediate density. Nonetheless, HUD does not pursue any policies explicitly oriented toward encouraging the construction, purchase, or renting of twin homes.⁴³

VI. The Feasibility of Twin Homes in Miami-Dade County as Affordable or Infill Housing

OCA inquired with the Miami-Dade Public Housing and Community Development Department (PHCD) on the feasibility of incorporating twin homes as part of the County's public housing roster portfolio. PHCD indicated that the twin home concept had not been considered by the department. The department also stated that the driving force in determining the feasibility of twin homes as low-cost housing in Miami-Dade County is determined by market conditions and constituency interest.⁴⁴ The standard types of homes utilized for affordable housing by PHCD are townhouses, duplexes and condominiums. Ultimately, the determining factors are governed by what may sell in the affordable market, cost, ease of development and determining the type of affordable rental.⁴⁵

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ Email correspondence with PHCD dated October 31, 2018.

⁴⁵ *Id.*

Figure 6 below depicts the fair market rents for Section 8 Housing Choice Voucher Program recipients as of January 1, 2019, as reported by PHCD:⁴⁶

Figure 6 Fair Market Rents for Section 8 Table

| 1 Bedroom | 2 Bedroom | 3 Bedroom | 4 Bedroom | 5 Bedroom | 6 Bedroom |
|-----------|-----------|-----------|-----------|-----------|-----------|
| \$1,147 | \$1,454 | \$1,934 | \$2,354 | \$2,589 | \$3,060 |

OCA met with the County Attorney's Office and the Planning Section Supervisor from the Regulatory and Economic Resources (RER) department to discuss any legislative or regulatory limitations that would restrict the construction of twin homes in Miami-Dade County. They stated that there are no legal impediments in either the County Charter or the County Code to construct twin homes in Miami-Dade County.⁴⁷ The building concept behind twin homes is similar in scope to other housing types, such as townhouses and duplexes, as it pertains to applicable regulatory guidance. For example, the townhouse zoning district, known as RU-2 in the County, allows a single owner to own a particular lot in fee simple.⁴⁸ This would also apply to a twin home. While HUD identified zoning regulations as a hurdle to the construction of twin homes, RER advised that building a twin home is no different than constructing a townhouse or duplex, particularly in unincorporated Miami-Dade County.⁴⁹ RER was not aware of any community that uses twin homes as an affordable housing strategy.⁵⁰

a. Building Costs as a Determining Factor for the Style of Homes Being Built

The cost of building materials and labor are primary considerations when deciding the type of structure that will be built for affordable housing. Building costs (materials and labor) must be substantially reduced in order to complement the lower cost of land (typically a nominal fee of \$10.00 per conveyance) by the County to result in an affordable housing model.⁵¹ The type of structure, such as a twin home, is a secondary consideration for developers who first need to gauge the economic viability of the investment.⁵²

The cost per square foot to construct a standard home built in Miami-Dade County is \$125.00 per square foot. This is substantially greater than the \$95.35 average per square foot price for home construction in the southeastern U.S, as reported by the U.S. Census Bureau.⁵³ When applying the \$125.00 Miami-Dade County cost per square foot to a townhouse, which can range from 600 sq. ft. to 1,919 sq. ft. on average, the sales price ranges from \$75,000 to \$239,875. Moreover, issues relating to zoning rules imposed by municipal governments, for example mandating landscaping costs, can increase the cost of affordable housing.⁵⁴

⁴⁶ *Fair Market Rents*, PUBLIC HOUSING AND COMMUNITY DEVELOPMENT, (last visited Aug. 20, 2019), <https://www8.miamidade.gov/global/housing/fair-market-rents.page>

⁴⁷ Email correspondence from RER dated September 19, 2019.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ Email correspondence from RER dated September 19, 2019.

⁵² Email correspondence with PHCD dated October 23, 2018.

⁵³ Email correspondence with PHCD dated August 16, 2019; Miami-Dade County Resolution No. R-1119-18 (November 8, 2018) Conveyance of Property to Miami Association of Realtors, Inc., <http://intra/gia/matter.asp?matter=182899&file=false&yearFolder=Y2018>

⁵⁴ Roy Diez, *How Much Does It Cost Per Square Foot to Build a New House?*, NEWHOMESOURCE, <https://www.newhomesource.com/guide/articles/cost-to-build-house-per-square-foot>

b. Land owned by Miami-Dade County can Potentially be Utilized for Twin Home Development

On April 5, 2016, PHCD provided a report regarding a 10-year plan to increase the number of affordable and workforce housing units close to transit corridors associated with Resolution R-292-16.⁵⁵ The resolution authorizes the mayor to author a 10-year plan providing workforce and affordable housing in zones within a 2-mile radius of Metrorail stations and a 1-mile radius of high-frequency Metrobus corridors. County owned land could facilitate twin homes as a viable option to counter the affordable housing crisis. These vacant lots could potentially be sites for twin homes, duplexes, townhouses or row homes. Below is a chart showing the number of parcels identified in the PHCD report.⁵⁶

Figure 7 below depicts a list of County properties within 3 miles of Metrorail stations.⁵⁷

Figure 7 List of County Properties within 3 Miles of Metrorail Stations Table

| Metrorail Station | Parcels Available | Units Currently Permitted | Commission District |
|--|-------------------|---------------------------|---------------------|
| Dr. Martin Luther King, Jr. Plaza | 98 | 1,070 | 2 |
| Northside | 37 | 940 | 2 |
| Culmer | 28 | 794 | 3 |
| Historic Overtown/Lyric Theatre | 2 | 305 | 3 |
| Brownsville | 60 | 204 | 3 |
| Allapattah | 21 | 136 | 3 |
| Earlington Heights | 16 | 91 | 3 |
| Civic Center | 3 | 65 | 3 |
| Brickell | 1 | 27 | 5 |
| Miami International Airport | 5 | 20 | 6 |
| Santa Clara | 3 | 14 | 3 |
| Vizcaya | 1 | 7 | 7 |
| Okeechobee | 1 | 2 | 13 |
| South Miami | 4 | 2 | 7 |
| Government Center | 1 | 1 | 5 |
| Tri-Rail | 1 | 1 | 13 |
| Palmetto | 1 | - | 12 |
| Total Potential Parcels and Units | 283 | 3,679 | |

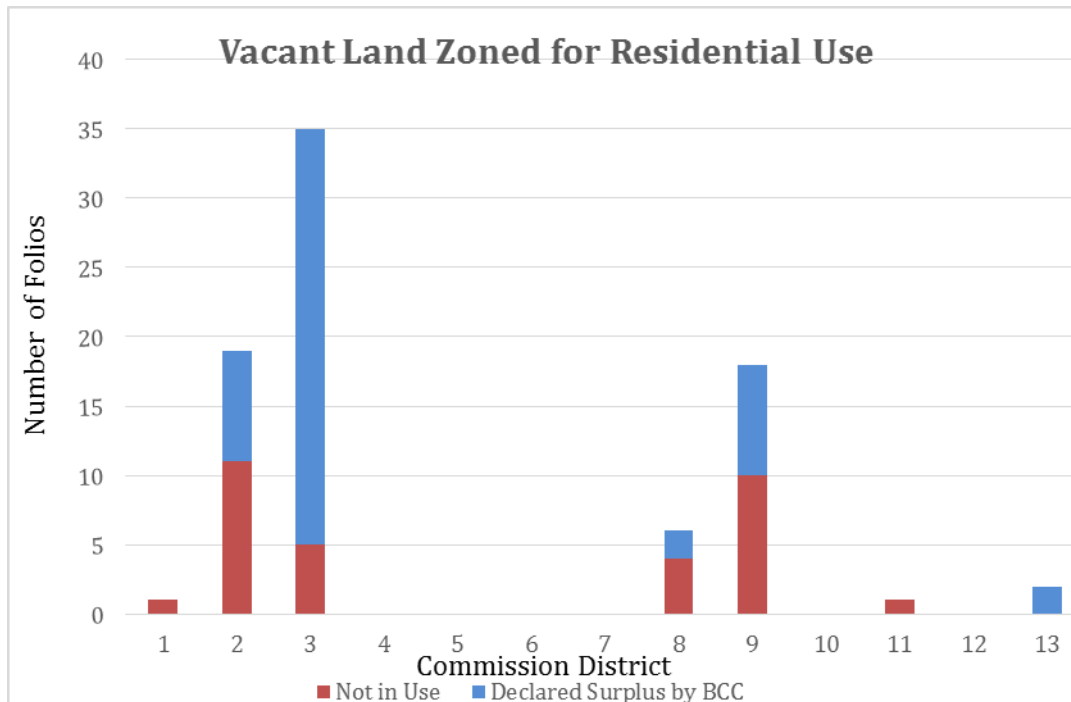
⁵⁵ Miami-Dade County Resolution No. R-292-16 (April 5, 2016) Affordable Housing; Transportation Networks; 10 Year Plan <http://www.miamidade.gov/govaction/matter.asp?matter=171838&file=false&fileAnalysis=false&yearFolder=Y2017>

⁵⁶ Miami-Dade County Directive 171838 (January 17, 2019) Affordable and Workforce Housing Units in Transit Corridors, <http://www.miamidade.gov/govaction/legistarfiles/Matters/Y2019/190111.pdf>

⁵⁷ *Id.*

Figure 8 below illustrates statistical information provided by PHCD concerning the availability of all vacant county land zoned for residential use, properties classified “Not in Use” and “Declared Surplus by BCC”. “Not in Use” denotes vacant lots that have not yet been brought before the Board to be declared surplus. “Declared Surplus by BCC” lots have already been approved by the Board as surplus.⁵⁸

Figure 8 Vacant Land Zoned for Residential Use Table



c. Federal and State Funding for Construction of Affordable Homes

The State of Florida administers the State Housing Initiatives Partnership program (SHIP). This program aims to provide local governments with an incentive to create partnerships that produce and preserve affordable homeownership and multifamily housing.⁵⁹ According to the Florida Housing Finance Corporation, SHIP dollars may be used to fund emergency repairs, new construction, rehabilitation, down payment and closing cost assistance, impact fees, construction and gap financing, mortgage buy-downs, acquisition of property for affordable housing, matching dollars for federal housing grants and programs and homeownership counseling.⁶⁰ Twin homes could be considered new construction intended to provide affordable housing, making twin homes ripe for SHIP funding.

The State of Florida’s Department of Economic Opportunity administers the Community Development Block Grant program (CDBG) created by Congress via the Housing and Community Development Act of 1974.⁶¹ The CDBG program focuses on assisting communities by providing funds for projects they cannot

⁵⁸ Email correspondence with PHCD dated August 23, 2019.

⁵⁹ *State Housing Initiatives Partnership (SHIP)*, FLORIDA HOUSING FINANCE CORP., (last visited Jul. 08, 2019) <https://www.floridahousing.org/programs/special-programs/ship---state-housing-initiatives-partnership-program>

⁶⁰ *Id.*

⁶¹ *Florida Small Cities Community Development Block Grant Program*, FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY, (last visited Aug. 1, 2019) www.FloridaJobs.org/SmallCitiesCDBG

afford, such as water and sewer improvements, rehabilitation of substandard housing, street and sidewalk improvements, economic development activities that create jobs for low and moderate-income people and drainage or stormwater improvements.⁶² If twin homes are constructed throughout the County, CDBG funding could be used to finance necessary capital improvement infrastructure projects, ensuring the cost of construction is kept as low as possible. The merger of SHIP and CDBG funding sources can assist in funding the construction of twin homes.

The Documentary Stamp Surtax program is another funding source for future twin homes. Since 1984 surtax loans are responsible for the construction of 5,750 low and very low-income residences⁶³ Moreover, over the past 35 years, the Surtax program provides low-cost construction financing allowing the County to partner with not-for-profit affordable housing developers to produce over 15,000 affordable multi-family rental units.⁶⁴

Furthermore, Florida has a Housing Credit program for profit and not for profit organizations providing a reduction on federal tax liability in exchange for acquisition and substantial rehabilitation or new construction of low and very low-income rental housing units.⁶⁵ Qualifying buildings include high rise, townhouses, duplexes/quads, single-family, or mid-rise with an elevator. Development projects not eligible are hospitals, sanitariums, nursing homes, retirement homes, trailer parks, and life care facilities.⁶⁶ Twin homes could potentially benefit from the Housing Credit program in much the same way that townhouses and duplexes benefit.

VII. Assessing Practicability of Twin Home Affordable Housing Legislation or Program for Miami-Dade County

The City of Miami Southeast Overtown/Park West Community Redevelopment Agency (SEOPW CRA) has proposed twin home construction to further the CRA's affordable housing goals specified in its Community Redevelopment Plan. The property designated as the future site of twin homes already maintains a duplex zoning designation.⁶⁷

The Tax Increment Finance Revenue that SEOPW CRA receives has already been allocated primarily to affordable housing projects. The planned twin homes in Overtown will be affordable to the future homeowners in the 50 to 60 percent AMI category. That is due to the involvement of the SEOPW CRA, which expects to ultimately sell the units at a cost lower than the expended amount for development. The cost for the structure is \$750,000, or \$375,000 per unit, which is calculated at a rate of \$183.00 per square foot. As stated by Mr. Brian Zeltman, CRA Director of Architecture and Development, the high development costs are a result of the rising costs of construction in the area and do not contribute to the affordability of the twin home. This phenomenon makes it nearly impossible for private developers to construct homes of the quality and size of those included in the SEOPW CRA affordable housing project, then sell at a price considered affordable for most local residents and while achieving a profit.

⁶² *Id.*

⁶³ MIAMI-DADE COUNTY, PUBLIC HOUSING AND COMMUNITY DEVELOPMENT, LIBRARY, (last visited Aug. 4, 2019) Brochure, <https://www.miamidade.gov/housing/library/brochures/surtax.pdf>

⁶⁴ *Id.*

⁶⁵ *Housing Credits*, FLORIDA HOUSING FINANCE CORP., (last visited Aug. 11, 2019) <https://www.floridahousing.org/programs/developers-multifamily-programs/low-income-housing-tax-credits>

⁶⁶ *Id.*

⁶⁷ *Folio: 01-3136-027-0250*, MIAMI-DADE COUNTY PROPERTY APPRAISERS OFFICE, (last visited Aug. 10, 2019) <https://www.miamidade.gov/Apps/PA/propertysearch/#/>

Another example of twin home development in Miami-Dade County is a proposed project by Lennar Corporation (Lennar). Lennar is developing a private twin home style housing project in Miami-Dade County.⁶⁸ While this development is a for-profit venture and not part of an affordable housing plan, the construction of this style home is important because it can illustrate trends in building styles and market demands based on constituent interests. Lennar's twin home development ranges in price from \$268,990 to \$298,990, with a square footage between 1,501 sq. ft. and 1,919 sq. ft.⁶⁹

Figure 9 below is an image of the twin homes being sold by Lennar Corp. in Miami-Dade County, Florida:



VIII. Conclusion

OCA's research reveals that twin homes are not a mainstream concept for affordable housing across the United States.⁷⁰ While the surveyed jurisdictions found twin homes to be marketable, the challenges associated with twin homes stem from the high cost of building materials and labor, which is a similar challenge experienced in other housing types. Without low cost materials and property, the possibility of selling a twin home at an affordable price is not likely to be realized as their price makes the twin home just as unaffordable as any other option requiring brick and mortar. The City of Miami's twin home experience demonstrated that the selling price of the units would have to be subsidized by tax dollars to make the homes affordable. OCA did not find any cost-benefit concerning twin homes in any of the jurisdictions analyzed.

Marketability was the only advantage cited in the jurisdictions surveyed. OCA found no legislative preemption or regulatory impediment limiting twin home construction in Miami-Dade County. Twin homes can be implemented in Miami-Dade County due to the sufficient availability of publicly owned land and the use of funding sources such as SHIP, CDBG, Documentary Stamp Surtax, and Housing Credit. However, the same could be said for higher density housing types such as townhouses, condominiums and duplexes.

Factors to consider in implementing the twin home concept in Miami-Dade County are building costs, market conditions (supply and demand) and maximization of space and density. These are the same factors to consider with any other type of housing. Additionally, other types of development can further maximize the footprint of vacant lots, such as quadplexes and condominiums. Available County land in proximity to mass transit corridors mentioned earlier creates a more favorable avenue for twin homes by maximizing the footprint efficiency and low impact on traffic density. This is complemented by the Workforce Housing Development program allowing property lots traditionally zoned for a specific number of units the

⁶⁸ *Campo Bello Twin Homes*, LENNAR, (last visited, May 1, 2019) https://www.lennar.com/new-homes/florida/miami/miami/campo-bello/twin-homes?utm_source=google&utm_medium=cpc&utm_campaign=dahlen_sem_google_md_branding&gclid=EAIaIQobChMIo77kn8SR5AIVgySGCh27XA35EAAYASAAEgJUCfD_BwE

⁶⁹ *Id.*

⁷⁰ Patty Decker, *Affordable housing project begins in Hillsboro*, HILLSBORO FREE PRESS (last visited Apr. 19, 2019) <https://www.hillsborofreepress.com/special-focus-sections/real-estate-focus/affordable-housing-project-begins-in-hillsboro>

flexibility of increasing the number of units.

The larger issue for the County and similar jurisdictions is the affordable housing crisis. As the cost of living increases and salaries remain static, housing becomes less affordable. Though twin homes is one option combating the County's housing crisis, OCA's research finds that the challenges associated with building cost did not give twin homes a comparative advantage as an effective solution.