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Residential neighborhoods of the Municipal District of Guanabacoa [1948-1959]

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Abstract: During the 1940s and 1950s, Havana experienced a growth in its urban sprawl that led to the conurbation of its old municipalities. With the purpose of obtaining a better understanding of the growth process of the city, this study deals with the urban expansion of the former Municipal District of Guanabacoa in the period 1948-1959, a territory located to the southeast of the city and, according to its population, third in importance of the capital. Through documentary and historical-logical analysis methods, supported by field and archive work, the research aimed to identify, classify and characterize the residential subdivisions of the central-south zone of the Municipal District of Guanabacoa. It is concluded that this urban growth was due to a new and extensive infrastructure system that enhanced the land for industrial and residential expansion on that sector of the city.

Key words: urban growth; Guanabacoa; Havana

1 Introduction

After the end of World War II, and until 1960, Havana experienced rapid urban growth on its outskirts due to a significant population increase. During this period, the city reached the size and complexity of a metropolitan area. Both the interstitial areas of the consolidated area and the outskirts were gradually occupied thanks to the development of transportation and a legal framework that encouraged construction.

There is an extensive body of literature that documents, to varying degrees, the urbanization processes of the city of Havana, but this is not an exhausted topic, as there are still gaps in the specialized literature. Among the efforts to gradually reconstruct these micro-histories, several texts stand out, including: "When the Orthogonal Grid Was Considered Ineffective and Boring" (2006), by architect Ángel Manuel Álvarez Gómez, and "Western Havana" (2008), by Dr. María V. Zardoya Loureda, which, from different perspectives and scopes, document the expansion of the former Marianao Municipal District, the second most important after the municipality of Havana. Furthermore, in Docomomo Cuba Bulletin No. 8 (April 2012), various urban areas that developed alongside the consolidation of the Modern Movement's architectural language—as part of that postwar expansion—were analyzed: La Puntilla, Nuevo Vedado, Santa Catalina, and Altahabana.

There is also a collection of valuable regional studies, developed by the Cuban Institute of History under the auspices of the National Project on Provincial and Municipal Histories—launched in 1987—which published the studies on Havana between 2002 and 2005 [1][1]. A standout among these efforts is the 2015 text, "La Habana Ciudad Azul. Metrópolis cubana" [2], by historian Rolando J. Rensoli. More recently, other works[2] have continued to investigate urban developments from

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this period, as urban developments located away from Havana's established centers remain largely unexplored.

This research focuses on the urban evolution of the former Municipal District of Guanabacoa (TMG), one of the four municipalities (along with Marianao, Regla, and Santiago de las Vegas) commonly associated with Havana in its recognition as the nation's capital [2]. Its geographical boundaries were established in the late 19th century and remained in effect until the political-administrative reorganization of 1976, when it was dissolved, and its territories went on to form the current municipalities of Guanabacoa and San Miguel del Padrón, almost all of Havana del Este, and a portion of Regla (Figure 1).

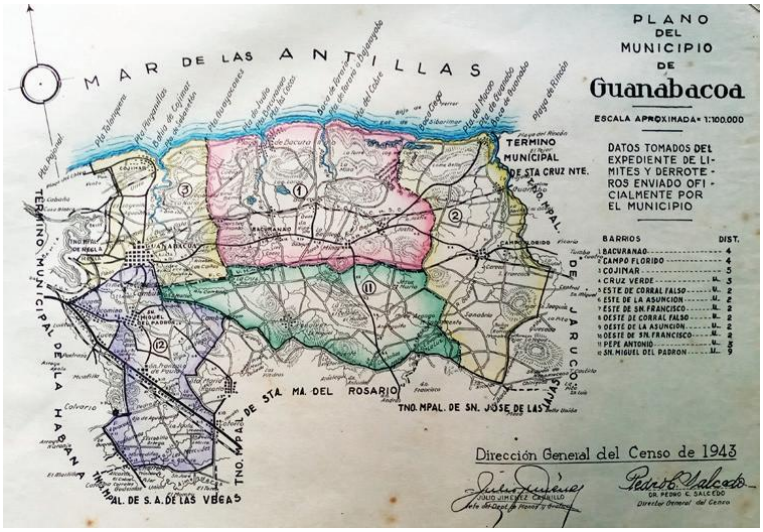


Figure 1. Map of the Guanabacoa Municipal District, showing its boundaries and its 12 neighborhoods. Source: Atlas of the General Report of the 1943 Census

Beginning in the 1940s, the Guanabacoa Municipal District (TMG) began to expand beyond the boundaries of its original areas, merging with other nearby settlements to the south—such as the San Miguel del Padrón neighborhood and its surrounding villages—and reaching a population of 112,333 inhabitants by 1953 [3]. Its administrative boundaries expanded, making it one of the most important municipalities in the province. The Central Highway and later the Vía Blanca, along with its robust industrial development [4], constituted the main drivers of urban growth in this territory [5], where various types of urban grids converged in an intense expansion process that lasted just over a decade, hence the need to reconstruct it.

Regarding the Guanabacoa region specifically, there are various studies available, ranging from historical analyses to research on the rehabilitation and preservation of its extensive tangible and intangible heritage, focused primarily on the periods of consolidation and development of the old town of Guanabacoa in the 18th[3] and 19th centuries [6]. In 2009, part of the TMG territory was analyzed and documented in the master's thesis "Influences of the Modern Movement on Guanabacoa's Urban-Architectural Heritage in the Second Half of the 20th Century," by Ana Teresita García Fortón, under the supervision of Dr. Eliana Cárdenas [7]. Meanwhile, the coastal strip of the municipality—associated with the leisure and summer resort developments spurred by the opening of the Bay Tunnel—was addressed in the diploma thesis "Historical-Urban Development of the Eastern Coast of the City of Havana. Residential Areas," by Lesly Robaina, supervised by Dr. María E. Martín, which outlines its formation process and details its urban components [8]. Furthermore, local archives contain some unpublished works [9] that provide greater depth at the architectural scale.

Although these contributions serve as valuable starting points, most of them offer only very general perspectives or emphasize specific areas that, due to their centrality, illustrate certain elements of Havana's growth process; as a result, the-

-y provide a fragmented view of the territory's evolution.

With the aim of providing a more comprehensive view, this research focuses specifically on the south-central area of the TMG. To this end, the study aimed to use analytical variables and urban maps to identify and characterize the residential subdivisions that drove this growth during the territory's heyday (1948-1959), as well as their relationship with Havana.

2 Materials and methods

This historical research was conducted in three stages, employing a combination of quantitative and qualitative methods. The first and second stages involved the search for and compilation of information related to the context of the TMG's urban evolution. The time frame spanned 1948 to 1959, a period marked by the most intense development of residential subdivisions in the south-central area of the former TMG, largely due to the development of Vía Blanca and other major thoroughfares, as well as the vigorous efforts of Mayor José C. Villalobos y Olivera[4]. The method employed was documentary analysis, supported by fieldwork involving observation, identification, recording, and the preparation of record-sheets.

To characterize the residential developments, the study began with the consultation, processing, and interpretation of extensive and valuable archival documentation, including the City Council Minutes and urban projects, located in the archives of the municipal museums of Guanabacoa and Santiago de las Vegas, the Provincial Directorate of Physical Planning (DPPF) of Havana, and the documentary collections of the José Martí National Library of Cuba. It was also necessary to use current satellite images of the city to make precise observations and comparisons, which were used to determine the exact location for each district. Efforts were also made to supplement the data by exploring other documentary sources.

A total of 62 housing developments were identified, and 151 archival documents were consulted, including 99 files on district and subdivision plans; analysis of these documents provided precise data regarding construction dates, designers, developers, and other relevant aspects that facilitated their mapping. Similarly, 40 applications for approval of urban projects were consulted in the City Council Minutes; these provided approval dates, property owners, development companies, and general elements—layout, water supply, storm drainage, sewerage—as well as the main construction conditions. This data was reconciled with that obtained from the parcel plans.

As a result, this research has so far identified 65 land subdivisions in the south-central part of the TMG, a territory defined as the Study Area (E). Of these, three that had been carried out clandestinely before 1948 were legalized, 62 were approved, and 58 were built, with the 1950s—specifically the years 1953 through 1956—marking the greatest boom in urban development in the territory.

The subsequent fieldwork, in which various techniques (observation, data collection, photographic records, and interviews), made it possible to identify the land subdivisions that had been carried out and to collect data on them, thereby completing the preliminary overview of the urbanization process in E and helping to define the Study Sample (SS). We excluded housing developments for which no archival records were available, or for which the information was insufficient to establish their characteristics. Likewise, we excluded developments built outside the defined time frame—even if they were legalized during this period—and those that were never actually built.

Following this process, the SS consists composed of 35 districts (Figure 2), belonging to the former neighborhoods of San Miguel del Padrón (32) and Cojimar (3), and which currently form part of the municipalities of Guanabacoa (9), San Miguel del Padrón (23), La Habana del Este (2), and Regla (2).



Figure 2. Neighborhoods comprising the study area. Source: prepared by the authors, 2021

The scarcity of available documentary information prevented us from taking a larger sample. An inventory form was created for each reparto in the SS (Figure 3), which subsequently allowed us to tabulate their characteristics.

In the third stage, based on the data recorded in the forms, qualitative and comparative evaluations and analyses of the SS were conducted using a historical-logical approach. The conclusions reached are based primarily on the consultation of primary sources of information of various types.

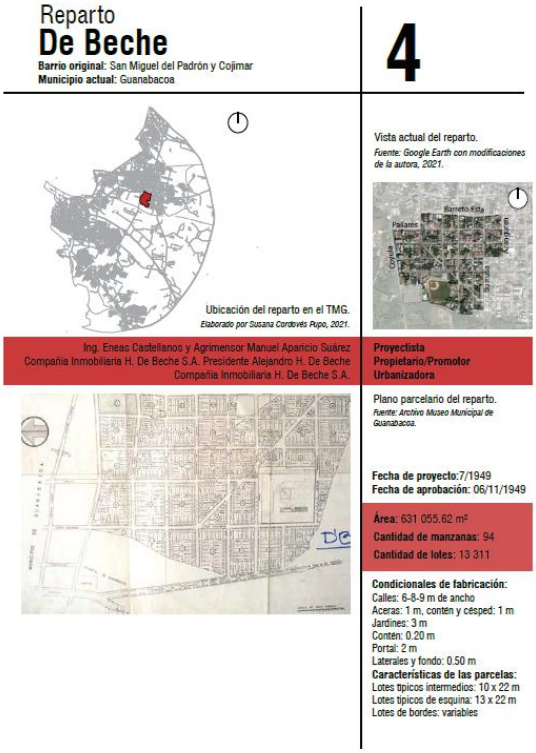


Figure 3. Inventory record-sheet for the Study Sample. Source: Prepared by the authors, 2021

3 Results and discussion

3.1 Havana and Guanabacoa: conurbations in the 20th century

The period from 1940 to 1959 marked the peak of the capital's expansion into the rural areas surrounding the established city. Construction activity, which had been interrupted by the economic crisis of the 1930s, accelerated after 1940, when Cuba's finances improved due to the rise in sugar prices on the international market as a result of World War II. By that time, the western part of the city was already expanding rapidly; the municipalities of Marianao and Havana had merged into a single urban area, thanks to a modern network of avenues that allowed the affluent middle class to settle in the new and flourishing outlying neighborhoods.

The urban sprawl absorbed whatever land remained available, placing a strain on the existing infrastructure. Problems such as traffic congestion, a lack of parking, water, and public spaces, as well as overcrowding, were raising alarms among architects and urban planners. Meanwhile, in the southeastern part of the bay, the old founding center of Guanabacoa was already outgrowing its boundaries.

Since the approval and enactment of the Organic Law of Municipalities [10] in 1908, Guanabacoa maintained its structure, consisting of seven urban neighborhoods that made up the traditional center of Guanabacoa—the municipal seat itself—and its extensions, and five rural districts—large tracts of land that grouped together small, isolated settlements located in the surrounding areas and connected to one another and to Guanabacoa by local roads.

Population pressure and the need for industrial investment required new areas to accommodate this growth. During the presidential term of Ramón Grau San Martín (1944-1948), measures under the Havana Zoning Plan were implemented. The Plan was advised by architect Pedro Martínez Inclín, who proposed as a fundamental premise the expansion of the

network of primary avenues to improve mobility in the city and that would increase the value of the surrounding land for urban development. Within this system of new avenues, two were essential for connecting the municipalities of Havana and Guanabacoa. Vía Blanca, running through the center of the territory, initially started at Plazuela de Agua Dulce and, extending in sections, connected Havana with the eastern beaches, Matanzas, and Varadero. Its importance in connecting areas of urban expansion attracted the establishment of new facilities, mostly associated with industry. Dolores Avenue was the second major thoroughfare, as it connected the residential developments in the municipality of Havana to the south with the Central Highway leading into the interior of the country.

Another significant urban solution within the Plan's road infrastructure was the Plazuela de la Virgen del Camino, built between 1946 and 1948, which addressed the intersection of San Miguel and Gínez avenues to the east, where they connect with Calzada de Luyan coming from the west, and with Vía Blanca to the north. The resulting traffic junction channeled the heavy traffic, alleviating the frequent traffic jams that occurred on Calzada de Luyan when crossing the old Alcoy Bridge[5] , which was later expanded. At that time, one of the most important transportation companies, the Cooperativa de Ómnibus Aliados (COA), was operating in the TMG with four of its terminals [11].

As part of the Plan, to promote the development of agriculture, industry, and commerce, regulations were implemented for suburban subdivisions, which had to conform to the network of roads, local roads, and public utility projects, as well as be connected to and have access to them. In addition to the land allocated for roads, it was mandatory to set aside 10% of the total area for parks, schools, markets, and other buildings or spaces for public use [12]. Furthermore, to promote Economic Residential Zones, new housing developments had to be located no more than eight kilometers from a city, industrial center, or town [13]. Hence, these developments were promoted around major industrial corridors, two of which—the Carretera Central and the Vía Blanca, developed between 1930 and 1950—crossed the territory of the TMG. Monumental Avenue to the north, which ran from the Bahía Tunnel to its junction with Vía Blanca, marked the end of this intense period of urban development in the TMG, as it connected the developing residential developments in the area known as Metropolitan East Havana, where the modern neighborhoods of Vía Túnel and Parque Residencial Bahía emerged.

These factors favored the subdivision of large tracts of land, which, combined with the Mortgage Insurance Act—known as the FHA and passed in 1953—fueled the dream of home ownership, enabling a significant segment of the population to acquire land and homes through monthly payments financed by banks.

3.2 The study area

To select the SE, the following premises were established: it must be developed areas and that no previous studies had been conducted. As a result, the south-central portion of the former TMG was defined, comprising the developed area of the former San Miguel del Padrón neighborhood and part of the former Cojmar neighborhood, according to the Atlas of the 1943 General Census Report [14]. It covers an area of approximately 9.63 km², representing 3.33% of the 289 km² of the former TMG's territory and 15.3% of its total urbanized area, including its historic centers. The residential areas that make up the SE follow diverse design patterns. Many were planned by surveyors, civil engineers, and architects—ranging from anonymous professionals to renowned and prestigious figures in the country—including Francisco Pividal, Jorge Luis Echarte, Germán Delamartter-Scott Tapia, Luis Torriente Nethol, Bernardo Sánchez Montoya, Jacobo Salomón, and Basilio del Real, the the latter being the owner of the company Urbanización y Fomento de Viviendas, S.A., the Alturas del Mañana neighborhood, and the Guanabacoa Roundabout [15].

3.3 Analysis of the study sample. Definition of variables and preliminary classification

For the purposes of this research, to determine the variables for analysis, four studies from the national context were

reviewed; their scope, themes, and subjects of study are similar, and they analyze the characteristics of urban developments [7,16,17,18]. These studies include definitions of the contextual qualities of their locations, the urban structure and service infrastructure, and the characteristics of the road network, city blocks, and lots—variables that were adopted for this study. The SS subdivisions were grouped and classified according to three aspects identified during the research: their legal origin, their location, and their standard, which facilitated their analysis and allowed for a better evaluation (Figure 4).



Figure 4. Distribution of SS neighborhoods by legal origin, location, and standard. Source: prepared by the authors, 2021

To determine their legal origin, we adopted the classification defined by García Fortún [7], which distinguishes between authorized and unauthorized housing developments. According to the available documentation, the majority of the neighborhoods analyzed were authorized (25, or 71.4% of the total); only six of them were identified as having been initiated without approval (17.2%) and subsequently began the process of legalization. It is presumed that this was the result of a resolution issued in 1953 in the municipality of Havana, which prohibited the granting of licenses for construction of any kind in developments or locations not approved by the City Council [19].

Although the location corresponded to the site of the original property, it is possible to identify three location patterns in their development: adjacent to the consolidated urban fabric, adjacent to interurban routes (main highways and avenues), and adjacent to suburban routes (highways and local rural roads).

Despite having an irregular layout, with blocks of various geometric shapes and narrow streets featuring capricious and unexpected turns, some new subdivisions expanded the urban fabric of the founding town, modifying its boundaries and serving as extensions of the established area of Guanabacoa[6]. In some cases, they utilized the continuity of the existing layout and its streets, or the shape and proportions of its city blocks, widening their cross-sections to facilitate vehicular traffic, or adapting to outgoing suburban roads, such as the Highway to Santa María del Rosario.

The creation of interurban thoroughfares — such as Vía Blanca and Vía Monumental — or the modernization of existing ones—such as the Gínez and San Miguel del Padrón thoroughfares—led property owners, developers, and housing subdivision planners to discover the future potential of the adjacent land to them. Being adjacent to these roads enabled rapid connectivity with the newly urbanized outskirts and, above all, with the city center — a factor that was always highlighted in the advertising of the time to encourage the purchase of these lots.

The largest number of subdivisions comprising the southern portion of the former San Miguel del Padrón neighborhood developed along the Ginés and San Miguel del Padrón roads (20, or 29.4% of the total), which had to adapt to their winding shapes to develop their own layout (Figure 5). Few new subdivisions were built along the Guanabacoa Highway (today Calzada Vieja de Guanabacoa), coming from Havana. Subdivisions located along Vía Blanca

demonstrated better urban design qualities and a higher standard (Table 1).

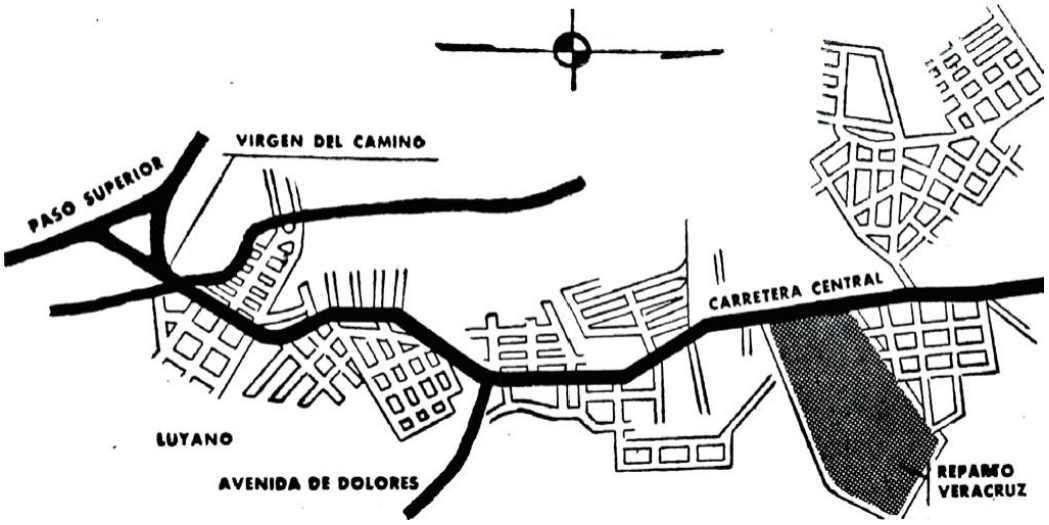


Figure 5. Location of Residencial Veracruz and other repartos adjacent to the Carretera Central. Source: Periódico Prensa Libre, 15 June 1958

Table 1. Classification of neighborhoods based on their location along roads

Repartos associated with interurban routes (main highways and avenues)				
Vía Blanca	Calzada de Güines (Carretera Central)	Calzada de San Miguel del Padrón	Carretera de Guanabacoa (now Calzada Vieja de Guanabacoa)	Vía Monumental
Parque Residencial Bahía (1951)	Emilio Mola (1950)	Luyanó Moderno (1950)	La Azotea (1951)	Residencial Vía Túnel (1958)
Alturas de la Vía Blanca (1952)	Avenida Dolores (1951)	Ciudadamar (1953)	Residencial Mañana (1954)	
Avenida Rotaria (1956)	Residencial La Cumbre (1954)	Residencial San Miguel (1954)		
	Residencial Carolina (1955)	Vista Hermosa (1955)		
	La Florida (1956)	El Afán (1955)		
	Residencial Veracruz (1958)	Residencial Monterrey (1956)		
Repartos adjacent to suburban routes (highways and local rural roads)				

Several emerged connected to the highways toward Regla, Campo Florido, Santa María del Rosario, San Francisco: Las Piedras (1955); and toward San Miguel del Padrón: Alturas del Mirador (1949) and El Mirador (1955). Source: prepared by the authors, 2021

Subdivisions were classified as being adjacent to suburban roads if their connection to the road network of the consolidated city was established via roads independent of the urban layout, most of which were inherited from the colonial period and still linked small towns and rural hamlets on the outskirts to the city. These were narrow roads, classified as local highways or trails, and too narrow for current traffic flow. Although some of the subdivisions adjacent to

these roads were originally intended as recreational estates, they eventually became residential developments.

There are no marked differences among the developments in the east; however, during their study and evaluation, it was observed that there were variations within that standard. In this regard, and although there were exceptions, the developments closest to Calzada de Ginés had better qualities, while those adjacent to Calzada de San Miguel del Padrón had smaller lots and a more modest character.

To define this aspect, the elements outlined in Decree No. 3213 of 1948 on Affordable Residential Zones [13] were used as a basis. Among other general aspects—such as urban location, management and financing, and the provision of services, and the characteristics of the buildings, stipulated that new subdivisions must consist of no fewer than 1,000 lots, each with a frontage of no less than 10 meters by a depth of 25 meters (250 m² of area).

As a result of the above, they are classified as modest housing units, those of a lower standard that generally do not comply with the provisions of the aforementioned decree (23, or 65.7% of the total), and as economical housing units, those of higher standard, which did satisfy the requirements of the law (12, 34.3% of the total). The former were generally occupied by workers linked to nearby production and industrial centers (for example: Vía Blanca, El Afán, and Avenida Rotaria); and the latter, by a middle class of professionals, merchants, and small property owners (for example: Alturas de la Vía Blanca, Residencial Monterrey, and Residencial Vía Túnel).

3.4 General characteristics of the neighborhoods in the study sample

3.4.1 Road layout, urban fabric, and city blocks

The new neighborhoods have diverse geometric shapes and road layouts, resulting from the irregularity of the original property boundaries or their adjacency to already urbanized areas, transportation and geographical features. However, their morphological qualities can also be distinguished based on their period of construction and their standard.

The subdivisions conceived in the late 1940s retained the traditional square grid as the structuring element of urban space. De Beche and the Guanabacoa Expansion, approved between 1949 and 1953, adopted a semi-square grid, with some irregular blocks, as an approximation to the urban characteristics of the traditional town, the purpose of which was to serve as an extension of the existing grid (Figure 6). Because the Ampliación de Guanabacoa arose in a narrow strip located between De Beche and the Road to Santa María del Rosario, it shares morphological continuity with De Beche, even in the naming of its streets, which make them appear as a single entity.



Figure 6. Aerial view of the De Beche area (1949), a reparto featuring the traditional grid layout. Source: Google Earth 2022, with annotations by the authors

The urban structures of Emilio Mola (1950), San Matías (built before 1951 and legalized in 1953), and other small, irregular neighborhoods had to contend with limited land areas, pre-existing facilities, and boundaries with railway lines and geographical features, such as rivers and tributaries, which shaped the conception and design of their layouts.

As the 1950s progressed, the need to maximize land use led property owners, developers, and subdivision planners to adopt a distinctly rectangular block layout, a practice widespread in other housing developments of the decade [20]. This layout altered the cross-sections of the streets, establishing hierarchical levels according to the development's design and its connection to the area's main thoroughfares; furthermore, flower beds and gardens began to take on greater significance as their dimensions increased. In the TMG, initial attempts to adopt a rectangular block layout resulted in a mixed grid—as seen in Ampliación de Guanabacoa (1953), Ampliación de Bellavista (1954) and Residencial Mañana (1954)—or small-scale rectangular grids —such as El Roble (1954) and Residencial Guanabacoa (1955)—which provided more space for roads. Gradually, experimentation intensified, leading to the implementation of layouts with "stretched" blocks—that is, very narrow and longer blocks (Figure 7).



Figure 7. Aerial view of Bellavista de San Miguel or El Afán (1955), a reparto with markedly elongated, narrow rectangular blocks. Source: Google Earth 2022, with annotations by the authors

Rectangular geometry was the most commonly used, in blocks with diverse shapes, orientations, and dimensions. The width-to-length ratio ranged from 1:2 to 1:5, resulting in excessively long urban blocks and generating long walking distances. Lengths between 100 and 175 m predominated, although in some exceptional cases they reached 296 m (Bahía Residential Park) and 298 m (Veracruz Residential Complex). The range in widths remained between 40 and 70 m, with 50 m being the most common. This lower variability in block widths made it possible to accommodate two lots 20-35 m deep, each facing the opposite street—a characteristic that led to the most absolute homogenization of the subdivision and favored the construction of model homes for sale. This variety meant that blocks could contain any number of lots, ranging from 26 in the smallest to twice that number in the largest (Figure 8).

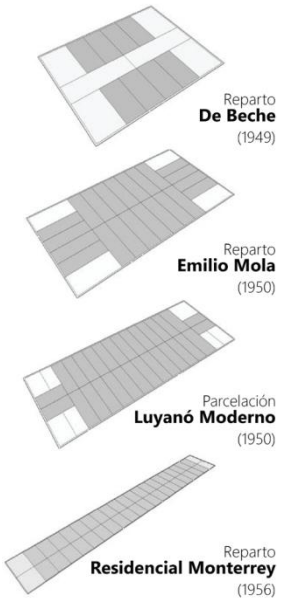


Figure 8. Typical city blocks in selected neighborhoods, showing their modular lot division. Source: prepared by the authors, 2021

Regarding lot subdivision, there are affordable housing developments that comply with the minimum of 250 m² established by law [12], such as Emilio Mola, Ampliación de Guanabacoa, Ampliación de San Matías, and El Roble. In some neighborhoods, the typical lot size significantly exceeded this figure, such as in Parque Residencial Bahía (280 m²), Residencial Monterrey (308 m²), Nalón (322 m²), Residencial Guanabacoa (between 362-452 m^2) and Alturas de la Vía Blanca (450 m²), with frontages ranging from 10 to 15 m. However, in most of the developments, the figures were lower than these, even falling below 200 m² , with frontages of 8.48 m or less (Figure 9). The subdivision design aimed to create as many lots as possible with similar dimensions and locations, with a frontage-to-depth ratio of 1:2.5 and 1:3, to facilitate their rapid development with model homes (Figure 10).

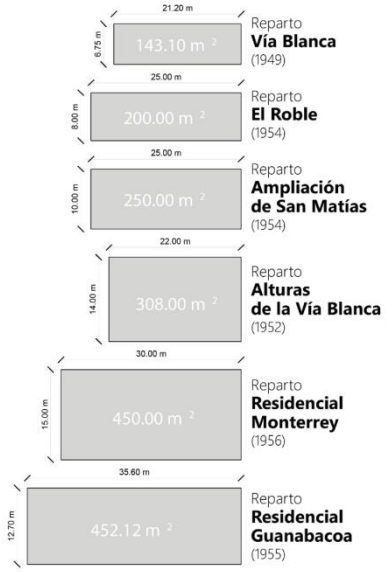


Figure 9. Types of regular lots in selected housing developments, showing differences in standards. Source: prepared by the authors, 2021



Figure 10. Serial housing models built in TMG subdivisions. Higher standard: Residencial Alturas de Mañana (top) and lower standard: De Beche (bottom). Source: Alexis J. Rouco, 2019

In turn, in general terms, road layouts can be classified by their geometry into regular, irregular, and free-form. Regular layouts produced square, semi-square, and rectangular blocks within an orthogonal grid that covered the entire available land area and ended at the edges with incomplete blocks. Irregular layouts, in an effort to adapt to the road junctions of adjacent developments, geographical features, and other preexisting conditions, produced trapezoidal or rhomboidal blocks, or those with sinuous or curved edges, although they could also contain some orthogonal sections. Those with free-form layouts were shaped by the nature of the site (irregular topography, natural features, or lush tree cover); and in order to take advantage of climatic, visual, and landscape factors, their streets meandered along varied paths. They inevitably recall the sinuous layout of certain neighborhoods in the western part of the city from the early decades of the 20th century, developed for the middle and upper classes and influenced by the garden city movement [21].

As the urbanization process intensified, new subdivisions gradually filled the available spaces on both sides of interurban, suburban, or local roads—primarily the Ginés and San Miguel del Padrón thoroughfares—until they occupied a strip extending inland. In this process of development, several types of urban grid patterns can be observed: open, closed, and mixed (Figure 11).



Figure 11. Types of urban fabric patterns in selected repartos: a) open (Ciudamar), b) closed (Residencial Monterrey), and c) mixed (La Florida). Source: prepared by the authors, 2021

Developments with an open layout allowed for future expansion or continuation by another subdivision, utilizing the layout of the streets already built. In these cases, the contact zones between the two layouts became transition areas with few inconsistencies, so that the routes extended and facilitated interconnection between the existing and the new. Closed subdivisions consisted of groups of blocks connected to the city at a single point. Generally, access to the development was via a nearby street or avenue, which connected all the blocks through a circular or winding route, leaving only a single row of edge lots along its perimeter. Mixed-grid developments combined attributes of the previous variants; their main street forms a loop that enters and exits after passing through all the blocks, while they are crisscrossed by cross streets. In general, their structures provided a sense of direction and orientation, and because the developments were not very large (typically comprising around 1,000 lots), most of their routes tended to be short and pedestrian-friendly, on a walkable scale (Table 2).

Table 2. Classification of SS neighborhoods according to road layouts and urban fabric.Source: prepared by the authors, 2021

Road layouts		
Regular	Irregular	Free- form
Vía Blanca (1952)	Avenida Dolores (1951)	Residencial Veracruz (1958)
Ampliación de San Matías (1953)	María Cristina (1953)	
El Roble (1954)	Residencial Carolina (1955)	
	Urban fabric	
Open	Enclosed	Mixed
De Beche (1949)	Residencial Monterrey (1956)	Avenida Dolores (1951)
Luyanó Moderno (1950)	El Afán (1955)	Residencial La Cumbre (1954)
Residencial Mañana (1954)	Vista Hermosa (1955)	
	La Florida (1956)	
	Residencial Veracruz (1958)	

3.4.2 Infrastructure and public services

One strategy used to stimulate the purchase of lots in various neighborhoods was to highlight the technical aspects of their infrastructure, such as street lighting, efficient sewer and water supply systems[7], and even the existence of a direct telephone network. Higher-end developments, such as Residencial Monterrey and Vía Túnel, received more media coverage in catalogs and newspaper advertisements. Their paved streets, lit by mercury vapor lamps [22], were 14.50 m wide, with 1.25 m sidewalks and 3 m-wide medians [23]. The avenues in Gran Residencial Vía Túnel were 16, 20, 30, and even 50 meters wide [24].

On the other hand, each new housing development was required to have a public service system at different scales, allowing it a certain degree of independence from the city. In the SS, three different approaches can be observed that developers and planners used to determine the location of the 10% of the area set aside for community services within the developments: by prior location, by subsequent selection, and by comprehensive zoning.

In some subdivisions, the project set aside entire blocks or groups of large, contiguous lots for the City Council, either in central areas or along the major road to which the subdivision was adjacent (Figure 12). In other subdivisions, the chosen locations were not always the most suitable for public services, This is because, generally, the outlying areas of the development and irregular or residual lots—which were not favorable for real estate investment—were set aside for this

purpose. In many cases, the completion of services was subsequently undertaken by the private sector, with various types of businesses—such as grocery stores, shops, pharmacies, and hair salons, among others—located on small corner lots and on the ground floors of multifamily buildings.



Figure 12. San Miguel del Padrón Road, a major thoroughfare with associated services along its edges. Source: Photographic Archive of the Ministry of Public Works

Some higher-standard housing developments were conceived through comprehensive zoning, which included in their design the location of a shopping center, a school, basic services, and a system of plazas, parks, and other open spaces. The Bahía Residential Park (1951) was organized around the Plaza del Este, a large circular urban space from which tree-lined avenues radiated throughout the neighborhood[8]. Other large green parks occupied entire blocks or half of them and were evenly distributed throughout the development. Years later, Residencial Vía Túnel (1958), as an integral part of the future Greater Eastern Havana Metropolitan Area—a symbol of the modernity to which the capital aspired in the 1950s—was conceived with a city-wide vision and in accordance with the urban planning principles of the Modern Movement. The development was based on a division into neighborhood sectors with irregularly shaped areas, which segregated industry, commerce, residential use, and administration. These urban structures defined neighborhoods intended primarily for residential use, which included parks, local shops, school zones, and other services related to daily life. It also included plans for ample parking lots and green spaces distributed evenly across traffic islands, within city blocks, and along the edges of the reparto[9]. Furthermore, the regulations clearly prohibited the construction of hotels and casinos in the area [8,24] (Figure 13).



Figure 13. Promotion material for Residencial Vía Túnel, illustrating its urban zoning into functional sectors. Source: Periódico Prensa Libre, 2 February 1956

3.5 The end of the urban development boom

During the 1950s, numerous development projects were submitted to the Guanabacoa Municipal Council. However,

some were never built, remaining only as proposals on blueprints and in descriptive reports, such as the Alturas del Lucero (1951) and Ciudad Gráfica (1956) developments. Meanwhile, other subdivisions outside the study areas also remained unfinished in terms of their layout and development, particularly those located along the coast.

In 1959, measures established by the Revolutionary Government halted the sale of land and urban properties. On April 7 of that same year, Law No. 218 on Vacant Lots was approved, stipulating their compulsory sale to promote housing and public-utility buildings [25]. The transfer to the State of private companies engaged in the real estate business led to the exodus of a significant number of owners of real estate development companies and construction professionals, who had been the driving force behind urban development at the time [26].

In general, government actions undertaken in the TMG were aimed at completing existing housing developments—some of which had a higher occupancy rate than others—and, therefore, it was necessary to finish what remained to be done: technical infrastructure, paving of roads and sidewalks, park areas, community service areas, commercial establishments, and schools. In this way, the goal was to increase the number of public utility projects in the area—which had been lacking—for the benefit of the social classes. Subsequent intervention in the inherited subdivisions altered the planned lot division.

4 Conclusion

The growth of the TMG occurred in parallel with the expansion of other urban areas of the city, as a result of demographic, political, and economic factors that both drove and shaped this development. Within this context, the initial drivers for urban expansion on this side of the city and its conurbation with the municipality of Havana were the opening of new thoroughfares such as Vía Blanca and Dolores Avenue, along with other infrastructure projects conceived within the Havana Master Plan promoted by Ramón Grau San Martín (1944-1948) and the subsequent opening of the tunnel under Havana Bay.

The impact of this infrastructure increased land values, primarily for plots located near interurban thoroughfares (major roads and avenues), leading to varying prices in the real estate market. In the east, a gradation in the standard of housing developments was observed, allowing them to be classified as modest and affordable. Based on the aspects evaluated, it was found that the southern neighborhoods primarily accommodated social sectors from the working and middle classes linked to new industries established along the main thoroughfares, facilitated by low land prices, while in the north, developments associated with Vía Blanca and Monumental were promoted due to their connection to the east, targeting the middle class as evidenced by the commercial advertisements of the time, and their market prices were higher.

The documentary research led to the conclusion that between 1948 and 1959, 68 residential developments were approved, built, or legalized in the TMG. According to the documentation, the majority of the housing developments analyzed were authorized (71.4%). Between 1953 and 1956 alone, 31 (45.6%) were planned, with this period marking the peak of urban development in the territory. The final study sample confirmed that of the 35 subdivisions analyzed, most were located in the San Miguel del Padrón neighborhood (32), primarily along Ginés and San Miguel del Padrón streets (47.1%).

The new subdivisions exhibit a variety of geometric shapes and road layouts, resulting from the boundaries of the original properties or their adjacencies to already developed areas, transportation routes, and geographical features. Their urban fabrics and road layouts ranged from the traditional grid pattern to a distinctly rectangular block layout. This block pattern led to the most complete standardization of the subdivision, which favored the construction of model homes for sale—a practice employed by developers that is also evident in other areas of the city.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

[1] Ciudad de La Habana. La identidad de la provincia y sus municipios [Multimedia en 4 tomos]. La Habana: Oficina de Asuntos Históricos del CP PCC de Ciudad de La Habana y Publicitaria Imágenes CIMEX; 2006.

[2] Rensoli R. La Habana Ciudad Azul. Metrópolis cubana. 2da ed. La Habana: Ediciones Extramuros; 2015.

[3] Oficina Nacional de los Censos Demográfico y Electoral de Cuba. Censos de Población, viviendas y Electoral 1953: Informe General. La Habana: P. Fernández; 1955.

[4] Guía Provincial de La Habana comercial, industrial, profesional, agrícola y social 1944. La Habana: Panamericana; 1944-1945.

[5] San Martín JR. El Plan de Obras Públicas del gobierno del Dr. Ramón Grau San Martín (1944-1948). Un informe a la nación. La Habana: Ministerio de Obras Públicas; 1948.

[6] Rodríguez MA. Crecimiento urbano de Guanabacoa. Evolución urbana. Arquitectura y Urbanismo. 1992; 13(3):29-36.

[7] García AT. Influencias del Movimiento Moderno en el patrimonio urbano-arquitectónico guanabacoense en la segunda mitad del siglo XX [Maestría]. La Habana: Instituto Superior Politécnico José Antonio Echeverría, 2009.

[8] Robaina L. Desarrollo histórico-urbano del Litoral Este de la Ciudad de La Habana. Zonas Residenciales [Diploma]. La Habana: Instituto Superior Politécnico José Antonio Echeverría, 2006.

[9] García AT. Valoración preliminar de la arquitectura moderna en Guanabacoa. Primera versión del Inventario. Coloquio de Historia de Guanabacoa, Guanabacoa. La Habana: Archivo del Museo Municipal de Guanabacoa; 2007.

[10] El cincuentenario de la Ley orgánica de los Municipios 1908-1958. Cuadernos de Historia 65. La Habana: Oficina del Historiador de La Habana; 1958.

[11] Cooperativa de Ómnibus Aliados, la mayor empresa de transporte de su época en Cuba. Havanacarhistory [serie en Internet]. 27 diciembre 2020 [consultado 20 diciembre 2021]. Disponible en: https://havanacarhistory.com/2020/12/27/cooperativa-de-omnibus-aliados-la-mayor-empres-de-transporte-de-su-epoca-en-cuba/.

[12] Parcelaciones urbanas. Decreto No.613, de 19 de marzo de 1946. En: Valladares ÁL. Urbanismo y construcción. 2da ed. La Habana: P. Fernández y Cía; 1954. p. 559-562.

[13] Zonas Residenciales Económicas. Estimúlase con la exención de impuestos la creación de Zonas Residenciales Económicas. Decreto Nº. 3213. En: Valladares ÁL. Urbanismo y construcción. 2da ed. La Habana: P. Fernández y Cía; 1954. p. 628-631.

[14] Atlas del informe General del Censo de 1943. La Habana: Dirección General del Censo de 1943, Departamento de Planos y Gráficos; 1943. Archivo del Museo Municipal de Santiago de las Vegas, La Habana.

[15] Jiménez G. Los propietarios de Cuba 1958. La Habana: Ciencias Sociales; 2007.

[16] Batista Y. Las viviendas del Movimiento Moderno en la ciudad de Holguín [Maestría]. La Habana: Instituto Superior Politécnico José Antonio Echeverría, 2009.

[17] Muñoz R. La obra del Instituto Nacional de Ahorro y Vivienda en La Habana [Maestría]. La Habana: Facultad de Arquitectura, Instituto Superior Politécnico José Antonio Echeverría, 2015.

[18] Rouco AJ. El legado urbano-arquitectónico residencial del Movimiento Moderno en el municipio Cerro [Maestría]. La Habana: Facultad de Arquitectura, Universidad Tecnológica de La Habana José Antonio Echeverría, 2020.

[19] Repartos clandestinos o repartos no aprobados. En: Valladares ÁL. Urbanismo y construcción. 2da ed. La Habana:

P. Fernández y Cía; 1954. p. 599-601.

[20] Muñoz R, Rouco AJ. La periferia habanera 1940-1960: una mirada a su retícula urbana. AU [Internet]. 2019 [consultado: 25 de octubre 2021]; 40(3):[5-20 pp.]. Disponible en: http://rau.cujae.edu.cu/index.php/revistaau/article/view/558/526.

[21] Álvarez Á. De cuando la retícula ortogonal era considerada ineficaz y aburrida. Planificación Física. 2006;(11):14-22.

[22] Residencial Monterrey iuna obra ejemplar! Prensa Libre. 19 enero 1958; 8.

[23] iLa mejor oferta de todas! Ya hay nuevamente casas disponibles. Prensa Libre. 30 junio 1957; 3.

[24] Morales R. El ocaso del millonario negocio de la Gran Habana del este: publicidad y realidad. Proyecto Estudio Memoria Histórica del Cartel Cubano. Historia, Arte y Comunicación [serie en Internet]. [Consultado 20 diciembre 2021]. Disponible en: https://m. monografías.com/trabajos 93/ocaso-del-millonario-negocio-gran-habana-del-este/ocaso-del-millonario-negocio-gran-habana-del-este.shtml.

[25] Ley sobre los solares yermos. Revolución. 8 abril 1959; 14.

[26] Muñoz R. La arquitectura habanera de los años 60. Edificios y espacios públicos para todos. Revista Arquitectura y Urbanismo [Internet]. 2017 [consultado: 25 de octubre 2021]; 40(1):[61-74 pp.]. Disponible en: https://rau.cujae. edu.cu/index.php/revistaau/article/view/399/374.

Note

[1] The municipal histories were published in their entirety in a four-volume multimedia series: *City of Havana. The Identity of the Province and Its Municipalities*, by the Office of Historical Affairs of the PCC Provincial Committee of the City of Havana and the advertising agency Imágenes de CIMEX, in 2006.

[2] See: *The Outskirts of Havana, 1940-1960: A Look at Their Urban Grid* (Ruslan Muñoz and Alexis J. Rouco, 2019), *The Urban Heritage of Southern Havana* (Yaneli Leal, 2020), and *Urban Expansion of Havana: El Cerro 1925–1960* (Alexis J. Rouco and Ruslan Muñoz, 2022).

[3] On August 14, 1743, it was granted the title of Royal Town of the Assumption of Guanabacoa, accompanied by a coat of arms that has identified this town to this day.

[4] José C. Villalobos y Olivera (1913-1997) was a key political figure in the history of the TMG. During his administration, he promoted significant public works and social changes, a fact led to his reelection on six occasions, keeping him in power for nearly 20 years. See: *Guía Provincial de La Habana comercial, industrial, profesional, agrícola y social 1944.*

[5] See: *Considerations on Improving Vehicle Traffic in the City of Havana* (Alberto Prieto) and *Traffic and Parking Problems in the City of Havana* (Luis Bonich), both articles published in Issue No. 184-185, 1948, of the journal *Arquitectura*, published by the National College of Architects of Cuba.

[6] For example, Nalón (1947), Pomo de Oro (1948), De Beche (1949), and the Guanabacoa Expansion (1953) to the southeast, and El Roble (1954) to the north.

[7] The Chapter Minutes of the subdivisions from that period specify that the water supply would come from the Guanabacoa Aqueduct, a project also promoted by the Villalobos administration.

[8] See: *Plano parcelario del Parque Residencial Bahía* (1950). File No. 121, Parcel Map Collection, Archive of the Provincial Directorate of Physical Planning of Havana.

[9] See: Plano parcelario del reparto Residencial Vía Túnel (1957). File No. 260, Parcel Map Collection, Archive of the Provincial Directorate of Physical Planning of Havana.