Impact of the Miami 21's Parking Requirements on the Real Estate Developments in the City of Miami

by

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Abstract:

In the last years, Fort Lauderdale, West Beach, and Miami together became the 8th largest metropolitan area in the U.S. with a population of approximately 6 million people. During the last four years the population of such area increased almost 5%. Along with the population, the number of jobs and firms, the supply of new homes, the car commuters, and traffic congestion increased exponentially throughout the area, especially in Miami.

The former Miami zoning code, Z.O. 11000, incentivized the large availability and construction of parking spaces in new real estate developments throughout the city, encouraging people to own and use cars even more. The excess of parking spaces due to the former parking requirements, in practice, generated two distinct, immediate effects: (i) an increase in the number of cars throughout the streets; and (ii) higher construction costs for real estate developers.

In 2010, the City of Miami adopted the Miami 21 form-based zoning code, changing the zoning and parking requirements. These changes incentivized the construction of transit-oriented developments throughout the city. The parking ratios for all the uses were reduced and some exceptions to the parking requirements were implemented, especially for new residential developments in urbanized transects.

The reduction in parking ratios diminished significantly the construction costs of parking garages for real estate developers, increasing their returns on investments. The outcome is that real estate developers became even more interested in developing in the core of Miami. In addition to these economic incentives, the new residents of Miami are willing to live, work, and play in the same area without having to commute long distances.

These conditions are transforming the skyline of Miami. There are now approximately 50 new residential developments being built in transit-oriented areas throughout the city, which represents an increase of more than 400% within the last 15 years.

The purpose of this thesis is to analyze (i) the current parking requirements; (ii) the impact of parking ratios in the construction costs; and (iii) the changes that occurred in the location of new constructions in Miami after the adoption of the Miami 21.

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Chapter 1: Introduction

Historically, Americans have preferred to commute every day between home and work by car. According to the 2009 U.S. Census Bureau research[1], 86% of American workers take their cars to go to work while only 5% take public transportation and 9% choose other means of transportation, such as bicycle, motorcycle, taxicab, and walk. The same study showed that 88% of those workers who commute by car on a daily basis drive alone, while 12% carpool. These statistics partially explain the intense traffic congestion in most of the largest metropolitan areas throughout the U.S.

In the last years, Fort Lauderdale, West Beach, and Miami together became the 8th largest metropolitan area in the U.S. with a population of approximately 6 million people. According to the 2013 Census research[2], during the last four years the population of this area increased almost 5%. Along with the population, the number of jobs and firms, the supply of new homes, the car commuters, and traffic congestion increased exponentially throughout the area, especially in Miami.

According to a 2013 research from the Bureau of Labor Statistics[3], the total nonfarm employment in Miami and Miami Beach increased by more than 40,000 since 2008. Additionally, construction and sales of new homes in Miami - especially those located in high rises – has been booming since 2010. According to research by the National Association of Realtors, 30% of these new homes were purchased by local workers and 70% were purchased by international investors.

As a result of economic, housing, and population growth, traffic sustainability has become an issue. Miami planners and regulators were ever more concerned about how to reduce the chaotic congestion and to make the city more accessible through public transportation. They also wanted to make the area more pedestrian- and bicycle-friendly.

While ideas such as massive investments in rapid transit systems connecting the suburbs to the center of the city and the different cities within Miami County are being discussed, they have not yet been largely implemented.

[1] https://www.census.gov/prod/2011pubs/acs-15.pdf
[2] http://en.wikipedia.org/wiki/List_of_Metropolitan_Statistical_Areas
[3] http://www.bls.gov/ro4/cesmia.pdf

The former Miami zoning code, Zoning Ordinance 11000, incentivized the large availability and construction of parking spaces in new real estate developments throughout the city, encouraging people to own and use cars even more.

A more plentiful supply of parking makes it easier and more convenient for people to use their cars. In the city of Miami, for example, the supply of parking was growing ever more due to the steep increase of new constructions in the early 2000's, even though there were still very high parking ratios.

The excess of parking spaces due to the former parking requirements, in practice, generated two distinct, immediate effects: (i) an increase in the number of cars throughout the streets; and (ii) higher construction costs for real estate developers.

Additionally, in conversations with real estate developers active in the Miami area, one can immediately notice that although units were fully occupied by tenants or new owners, parking lots were partially empty. The first explanation for that is the fact that 70% of the units in the city are purchased by foreign investors to serve as second homes; therefore, cars are only needed sporadically or not at all. The second is that the residents might be changing their minds on how to deal with the city. Specifically, residents start questioning whether it is really worth it to own and use cars instead of other cleaner, more sustainable, cheaper, faster, and/or healthier modes of transportation.

In order to address the effects described above, the City of Miami adopted a new form-based zoning code called Miami 21. The new code reviews the city's zoning and parking requirements, entirely replaces Miami Zoning Ordinance 11000 rules, and incentivizes more transit-oriented developments throughout the city.

Miami 21 concerns the city as a whole. The parking ratios for all the uses were reduced and some exceptions to the parking requirements were implemented, based on adoption of shared parking and proximity to transit corridors, as well as Metromover and Metrorail stations.

One of the results of the change in parking requirements in the Miami 21 zoning code is that real estate developers became even more interested in developing buildings in areas in the core of the city of Miami, such as Brickell and Downtown.

Both the will of the residents to live, work, and play without having to commute long distances and the reduction in construction costs for developers contributed to the increasing development of the core of the city. Nowadays, most of the new buildings are located within walking distance to the main Metromover and Metrorail stations and the city's traffic sustainability is changing.

The purpose of this thesis is to analyze (i) the current parking requirements; (ii) the impact of parking ratios in the construction costs; and (iii) the changes that occurred in the location of new constructions in Miami after the adoption of the Miami 21.

Chapter 2: Miami Population Growth and City Expansion

From 1900 to 1920 the population of the City of Miami jumped from 1,681 to 30,000 people. With the rapid increase in population, there was a clear need for additional land to settle all the new families. The people from Miami used to live 5 kilometers west of Biscayne Bay, where the lands were not wet and where real estate developments could happen. Some canals were built to remove water from lands in Biscayne and turn them into developable and livable areas.

In 1913, with the completion of the bridge connecting downtown Miami to South Beach, new lands became available for new constructions. Population more than doubled from 1920 to 1923 because Miami authorities passed a bill authorizing casinos and gambling activities. Americans, especially those addicted to gambling, moved in from different parts of the country to Miami. This caused the first big land boom in the city in the 20th century. Many high-rises were built in South Beach and in the Downtown area to accommodate these new residents. Some separate districts were annexed to Miami, creating the Greater Miami Area.

By the end of the '20s, the cost of living in Miami increased exponentially and it became impossible to find an affordable place to live in the city. Additionally, many new constructions were delayed because of materials transportation problems, and the unsustainable situation led to the burst of the first economic bubble in the city. Furthermore, a category 4 storm struck Miami and caused many deaths and the destruction of buildings and houses. Finally, the Great
Depression caused more than 16,000 people in Miami to lose their jobs.

In February 1933, the former president of the United States, Franklin Roosevelt, survived an assassination attempt while speaking in Miami's Bayfront Park, Miami's mayor founded the Art Deco district in South Beach. Both events focused Americans' attention on Miami.

By the beginning of the 1940s, Miami was still recovering from the Great Depression. Even though the entire world was suffering from the effects of the World War II, Miami's economic and real estate markets were not that much affected. The reason is that hundreds of military ships were located in Miami and thousands of soldiers moved to south Florida because military bases were located in Key

West and Miami. After the war, a considerable number of servicemen and women went back and settled in Miami, increasing the local population to 500,000.

The 1959 Cuban revolution also contributed considerably to the increase in Miami's population. By the beginning of the '70s, more than 400,000 middle- and upper-class Cubans had left their country after Fidel Castro took power and headed to Miami, incentivized by the U.S. government. As the Cuban refugees moved to the U.S. without any savings, they slowly settled in the surrounding areas of the city, such as Little Havana, Flagami, Doral, and Coral Gables, expanding the footprint of Miami and creating opportunities for new real estate developments in those peripheral areas.

In 1978, there was a later immigration of 150,000 Cubans to Miami. Because of that, 90% of the white American middle class that lived in the area decided to leave to other cities within the U.S. In the '90s, refugees from other Latin countries, such as Haiti, moved to Miami in an attempt to get a better life and freedom, causing the city's population to increase even more.

Miami became a global city in the '80s because it was one of the country's largest drugs transshipment points. Billions of dollars generated by the cocaine industry were brought to Miami. As a result, the city became a prime destination, with luxury car dealerships, five-star hotels, nightclubs, huge commercial developments, shopping malls, and condominiums in high-rise buildings.

Most of the new residential and hospitality developments that were built in the '80s were in coastal boroughs such as South Beach, Brickell, North Miami, Sunny Isles Beach, and Coral Gables, because of the increase in the number of tourists and new residents. This boom led to an exponential increase in businesses moving to Miami Downtown and a large number of new commercial and retail developments. Brickell Avenue also emerged as a center of commerce, with skyscrapers housing foreign banks and other financial institutions.

From then on, the population of Miami continued to grow. The city became ever more focused on good education and attracted different businesses. As a result, hundreds of thousands of young people moved in and changed the urban scenario and the real estate stock requirements. The lack of equilibrium between supply and demand led to another boom in construction in the late '90s and early

2000s. The new residents needed small apartments located close to the Downtown and Brickell areas. The U.S. economy was performing well and the real estate sector in Miami was strong.

The effect of the last housing bubble crisis in the real estate market in Miami varied across the different types of use. The commercial, retail, and low-income residential real estate markets suffered tremendously. The luxury residential market, however, did not feel the crisis as much as the other big cities throughout the U.S. The reason was very well explained by Jorge Perez, the developer known as the "Condo King", in a conference in early 2014: "It's a very local market. It's for people who are used to paying cash for the most of their second homes, especially foreigners."

In the last five years, the city of Miami has been recovering quickly from the crisis and it can be clearly seen by the new constructions going on all through the city's footprint, especially in the Downtown and Brickell areas. There are currently more than 25 new mixed-use developments taking place in these areas to accommodate all the young people who are migrating to Miami. According to a local real estate developer who preferred not to be identified, "Most of the new units in new luxury condo buildings are being sold to foreign investors who pay 50% of the price upfront. These foreign investors rent their units out and are concerned not only with the yield but also in a way to protect their money and diversify their investments."

In the last years, Fort Lauderdale, West Beach, and Miami together became the 8th largest metropolitan area in the U.S. with a population of approximately 6 million people and, during the last four years, the population of the area increased almost 5%. Along with the population, the number of jobs and firms, the supply of new homes, the car commuters, and traffic congestion increased exponentially throughout the area, especially in Miami. Additionally, construction and sales of new homes in Miami - especially those located in high rises – has been booming since 2010.

As a result of economic, housing, and population growth, traffic sustainability has become an issue. Miami planners and regulators are ever more concerned about how to reduce the chaotic congestion and to make the city more accessible through public transportation. They also wanted to make the area more pedestrian- and bicycle-friendly. While ideas such as massive investments in rapid transit systems connecting the suburbs to the center of the city and the different cities within Miami County are being

discussed, they have not yet been largely implemented. In order to bring more sustainability to the city of Miami, however, changes were made to the zoning regulations.

Chapter 3: Zoning Codes

There are two main types of contemporary zoning codes: Euclidean Zoning Codes and Form-Based Zoning Codes. The City of Miami adopted a Euclidean Zoning Code until 2010. The adoption of the Miami 21 Form-Based Zoning Code in May 2010 changed the type of zoning code used by that city to regulate its growth.

The Miami 21 website[4] defines Euclidean Zoning Codes as "a type of zoning named for the Village of Euclid, Ohio where zoning was upheld in 1926 as a legitimate governmental power. These codes are characterized by establishing and regulating land-based use. Typical types of land-use districts in Euclidean zoning are: residential, commercial, institutional, and industrial. Euclidean Zoning is also referred to as 'Traditional Zoning' or 'Building Block Zoning'."

The main elements of a Euclidean Code are (i) a plan and map of the area that is regulated indicating the allowed activities and regulations; (ii) special district regulations that analyze each district individually; (iii) special exceptions, class II permits, and MUSP permit overlay districts; (iv) application and project review by the administration; and (v) definitions.

In a Form-Based Code, however, the main elements are (i) a plan and map of the area that is regulated indicating the allowed activities and regulations; (ii) regulations controlling the configuration, functions, and characteristics of buildings that define the interaction between the private and the public, including some illustrations of technical aspects; (iii) specifications for the elements within the public realm; (iv) a clear explanation of applications and review process by the administration; and (v) definitions.

While the goals of Euclidean Zoning are to prevent illegal overcrowding of certain parts of the cities and to separate uses based on factors such as height, size, noise, pollution, and parking requirements, the goals of form-based zoning are to incentivize mixed-use activities within neighborhoods, (making the city more walkable), to improve pedestrian pathways and public spaces, and to improve transit throughout the city.

[4] http://www.miami21.org/TypesofZoningCodes.asp

As a result, Euclidean Zoning generates segregation of uses throughout the city, long commutes for certain communities, and dependence on automobiles, thus increasing the need for parking spaces and streets built mostly for cars. On the other hand, the outcomes of form-based zoning are areas with greater intensity, zones with mixed-use developments, transitional zones created by form rather than use, fewer cars commuting throughout the city, focus on public transportation, and pooled vehicles.

According to the Miami 21 website[5], "Miami 21 represents the 'Miami of the 21st Century' and entails a holistic approach to land use and urban planning. It provides a clear vision for the City that is supported by specific guidelines and regulations so that future generations can reap the benefits of well-balanced neighborhoods and rich quality of life. Miami 21 takes into account all of the integral factors that make each area within the City a unique, vibrant place to live, learn, work, and play. Six elements served as the lynchpins in the development of the blueprint of Miami: Zoning (Miami 21 Zoning Code), Economic Development, Historic Preservation, Parks and Open Spaces, Arts and Culture, and Transportation."

Some of the planning principles of Miami 21 are (i) activation of inactive streets by transforming blank walls, bringing buildings closer to the sidewalk, and creating pedestrian- and bicycle-friendly sidewalks; (ii) urban infill redevelopment that transforms vacant lots and open intersections into walkable and urban areas; (iii) development of mixed-used neighborhood centers that generate jobs and local services within walking distance to the residents; (iv) transformation of the main corridors of the neighborhoods into job and service hubs and investment in rapid transit systems; (v) transformation of one-way streets into two-way streets in order to activate them; (vi) creation of bike lanes connecting neighborhoods; (vii) reduction in the number of cars in the streets by creating alternative commuting methods; and (viii) lining of parking garages with well-designed buildings creating storefronts to the streets as well as improved businesses and pedestrian pathways.

[5] www.miami21.com

Chapter 4: History of Zoning in Miami

The new zoning code provides a new vision for the growth and future sustainability of Miami. Before looking forward, it is instrumental to understand the context in which this code was created and take a look at the history of zoning in Miami.

In February 1915, H.G. Ralston, the city councilman, "called attention to the manner in which the city is now spreading out, the platting of new additions without any idea of conformity to streets in the older sections" (City of Miami, 2009b). Apparently, according to the article "City Planning Program is Delayed" from the *Miami Daily Metropolis*, February 1915[6], at the time the city could not afford the cost of $1,500 of the Master Plan charged by the consulting engineering firm.

A couple of years later, the Miami Chamber of Commerce disclosed the article of zoning, endorsing the creation of a code to regulate zoning in Miami and the mayor pushed the Commission to approve it. The first zoning ordinance, however, was not adopted until August 8, 1934. It was modified more than 5,000 times, creating a "hodge-podge, meaningless ordinance, similar to what Miami is experiencing today", according to the City of Miami[7].

The 1934 zoning ordinance was finally replaced in 1960 by a new one that rezoned the entire city, dividing it into nine different sections. This rezoning affected more than 30,000 properties. Not surprisingly, the population complained and objected to the new plan.

A new ordinance called "Zoning Ordinance 9500" was created in 1982 to replace the one from 1960. This new ordinance introduced new concepts such as mixed-use and neighborhood activities. The 9500, in turn, was replaced by "Zoning Ordinance 11000" as an attempt to "simplify the ordinance and address issues with parking and setbacks for residential homes," according to the City of Miami. It increased parking requirements for new apartments and doubled the minimum lot size to handle extra parking. Among other provisions, developers had to pay extra money to the city in order to increase their development sizes. This code was very permissive. The 11000 was amended several times during its life and the city started working on a new zoning code to replace this one.

[6] http://www.miami21.org/Miami_Zoning_History2.asp
[7] http://www.miami21.org/Miami_Zoning_History.asp

After almost eight years of discussion, the form-based code Miami 21 was approved in 2010 to replace the 11000. As previously explained, this code attempts to create a better, more pedestrian- and bicycle-friendly city that features more open and public spaces, more transit-oriented developments, and less traffic congestion.

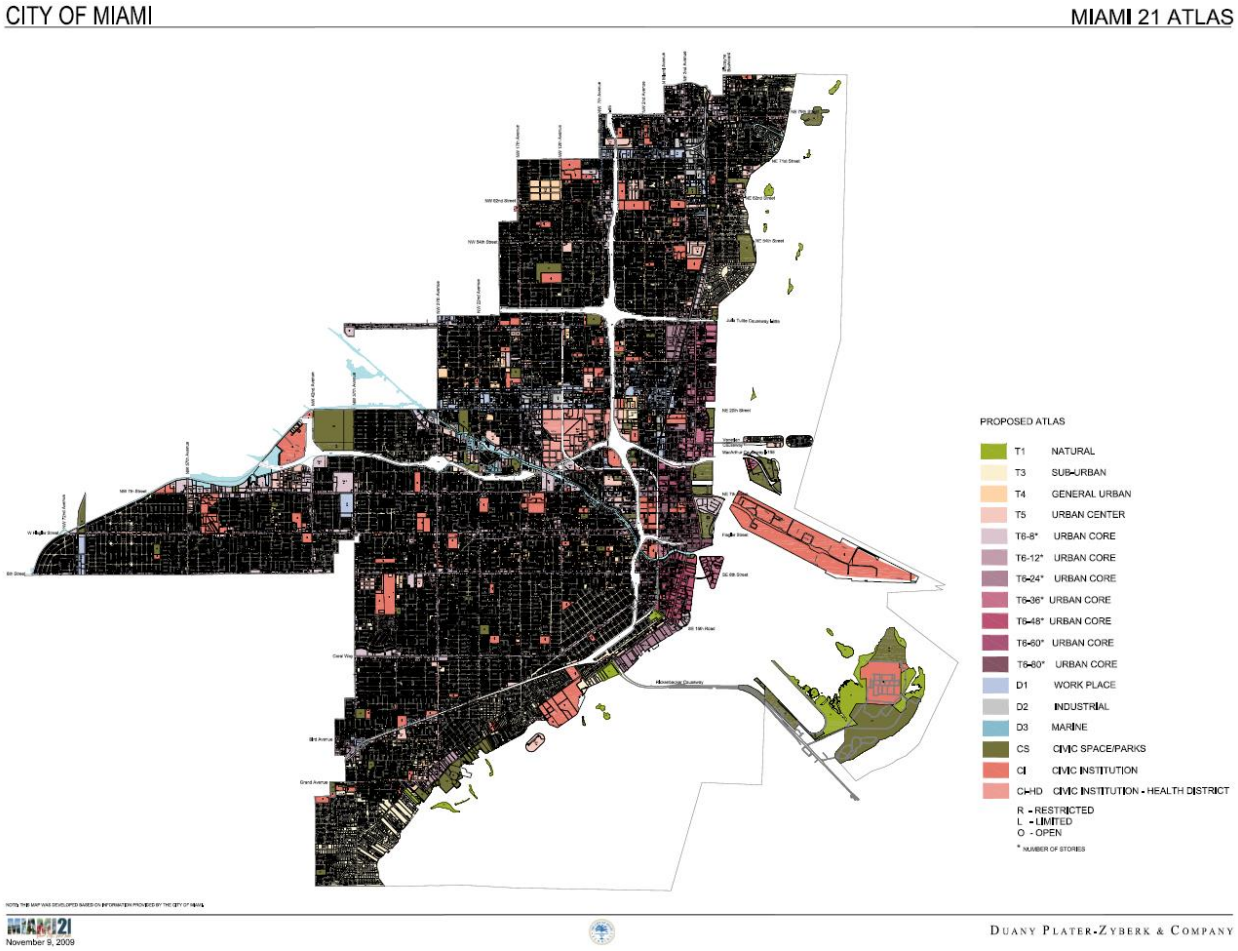
Just after its publication, the Miami 21 code won a national award from the American Planning Association in 2011. As published by Andres Viglucci in *The Miami Herald* on January 15th, 2011[8]:

> "The city of Miami's pedestrian-friendly zoning overhaul, which went into effect in 2010 after years of often-contentious debate, has hauled in another big national award, this one from the American Planning Association.
>
> The planning profession's main organization this week named Miami 21 the winner of its 2011 National Planning Excellence Award for Best Practice, one of the group's top awards.
>
> The APA's announcement hailed the new zoning code for paying ``particular attention to interaction between the public and private realms, especially to encourage walkable and vibrant streetscapes.'
>
> The Miami 21 code, a cornerstone of former Miami Mayor Manny Diaz's administration, replaced an antiquated code that critics said encouraged haphazard, overscale development and fostered an urban environment that favored autos over pedestrians. The new, urban-oriented code requires new buildings to have pedestrian-friendly, sidewalk-hugging frontages to foster street activity.
>
> Among other awards, Miami 21 previously garnered an American Architectural Foundation award for Diaz, and led *Governing* magazine to recognize former planning director Ana Gelabert-Sanchez, who shepherded the code to enactment, as its Top Public Official of the Year."

[8] http://www.miami21.org/Media_Headlines/TMH20110115-2.pdf

Chapter 5: Miami 21 Formed-based Zoning Code

The Miami 21 form-based zoning code divides the city of Miami into building blocks and defines each building block as a transect. The City of Miami provided us with the atlas below (Figure 1) that shows each different transect throughout the city and its characteristics.



[**Figure 1** – Miami atlas showing the transects division throughout the city]

The general definition of transect given by the City of Miami[9] links the concept to a "zone which functions more like an inclusive environment, rather than simply regulating uses (as traditional zoning). The term Transect Definition is borrowed from the natural sciences and is used to describe geographical cross sections that are distinct natural environments."

[9] http://www.miami21.org/TheTransect.asp

In human environments, transect zones makes it possible to organize different components from the real world, such as buildings, open space, public parks, lots, and streets. They help identify rural and urban places within the city's blueprint. Some of these transects in an urban area have a high intensity of human development, whereas others have a low intensity of. The more human development, the less natural diversity such as green spaces and preserved areas. The T1 transects are all green and do not show any human development because they are natural zones. The closer the transects are from T1 the more natural they are.

This transects system regulates much more than traditional zoning does. As it focuses on each block separately and carefully, it also regulates: the buildings' disposition in relation to the parcel of land or lot; the building's configuration, shape, and form,; the uses allowed in each transect and the percentage of the building that should be addressed for each use; the landscape standards; the parking standards depending on the transect, the use, and the intensity of use; the integration between private property and public spaces through pedestrian orientation and landscape standards; and the relationship between different transects, ensuring a smooth succession of environments.

5.1. Types of Transects

5.1.1. T3 – Sub Urban Zones

These zones are partially developed and keep some of their natural features. The developments in this type of transect are characterized by their low density and consist mostly of single- and two-family residential units with deep setbacks, streetscapes, and pedestrian pathways in front of the houses. The blocks here are usually larger than those in the more developed transects and can accommodate natural and/or historical conditions.

Only residential, civic, civil support, and educational uses are permitted in these transects. For most of the residential types the permitting is granted by right, while for civic and educational uses the permitting is granted exception. For the development of civic support buildings, a warrant is necessary. The table summarizing the regulation of uses for the T3 areas, available in the City of Miami website[10], is enclosed as **Appendix 1**.

The parking requirements for residential developments in T3 areas depend on the intensity of use, which is divided into restricted, limited, and open. The first designates areas with residential single-family only, the second designates areas with residential single-family and ancillary units, and the third refers to areas with residential single- and two-family (duplex) units.

For Restricted T3 zones, the maximum density allowed by the zoning regulation is nine units per acre. For principal dwelling units at least two parking spaces are required. For adult family-care homes, the minimum parking requirements are one space per staff member and one space per four residents. For community residences, the requirement is one parking space per staff member in addition to the parking required per dwelling unit.

For Limited T3 zones, the maximum density and the parking requirements per use are exactly the same. The only difference is that for ancillary dwellings there is a minimum of one parking space per ancillary dwelling unit. For Open T3 zones, the parking requirements are exactly the same; however, the

[10] http://www.miami21.org/T3_TypesPage.asp

maximum density increases to 18 units per acre. The table enclosed as **Appendix 2**, also available in the City of Miami website[11], summarizes the parking requirements for T3 zones.

5.1.2. T4 – General Urban Zones

These zones are one of the easiest to find in the United States. Their vitality is typical of American urbanism. They are primarily residential, with mixed-use buildings that vary from townhouses and small apartments to live/work units and bungalow courts. In these zones the setbacks are short and the streetscape has larger sidewalks and trees. The lots are medium-sized and within walking distance to the main corridors of the town center.

Residential, lodging, office, and commercial are the uses permitted in these transects. The table enclosed as **Appendix 3**, also available in the City of Miami website[12], summarizes the regulation of uses and the type of permitting necessary for each use for the T4 areas. In this study we will focus on the residential use only.

The parking requirements for residential developments in T4 areas also depend on the intensity of use. Despite the intensity, for all of the T4 zones the maximum density allowed by the zoning regulation is 36 units per acre.

In Restricted T4 zones, there is a requirement of at least 1.5 parking spaces for principal dwelling units. For ancillary dwellings there is a minimum of one parking space per unit. For adult family-care homes, the minimum parking requirements are one space per staff member and one space per four residents. For community residences, the requirement is one parking space per staff member in addition to the parking required per dwelling unit.

For Limited T4 zones, the parking requirements per residential use are exactly the same. The only differences are that for live-work the minimum parking requirement applies for non-residential and residential use. These parking requirements may be reduced according to the adoption of shared

[11] http://www.miami21.org/T3_Parking_Landscape.asp
[12] http://www.miami21.org/T4_TypesPage.asp

parking, and one bicycle rack is required for every 20 vehicular spaces. For Open T4 zones, the parking requirements are exactly the same. The table enclosed as **Appendix 4**, also available in the City of Miami website[13], summarizes the parking requirements for T4 zones.

5.1.3. T5 – Urban Center Zones

These zones are well developed and consist of higher density mixed-use buildings, with retail, commercial, and residential components. The developments in this type of transect are characterized by the creation of network blocks, which feature wide sidewalks with consistent tree planting. Buildings have short setbacks with numerous doors and windows to incentivize pedestrian activities and interaction between the private property and the public spaces.

Residential, lodging, office, commercial, civic, civil support, and educational uses are permitted in these transects. The table enclosed as **Appendix 5**, also available in the City of Miami website[14], summarizes the regulation of uses and the type of permitting necessary for each use for the T5 areas. In this study we will focus on the residential use only.

The parking requirements for residential developments in T5 areas also depend on the intensity of use. Despite the intensity, for all of the T5 zones the maximum density allowed by the zoning regulation is 65 units per acre.

For principal dwelling units in Restricted T5 zones, there is a requirement of at least 1.5 parking spaces plus one additional visitor space for every 10 dwelling units. For ancillary dwellings there is a minimum of one parking space per unit in addition to the parking required for the principal dwelling unit. For adult family-care homes, the minimum parking requirements are one space per staff member and one space per four residents. For community residences, the requirement is one parking space per staff member in addition to the parking required per dwelling unit. These parking requirements may be reduced according to the adoption of shared parking, and one bicycle rack is required for every 20 vehicular

[13] http://www.miami21.org/T4_Parking_Landscape.asp
[14] http://www.miami21.org/T5_TypesPage.asp

spaces. If the development is within a ½ mile radius of transit oriented development (TOD) and a ¼ mile radius of a transit corridor, the parking ratio can be reduced by 30%.

For Limited T5 zones, the parking requirements per residential use are exactly the same. The only additional requirements are that for live-work the minimum parking applies for non-residential and residential use. For Open T5 zones, the parking requirements are exactly the same. The table enclosed as **Appendix 6**, also available in the City of Miami website[15], summarizes the parking requirements for T5 zones.

5.1.4. T6 – Urban core zones

These are very high-density zones consisting of an enormous variety of uses, such as residential, commercial, retail, and civic buildings of regional importance. T6 zones' streets have wide sidewalks with consistent tree plantings. Buildings have short setbacks and their doors and windows are planned in a way to incentivize pedestrians to come in. The interaction between the private property and the public areas is important in T6 zones.

These zones are complex and their regulation has to control not only uses but also the number of stories and square footage of the buildings. To accomplish this, the city divided the urban core zones into various transect sub-zones, identified by T6, followed by the maximum number of stories permitted by right for such transects, according to the table below (Figure 2).

T6-8	max. eight (8) stories
T6-12	max. twelve (12) stories
T6-24	max. twenty-four (24) stories
T6-36	max. thirty-six (36) stories
T6-48	max. forty-eight (48) stories
T6-60	max. of sixty (60) stories
T6-80	max. of eighty (80) stories

[**Figure 2** – T6 transect subzones identifying the maximum number of stories]

[15] http://www.miami21.org/T5_Parking_Landscape.asp

The uses permitted for T6 zones are residential, lodging, office, commercial, civic, civil support, and educational. The table enclosed as **Appendix 7**, also available in the City of Miami website[16], summarizes the regulation of uses and the type of permitting necessary for each use for the T6 areas. In this study we will focus on the residential use only.

The parking requirements and the maximum density for residential developments in T6 areas also depend on the intensity of use. In Restricted and Limited T6 zones, the maximum density allowed is 150 units per acre while in Open T6 zones the maximum can vary from 150 to 1,000 units per acre.

For principal dwelling units in Restricted T6 zones, there is a requirement of at least 1.5 parking spaces plus one additional visitor space for every 10 dwelling units. For adult family-care homes, the minimum parking requirements are one space per staff member and one space per four residents. For community residences, the requirement is one parking space per staff member in addition to the parking required per dwelling unit. These parking requirements may be reduced according to the adoption of shared parking, and one bicycle rack is required for every 20 vehicular spaces. Another possibility of reduction of parking ratio by 30% is that in which the development is located within ½ mile radius of TOD and within ¼ mile radius of a transit corridor. In T6-36 and T6-48, parking for residential uses is not required as long as these subzones are located within 1,000 feet of a Metrorail or Metromover station. Alternatively, offsite parking can be provided by ownership or lease within 1,000 feet.

For Limited T6 zones, the parking requirements per residential use are exactly the same. The only additional requirements are that for live-work the minimum parking applies for non-residential and residential use. For Open T6 zones, the parking requirements are exactly the same. The table enclosed as **Appendix 8**, also available in the City of Miami website[17], summarizes the parking requirements for T6 zones.

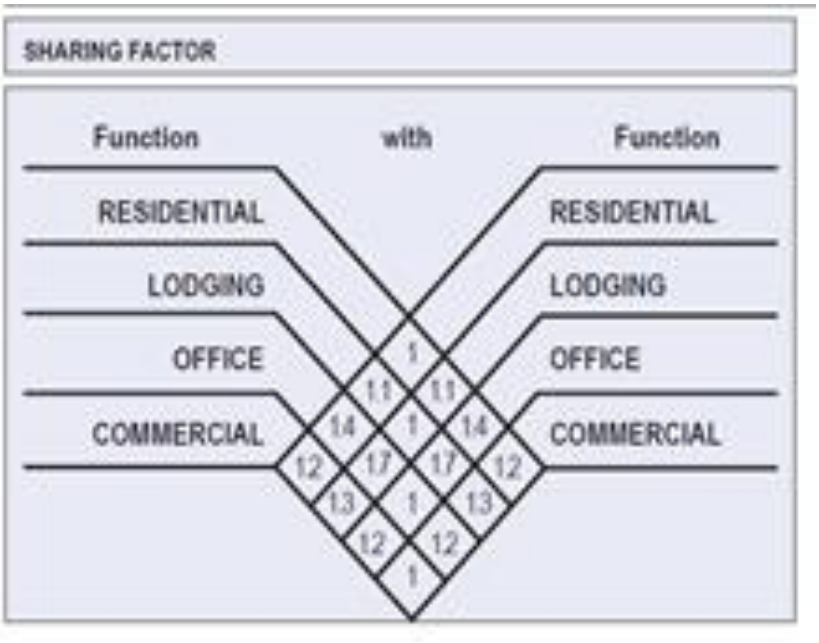
[16] http://www.miami21.org/T6_TypesPage.asp
[17] http://www.miami21.org/T6_Parking_Landscape.asp

Chapter 6: Further look into parking requirements' exceptions

According to the Miami 21 zoning code, the City of Miami allows developers to build certain residential projects in certain areas without having to comply with the minimum parking requirements established in the regulation.

The first exception is applicable for residential developments located in urban center zones and urban core zones within a ½ mile radius of TOD or within a ¼ mile radius of a mass transit corridor. In its website, the city defined TOD in order "to support and promote the use of public transit, involving an area of roughly one half mile radius, with a convergence of modes of transit or a train station". The city defines a transit corridor as "a mass transit route with designated transit vehicle(s) operating at an average 10 minute or less headway Monday to Friday between the hours of 7am thru 7pm and includes designated transit stop locations". Moreover, according to the city, "multiple transit routes or types of transit vehicles may not be added cumulatively under this definition for the purpose of parking reductions". This parking reduction is only applicable if the development is not within 500 feet of a transect T3.

The second possibility of a parking reduction involves having shared parking standards, which means that parking spaces are available for more than one function. It is applicable for limited and open transects in general urban zones, and for all the transects in urban center zones and urban core zones. This reduction is only applicable for mixed-use developments. The city provides the following shared parking standards table to help with the calculation of shared parking for this type of development. According to the Miami 21 code, "the parking required for any two functions on a lot is calculated by dividing the number of spaces required by the lesser of the two uses by the appropriate factor from this table and adding the result to the greater use parking requirement". Additionally, if there is another use that is not indicated in the sharing factor chart, then the sharing factor of 1.1 should be considered by the developer.

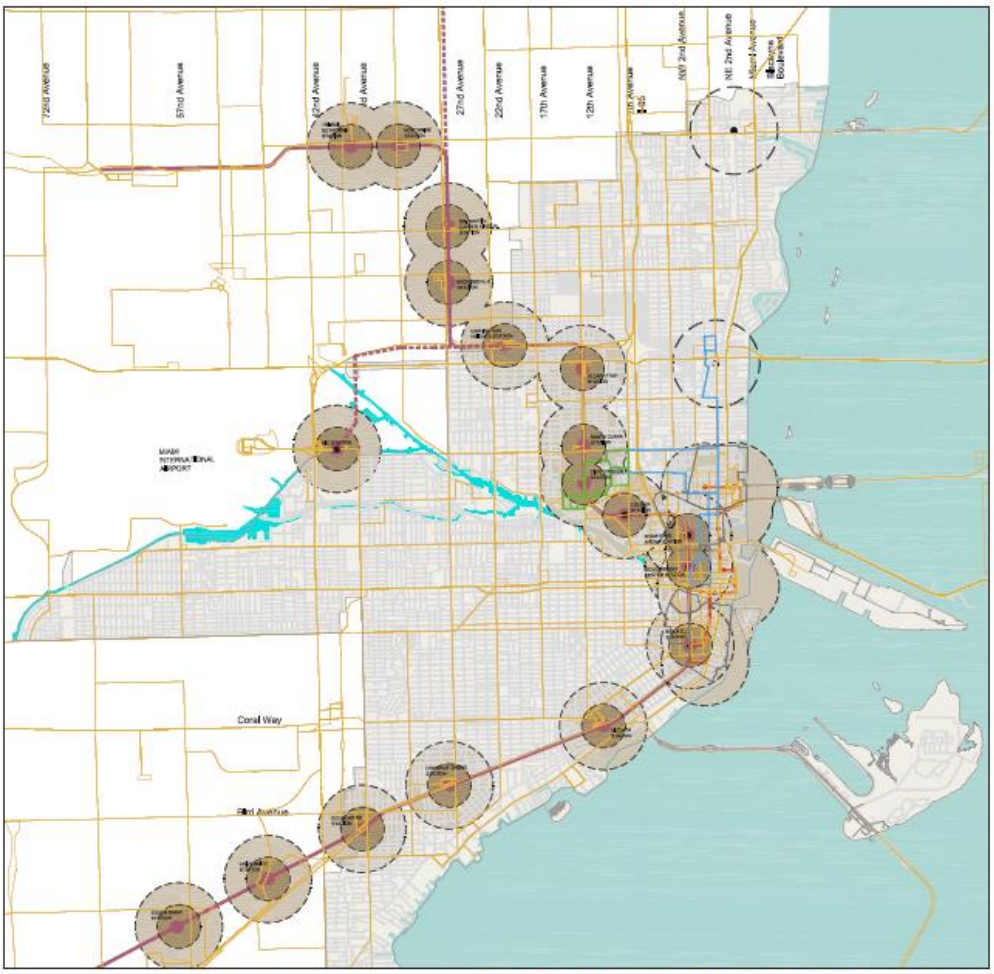


[**Figure 3** – Parking's sharing factor chart for mixed-use developments]

As an example, for a building with residential use that requires 200 spaces and an office use that requires 28 spaces, one should divide the 28 spaces by the sharing factor 1.4, getting the total requirement of 200 plus 20 spaces.

A third method of parking reduction allowed by the Miami 21 code for limited and open transects in urban center zones and in urban core zones involves offsite parking. According to the code, "parking may be provided by ownership or lease offsite within 1,000 feet by process of waiver, except when the site is within 500 feet of T3 transects". For these specific transects real estate developers can provide parking for rent or sale outside the residential development, thereby reducing the amount of parking spaces inside the development.

One final exception provided by the Miami 21 code allows real estate developers to build residential buildings up to 80 stories without any parking space in transects T6-60 and T6-80 of urban core zones, as long as these developments are located within 1,000 feet of Metrorail or Metromover stations. The Miami 21 code provides the following diagram that identifies all the existing Metrorail and Metromover stations throughout Miami.



Note: The Official Miami 21 TOD Diagram is maintained in the Office of the City Clerk.

- METRORAIL
- FUTURE METRORAIL
- METROMOVER
- BUS ROUTES
- STREETCAR
- HEALTH DISTRICT CIRCULATOR
- HEALTH DISTRICT STOPS
- FUTURE TRANSIT SHEDS
- 1/2 MILE TRANSIT SHED
- 1/4 MILE PEDESTRIAN SHED

[**Figure 4** - Diagram identifying the existing Metrorail and Metromover stations in Miami]

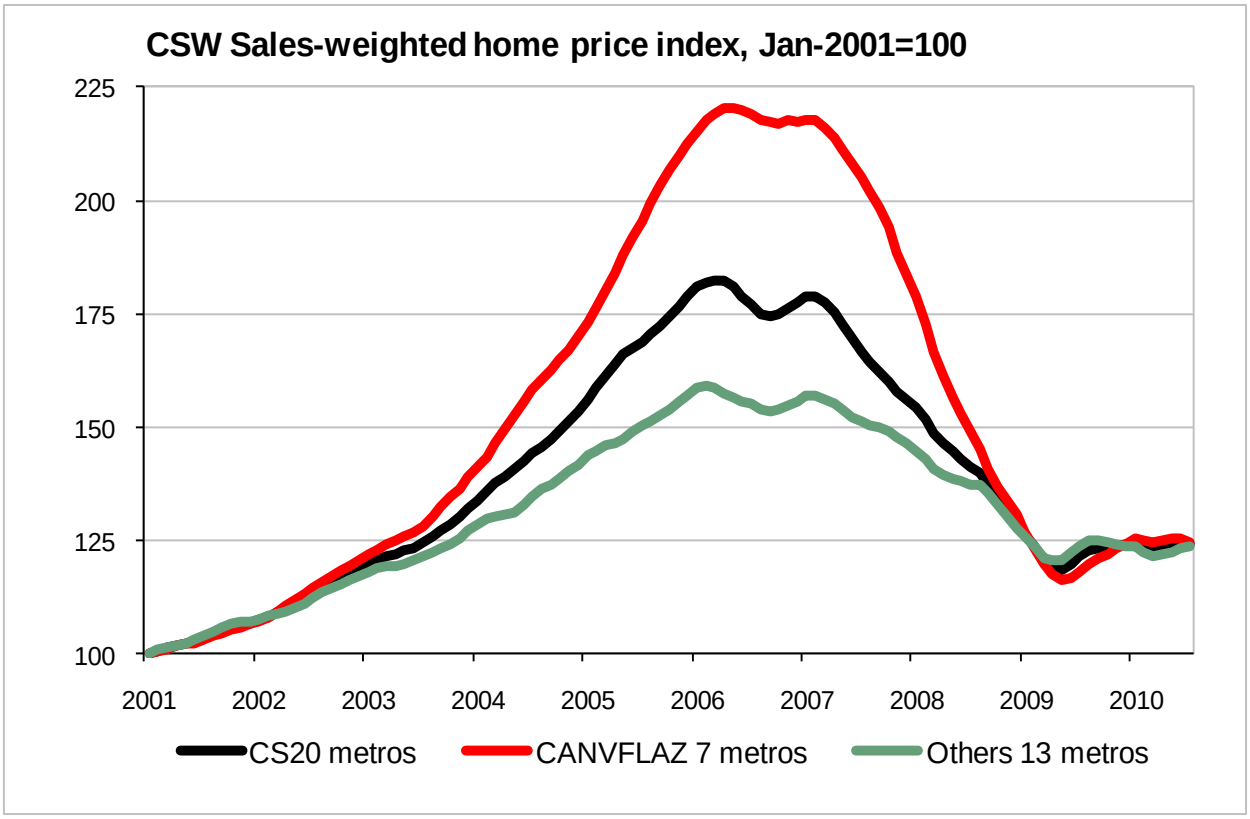
Chapter 7: Second Home Markets During the Crisis

Since the '90s Miami has been a real estate investment target for foreign investors and non-residents, meaning that it became a second-home market and foreign investors' haven. In order to understand what happened in Miami real estate market before, during, and after the crisis, it is worth looking into William Wheaton's study on the high volatility of property prices in second-home markets[18].

The number of second homes in a certain place can be calculated from the vacancy data disclosed by the Census. The calculation considers the sum of usual residence elsewhere, seasonal residence, occasional use, and others. Wheaton's study found that within the U.S. the percentage of second homes grew from 8% of owned units in 1978 to 16% in 2008, or by 200,000 additional second homes per year.

Not coincidentally, four states in the U.S. contributed in a disproportional way to the real estate boom and bust during the same period: Florida, California, Arizona, and Nevada. Most of the second homes in the U.S. are located in these states. When the economy is doing well, people tend to buy additional properties in these areas and prices tend to increase in a steep curve. The appreciation of home prices in second-home havens is more evident than the appreciation of prices in other cities, when the buying curve is on the rise. For instance, the housing prices in Florida, California, Arizona, and Nevada were two times the housing prices in the other metropolitan areas from 2006 to 2008. This housing price behavior can be identified in the graph below, also developed by Wheaton[19].

[18] Wheaton, William C. and DiPasquale, Denise. *Urban Economics and Real Estate Markets*.
[19] Graph obtained from the Week 9 presentation made by William Wheaton in the Real Estate Economics course at MIT – Center for Real Estate.



[**Figure 5** – Weighted home price curves for groups of states from 2001 to 2010]

According to the Wheaton study, the participation of these four states in the U.S. real estate crisis is extremely significant relative to population or housing market share. The table below, taken from the same study[20], shows the states' percentage of population, residential permits, existing sales, second-home investments, total loans, under water loans, and foreclosure relative to the entire country.

[20] Table obtained from the Week 9 presentation made by William Wheaton in the Real Estate Economics course at MIT – Center for Real Estate.

	CANFLAZ as a % of US							
	2001	2003	2005	2006	2007	2008	2009	2010*
Total population	20.4	20.7	21.0	21.0	21.0	21.1	21.1	21.1
Residential permits	25.2	27.7	29.3	25.5	20.7	18.2	15.7	16.8
Existing home sales	20.6	20.8	20.4	16.5	14.0	18.0	21.8	21.4
2nd/investment home loans	35.4	39.9	44.2	*NA*	*NA*	*NA*	*NA*	*NA*
Total loans	27.6	27.1	29.4	27.7	25.8	26.1	26.3	26.3
"Under Water" Loans	NA	NA	NA	NA	NA	NA	NA	49.2
Foreclosure starts	*NA*	*NA*	23.8	26.6	37.9	47.4	50.4	46.8

** year-to-date*

Sources: BLS, BOC, HopeNow, HMDA, Loan Performance, NAR, RealtyTrac.

[**Figure 6** – Table showing the percentage of population, residential permits, existing sales, second-home investments, total loans, under water loans, and foreclosure compared to the entire country]

According to the table, one can conclude that although these four states only contained approximately 21% of the population of the U.S., they represented more than a quarter of all the real estate loans in the country and approximately 50% of the foreclosures nationwide in 2008. Additionally, the number of second-home loans in these states until 2005 compared to the U.S. as a whole is quite high.

Based on these data one can conclude that second-home markets and foreign investment havens are very risky. Volatility in home prices is high and can be attributed to several different factors.

The first factor is that second home developments are usually large and feature long lead times. Often they are not completed within the same real estate cycle, which means absorption of the new stock available in the market is pretty low.

The second factor is that potential buyers of second homes usually stop buying properties when the economy slows down and the market starts to soften. They walk away from sales commitments to avoid big losses because the second home is an investment and not the place for permanent residence.

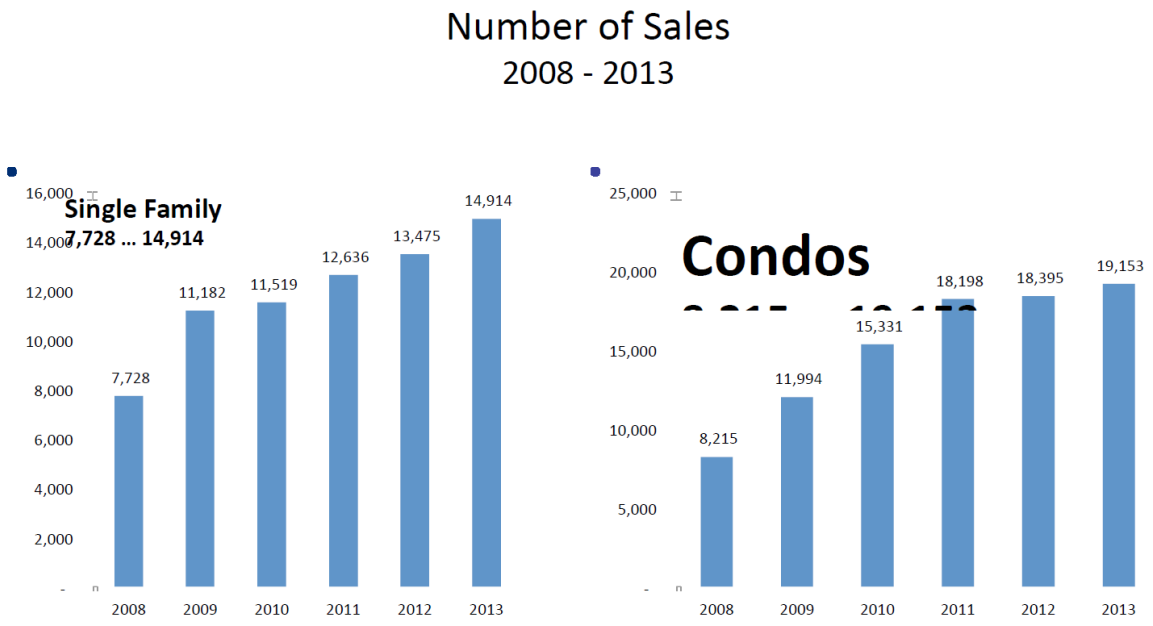
The third factor is that it is hard to determine demand for properties in these places. Potential second-home buyers usually come from different parts of the country and the world. Their countries' political and economic climates and their tolerance for risk influence their decision to invest in a different real estate market and to buy second homes. It is not easy to forecast their demand with accuracy.

Another important factor is the patience of investors when the markets are declining. Depending on the opportunity cost of capital for different investors, some will have more patience and will keep their properties and their commitments while others will immediately sell and "get out" at one. The behavior of these investors has an enormous impact on the second home market.

Lastly, another factor that strongly influences the real estate industry in second-home markets and foreign investment havens is the foreign exchange rate. The stronger the U.S. dollar is, the less likely foreign investors are to buy a second home in the U.S. When foreigners are converting their currencies into U.S. dollars, a rising dollar will negatively impact their ability to purchase and invest in second homes in the U.S.

Chapter 8: Miami Real Estate Market Overview

According to the presentation "Doing Business with Argentina" from the Miami Association of Realtors, despite the 2008 crisis, Miami is experiencing the highest number of property sales in its history. Since 2008, the number of sales of residential units in Miami has more than doubled for both single-family units and condominiums, according to the graph below, also extracted from the same presentation[21].



[**Figure 7** – Graph showing the number of sales in single-family units and condos from 2008 to 2013]

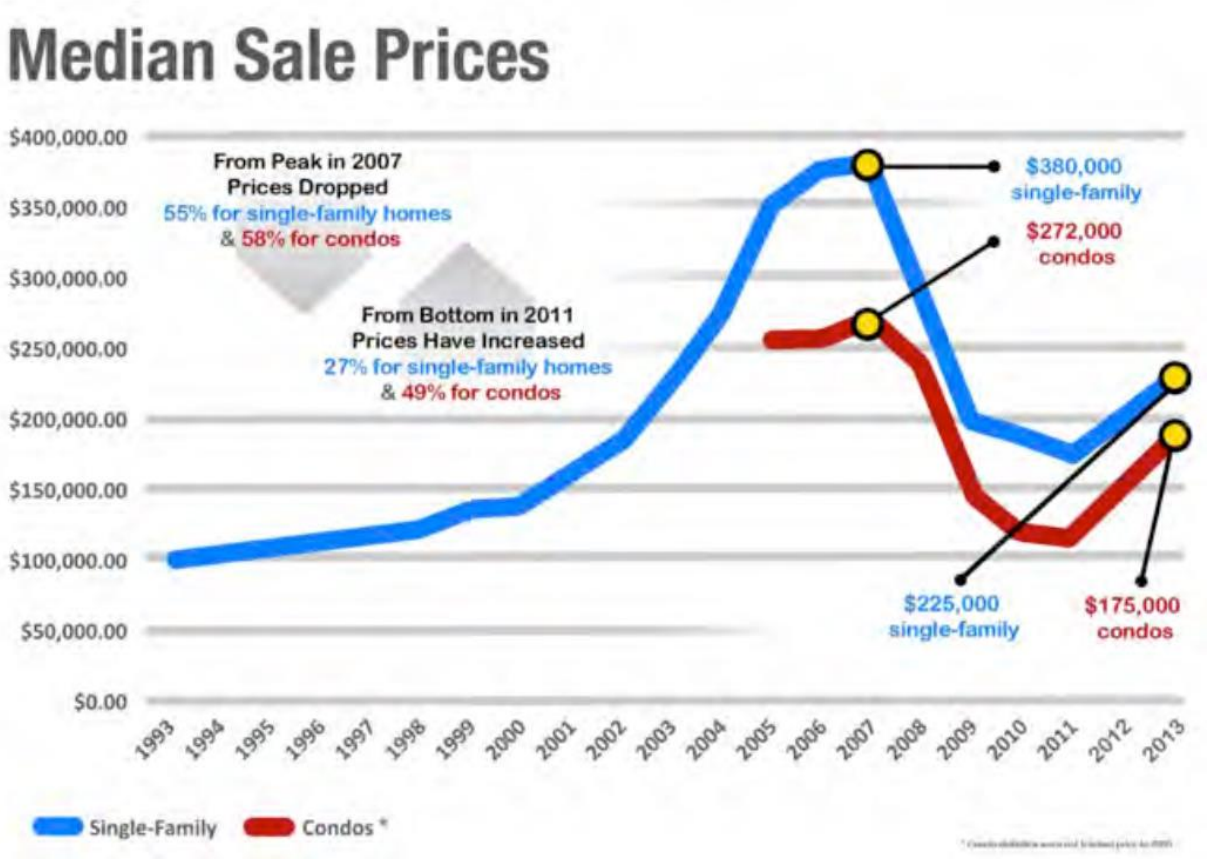
These graphs show that real estate investors and buyers are ever more confident in Miami's real estate market. The lack of supply in previous years and a massive increase in the population of the City of Miami due to job growth has encouraged real estate sales. According to a 2013 research from the Bureau of Labor Statistics[22], the total nonfarm employment in Miami and Miami Beach increased by more than 40,000 since 2008.

[21] Presentation "Doing Business with Argentina" by the Miami Association of Realtors. http://www.miamire.com/docs/default-source/doing-business-with-series/2014-doing-business-with-argentina.pdf?sfvrsn=2

[22] http://www.bls.gov/ro4/cesmia.pdf

The Miami Association of Realtors also provided the following graph showing the change in median sale prices for single-family homes and condominiums in Miami from 1993 to 2013.

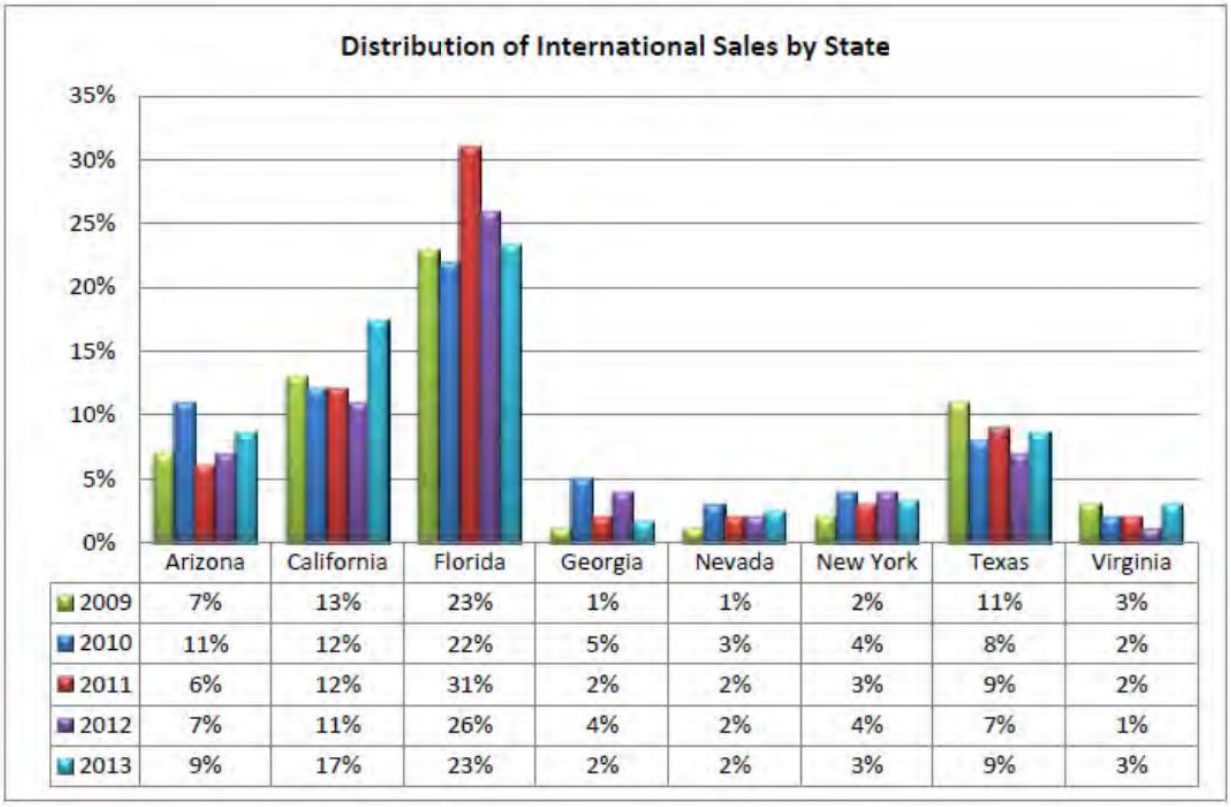
In the graph, one can clearly see that the prices throughout the city were heavily affected by the crisis because of the reasons previously explained, and that since 2008, the median sale prices started growing again (although they are still far from the median real estate prices pre-crisis).



[**Figure 8** – Graph showing the median sale prices of single-family homes and condos in Miami from 1993 to 2013]

According to the Wheaton study, second-home markets are more volatile than housing markets in well-established cities with a large resident population. In times of crisis, second-home markets are the first to feel the reduction in property prices. The numbers in the previous graph show that Wheaton's theory clearly applies to Miami. From the peak of the median sale prices in 2007 to the bottom in 2011, prices declined drastically.

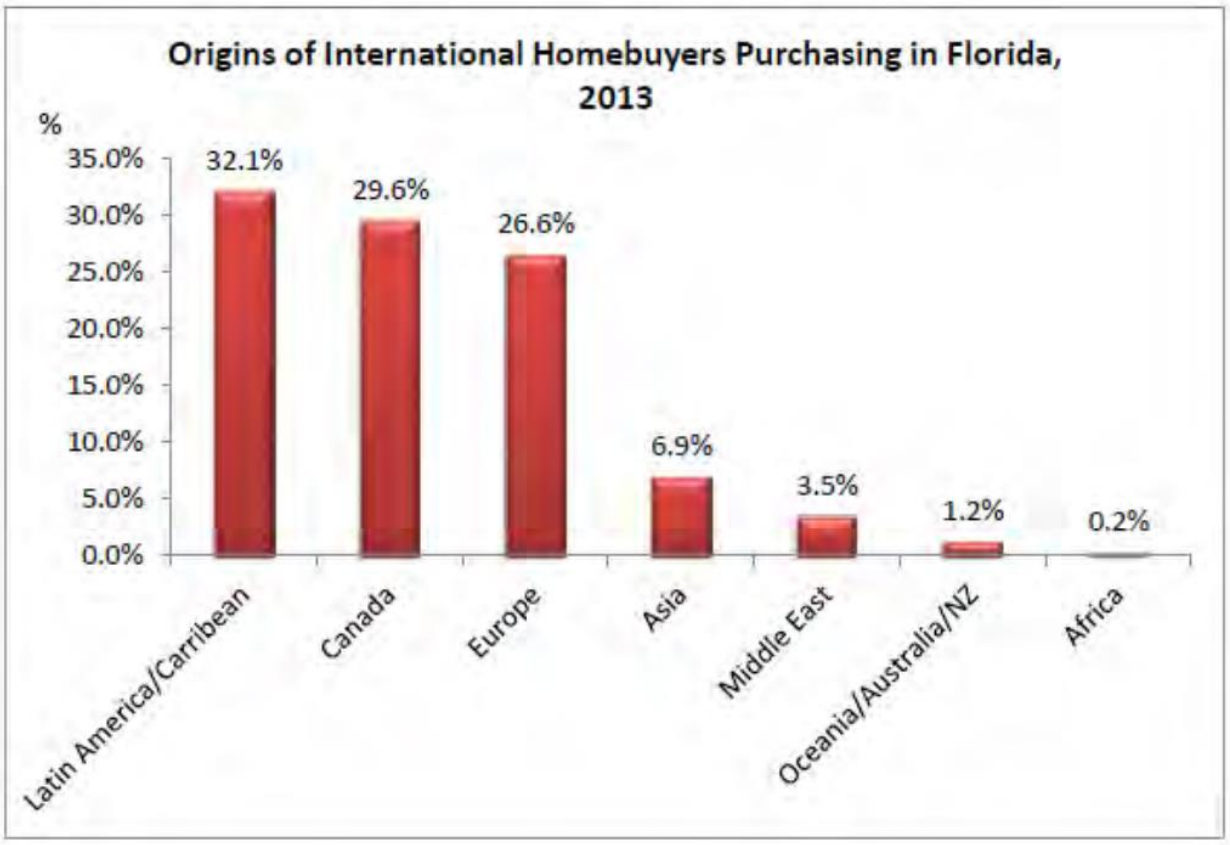
To analyze the change in prices, however, one should consider that Florida is a safe investment haven for investors from more than 20 countries around the world. Despite the crisis in the U.S., there are always potential foreign buyers for properties in the region. According to the Miami Association of Realtors, in 2013, 23% of the international property sales in the U.S. took place in Florida, as illustrated by the following graph:



	Arizona	California	Florida	Georgia	Nevada	New York	Texas	Virginia
2009	7%	13%	23%	1%	1%	2%	11%	3%
2010	11%	12%	22%	5%	3%	4%	8%	2%
2011	6%	12%	31%	2%	2%	3%	9%	2%
2012	7%	11%	26%	4%	2%	4%	7%	1%
2013	9%	17%	23%	2%	2%	3%	9%	3%

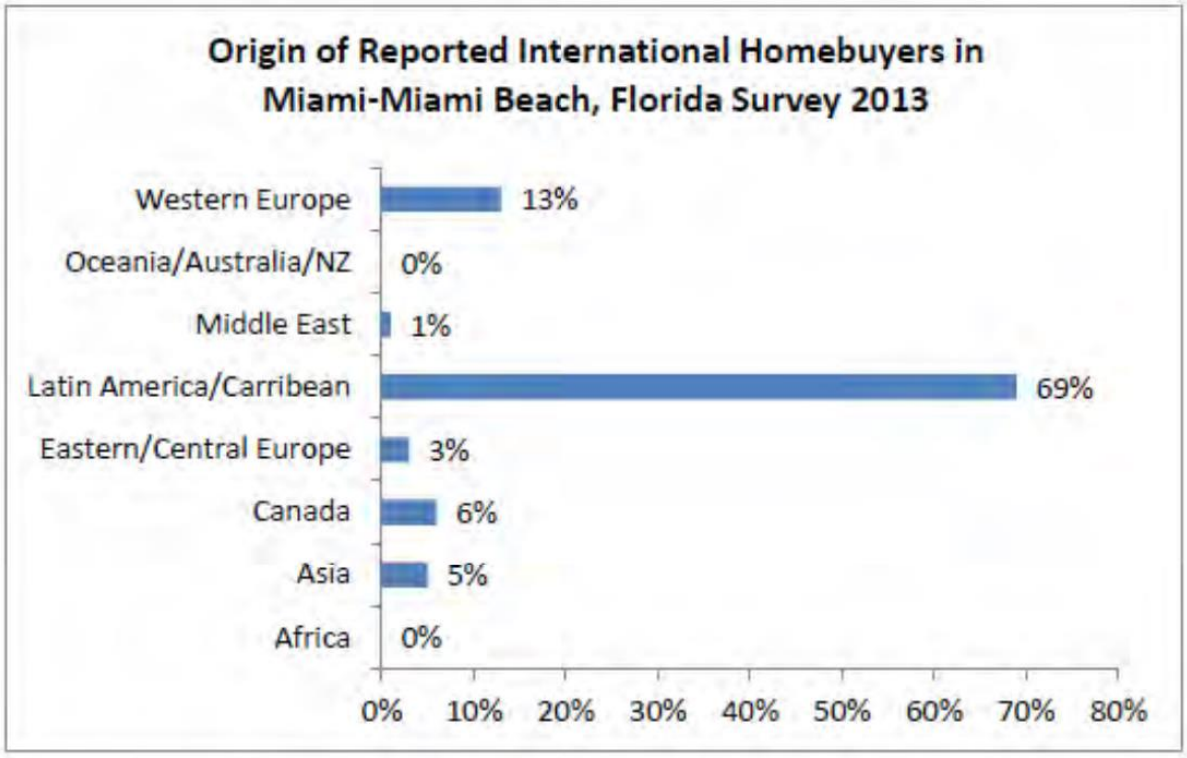
[**Figure 9** – Graph showing the distribution of international sales by state in the U.S. from 2009 to 2013]

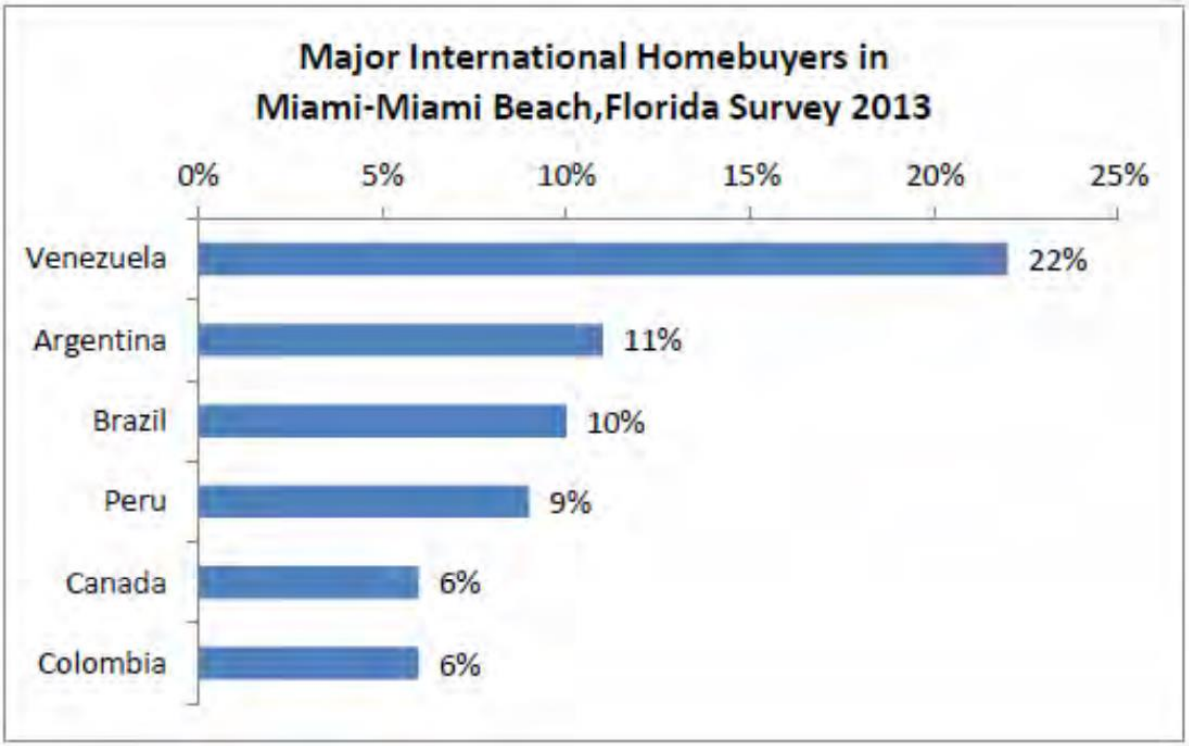
Additionally, out of all the sales that took place in Florida last year, Latin America and Caribbean countries' investors were responsible for more than 32%, followed by Canadians and Europeans, according to the following graph, also provided by the Miami Association of Realtors. Historically, Latin American countries' politics and economies have been unstable, forcing investors to look for other places, such as Florida, to invest their money. This also explains the historical increase in property sales and the recovery of property prices after the crisis.



[**Figure 10** – Graph showing origins of international homebuyers who purchased in Florida in 2013]

Based on the following graphs provided by the Realtors Association, almost 70% of the international homebuyers in Miami and Miami Beach in 2013 were from Venezuela, Argentina, and Brazil, countries with current political instability and high inflation. Clearly, these foreign investors see real estate in Miami as a hedge investment against the inflation and monetary devaluation present in their own countries.





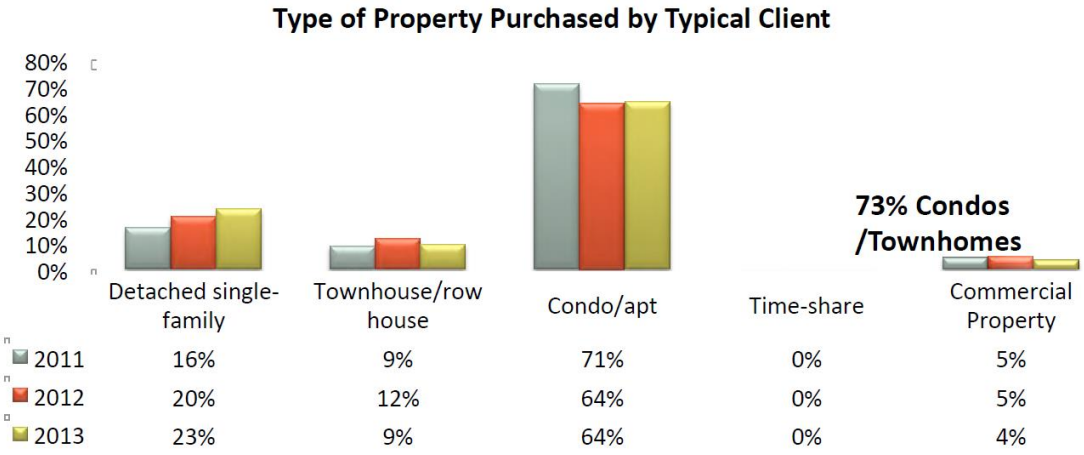
[**Figures 11 and 12** – Graphs showing origins by region and country of international home buyers in Miami-Miami Beach in 2013]

A factor that undermines Wheaton's theory effect in Miami is that most of the international buyers pay for their properties with cash instead of a bank mortgage. According to a local real estate developer who preferred not to be identified, "Most of the international buyers pay approximately 50% of the sales price in advance and the rest through the construction period". In these sales, therefore, the risk of default is remote.

According to the following graph and study obtained from the National Association of Realtors, the typical home buyer in Miami looks for condominiums and apartments as opposed to detached single-family homes, townhouses, and commercial properties,.

Condominiums: The Major Choice
Detached Single-Family of Increased Interest

NAR Survey
for Miami-Broward
October 2013



[**Figure 13** – Graph showing the types of properties purchased by typical client in Miami from 2011 to 2013]

With the increase in property buyers, the stock of condos and apartments available for purchase in the last years became insufficient, leading to an excess of demand and a shortage of supply. As a result, many new condominium and apartment developments are taking place in the city of Miami.

Chapter 9: Residential Developments after the Adoption of the Miami 21

Since the Miami 21 zoning code has been adopted, most of the new residential developments in the city of Miami have been located within 1,000 feet of Metromover and Metrorail stations. This is happening for four main reasons.

The first is that under the current zoning code, depending on the transect in which the development is located, it can be eligible for a 30% reduction in parking or even for no parking requirements, as per the exceptions explained in the previous chapter. For real estate developers, the reduction in parking spaces means a significant decrease in the cost of construction and the possibility to build more sellable units.

Since real estate developers usually spend approximately $100 per square foot of parking space, a parking space reduction means the developer saves money and the investors enjoy a higher internal rate of return. On average, each parking space occupies 322 square feet, leading to the cost of $32,200 per parking space.

As an example, for a 24-story building with 150 residential dwelling units and no eligibility for parking reduction, it would be necessary to build 225 parking spaces, or 1.5 parking spaces per dwelling unit. The costs for a developer would be approximately $7,245,000, which is $32,000 per parking space, or $100 per square foot. According to market research, the average cost of construction per square foot of this kind of mid-rise building in the city of Miami is approximately $350. Assuming that the total square footage of the hypothetical building is 413,000, one can calculate the total cost of construction as $144,550,000 for the entire building. In this scenario the parking spaces would represent 5% of the total cost of construction for the developer.

However, if this hypothetical building is eligible for a parking reduction of 30%, only 158 parking spaces would be required and the total cost of construction of parking would decrease to $5,087,600, representing only 3.5% of the total cost of construction for the developer.

Continuing to use this hypothetical example, if the building is also located within 1,000 feet of a Metrorail or Metromover station, and the developer takes advantage of the possibility to build without

a parking lot, there would be no parking construction costs at all. This means the developer would save 5% of the cost of construction otherwise incurred for the 225 parking spaces.

The second reason that more residential units are being built within 1,000 feet of a Metrorail or Metromover station is that the reduction in the required parking spaces makes it possible for developers to develop more sellable units within a certain development. Under the former code, developers had to build fewer units than the total number permitted by the zoning code because it was impossible for them to build the required corresponding parking spaces.

According to a local real estate developer who preferred not to be identified, his firm's last real estate development located at East Edgewater "had less units than initially approved by the municipality because of lack of sufficient parking spaces to serve all those units."

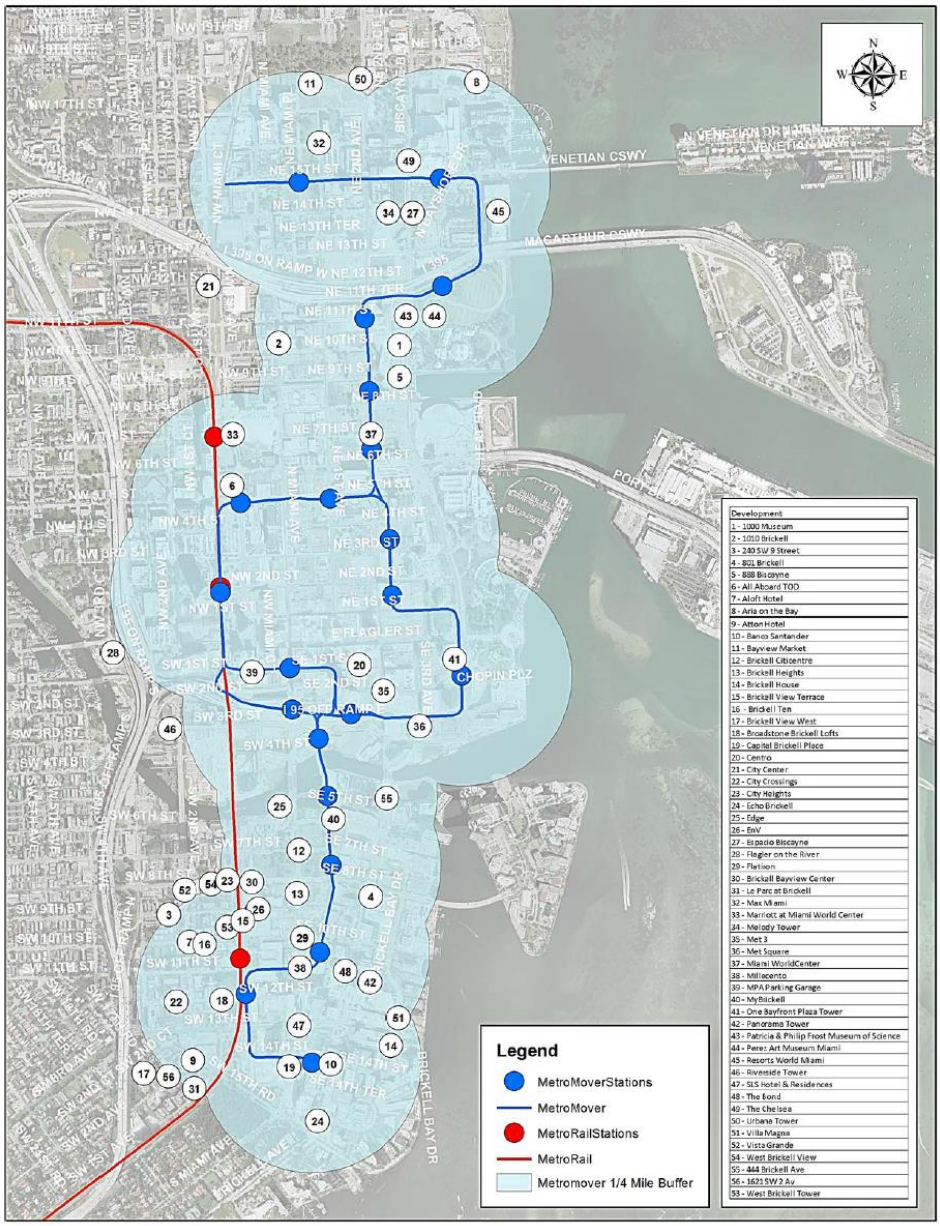
The third factor influencing residential units' proximity to public transit stations is that underground parking garages has always been problematic in Miami. Almost 75% of the developable lands in the City contain underground water, making it extremely expensive and sometimes unfeasible for developers to build underground parking lots. According to Randy Smith, spokesman for the Florida Water Management District, "It doesn't have to be very deep, a few feet, and you're going to hit water." He continues: "It is right under our feet".

Also, according to Joe Herndon, development manager at Fortune International, partner on the Fairwinds project, "[underground parking lot] is new to South Florida because it's too expensive, and until such time as property values get extremely higher, then it is not worth doing this." According to local developers, it costs roughly three times more to build underground garages than it does to build above-ground parking.

The fourth factor behind more residential units being near public transit is that 70% of the new high-density developments in Miami City are sold to foreign investors who are willing to rent their units or to non-residents as second homes. The foreign investors are looking for properties that will generate higher yields through rents. Those properties right in the center of the city, close to the areas with jobs, restaurants, and other attractions, are a target. Coincidentally, these are the areas closer to the

Metromover and to Metrorail stations. Non-residents looking for second homes also look for centrally located places where they can enjoy the best of the city within walking distance.

The Department of Capital Improvement and Transportation Program from the City of Miami provided the map below that shows some of the current residential developments throughout the city and their proximity to the Metromover and Metrorail stations.



[**Figure 14** – Map showing the current residential developments within a ¼ mile buffer from the Metromover and Metrorail stations]

According to the data provided by the City of Miami, there are approximately 50 high-density, transit-oriented, residential developments currently in construction in Miami city within a ¼ mile buffer from the Metrorail and Metromover stations. According to local developers, "The reduction in cost of construction because of the possibility of reduction in parking spaces makes it very attractive for real estate developers to build transit-oriented developments close to Metromover and to Metrorail stations."

Most of the developments located in this radius benefit from reduction in parking spaces based on the Miami 21 parking exceptions. Most of the residential ones entered into the waiver process to obtain the 30% reduction, while most of the mixed-use ones are obtaining the approval to reduce parking requirements based on shared parking standard, according to the sharing factors explained previously.

Out of those 50 developments highlighted in the map, two new developments benefit from the parking-free exception provided by the code. According to Andres Viglucci's article in the *Miami Herald* of July 14th, 2013[23]: "The planned Centro Lofts tower may well set a new template for residential development in Miami's downtown core: compact units, 10-foot ceilings, interiors by top-drawer celebrity designer Yves Behar, a signature restaurant and rooftop pool, and a two-story private lounge. But no parking garage. In its stead: a valet, a five-spot Car2Go auto-share hub, covered bicycle parking and, possibly, also a station for Miami's upcoming bike-share program. Residents who need parking can get a spot at a nearby city garage. If you think this sort of thing won't fly in auto-centric Miami, guess again. Half of Centro's 352 units are sold even though the building hasn't broken ground. Prices start at $220,000 and top out in the mid-$400,000s." Oscar Rodriguez, senior vice president for the developer of Centro lofts adds: "These types of projects are really the wave of the future."

Also, according to local developers, Jorge Perez's Related Group recently got approval from the Planning, Zoning, and Appeals Board to build the new condo tower called MyBrickell with no parking lot. The residents will have the option to park their cars in the building 500 Brickell, also developed by the same firm.

[23] http://www.miamiherald.com/2013/07/14/3500524/no-parking-no-problem-for-planned.html

Moreover, according to the City of Miami, “The young people constantly moving to Brickell and to Downtown Miami are looking for quality of life, for a place where they can live, work, and play, without having to move with cars.” One can easily conclude that this new crowd moving to Miami business districts is really willing to live in a car-free environment.

Local developers, however, say that it takes time for the population as a whole to accept the idea of living without cars and to understand the importance of a pedestrian-friendly and walkable city, so there are still some developers who do not want to take the risk of being one of the first movers. According to them, even though the cost of construction for developers is reduced, not all of the developers are willing to take the risk of not selling all the units because of lack of parking spaces.

A critical concern for residents is the lack of investment in public transportation in the city in recent years. Some people still see Miami as a spread-out city where cars are instrumental to circulate and to commute. During the last several years, there were a few improvements in the transit system in the city. Biscayne, Edgewater, Design District, Wynwood, and other areas in which there are several real estate developments going on are still isolated from the rest of the city when it comes to rapid public transportation, which is leading people to choose to live in transit-oriented developments close to Downtown and Brickell.

According to David Geltner, more than direct monetary cost influences the decision of people to live close to the place where they work. According to his book *Urban Economics and Real Estate Market Analysis*, “For passenger transportation, travel time is usually the most important component of transportation cost.”

In contrast with the current scenario, the real estate development map in the city of Miami before the adoption of Miami 21 was completely different than the one showed in the Figure 14. According to real estate developers, during the early 2000s developers were looking for lands outside the core of the city to develop. There were fewer than 10 residential developments being built in Downtown and Brickell. Back then, buyers were not seeing the center of the city as a livable area. Nowadays, people want to live, work, and play without spending time and money on commuting. In addition to that, Miami 21 incentivized developers to focus on the core of the city.

Chapter 10: Conclusion

With its rapid growth during the last century and the enormous flow of immigrants into the city, Miami's urban shape was not really planned throughout the years. Latin immigrants, especially Cubans, kept coming to the city during the '90s and establishing their homes while the zoning regulation was being changed from time to time.

The zoning regulation in Miami until 2010 was based on Euclidean zoning codes, which means that it regulated mostly land-based use. For the municipality, the most important aspect of zoning was to define types of land-use per districts, creating separate residential, commercial, institutional, and industrial districts.

With the passage of time, the Euclidean zoning model became outdated. Following the separation of the city into districts driven by the types of use, car congestion became a big problem in Miami. Residents had to commute long periods to get between home and work. The problem worsened because very few investments were made in rapid transit transportation throughout the last decades.

In 2010, just after the real estate financial crisis in the U.S., the City of Miami adopted the Form-Based Zoning Code - Miami 21 in order to address the problems created by the division of the city into districts and to provide a clear vision for the City so that future generations would reap the benefits of well-balanced neighborhoods and rich quality of life.

The new code was adopted in a period in which the real estate industry in Miami, heavily affected by the crisis because of its volatility, was recovering. Miami 21's main objective was to take into account all of the integral factors that make each area within the City a unique, vibrant place to live, learn, work, and play. It takes into account not only the types of use, but also elements such as economic development, historic preservation, parks and open spaces, arts and culture, and transportation.

In order to analyze each and every single building block, the Miami 21 code divided the city into transects and analyzed the particularities of each transect and its relationship with the adjacent transects and with the city as a whole.

To address the transportation problem, the new code incentivizes the creation of mixed-use developments and neighborhoods throughout the city. This way the city would become more sustainable in the future, the neighborhoods would be more self-sufficient, and car congestion would be reduced exponentially.

Through the Miami 21 code, the City also encourages the development of new buildings in transit-oriented areas, close to Metromover and Metrorail stations, by giving the option for the developers to reduce the number of parking spaces up to a certain percentage or even eliminate the need for a parking garage in these developments. Also, the City allows developers to build fewer parking spaces in mixed-use developments with shared parking and to offer external parking for new developments located in certain urban areas.

The option to request a waiver from the City to reduce the number of parking spaces within a certain residential development clearly benefits the developer, as the construction cost for the whole development is reduced by up to 5% when the parking garage is above ground and up to 15% when it is below ground level. Given the high cost of real estate development, these savings usually represent a substantial amount of money that otherwise would have to be raised with investors for each new building.

The combination of reduced cost of construction and stable high sales prices will lead to an increase in the rate of returns offered to real estate developers and to investors. As a result, developers are ever more interested in lands in the areas that are eligible for parking reduction to build new real estate developments.

This new trend is clearly evident in the map provided by the Department of Capital Improvement and Transportation Program from the City of Miami, which shows the number of new residential developments within 1,000 feet of Metromover and Metrorail stations. From the early 2000s to 2014 there was approximately a 500% increase in residential developments within transited-oriented areas. This comparison also shows that the adoption of the Miami 21 was crucial for the residential development of central urban areas in Miami.

Along with the economic incentive for developers, the city also gains from the reduction in parking spaces in new developments. The less parking there is throughout the city, the less of an incentive there is for residents to commute by car. When parking garages are difficult to find, people start considering public transportation, pooled cars, and other environmentally friendly ways of transportation such as bicycles.

As 70% of the new condos in Miami are sold to foreign investors or second-home buyers who do not use cars very often (or do not even have them), the lack of parking in the new developments is even less relevant in a city like Miami. This, in turn, makes these types of developments in urban areas even more attractive.

Our view is that in the next five years the Miami real estate market will consolidate as one of the largest markets in the U.S. for condo constructions and number of sales. Although it is considered a volatile market because of the second-home characteristics, we understand that the political and economic instability of Latin American countries such as Venezuela, Argentina, and Brazil will contribute to the growth of condo sales throughout the city.

The current trend of new real estate developments concentrated in areas close to Metromover and Metrorail stations will continue, because of the significant savings developers can realize with fewer parking space requirements and because of the will of new residents to live, play, work, and learn without commuting by car.

Certainly, the adoption of the Miami 21 was a huge advance for Miami City. The City has been achieving its goals of increasing the residential density in transit-oriented areas and reducing the number of cars commuting on a daily basis, while the developers have been satisfied with the savings in construction costs and higher returns from developments with reduced or non-existent parking.

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Appendix 1

T3 – Regulation of Uses

REGULATION OF USES	R	L	O
Residential			
Single Family Residence	R	R	R
Community Residence	R	R	R
Ancillary Unit		R	
Two Family Residence			R
Multi-Family Housing			
Dormitory			
Home Office	R	R	R
Live – Work			
Work – Live			
Civic			
Community Facility			
Recreational Facility	E	E	E
Religious Facility	E	E	E
Civil Support			
Infrastructure & Utilities	W	W	W
Educational			
Elementary School	E	E	E
Middle / High School	E	E	E
Pre-School	E	E	E

Intensity of Use:
Restricted (R) residential single family only
Limited (L) residential single family and ancillary units
Open (O) residential single family and two family residence

Permitting:
R = the use is permitted by right
W= the use is permitted by Warrant
E = the use is permitted by Exception

Appendix 2

T3 – Parking Requirements

	Restricted	Limited	Open
Density (UPA)	**9 Units per Acre**	**9 Units per Acre**	**18 Units per Acre**
Residential	Residential Uses are permissible as listed in Table 3, limited by compliance with: - Principal dwelling - Minimum of two parking spaces per principal dwelling unit. - adult family-care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the principal dwelling unit.	Residential Uses are permissible as listed in Table 3, limited by compliance with: - All dwelling units shall be under single ownership. - Principal dwelling - minimum of two parking spaces per principal dwelling unit. - Ancillary dwellings - minimum of one parking space per ancillary dwelling unit. - Adult Family-Care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the principal dwelling unit.	Residential Uses are permissible as listed in Table 3, limited by compliance with: - Principal dwelling - minimum of two parking spaces per principal dwelling unit. - Adult Family-Care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the principal dwelling unit.

Appendix 3

T4 – Regulation of Uses

REGULATION OF USES	R	L	O
Residential			
Single Family Residence	R	R	R
Community Residence	R	R	R
Ancillary Unit	R	R	R
Two Family Residence	R	R	R
Multi-Family Housing	R	R	R
Dormitory		E	E
Home Office	R	R	R
Live - Work		R	R
Work - Live			
Lodging			
Bed & Breakfast	W	R	R
Inn			R
Hotel			
Office			
Office		R	R
Commercial			
Entertainment Establishment			R
Food Service Establishment		R	R
Alcohol Service Establishment		E	E
General Commercial		R	R
Civic			
Community Facility		W	W
Recreational Facility	E	R	R
Religious Facility	E	R	R
Civil Support			
Community Support Facility		W	W
Infrastructure & Utilities	W	W	W
Major Facility			
Marina	E	W	W
Public Parking		W	W
Transit Facilities		W	W
Educational			
Childcare	E	W	W
College / University			
Elementary School	E	E	E
Learning Center		E	E
Middle / High School	E	E	E
Pre-School	E	E	E
Research Facility		R	R
Special Training / Vocational			E

Intensity of Use:
Restricted (R) residential single family only
Limited (L) residential single family and ancillary units
Open (O) residential single family and two family residence

Permitting:
R = the use is permitted by right
W= the use is permitted by Warrant
E = the use is permitted by Exception

Appendix 4

T4 – Parking Requirements

	Restricted	Limited	Open
Density (UPA)	**36 Units per Acre**	**36 Units per Acre**	**36 Units per Acre**
Residential	Residential Uses are permissible as listed in Table 3, limited by compliance with: - Principal dwelling - Minimum of 1.5 parking spaces per principal dwelling unit. - Ancillary dwellings - minimum of one parking space per ancillary dwelling unit. - adult family-care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the dwelling units.	Residential Uses are permissible as listed in Table 3, limited by compliance with: - Principal dwelling - minimum of 1.5 parking spaces per principal dwelling unit. - Ancillary dwellings - minimum of one parking space per ancillary dwelling unit. - Live-work - Work component shall provide parking as required by non-residential use in addition to parking required for the dwelling units. - Adult Family-Care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the principal dwelling unit. - Parking requirement may be reduced according to the Shared Parking Standard, Article 4 Table 5. - Minimum of one (1) bicycle rack for every 20 vehicular spaces required.	Residential Uses are permissible as listed in Table 3, limited by compliance with: - Principal dwelling - minimum of 1.5 parking spaces per principal dwelling unit. - Ancillary dwellings - minimum of one parking space per ancillary dwelling unit. - Live-work - Work component shall provide parking as required by non-residential use in addition to parking required for the dwelling units. - Adult Family-Care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the principal dwelling unit. - Parking requirement may be reduced according to the Shared Parking Standard, Article 4 Table 5. - Minimum of one (1) bicycle rack for every 20 vehicular spaces required.
Lodging	- See Historic Use Exceptions	- Lodging uses are permissible as listed. In the table 3, limited by compliance with: -minimum of one parking space per every 5 lodging units. - Parking requirements may be reduced according to the shared parking standard (Article 4, table 5). -Minimum of one (1) bicycle rack for every 20 vehicular spaces required.	- Lodging uses are permissible as listed. In the table 3, limited by compliance with: -minimum of one parking space per every 5 lodging units. - Parking requirements may be reduced according to the shared parking standard (Article 4, table 5). -Minimum of one (1) bicycle rack for every 20 vehicular spaces required.

Office		- Office uses are permissible as listed. In the table 3, limited by compliance with: - The first story of the principle building or the ancillary building shall be less than 50% building floor area total. - Minimum 3 parking spaces for every 1000 square feet of office use. - Parking requirement shall be reduced according to the shared parking standard (Article 4, table 5). -Minimum of one (1) bicycle rack for every 20 vehicular spaces required.	- Office uses are permissible as listed. In the table 3, limited by compliance with: - The first story of the principle building or the ancillary building shall be less than 50% building floor area total. - Minimum 3 parking spaces for every 1000 square feet of office use. - Parking requirement shall be reduced according to the shared parking standard (Article 4, table 5). -Minimum of one (1) bicycle rack for every 20 vehicular spaces required.
Commercial		- Commercial uses are permissible as listed. In the table 3, limited by compliance with: - The first story of the principle building shall be less than 50% building floor area total. - Minimum 3 parking spaces for every 1000 square feet of commercial use. - A maximum area of 4000 sq. ft. per establishment. - Food establishment of a maximum seating capacity of 40 patrons. - Parking requirement shall be reduced according to the shared parking standard (Article 4, table 5). -Minimum of one (1) bicycle rack for every 20 vehicular spaces required.	- Commercial uses are permissible as listed. In the table 3, limited by compliance with: - The first story of the principle building shall be less than 50% building floor area total. - Minimum 3 parking spaces for every 1000 square feet of commercial use. - A maximum area of 4000 sq. ft. per establishment. - Food establishment of a maximum seating capacity of 40 patrons. - Parking requirement shall be reduced according to the shared parking standard (Article 4, table 5). -Minimum of one (1) bicycle rack for every 20 vehicular spaces required.

Appendix 5

T5 – Regulation of Uses

REGULATION OF USES	R	L	O
Residential			
Single Family Residence	R	R	R
Community Residence	R	R	R
Ancillary Unit			
Two Family Residence	R	R	R
Multi Family Housing	R	R	R
Dormitory		R	R
Home Office	R	R	R
Live - Work		R	R
Work - Live			
Lodging			
Bed & Breakfast	E	R	R
Inn	E	R	R
Hotel		R	R
Office			
Office		R	R
Commercial			
Auto Related			W
Entertainment Establishment		W	R
Entertainment Establishment - Adult			
Food Service Establishment		R	R
Alcohol Service Establishment		E	E
General Commercial		R	R
Marine Related		W	W
Open Air Retail		W	W
Place of Assembly		R	R
Recreational Establishment		R	R
Civic			
Community Facility		W	W
Recreational Facility	E	R	R
Religious Facility	E	R	R
Civil Support			
Community Support Facility		W	W
Infrastructure & Utilities	W	W	W
Major Facility			
Marina	E	W	W
Public Parking	E	W	W
Rescue Mission			
Transit Facilities	E	W	W
Educational			
Childcare	E	W	W
College / University		W	W
Elementary School	E	W	W
Learning Center		R	R

Middle / High School	E	W	W
Pre-School	E	R	R
Research Facility		R	R
Special Training / Vocational		W	W

Intensity of Use:
Restricted (R) residential single family only
Limited (L) residential single family and ancillary units
Open (O) residential single family and two family residence

Permitting:
R = the use is permitted by right
W= the use is permitted by Warrant
E = the use is permitted by Exception

Appendix 6

T5 – Parking Requirements

	Restricted	Limited	Open
Density (UPA)	**65 Units per Acre**	**65 Units per Acre**	**65 Units per Acre**
Residential	Residential Uses are permissible as listed in Table 3, limited by compliance with: - Principal dwelling - Minimum of 1.5 parking spaces per principal dwelling unit. Min. of one additional visitor space for every 10 dwelling units - Ancillary Dwelling - Minimum of 1 parking space per ancillary dwelling unit in addition to the parking required for the principal dwelling unit. - adult family-care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the principal dwelling unit. - Parking requirement may be reduced according to the Shared Parking Standard, Article 4 Table 5. - Minimum of one (1) bicycle rack for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty (30%) by process of a Waiver, except when the site is within 500 feet of T3. - Loading, see article 4, Table 5.	Residential Uses are permissible as listed in Table 3, limited by compliance with: - Principal dwelling - Minimum of 1.5 parking spaces per principal dwelling unit. Min. of one additional visitor space for every 10 dwelling units - Ancillary Dwelling - Minimum of 1 parking space per ancillary dwelling unit in addition to the parking required for the principal dwelling unit. - Live-work / Work-live - Work component shall provide parking as required by the non-residential use in addition to the parking required for the dwelling unit - Adult Family-Care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the principal dwelling unit. - Parking requirement may be reduced according to the Shared Parking Standard, Article 4 Table 5. - Minimum of one (1) bicycle rack for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty (30%) by process of a Waiver, except	Residential Uses are permissible as listed in Table 3, limited by compliance with: - Principal dwelling - Minimum of 1.5 parking spaces per principal dwelling unit. Min. of one additional visitor space for every 10 dwelling units - Ancillary Dwelling - Minimum of 1 parking space per ancillary dwelling unit in addition to the parking required for the principal dwelling unit. - Live-work / Work-live - Work component shall provide parking as required by the non-residential use in addition to the parking required for the dwelling unit - Adult Family-Care homes - minimum of one parking space per staff member and one space per four residents. - Community Residence - minimum of one parking space per staff member in addition to the parking required for the principal dwelling unit. - Parking requirement may be reduced according to the Shared Parking Standard, Article 4 Table 5. - Minimum of one (1) bicycle rack for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty (30%) by process of a Waiver, except when the site is within 500 feet of T3. - Loading, see article 4, Table 5

		when the site is within 500 feet of T3. - Loading, see article 4, Table 5.	
Lodging	Lodging Uses are permissible as listed in Table 3 - Minimum of one parking space per 2 lodging units. - Minimum of 1 additional visitor parking space for every 10 lodging units. - Parking may be reduced according to the Shared parking Standard, Article 4, Table 5. - Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty 30% by process of a Waiver, except when site is within 500 feet of T3. -Parking may be provided by ownership or lease offsite within 1,000 feet by process of a Waiver, except when site is within 500 ft. of T3. - Loading, see article 4, Table 5.	Lodging Uses are permissible as listed in Table 3 - Minimum of one parking space per 2 lodging units. - Minimum of 1 additional visitor parking space for every 10 lodging units. - Parking may be reduced according to the Shared parking Standard, Article 4, Table 5. - Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty 30% by process of a Waiver, except when site is within 500 feet of T3. - Parking may be provided by ownership or lease offsite within 1,000 feet by process of a Waiver, except when site is within 500 ft. of T3. - Loading, see article 4, Table 5.	Lodging Uses are permissible as listed in Table 3 - Minimum of one parking space per 2 lodging units. - Minimum of 1 additional visitor parking space for every 10 lodging units. - Parking may be reduced according to the Shared parking Standard, Article 4, Table 5. - Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty 30% by process of a Waiver, except when site is within 500 feet of T3. -Parking may be provided by ownership or lease offsite within 1,000 feet by process of a Waiver, except when site is within 500 ft. of T3. - Loading, see article 4, Table 5.
Office		Office Uses are permissible as listed in Table 3, limited by compliance with: - The first and second story of the principal building shall be less than 25% of the building floor area total. - Minimum of 3 parking spaces for every 1,000 sq. ft. of office use. - Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. - Minimum of 1 Bicycle Rack	Office Uses are permissible as listed in Table 3, limited by compliance with: - The first and second story of the principal building shall be less than 25% of the building floor area total. - Minimum of 3 parking spaces for every 1,000 sq. ft. of office use. - Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. - Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a

		Space for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty 30% by process of a Waiver, except when site is within 500 feet of T3. - Parking may be provided by ownership or lease offsite within 1,000 feet by process of a Waiver, except when site is within 500 ft. of T3. - Loading, see article 4, Table 5.	Transit Corridor by thirty 30% by process of a Waiver, except when site is within 500 feet of T3. - Parking may be provided by ownership or lease offsite within 1,000 feet by process of a Waiver, except when site is within 500 ft. of T3. - Loading, see article 4, Table 5.
Commercial		Office Uses are permissible as listed in Table 3, limited by compliance with: - The first and second story of the principal building shall be less than 25% of the building floor area total. - A maximum of 55,000 sq. ft. per establishment. Minimum of 35 parking spaces for every 1,000 sq. ft. of commercial use. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty 30% by process of a Waiver, except when site is within 500 feet of T3. - Parking may be provided by ownership or lease offsite within 1,000 feet by process of a Waiver, except when site is within 500 ft. of T3. - Loading, see article 4, Table 5.	Office Uses are permissible as listed in Table 3, limited by compliance with: - The first and second story of the principal building shall be less than 25% of the building floor area total. - A maximum of 55,000 sq. ft. per establishment. - Minimum of 3 spaces for every 1,000 sq. ft. of commercial use, except for Public Storage Facilities, minimum of 1 parking space for every 2,000 sq. ft. - Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. - Minimum of 1 bicycle rack for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of TOD and within 1/4 mile radius of a Transit Corridor by thirty 30% by process of a Waiver, except when site is within 500 feet of T3. - Parking may be provided by ownership or lease offsite within 1,000 feet by process of a Waiver, except when site is within 500 ft. of T3. - Loading, see article 4, Table 5. - Auto-related Drive-thru or Drive-In Facilities - See Article 6.
Civil Support	Civil Support Uses are permissible as listed in Table 3, limited by compliance with: - Minimum of 1 parking space per	Civil Support Uses are permissible as listed in Table 3, limited by compliance with: - Minimum of 1 parking space per every 1000 sq. ft. of civil support use.	Civil Support Uses are permissible as listed in Table 3, limited by compliance with: - Minimum of 1 parking space per every 1000 sq. ft. of civil support use.

	every 800 sq. ft. of civil support use. - Minimum 1 parking space for every 5 seats of assembly use. - Minimum of 1 parking space for every 5 slips of marine use. - Parking requirement may be reduced according to the Shared Parking Standard Article 4, Table 5. - Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. - Loading - See Article 4, Table 5.	- Minimum 1 parking space for every 5 seats of assembly use. - Minimum of 1 parking space for every 5 slips of marine use. - Adult Daycare - Minimum of 1 space per staff member. - Parking requirement may be reduced according to the Shared Parking Standard Article 4, Table 5. - Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. - Parking ratio may be reduced within 1/2 mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. - Loading - See Article 4, Table 5.	- Minimum 1 parking space for every 5 seats of assembly use. - Minimum of 1 parking space for every 5 slips of marine use. - Adult Daycare - Minimum of 1 space per staff member. - Parking requirement may be reduced according to the Shared Parking Standard Article 4, Table 5. - Minimum of 1 Bicycle Rack Sapce for every 20 vehicular spaces required. - Parking ration may be reduced within 1/2 mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. - Loading - See Article 4, Table 5.

Appendix 7

T6 – Regulation of Uses

REGULATION OF USES	R	L	O
Residential			
Single Family Residence	R	R	R
Community Residence	R	R	R
Ancillary Unit			
Two Family Residence	R	R	R
Multi Family Housing	R	R	R
Dormitory		R	R
Home Office	R	R	R
Live - Work		R	R
Work - Live			
Lodging			
Bed & Breakfast	E	R	R
Inn	E	R	R
Hotel		R	R
Office			
Office		R	R
Commercial			
Auto Related		W	W
Entertainment Establishment		R	R
Entertainment Establishment - Adult			
Food Service Establishment	W	R	R
Alcohol Service Establishment		E	E
General Commercial	W	R	R
Marine Retail		W	W
Open Air Retail		W	W
Place of Assembly	E	R	R
Recreational Establishment		R	R
Civic			
Community Facility		W	W
Recreational Facility	E	R	R
Religious Facility	E	R	R
Regional Activity Complex			E
Civil Support			
Community Support Facility		W	W
Infrastructure & Utilities	W	W	W
Major Facility			
Marina	E	W	W
Public Parking	E	W	W
Rescue Mission			
Transit Facilities	E	W	W
Educational			
Childcare	W	W	W

College / University		W	W
Elementary School	E	W	W
Learning Center		R	R
Middle / High School	E	W	W
Pre-School	E	R	R
Research Facility		R	R
Special Training / Vocational		W	W

Intensity of Use:
Restricted (R) residential single family only
Limited (L) residential single family and ancillary units
Open (O) residential single family and two family residence

Permitting:
R = the use is permitted by right
W= the use is permitted by Warrant
E = the use is permitted by Exception

Appendix 8

T6 – Parking Requirements

	Restricted	Limited	Open
Density (UPA)	**150 Units per Acre**	**150 Units per Acre**	**150 - 1,000 Units Per Acre**
Residential	Residential Uses are permissible as listed in Table 3, limited by compliance with: • Principal Dwelling - Minimum of 1.5 parking spaces per principal dwelling unit. • Minimum of 1 additional visitor parking space for every 10 dwelling units. • Adult Family-Care Homes- Minimum 1 space per staff member and 1 space per 4 residents. • Community Residence- Minimum of 1 parking space per staff member in addition to the parking required for the principal dwelling unit(s). • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when T6 is within 500 feet of T3. • In T6-36 & T6-48, parking for residential uses located within 1000 feet of a Metrorail or Metromover station shall not be required. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	Residential Uses are permissible as listed in Table 3, limited by compliance with: • Principal Dwelling - Minimum of 1.5 parking spaces per principal dwelling unit. • Minimum of 1 additional visitor parking space for every 10 dwelling units. • Live-work/ Work-Live - Work component shall provide parking as required by the non-residential use in addition to parking required for the dwelling unit. • Adult Family-Care Homes- Minimum 1 space per staff member and 1 space per 4 residents. • Community Residence- Minimum of 1 parking space per staff member in addition to the parking required for the principal dwelling unit(s). • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when T6 is within 500 feet of T3. • In T6-36 & T6-48, parking for residential uses located within 1000 feet of a Metrorail or Metromover station shall not be required. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver,	Residential Uses are permissible as listed in Table 3, limited by compliance with: • Principal Dwelling - Minimum of 1.5 parking spaces per principal dwelling unit. • Minimum of 1 additional visitor parking space for every 10 dwelling units. • Live-work/ Work-Live - Work component shall provide parking as required by the non-residential use in addition to parking required for the dwelling unit. • Adult Family-Care Homes- Minimum 1 space per staff member and 1 space per 4 residents. • Community Residence- Minimum of 1 parking space per staff member in addition to the parking required for the principal dwelling unit(s). • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when T6 is within 500 feet of T3. • In T6-36 & T6-48, parking for residential uses located within 1000 feet of a Metrorail or Metromover station shall not be required. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5

		except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	
Lodging	Lodging Uses are permissible as listed in the Table 3. • Minimum of 1 parking space for every 2 lodging units. • Minimum of 1 additional visitor parking space for every 10 lodging units. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	Lodging Uses are permissible as listed in the Table 3. • Minimum of 1 parking space for every 2 lodging units. • Minimum of 1 additional visitor parking space for every 10 lodging units. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	Lodging Uses are permissible as listed in the Table 3. • Minimum of 1 parking space for every 2 lodging units. • Minimum of 1 additional visitor parking space for every 15 lodging units. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5
Office		Office Uses are permissible as listed in the Table 3, limited by compliance with: • The building area allowed for office use on each lot is limited to the first four stories of the principal building and shall be less than 25% building floor area total. • Minimum of 3 parking spaces for every 1,000 square feet of office use. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5.	Office Uses are permissible as listed in the Table 3. • Minimum of 3 parking spaces for every 1,000 square feet of office use. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3.

		• Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	• Loading - See Article 4, Table 5
Commercial	Commercial Uses are permissible as listed in Table 3, limited by compliance with: • Commercial establishments limited to a maximum area of 4,000 square feet each and shall be less than 25% building floor area total. • The building area allowed for commercial use on each lot is limited to the first two stories of the principal building. • Minimum of 3 parking spaces for every 1,000 square feet of commercial use. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Loading - See Article 4, Table 5	Commercial Uses are permissible as listed in Table 3, limited by compliance with: • The building area allowed for commercial use on each lot is limited to the first two stories of the principal building and shall be less than 25% building floor area total. • A maximum area of 55,000 square feet per establishment. • Minimum of 3 parking spaces for every 1,000 square feet of commercial use. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	Commercial Uses are permissible as listed in Table 3, limited by compliance with: • The building area allowed for commercial use on each lot is limited to the first two stories of the principal building and shall be less than 25% building floor area total. • A maximum area of 55,000 square feet per establishment. • Minimum of 3 parking spaces for every 1,000 square feet of commercial use, except for Public Storage Facilities, minimum 1 parking space for every 2,000 square feet. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Auto-related - Drive-Thru or Drive-In Facilities - See Article 6. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5

Civic	Civic Uses are permissible as listed in Table 3, limited by compliance with: • Minimum of 1 parking space for every 5 seats of assembly uses. • Minimum of 1 parking space for every 1,000 square feet of exhibition or recreation area, and parking spaces for other uses as required. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space fo r every 20 vehicular spaces required. • Loading - See Article 4, Table 5	Civic Uses are permissible as listed in Table 3, limited by compliance with: • Minimum of 1 parking space for every 5 seats of assembly uses. • Minimum of 1 parking space for every 1,000 square feet of exhibition or recreation area, and parking spaces for other uses as required. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	Civic Uses are permissible as listed in Table 3, limited by compliance with: • Minimum of 1 parking space for every 5 seats of assembly uses. • Minimum of 1 parking space for every 1,000 square feet of exhibition or recreation area, and parking spaces for other uses as required. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5
Civil Support	Civil Support Uses are permissible as listed in Table 3, limited by compliance with: • Minimum of 1 parking space for every 800 square feet of civil support use; or • Minimum of 1 parking space for every 5 seats of assembly use; or • Minimum of 1 parking space for every 5 slips of marine use; or • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and	Civil Support Uses are permissible as listed in Table 3, limited by compliance with:. • Minimum of 1 parking space for every 1000 square feet of civil support use. • Minimum of 1 parking space for every 5 seats of assembly use. • Minimum of 1 parking space for every 5 slips of marine use. • Adult Daycare- Minimum of 1 space per staff member. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5.	Civil Support Uses are permissible as listed in Table 3, limited by compliance with:. • Minimum of 1 parking space for every 1000 square feet of civil support use. • Minimum of 1 parking space for every 5 seats of assembly use. • Minimum of 1 parking space for every 5 slips of marine use. • Adult Daycare- Minimum of 1 space per staff member. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor

	within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	• Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5
Educational	Educational Uses are permissible as listed in Table 3, limited by compliance with: • Minimum of 2 parking spaces for every 1,000 square feet of educational use. • Childcare Facilities- Minimum of 1 space per staff member. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	Educational Uses are permissible as listed in Table 3, limited by compliance with:. • Minimum of 2 parking spaces for every 1,000 square feet of educational use. • Childcare Facilities- Minimum of 1 space per staff member. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5	Educational Uses are permissible as listed in Table 3, limited by compliance with: • Minimum of 2 parking spaces for every 1,000 square feet of educational use. • Childcare Facilities- Minimum of 1 space per staff member. • Parking requirement may be reduced according to the Shared Parking Standard, Article 4, Table 5. • Minimum of 1 Bicycle Rack Space for every 20 vehicular spaces required. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor by thirty percent (30%) by process of Waiver, except when site is within 500 feet of T3. • Parking may be provided by ownership or lease offsite within 1000 feet by process of Waiver, except when site is within 500 feet of T3. • Loading - See Article 4, Table 5
Industrial			• Minimum of 1 parking space for every 1,000 sf of industrial use. • Parking may be provided offsite in T5 or T6 within 1000 feet through a parking management plan/zone. • Parking ratio may be reduced within ½ mile radius of TOD and within ¼ mile radius of a Transit Corridor

			by thirty percent (30%) by process of Waiver, except when T6 is within 500 feet of T3. • Loading required as listed in Loading Berth Standards. • Loading - See Article 4, Table 5.