

THE NEW ADMINISTRATIVE CAPITAL

ITS VALUE ON SUPPLY & DEMAND IN THE EGYPTIAN REAL ESTATE



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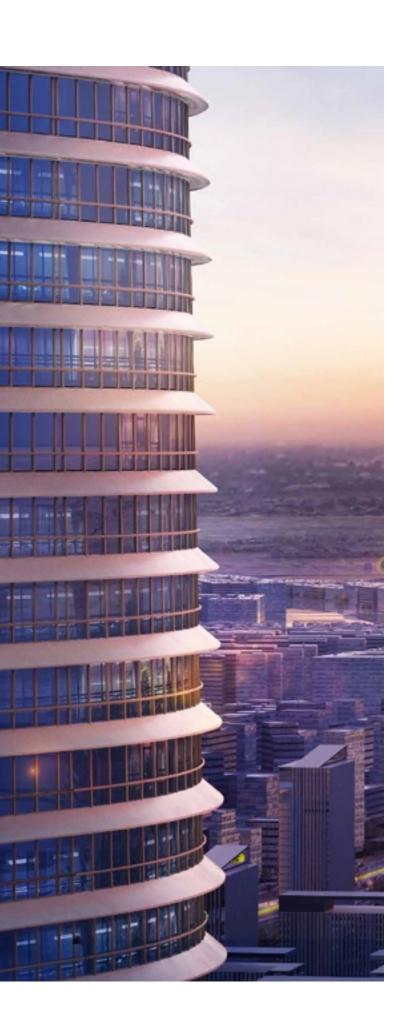
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PREFACE

Cince 2011, the need for economic growth (which implied the need to ameliorate the business environment through the improvement of the country's infrastructure), has driven the state to resort to gigantic public works, just as had Roosevelt and the Asian Tigers done to oil the wheels of their economies. In 2013, a new page in Egypt's history was drawn and megaprojects have started to see the day, not only with the improvement of transportation networks (think the National Roads Network), the building of many power stations across the country, and the extension of the electric gridline, but also through the construction of megaprojects that include new cities to accommodate Egypt's growing population. Amongst those megaprojects is the New Administrative Capital (NAC), a new project of its kind, one that will have many consequences on the real estate market in Egypt. As such, the purpose of this report is to examine the retaliatory effects of the building of this NAC and how it will sustainably become the country's future capital.



THE NEW ADMINISTRATIVE CAPITAL: CAIRO'S PAINKILLER

- » INTRODUCTION
- » THE LAST DECADES' NEW URBAN COMMUNITIES
- » THE VISION OF A NEW EGYPTIAN CAPITAL



INTRODUCTION

Back in 2015, when news broke out from Sharm El Sheikh that the Egyptian government was planning to create a new capital for the country. The megaproject was perceived by some as a fantasy that wouldn't bear fruit in the near future—if at all. In fact, Egyptians had forgotten that such news came out of a very similar city that was built from scratch just a few decades earlier, to become one—if not *the*—fully fledged and main destination for tourists flowing into the country.

Thirteen months and 80% of the first phase's land was already sold out; 27 developers have entered the first phase of the project, while the government announces a timeframe for the moving of its institutions and bureaucrats to their respective new headquarters in what is now called NAC. Promising to be an Egyptian Marvel, only second to that of the Pharaohs ancestors' Great Pyramids of Giza, NAC is situated just east of New Cairo and south of the 10th of Ramadan City. It is promising to bring along with it a new era of civilization for the country and its people as it comes at a time to save Egypt from the many challenges and drags that the current capital, Cairo, weighs on its people and economy.

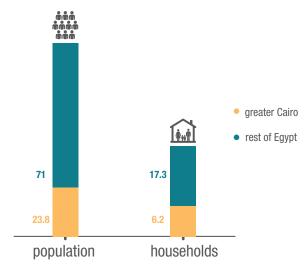






Truth be told, those challenges might really be the main reason to why the country's leadership had decided to make such a move three years ago. A city the size of Cairo could no longer account for the ever-rapidly increasing population it was sustaining, with a Cairene population (Greater Cairo) of over 23.8 mn people, and around 6.2 mn households (out of the 23.5 mn households in the country, or approximately 26.5% of Egypt's households). The current capital is rather becoming an inferno for the bureaucracy, the economy and at the heart of it all, the Egyptians. Thus, NAC was designed so as to lift some of that stress and pressure that Cairo had over-endured for the good part of the past half-century, along with all the consequences emanating from the squeezing of such a population density, such as high levels of pollution, rapidly-deteriorating roads, lack of housing supply, and poor infrastructure. Daily (read: hourly) gridlocks all over the city's roads and highways meant that the necessity for such a switch was only a question of time before people would not be able to meet their morning errands before sunset or head home after work before dawn. This is the main issue that NAC has primarily vowed to address: enabling guick and simple access to public administrations in order to render, amongst other things, the economy much more productive and efficient.

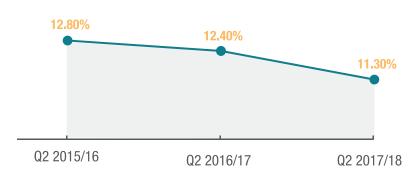
Population Dispersion in Greater Cairo & Egypt (mn)



Source: Central Agency for Public Mobilization and Statistics (CAPMAS) 2017 Census

NAC, however, also set out to make some macroeconomic adjustments to a periling and then-freefalling Egyptian economy, one that drowned as a result of the after-effects of unrests since early 2011. The aim was mutually beneficial and circular in all ways: a new capital would give ease of access for citizens for their public services (and servants), free up Cairo from the over-crowdedness of its roads and districts, alleviate the pressure on its old infrastructure, and generate more economic activity in the country. It would also bring in more investments than those that were lost due to decreasing remittances or declining tourism's foreign currency inflows following the Arab Spring. In addition, it would create a wave of employment to tackle not only the residual unemployment rates that were, in part, one of the cause of such revolts, but to meet some more unemployment challenges such as to employ the large manpower that came back from mainly Libya on top of those who had come back from other neighboring countries amidst the wave of unrests there. Initially recording 12.8% during Q2 2015/16 (pre-initiation works at NAC), Egypt's unemployment rate decreased by 1.5 percentage point to become only 11.3% during Q2 2017/18. This happened at a time when the real estate sector amounted to around 10.42% of the gross domestic product (GDP) of Egypt in FY 2017/18, compared to 9.5% in FY 2014/15 (even though the annual growth rate of real estate sector decreased to 3.7% in FY 2017/18 from 5.2% in FY 2016/17).

Unemployment Rate

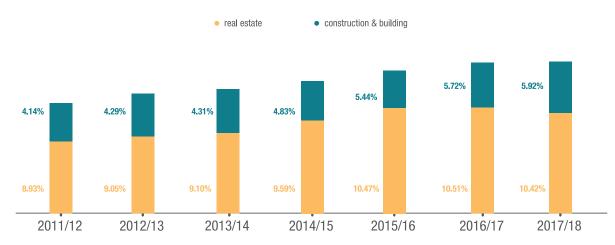


Source: CAPMAS



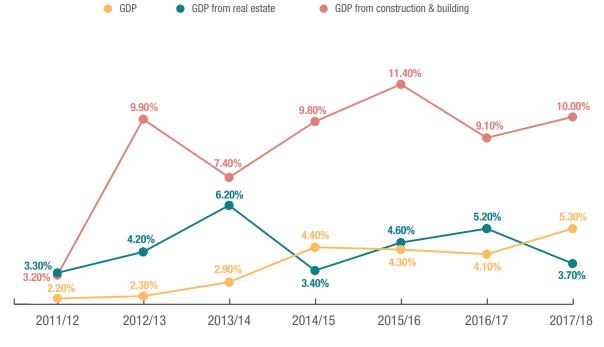


Contribution of Construction & Real Estate to GDP (%)



Source : Calculated from Ministry of Planning, Monitoring, and Administrative Reform

GDP & Real Estate in GDP (Growth Rate)



Source: Calculated from Central Bank of Egypt (CBE)

THE LAST DECADES' NEW URBAN COMMUNITIES

Although the prospects of building new cities and urban communities to alleviate the strain on Cairo is not a new exploit by any means, only two projects that were started earlier are the most popular and most worthy of mentioning: the 6th of October City - along with the Sheikh Zayed district (both part of Giza governorate) - and the New Cairo settlements including Rehab City, the First all the way to the Fifth Settlement, among others. The former, was a creation of a city in the desert, afar from other settlements in Giza governorate, it was meant to be a new city in whole, not one relying, leaning on, or expanding from a pre-existing city (i.e. Giza). The latter, however, was an expansion of Cairo governorate's main conglomerates, such as the Heliopolis or Maadi districts and the expansion was made farther east of the Nile, not along it, despite usual repartition of the Egyptian population and the historical habitude to scatter along the Nile River-mainly for practical reasons since Egypt has historically been an agricultural country that depends and relies on the Nile as its main source of freshwater, for both its irrigation and the population's water needs. That's been the classical division of the heart of Egypt: east and west of the Nile.





WHICH WERE MOST SUCCESSFUL?

The controversy over which new urban communities and settlements have been the most successful has raged for many years and is still a key point of debate when discussing the future of settlements and urban expansions in Egypt. This is mainly because, as logical and sound as it may seem, developers and urban architects are trying to understand how to make a successful city, and in other words, what has prevented in the past and what's still preventing people's mobility to those areas, where lack of congestion, more advanced infrastructure, and overall "neater" and "chic"-er lifestyles (i.e. compounds and gated communities) are all glorified in the promise of a better life.

Colloquially speaking, Egyptians always refer to the idea that Gizawites will remain in Giza, and as such, those who living in Dokki, Agouza, or even Al Haram are more likely to make the move to the 6th of October or Sheikh Zayed cities. Comparably, those living in Heliopolis or Maadi,

would more easily make the move to nearby districts such as New Cairo's Fifth Settlement, Al Mokattam, Rehab City, or even Madinaty. It's also worth mentioning that such an arguably correct prejudice comes from the fact that, historically, different parts of Greater Cairo were divided in such a way so as to make them specialized areas. Giza was always known to be agricultural, that's why when driving on the 26th of July Corridor, green fields occupy both the right and left scenery. Heliopolis was, on the other hand, the bastion of the Egyptian military, if not the Egyptian state as a whole. The presidential palaces, the prestigious Nasser Military Academy, the Ministry of Defense, as well as many other ministries, government authorities, religious institutions, and airports (many of which are military) were always on the eastern bank of the Nile, rather than on its western one.





This meant that the expansion into what would later on become New Cairo would serve the pre-existing public administrations and institutions that were in Heliopolis and, in hindsight, the country's (political) elite. As such, the new Police Academy is located in New Cairo, as well as big gated communities and compounds, some of which cater for a specific social class and high-ranking official cast, are located there. Al Futtaim's first megaproject, the Cairo Festival City (CFC), which includes the CFC Mall, is also in New Cairo - on the edge of Greater Cairo's Ring Road. In the same way, the most prestigious and private academic institutions, schools, and universities were built in New Cairo. The 100-year old prestigious American University in Cairo (AUC) also opened its state-of-the-art campus in New Cairo in 2008, as well as the German University in Cairo (GUC), the British University in Egypt (BUE), and the French University in Egypt (Université Française d'Égypte, UFE) are also located in east Cairo, rather than in Giza. If the choice of the upper and upper-middle classes of the Egyptian society is to enroll their children in undergraduate studies in Egypt, they go to these universities, perhaps even in that specific order as stated previously.

Another factor is that the political elite would most likely than not choose to move to New Cairo instead of going for the western shores of the Nile, not simply due to the proximity to workplaces, but also because of the proximity to services related to their professions.





For instance, Heliopolis and New Cairo have a lot of military hospitals, and if not for military surgeons and practitioners going to those hospitals every day, then at least because those hospitals are key to serve them and their families. Those hospitals treat not only the injured, the soldiers, and ranking officers, but also their families for a very discounted rate (compared to other private hospitals); not to mention their assuredness and trust in military hospitals, compared to other privately-owned and for-profit hospitals, healthcare centers, and clinics, let alone public hospitals (even though, some of these military hospital are also for-profit when treating the general non-enlisted public). The Al Galaa Military Medical Complex, Wady El Nile Hospital, or even the newest of them all, the Air Force Specialized Hospital, are only some of what makes the eastern side of Cairo so much more attractive for retention of their inhabitants. In 6th of October and Giza areas, for instance, there are simply no military hospitals. The calculation is quickly made. The same goes for the banking sectors, (i.e. bankers as well as the business elite in general), business trips are just that much easier when a fully operational airport is right at the end of your home's main street.

In spite of the presence of airports in other parts of Greater Cairo, more specifically in Giza governorate with the 6th of October Airport and the awaited inauguration of the Sphinx International Airport, as well as the many universities present there, it is just not the same. Maybe the inauguration of the Sphinx airport will rearrange and restructure the air traffic in Egypt, perhaps in the same fashion that the division between Paris' two airports, Paris Charles de Gaulle and Orly, did; the former specializes in long-distance flights while the latter focuses mainly on lowcost regional and local flights. But that's only a stretch in speculations and in believing that the new airport is what's going to tip the scale in the west's favor.

RESIDENTIAL CONFIGURATION OF GREATER CAIRO

It may be the case that today, we witness a greater acceleration of demand in rent in New Cairo than that of 6th of October, which makes us confidently presume that it's not just that New Cairo is more appealing to Egyptians, but perhaps 6th of October City is much unappealing to them, and it arguably never was that tempting in the first place because its only appeal might have only been by necessity and sole option to escape over-crowded Cairene districts, back when the prospects of New Cairo were obscure and subject to doubt and concern. With a large presence of foreigners in the governorate (mainly Middle-Eastern immigrants who consider the suburbs of Giza an escape from the high-cost and low-quality housing they'd gotten years earlier), many of the international students who've come from the Gulf (and from the Levant in more recent years) sought refuge in 6th of October City, perhaps in the comfort of the name of its prime district, Sheikh Zayed. Even then, those who've confined themselves on the hills of Sheikh Zayed's districts, such as Palm Hills and other newly constructed urban communities for high-income, upper-class, and upper-middle class citizens such as City View, New Giza, Beverly Hills, Allegria, and the such, would still rarely enroll their kids in public universities or less prestigious and internationally recognized and accredited ones such as the Nile University, the Sheikh Zayed University, the 6th of October

University, and other campuses of Cairo University located at the heart of the Sheikh Zayed district. It would be an overestimation to think that the New Giza University could change that trend a bit, since it would be an established university partnering with internationally renown academic institutions right next to home, but it's safe to say that it would be a small dent to the overall trend.





WORK-LIFE BALANCE: THE COMMUTE

If at one point the 6th of October region was rendered more appealing to home-buyers since it would be only a few minutes away of traffic-less drive to their workplaces in the Smart Village, New Cairo managed to up the game in that league by creating the Business District - more colloquially known by its Arabic name "مجمع "(Banks' District) - where not only many of the banks' headquarters are now established, but also where many multinational companies such as Unilever, Procter and Gamble, Nestle, as well as local business giants such as El Sewedy Electric's headquarters are sitting. Some startups now choose their smart-offices to be located there in proximity to prestigious universities for recent graduates who've settled

in the area or for potential part-time students. Agrimatic Farms is only one of many examples of the hypothesis. The banking sector's move to New Cairo is enough of an incentive to have a large portion of the population settle near their workplaces, since Egypt is mainly a service economy and a large chunk of its population is employed in the banking sector.

The sectorial divide and zoning is also crucial to understanding why the 6th of October area is repulsive to some people, this time not for something that it lacks but because of something it in fact has: an industrial area. The 6th of October City was for long hailed as the city of the future, and as such, when the thinking was

that industries are necessary for the economy, industrial areas were drawn within the city's boundaries. If not of fear of polluting waste (counting air and sound pollutions, water contamination, and so on) coming out of factories and affecting nearby residential areas, then at least due to the expansion of the residential areas that would collide with the large industrial areas and would, as a consequence, cause health risks (and fears) for anyone looking to settle in the suburbs of Giza governorate and create unwanted low-income workers and high-income residents mixity (sometimes perceived as a security risk).

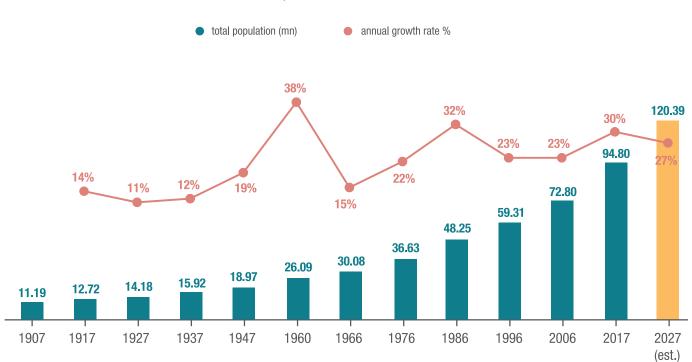


In saying that, this report's aim is to explain NAC's value on supply and demand in the Egyptian real estate market as a new player and destination for investors and developers alike, and in doing so, explain why it is potentially a prime destination for real estate investments.

As per the argument of this report, an exploration of the real estate scene in Egypt would indicate that there are currently over 20 urban projects being developed by the government, all of which having fourth-generation city standards, which is creating more competitivity between those new cities and the new capital, perhaps one or more being successful at the expense of others. On the other hand, perhaps the NAC's establishment will generate great and exponential development in surrounding areas, as is with any new settlement.

In theory, NAC is supposed to bring out all the success factors that made New Cairo and 6th of October areas flourish, all within the vision of making it an administrative capital for Egypt, taking into account the desire to make it a sustainably growing city and a capital for the future (and future generations). The aim would be to do that without the strain that Cairo has endured in terms of population density and weight on its infrastructure due to Egypt's demographic explosion in the last few decades: that has been mainly due to a high marriage rate and very high numbers of births per year as 2.5 mn new births were recorded in 2017 - a growth trend that's expected to continue on that path to potentially reach a total population of 120.4 mn Egyptians in 2027. All the while learning from past mistakes to identify what prevented (and still is) people's mobility to previously-new cities.

Population Growth



Source: CAPMAS (2017 census), R&A Estimation



THE VISION OF A NEW EGYPTIAN CAPITAL

NAC, Egypt's megaproject and capital of the future, was thought of and engineered in March 2015 during the Egyptian Economic Development Conference in Sharm El Sheikh. The Egyptian government back then knew that one of the major issues it had to tackle to move forward with the country and give it a chance to prosper and grow was to solve the capital's over-crowdedness issue. For a city that was built to accommodate anywhere between 5 and 7 mn individuals, Cairo has done more than it could to accommodate all 20+ mn people. The deteriorating and ageing infrastructure as well as the two-lane bridges that were built in a whole other era with a very different thinking and way of life, had to be replaced with newer, larger transportation networks, infrastructure, and residential housing spaces. The move would not just be the equivalent of an super-sized replica of Cairo, with larger, wider, and longer streets and highways. The move is also meant to make use of the digital age the world is living and absorb much of those digital advances and technologies by utilizing them in ways that not just advanced cities of the world

use, but most importantly, in the same way smart future cities are going to function. This is not only going to pave the way for a new age in Egyptian civil engineering (and all about 4th generation cities), but in fact, will respond to an already well-established audience that is thirsty for these amenities and technological advantages.

As the project spans over 170,000 acres of land, it will include enough housing units to accomodate 6.5 mn people. In its first phase alone, NAC has 27 developers working on ground, with 25 residential projects, of which at least two are already completely sold out, with eight commercial projects, of which one has been completely sold out. Being one of the 20 megacities and projects currently under construction in Egypt, around 40% to 50% of NAC's investments are made by foreigners, according to Administrative Capital for Urban Development Chairman (ACUD) Ahmed Zaki Abdeen, who also expects this rate to go further up in the coming period with the advancement of the project.

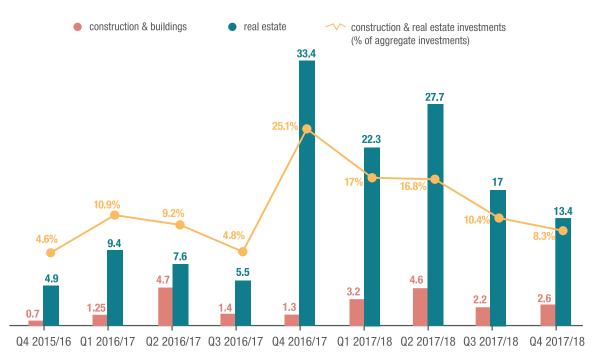


GROWING INVESTMENTS IN THE NEW CAPITAL

The chairman of the ACUD's premise that NAC will bring in more investments is probably supported by the fact that not only have net foreign direct investments in Egypt grown from EGP 3.8 bn during FY 2012/13 to EGP 7.7 bn in FY 201718, but also due to the fact that real estate is one of the fastest growing sectors Egypt, with total investments reaching peaks of around EGP 80.45

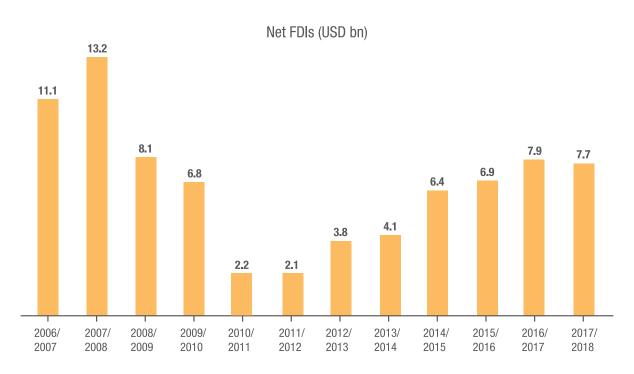
bn in FY 2017/18, a Y-o-Y increase of 44% from EGP 55.93 bn in FY 2016/17. Even more so, the first phase of NAC has sold 80% of its available slots for around EGP 300 bn, which may be largely due to the fact that NAC is intensely marketed-for abroad and in real estate exhibitions.

Construction & Real Estate Investments (EGP bn)



Source: Calculated from Ministry of Planning, Monitoring, and Administrative Reform





Source: Central Bank of Egypt (CBE)

PROGRESS IN NAC

Approximately three years and eight months have passed since the ambitious NAC has been unveiled and only 13 months since the first stone has been laid to inaugurate the project. Although these suspicions are constantly being addressed to by numerous on-field media visits that shed the light on the project's accomplishments, people still don't seem to really know the fate of that new city, whether it will really be habitable and livable in or not, let alone whether it'll be completed soon-if at all-or not.

Nonetheless, everyday seems to get closer for NAC to become a fully-fledged and livable city-and this is not simply a matter of good fortune or lack of other projects that are worthy of investments, labor, or even attention, which is reassuring not only the greater public (Egyptian citizens), but equally reassuring investors, hence attracting more investments constantly.

MASTER PLAN



AREA

TOTAL 170,000



POPULATION

6.5 mn

40% for people (each person has 15m² green areas)

30% for the business sector



20 RESIDENTIAL DISTRICTS

35% high population density 50% moderate population density 15% low population density

INFRASTRUCTURE



MAJOR ROADS

OF 650 km 40% allocated to pedestrians



AN ELECTRIC **TRAIN**

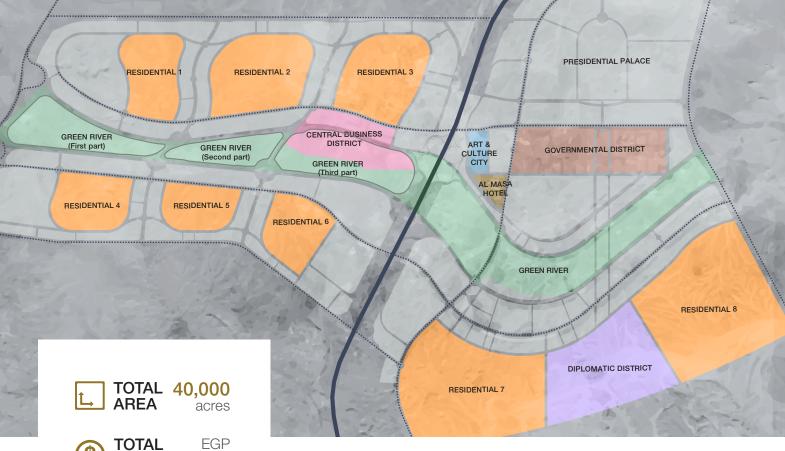
linking NAC with 10th of Ramadan & El Salam cities



SOLAR ENERGY

covering 70% of the roofs

FIRST PHASE



COST

300 bn

RESIDENTIAL DISTRICT (R3)

RESIDENTIAL DISTRICTS (R7&R8)

RESIDENTIAL DISTRICTS

1,000

acres 25,000 social housing units 27 developers

25 residential projects

commercial projects





SMART INFORMATION **NETWORK**

covering all the city



UTILITY NETWORKS

water tanks, electricity stations "Siemens"



INTERNATIONAL AIRPORT 33 km²

SERVICES



MOSQUES & CHURCHES

1,250



SCHOOLS & UNIVERSITIES 2,000



MEDICIAL CITY

540 acres 600 medical facilities



A 5,000-SEAT **CONFERENCE CENTER**

274 acres

EXPO CITY 900 acres



SMART VILLAGE

204 acres

KNOWLEDGE CITY

355 acres

GOVERNMENT DISTRICT

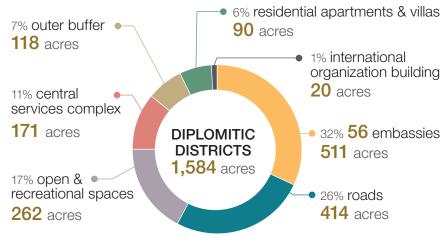
ministries, cabinet egyptian parliament, administative control authority

CENTRAL BUSINESS DISTRICT

20 towers interposing them the highest tower in Africa

30 banks

(16 out them received lands)



(80% of the utilities and infrastructure have been completed)

AL MASA HOTEL

10 acres

(tourist resort, lake, conference hall, mosque, and large shopping mall)



7 INTERNATIONAL **UNIVERSITIES**



SPORTS CITY



CITY OF THE ART AND **CULTURE**

opera, cinema halls, and theaters

GREEN RIVER

open theater

FIRST PART (CP1) **595** acres **128** acres 45 acres plants garden mosque **172** acres 66 acres open zoo egyptian garden 14 acres restaurants area **256** acres SECOND PART (CP2) 10 acres 38 acres restaurants area hotels 26 acres 26 acres wellness Center spas 20 acres club & playground THIRD PART (CP3) **514** acres 25 acres lake restaurants 51 acres playground

63 acres



THE PROSPECTIVE SUCCESS OF THE NEW CAPITAL

- » TRAFFIC & CONGESTION
- » SALABILITY OF NAC
- » THE NEW CAPITAL: A MODERN & SMARTER LIFESTYLE



TRAFFIC & CONGESTION

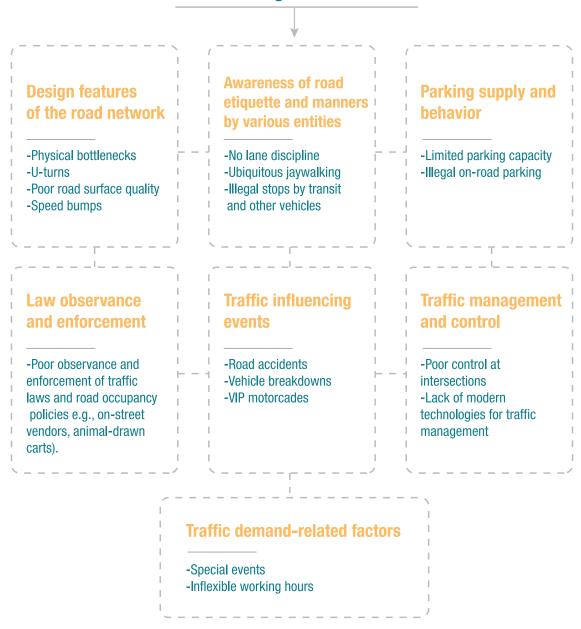
hat makes this project a prospectively successful one, are mainly two things. The first is that there is a clear and undeniable necessity to the move out of Cairo to another capital to facilitate all things such as transportation, infrastructure, government institutions, as well as administrations' efficiency and housing at the top of the list. With slums and informal settlements constituting around half of the housing of the Cairene population, traffic jams all over Cairo from Salah Salem road to Mohandessin areas and from New Cairo to 6th of October City; there had to be a solution to come and answer Egypt's housing and traffic issues.

As much as the above may seem like singular or ignorable justifications for the move and the construction of a project this big in the first place, the consequences of traffic in Cairo are multiple. A recent study by the World Bank published in 2014 estimated that the economic cost of Greater Cairo's congestion issues would cost the Egyptian economy around USD 8 bn—and that this figure would go as high as around USD 18 bn in 2030 because, amongst other things, traffic jams and over-crowdedness in the subway network seem to hinder the ease of doing not just business, but pretty much everything else in the capital. The plan is mainly to reengineer a city that omits many of the causes of in-city bottlenecks such as parking spaces, road quality, and modern technologies for traffic management.





Causes of Congestion in the Greater Cairo Metropolitan Area - Traffic Management Problems



Source: Cairo Traffic Congestion Study - Executive Note, The World Bank Group (2014)

The second reason is that the heart of the state, along with its other organs, will be in the NAC. Presidential premises, government ministries, and other bureaucratic institutions, as well as the parliament, will be fully operational by the end of 2019. This will create an outflow of residents that are bound to move to NAC in order to avoid the three to four hours and 90-kilometer daily commute from and

to the current capital. In addition, it will pressure other stakeholders and parties (embassies, consulates, and other diplomatic missions, of which 56 parties have already sent requests for the move to the Egyptian Ministry of Foreign Affairs as 80% of the diplomatic district of the NAC's infrastructure has already been completed) to move to NAC as well, according to ACUD's chairman.

SALABILITY OF NAC

Not only will the new capital be closer to Ain

Sokhna than iit is to some parts of Cairo for those who enjoy their weekends on the beach, but in fact, it'll be closer to the Suez Canal, with an expected influx of workers from the anticipated and awaited growth and logistics expansion in the Suez Canal Economic Free Zones, who are potentially seeking to buy homes in NAC, somewhere nearby and within a major city (the would-be capital).

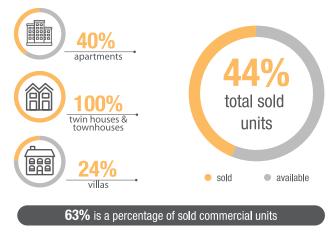


SALES INDICATORS

Other indicators show that sales are picking up fast enough to brand the project as a successful one: upon surveying the market, as well as NAC's developers, 100% of twin and town houses across all residential projects have been completely sold out (even though those housing types constituted only 1% of total housing supply).

This, combined with the fact that 44% of all units at NAC have been sold, is a clear indication that almost a year before state institutions are expected to make the move to NAC (by the end of 2019), about half of housing units in NAC's first phase have been sold out.

Unit Types Sales Rates (Residential)



Source: Invest-Gate R&A

COMMERCIAL SALES IN NAC

After the move of the Egyptian bureaucracy, government, parliament, and other state institutions is complete, NAC could become an important hub and be at the heart of real estate demand in Egypt as it will include big commercial real estate venues, complementing the idea that each residential area will have its own commercial district, on top of the 16 banking institutions that have decided to make the move to NAC.



THE NEW CAPITAL: A MODERN & SMARTER LIFESTYLE

However, demand in NAC is driven by much more than the fact that it is just a new urban community and a new settlement for public servants and others alike. With its state-ofthe-art sewers systems (ones built in the same fashion as those of Paris, allowing people at the very least to walk and pass in those corridors) and its complete surveillance system and smart features (exemplified in its Smart Information Network system) that the city intends to give to its residents, NAC will be rendered an attractive location for people to invest and live in once they see how "easy" urban life can become, especially when it is "connected." Amongst these features are those which are solely technological, like the fact that some of the city's gated communities will be wholly covered by wireless internet connectivity and that utility bills will be paid for via a rechargeable smart card (and the "collector" system will vanish). In addition to the idea that

the new capital could be wholly controlled from the insides of a city's sort of "operations room." Then, on the other hand, are other factors that will make NAC absorb a lot of the demand on the Egyptian real estate sector: the fact that there won't be any informal settlements, transportation will be planned, and roads are designed to avoid Cairo-like jams—as well as pollution (with the new city having vast green spaces to sponge up CO2 emissions in the air). Perhaps also in resorting to diminishing congestion, car's greenhouse gas emissions, and increasing fuel efficiency, a recent USD 1.2 bn loan was signed with Chinese partners (Aviation Industry Corporation of China and Exim Bank of China) in order to finance the building of an electric train that would connect NAC to other major cities, some of which are currently being designed and constructed as well, including New Alamein, New Mansoura, amongst others.

ADVANTAGES OF PURCHASING HOMES IN NAC

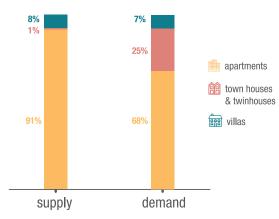
On top of those positive features, the abundance of choices of housing units for buyers to choose from (which the government required to be delivered fully finished by their developers) certainly increase the marketability and salability of the whole project, or at the very least that of its very first phase for now, which has indeed seen at least two of its residential projects being completely sold out.



In addition to that, one must keep in mind that there is a coherent lack of correlation between the supply and demand of unit types as, for example, almost a quarter of those interviewed wanted town and twin houses and the supply only offered 1% of the developers' whole inventory of houses in that type.

According to people's demands, some of the facilities and services they wanted include restaurants and cafes (100%), commercial and shopping areas (96%), clubhouses (79%), and gym and sports facilities (61%) - in which developers were more than eager to fulfill as the latter's supply closely correlated with buyers' demands.

NAC Unit Types (Demand Vs Supply)

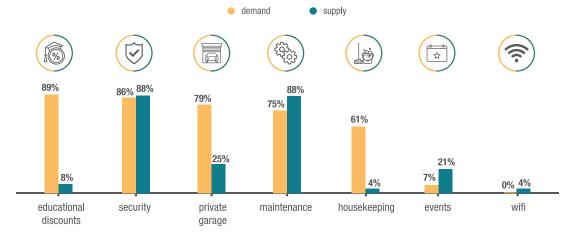


Source: Invest-Gate R&A

Top Facilities demand supply 100% 96% 95% **79**% 80% 68% 61% 0% 0% 5% 0% 12% swimming restaurants/ commercial & club healthcare gym and sports hotels lagoons facilities facilities cafes shopping areas houses pools

Source: Invest-Gate R&A

Top After-Sales Services



Source: Invest-Gate R&A

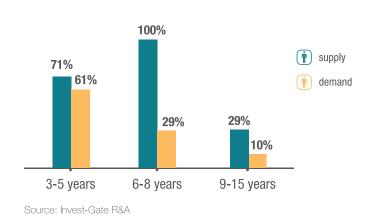
These amenities all concern residential housing, on top of those that are promised in commercial quarters, where 13% of commercial projects offer VIP lounges, movie theaters, as well as solar energy use, paving the way towards sustainability in parallel with Egypt's 2030 vision. Payment plans and options have also been tailored to support a greater market and to assist buyers with their financial capabilities, whereby 100% of all developers have offered six to eight-year payment plans, 71% of them offered three to five-year payment plans and 29% offered 9-15

years, always surpassing the demand for those payment plan options by buyers. Following up with facilitations for financing purchases, real estate developers have adopted new ways to ease payments on prospective buyers, where most of them (72% of developers) only required a 10% down-payment on property purchases and the second most popular down-payment requirement was 0% deposits (among 44% of developers). This completely conforms with findings that 85.7% of people prefer to finance their purchases through installments.

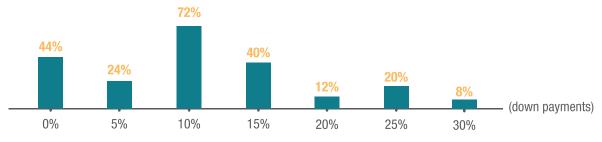
Buyers' Preferred Payment Methods

Source: Invest-Gate R&A

Payment Plans



Down Payments Offered by Developers



Source: Invest-Gate R&A

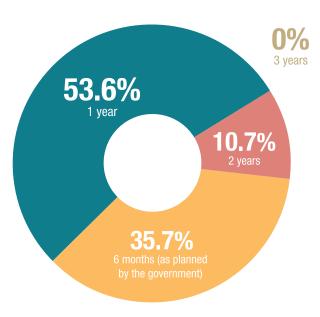


REASSURANCES OF THE FUTURE OF NAC TO BRING IN MORE INVESTMENTS AND BUYERS

In November 2016, the EGP (Egypt's local currency) was floated and lost almost half of its value (48% to be precise). As much as this move by the country's decision-makers was important and necessary for a national economic recovery following the Arab Spring and the June 2013 Egyptian events that shook the country's production and negatively impacted inflows of investments and remittances, as much as it affected Egyptians and various markets in ways that had almost never been witnessed before. Between that last devaluation round, which came in the end of 2016, and the one that took place almost four years earlier when the value of the EGP surpassed the EGP 7 per USD 1 mark, the currency market had been subjected to great fluctuations and saw the birth of a black market where foreign currencies were exchanged at advantageous prices (sometimes double those of the official exchange rate for the US Dollar for example).

Accordingly, this had led consumers to look for alternatives to reliably save and store their wealth, if not even look for ways to create returns to compensate the impacts of possible further devaluations of the local currency and create more profits out of their investments. As such, real estate has been seen as a safe haven

Buyers' Expectations Regarding Livability of NAC



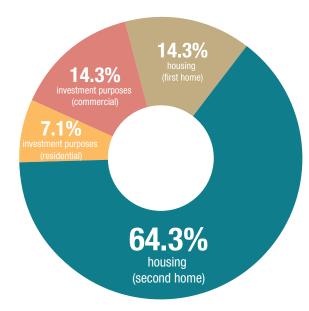
Source: Invest-Gate R&A

from economic shocks, ones that were due to internalities as well as externalities. The rationale is that as prices increase, real estate properties' prices increase accordingly. That is the argument for all (100%) of those who've been surveyed by Invest-Gate, who affirmed their expectations that real estate prices are going to rise.

Not only that, but in fact, around 21.4% of those who purchased estates in the NAC have done so solely as an investment, most likely considering that they could possibly cash in their profits in the near future as the majority thought the city could become inhabitable within a year. According to

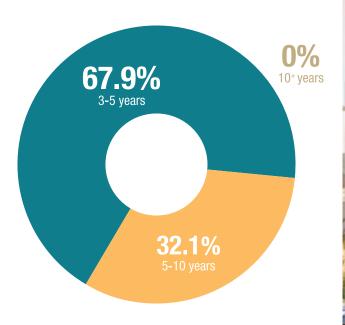
Invest-Gate's findings, 67.9% thought the new capital would become not only inhabitable, but will in fact be a fully-fledged standing city anywhere between 3 to 5 years. In all cases, all have expressed that NAC would become a success (as opposed to becoming a ghost city).

Reasons for Buyers' Current / Future Purchases



Source: Invest-Gate R&A

Expected Full Completion of NAC



Source: Invest-Gate R&A

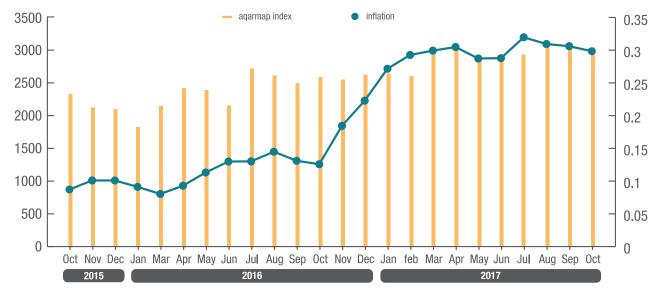


INFLATION AS A DRIVER OF SALES IN THE EGYPTIAN REAL ESTATE SECTOR

Following the EGP flotation, some consumers have resorted to bank deposits and investment certificates with historical interest highs to get greater yields on their savings and investments. Even if such an alternative was particularly reserved to consumers with less capital to invest, and thus, with less affordability to purchase real estate, bigger investors with more investable wealth had chosen to go with banks deposits and were satisfied with a safer (theoretically 0% risk) rate of return on their investments in cash deposits. Today the case has changed;

initially around 20% returns per year on 3-year certificates, the highest interest rates on deposits today do not surpass the 15% mark (or 17% on certificates with variable interests) and that rates are expected to be lower in 2019, should global financial markets and Egypt's interest and inflations rates stabilize. In fact, inflation on its own reached peaks of around 30% in early 2017, shortly after the November 2016 devaluation. This has further pushed Egyptians - who dislike having their wealth inappropriately invested to invest in real estate.

Correlation Between Real Estate Demand and Inflation



Sources: Central Bank of Egypt (CBE) & Agarmap

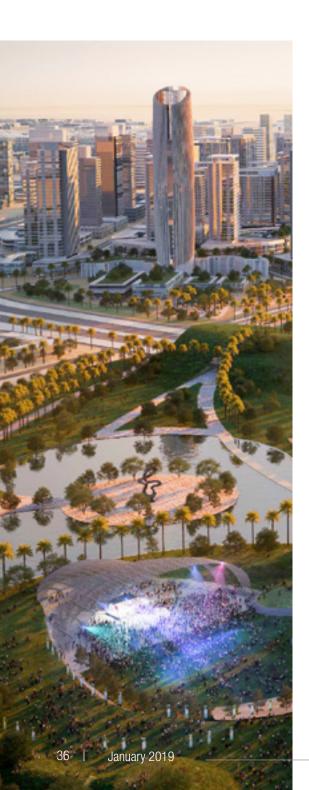


AN INCREASINGLY COMPETITIVE & BOOMING REAL ESTATE MARKET

- » A COMPARATIVE EDGE FOR NAC
- » WHERE DOES NAC STAND IN THE EGYPTIAN REAL ESTATE MARKET?



A COMPARATIVE EDGE FOR NAC



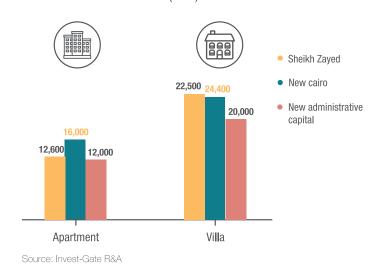
eing a more so centralized country than not, Egypt tends to have its population scattered around and close to the siege of power, i.e. Cairo. Henceforth, the country's decisionmaking organs move of the NAC could very much cause a rise in vacant homes in downtown-not to be calling it "old" - Cairo's real estate market, thus driving the average price of properties there down. On the other hand, NAC undoubtedly had retaliatory impacts on the surrounding real estate market, if not even the national one. For instance, as has been showcased in some of the earlier graphs, even if for the time being, around as much as 64.3% of surveyed individuals expressed their wish to purchase residential properties in the new capital in order to be used as their second homes. Many could potentially convert those second homes into first homes when life in the new city becomes more adaptable to residents, while providing them with the comfort and ease of living they seek, as has indicated ACUD's chairman, Abdeen, when asked about his outlook on the new capital and his intuition about whether people would move to it or not.

On top of that, surrounding and close-by cities have seen exponential price surges, as elucidated by Aqarmap's "Egypt Real Estate Trends 2018" report, which showed a Y-o-Y price increase in popular areas. For instance, New Cairo's units have skyrocketed by a staggering 48% high for apartments being sold at EGP 8,800 per square meter for the whole area and currently EGP 16,000 per square meter inside gated communities and 34% for villas sold at EGP 17,100 per square meter for the area, presently EGP 24,400 per square meter inside gated communities, up from the 2016-17 numbers - which recorded a 25% and 31% increase for



apartments and villas respectively. The Sheikh Zayed district shows even greater increase in prices as the 2017/18 Y-o-Y increase recorded a 58% (selling at EGP 8,400 per square meter for the area and EGP 12,600 per square meter inside gated communities*) and 48% (selling at EGP 14,950 per square meter for the area and EGP 22,500 per square meter inside gated communities*) surge in apartments and villas, respectively. As such, prices in NAC's gated communities, for both apartments and villas, are relatively lower than those of Greater Cairo's gated communities, but in general, tend to be more expensive than the general and average prices of Greater Cairo's housing markets.

Housing Units Prices Per SQM in Gated Communities for Q4 2018 (EGP)



^{*} Prices of properties inside gated communities have been collected by Invest Gate's Research and Analysis Department



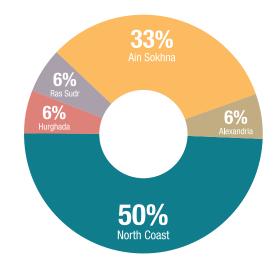
THE EFFECT OF NAC'S PROXIMITY TO AIN SOKHNA

Although the current Y-o-Y increase is only of 12 months since March 2017, this is an indication that, perhaps at the expense of downtown Cairo and older districts' "demise," the new areas on the outskirts of the current Egyptian capital will attract much more attention from people who'll buy a property there either solely for investment purposes or for housing and accommodation. Another important point worth mentioning would be that of the coastal city of Ain Sokhna, where high-end residents who have units there supposedly opt for beach-front homes and accept a commute from Ain Sokhna to NAC a 90-kilometer travel by car on a highway, i.e., an hour, give or take, almost similar to the one they're having today with a 70-kilometer drive from downtown to NAC, part of it in-city, i.e., an hour give or take, but at the benefit of a greater and more relaxed lifestyle. Infrastructure projects like the building as well as the upgrading of roads leading to Ain Sokhna, as part of the National Roads Project, have also contributed much to this coastal city a being a very attractive destination for sun and beach aficionados, besides the reveal of II Monte Galala project, among many others.

This presumption is built on findings gathered from surveys conducted by Invest-Gate's Research Department, where 50% of responders had second or summer homes in the coastal areas, farther away from NAC (i.e. the North Coast). Naturally, those who have summer homes in Ain Sokhna are less inclined to purchase a home in NAC for housing purposes as explained earlier.

All of that, combined with the fact that downtown Cairo has become very much unattractive to live in for many reasons, including, but are not limited to, congestion problems, pollution, and old infrastructure, making it very likely that NAC is currently becoming the epicenter of real estate demand in Cairo, if not the whole of Egypt. If imaginable, NAC could witness the birth of a new kind of property types, perhaps ones that would be titled "second first-homes," as some potential homebuyers already have homes in the current capital (either on the eastern or western banks of the Nile).

Second Homebuyers in NAC Have Summer Homes in:



Source: Invest-Gate R&A

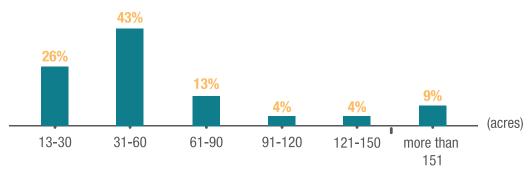


WHERE DOES NAC STAND IN THE EGYPTIAN REAL ESTATE MARKET?

As more than 20 megaprojects are filling the news, one must wonder: where does NAC stand within all those developmental projects? Will it be able to attract buyers and compete with other projects or not? As such, fear of the new capital becoming a "Ghost Town" is worrying some investors and buyers. The silver lining here, however, resides in understanding that, although NAC is very much in competition with many of the 19 other developing urban megaprojects Egypt has set to build like that of the New Alamein or New Mansoura cities, it has a comparative advantage and competitive edge when compared to all the other projects. NAC is not intended to become just a new city or megapolis like the rest, rather, it is intended to become a new Cairo that

will inevitably attract a new influx of habitants year after year because of the centralized nature of Egypt and arguably as has happened with Brazil's new capital, Brasília. In fact, the way the NAC is being built, by focusing on the residential areas, at least in the first phase of the project, has granted a continuous supply of units from developers, where a majority of gated communities' land sizes are relatively small, allowing more developers to take part in the megaproject. Around a quarter of projects' land sizes in NAC are between 13 and 30 acres and 43% between 31 and 60 acres, leaving only 30% of the projects larger than 61 acres and less than 131.

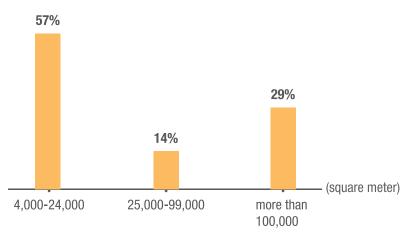
Distribution of Residential Compounds Per Land Size



Source: Invest-Gate R&A

It is also worth mentioning that we can observe a similar repartition of commercial real estate whereby the majority of developers are leaning towards smaller commercial buildings' land sizes, as indicated in the graph below, and that current average prize of commercial units is 45,500 per square meter.

Distribution of Commercial Buildings Per Land Size



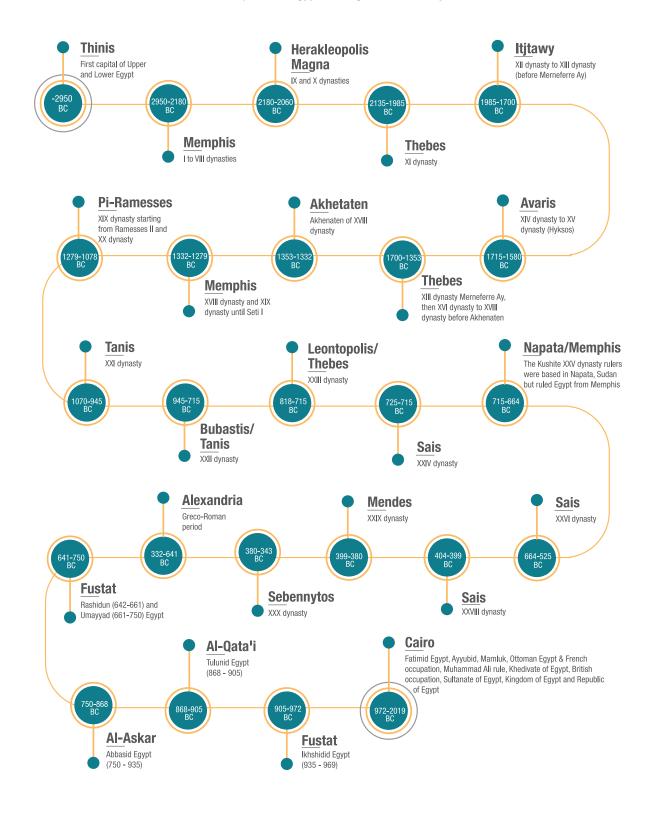
Source: Invest-Gate R&A

Nonetheless, the new capital carries with it some risks and fears as well. Over the course of its history, Egypt has known 21 capitals, including its current and latest one, Cairo, so the prospects of inaugurating a new capital for the country isn't any new to Egyptians. Furthermore, Egypt isn't the only country to witness a change in the political capital; India, Brazil, Benin and Bolivia have all preceded the north African country.





Capitals of Egypt Throughout its History





NAC: A COMPARATIVE CASE STUDY

- » BRASÍLIA: BRAZIL'S DISAPPOINTMENT
- » SMART CITY: MANAGEMENT SCHEME



airo has been Egypt's capital since the the begining of the Fatimid Caliphate in 969. Having said that, Cairo can very much be assimilated to Rio de Janeiro, the former capital of Brazil as, amongst other things, both have very high population densities and have been replaced by newly

designed administrative capitals. In 1827, a plan was conceived for Emperor Pedro I by one of his advisors on how and where the city should be. It's not until 1956 that the new capital's construction began, taking 41 months to complete, finally seeing the day in 1960.

BRASÍLIA: BRAZIL'S DISAPPOINTMENT

Many see in Brasília some traps of urban planning. Designed by urban designer Lúcio Costa, chief architect of most government buildings Oscar Niemeyer, and landscape designer Roberto Burle Marx, the plan of the city was drawn to resemble the shape of a flying bird, with a right wing, a left wing, and a central vertical body: the Plano Piloto. Fast forward to 2018, the city is now accomodating close to 3 mn individuals, close to six times the capacity that it was initially designed to withstand - 500,000 people. Many are questioning the success of the project; what was supposed to become Brazil's representation of a fair, equal country and society has turned into a sign of rich and poor's disparities, in a city

where slums exist on its outskirts, alonside some homes and mansions worthy of Hollywoodian and lavish lifestyles being sold for millions of dollars. The key problem is maybe in its original design: the wings of the bird contain mainly residential areas, where long stretches of roads and highways reach both ends of the city, whereby only one wing has access to the metro, for example. Another thing about residential areas is that, even if we could sometimes question the aesthetics behind having the same design for most of the apartment blocks, one thing causes trouble: the segregation between commercial and residential properties, in which each being in separate areas of the city.





THE TRAP OF SEGMENTATION & URBAN ZONING

Urban zoning can sometimes be practical, but on such a large scale, it becomes at the same time counterproductive. When the residential area is completely deserted in the morning as citizens rush to their workplaces, and when the commercial and business districts are completely emptied at night as those same citizens head back home, security risks arise and crime rates sour. This has been underlined in many research papers including that of João Ricardo Faria, Laudo M. Ogura, and Adolfo Sachsida's "Crime in a planned city: The case of Brasília" published in The International Journal of Urban Policy and Planning in 2013.

Hence, the above calls for a comparative case study between Egypt's NAC and Brazil's Brasília. For example, it is a good thing that NAC doesn't include a natural reserve or protectorate on its outskirts and it's an even better thing that each residential area has its own business and

commercial districts, granting life in the middle of empty residential areas in the day and allowing residents to oversee and "safeguard" any suspicious activities they may encounter nearby in the night. The idea of having instituted gated communities in NAC also calls for reassurance and perhaps some praise. As much as police presence is essential in all areas of any city to ensure the rule of law in it, yet sometimes the efficacity of such a force is comparably weaker when compared to security personnel, who have far lesser rotations and will be abundant at NAC's gated communities, and when there are any, they're basically almost always the same people on respective shift; they who know the owners and inhabitants of each house. They then know the cars that come and go, as well as the inhabitants' schedules and habitudes, which renders them more apt to spot, detect, and identify potential security breaches and risks in those areas.

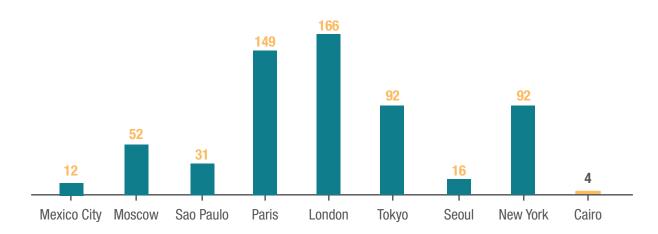


SMART CITY: MANAGEMENT SCHEME

The 2014 World Bank report - mentioned earlier - implies that some of the main causes behind the congestion issue in Egypt are not in the public transportation's poor networks alone, but perhaps more so in the lack of infrastructure and means of transportation's abundance (i.e. the size of the city's bus fleet, subway lines and trains, and so on). For a city the size of Cairo, Cairenes are amongst the longest subway riders in the world (36.92 kilometers per day per rider), surpassing even Beijinger riders (30.08 kilometers per day per rider), for one of the smallest metro networks

relative to its population (only 4 kilometers of metro for every million Egyptian). Currently, no information is available with regards to metro stations or bus networks to cater for the influx of daily commuters from within NAC or even those from outside. Even though plans of an electric train and a monorail have been laid out, very little is known about their way of operation, their capacity or the dispersion and number of stations of such networks, or even signs of a public bus rapid transport (BRT), the same one many modern cities use to manage their public transport.

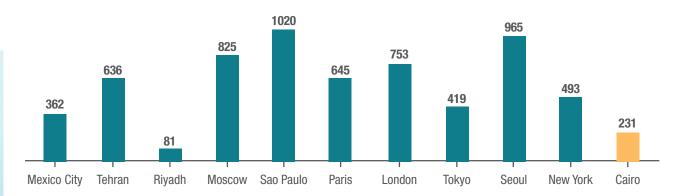
Km of Metro/Mn Population in Cairo Compared to Other Major Cities



Source: Cairo Traffic Congestion Study - Executive Note, The World Bank Group (2014)



Buses/Mn Population (Full-Sized Buses)



Source: Cairo Traffic Congestion Study - Executive Note, The World Bank Group (2014)

Ridership/Day/Km of Metro Network ('000)



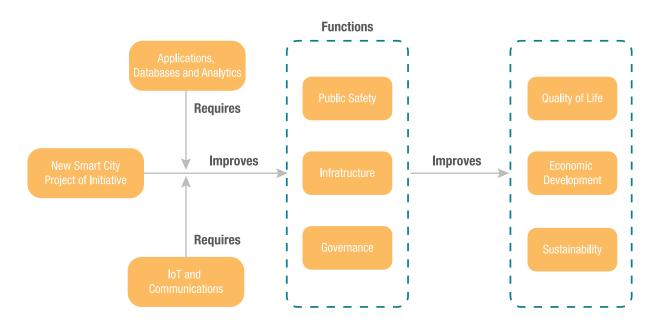
Source: Cairo Traffic Congestion Study - Executive Note, The World Bank Group (2014)



The last thing that should be considered when talking about smart cities is the way they will be managed and overseen. So far and as of the promotional video of the project, the only known thing about NAC's smart city initiative is that it will have a Computer-Aided Dispatch (CAD) system for incidents and resources management, a Geographic Information System (GIS), Integrated Communications Control System (ICCS), as well as a Video Management System (VMS). However, and without delving much into the fears and speculations of recreating a Watch Dogs scenario - a video game that examines

the life of a hacker and vigilante in Chicago, who easily hacks and uses the smart city's technology and communications infrastructure to bring out justice), we don't know the full technical aspects and details of the city's smart infrastructure. In other words, we're not exactly sure how far the Internet of Things (IoT) phenomenon will be utilized to render NAC fully connected and smart - therefore, how consumers' smart devices that have the ability to "sense surrounding stimuli" can be utilized by a centralized body or structure - and how comfortable will inhabitants of the city be with regards to their privacy, amongst

Functions and Mission of Smart Cities



Source: A Systems Approach to Smart City

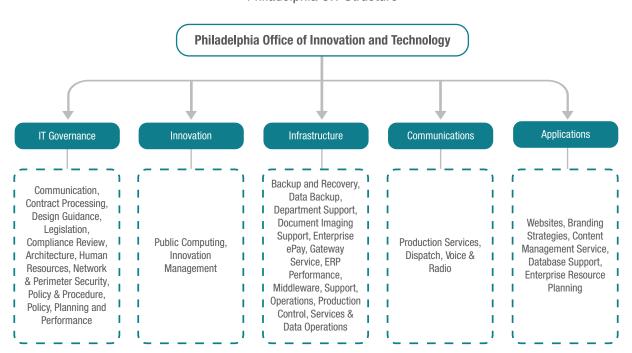


other things. Many cities have opted for clear designs when it comes to the administration of their smart infrastructures, and some examples include the cities of Chicago, Philadelphia, Charlotte, San Francisco in the United States of America, but even New Delhi in India. As such the sustainability and ability in the first place of smart cities, which aim mainly at improving the quality of its residents' lives, ensuring economic development opportunities throughout it and all of that by using the city's resources in a sustainable way, as explained by Stephen N. Dawe and Dr. David Paradice in their research paper "A

Systems Approach to Smart City Infrastructure: A Small City Perspective." Such mechanism should be controlled by an organizing and official body to arrange its matters and ensure its security.

In Philadelphia, for instance, the Philadelphia Office of Innovation and Technology (OIT) has five departments under it that manage the administration of the city's smart systems as portrayed below.

Philadelphia OIT Structure

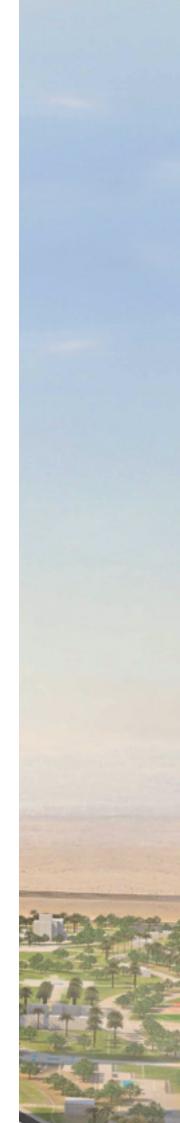


Source: "A Systems Approach to Smart City Infrastructure: A Small City Perspective" research paper



NAC & THE EGYPTIAN REAL ESTATE MARKET: OUTLOOK & CONCERNS

- » REAL ESTATE CYCLES & THE BURSTING OF A BUBBLE
- » REAL ESTATE BUBBLING OR BOOMING?
- » FEARS OF A 2008-LIKE ECONOMIC CRASH



content) to achieving any desired goal; and the new capital's project is no exception to this rule. There are mostly positive prospectsfor the project, many in fact, some of which come in the form of possible solutions to current and foreseeable problems, but there are also concerns about the project and its implementation. Today, however, people's opinions are divided; some believe the Egyptian real estate market is going through a bubble, while others believe that the market is currently witnessing an expansion or a boom that will cause no harm. In reality, there is truth in both arguments, but the reality is quite more complex than that two extremes. January 2019

As with any ambitious project, there are always potential risks (both in form and

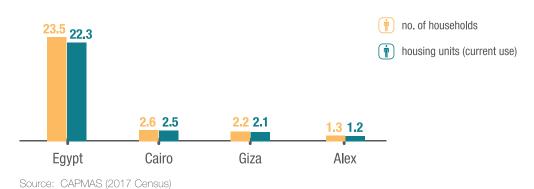


REAL ESTATE CYCLES & THE BURSTING OF A BUBBLE

In the late 19th century, a man by the name of Henry George unveiled the cycle that the real estate sector regularly goes through, except for periods of long recessions and wars. As he observed, the four phases of real estate cycles are expansion, hypersupply, recession, and recovery. Although each phase is self-explanatory and goes without need of much explanation, it is essential to distinguish and understand which phase the market is currently in and how such a position is determined, but most importantly, what leads to it. If anything, if such phases were correctly analyzed in the US prior to the mortgage crisis of 2008, following the 2006 real estate market boom's peak, the whole economic shakedown could have probably been avoided.

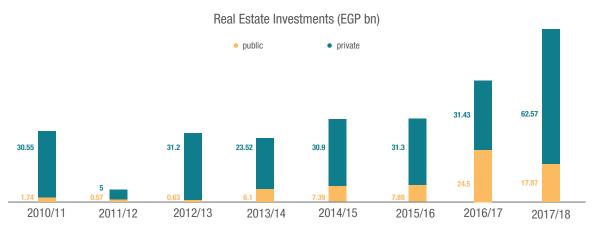
It is safe to assume that we are currently in the expansion phase of the real estate cycle and this assumption is mainly supported by the fact that not only more and more projects are piling up in the industry's portfolio, especially in the private sector's as it has, for its part, doubled in 2017/18 compared to 2016/17). But also the idea that rent prices are going up year over year in many parts of at least Greater Cairo, if not the whole country. On top of this, the fact that there is currently enough demand to meet the supply provided by developers is a clear indication that a boom is underway and that there is an investors' frenzy to invest in real estate as they calculate their yields based on such expected growth. Proof of the demand meeting the supply is that residential units' vacancy rates are currently low - some projects were completely sold out before they're even built - and the fact that the number of households for 2017, which reached 23.5 mn, far exceeded that of available units - which marked 22.3 mn for the same year.

Residential Demand-Supply Gap in 2017 (mn)



The New Administrative Capital | 53

REAL ESTATE BUBBLING OR BOOMING?



Source: Ministry of Planning, Monitoring, and Administrative Reform

Worries emerged from the idea that the bubble is brewing due to supposed speculation in price increase. But in reality, it's only when units' vacancy rates start going up and occupancy rates go down, the sector will enter the recession phase, just following the hypersupply phase. Then there will be more supply than the market can possibly absorb. That hypersupply phase starts when decelerating (or decreasing) real estate prices commence, meaning that the peak has passed, marking the end of the expansion phase, which could be indicative of the bursting of the bubble: So far, sales and demand indices show and indicate that the real estate sector is a booming one. Whilst some areas show a potential decrease in rent demand, such a drop is far outweighed by increases in other areas, as the general trend for rents tends to be upward slopping, as new-contract types of rent have increased by 33% to 1,450,153 in 2017 up from 1,089,914 in 2006, according to the 2017 CAPMAS census. As such, and concerning the formation of a bubble, there's only one way to put it and that is developers have to carefully predetermine the feasibility of the project's occupancy potential and the market's demand - its thirst for new units and properties. Sure, advocates of a self-adjusting economy will praise the pearl that is the equilibrium of supply and demand and that the economics of real estate will come in play, meaning that the market demand and supply curves will readjust accordingly. But by then, it might just be too late before actions can be taken to "gently" deflate the bubble. In such case, odds are developers will be brought to drastically bring down their prices, thus disrupting the whole market. In four words: the higher the climb, the harder the fall.



FEARS OF A 2008-LIKE ECONOMIC CRASH

Another important point to factor in the analysis, when some speak of the awe resented by the reminiscence of the US Mortgage crisis of 2008, as well as that of Dubai's real estate market, this is the fear of a crashing economy caused by an unregulated real estate market. Those fears can be put to rest because the dynamics here and there are quite different. In the early 2000's in the US, almost anyone could own a credit card (or in fact multiple ones), get a mortgage, as consumerism was on the rise especially after the economic slowdown of 2000. As such, the precautionary measures and terms had to fulfill to qualify and be eligible for a loan, let alone a mortgage in Egypt and the US, are very much different; much more lenient there (at least back then) and much more cautionary here in Egypt. Without going through the socio-economic implications of labor laws in both countries, whereby in the US, job security isn't always ensured and thus a mortgage payer can find himself unable to pay back his mortgage the next day. In Egypt, the case for employment

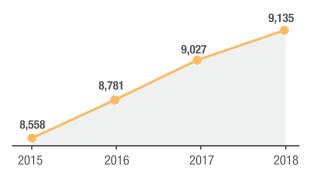
security and stability is much more favorable for those who seek income-security and therefore have lower probabilities of defaulting. In fact, Egyptians by law can only pay back loans that would require them to pay back at the maximum 35% (if not 30% with some banks) of their monthly salaries, therefore reducing homebuyers' risk of defaulting on their mortgage payments or loans to the minimum, in general for that matter, even if developers are starting to be the recipients of those mortgages, simply because they have leverage over the customers' house in case the latter don't make their payments in time. Second to that, Egyptians tend to buy their houses, whereas Americans tend to rent them. As such, many of the homes that are bought solely for investment purposes, are easing market fluctuations in the sector due to recurring supply and demand. When you buy a house for residency, there's only one transaction: you buy it, the developer transfers its ownership to you, and the room for multiple and repetitious price speculations is reduced.

POTENTIAL RISKS

On top of this, there are some factors that could hald the project, as is possible with any development. Although current figures clearly show that there is high and positive (read: sufficient) demand for the developers' supply of projects, those same developers could soon be unable to capitalize on their investments in other residential areas in the first phase of NAC, let alone in its future phases. If (or more accurately, when) real estate demand falls, real estate developers, who bought lands in NAC, could face some issues with regards to the repayment of the plots they've acquired on installment. There is always the argument of hedonic adaptation (i.e. the more you have the more you want) and the fact that Egyptians will conform to having two homes will be the norm of the future; just as owning a summer home in the coasts of Egypt is becoming one. Perhaps this conjecture could be advanced by the idea that both Egypt's investment and business environments are climbing up, following the reforms momentum that has seen Egypt's position go up to the 120th rank (out of 190 countries) in 2019, according to the "Ease of Doing Business Report," published by the World Bank Group in 2018 - an 11 ranks improvement from its 131th place three years earlier. The economy's growth rate, on the other hand, is expected to gradually increase to 5.8% by 2020, according to the World Bank's Egypt's Economic Outlook of April 2018, up from 5.3% in 2018, 4.181% in 2017, and 4.347% in 2016; and thus, the country will see its GDP per capita grow in the coming years (as the average salary is on the rise, with a median salary of EGP 6,000).

Also some new financing methods and terms are ought to be explored, as the issue has been raised during Invest-Gate's Real Estate Tourism Development Roudtable by Chairman of the Bahrawi Investment Company Samir Bahrawi, pointing out the flaw in the fact that mortgage terms in Egypt, which are currently for a maximum of 15 years and sometimes 20 years, do not come close to the possibilities of those in some other countries, where mortgage loans can be repaid on a period of 25-30 years and sometimes even 40 years. If such arrangements are feasible in Egypt, perhaps the idea of paying larger sums of money for a property could be extended on longer periods of time and therefore reduce the amount of monthly payables—and the psychological effect of wealth draining—of buyers, could be an "innovative" and new method in Egypt to incite more people to buy properties.

Average Salaries in Egypt (EGP/month)

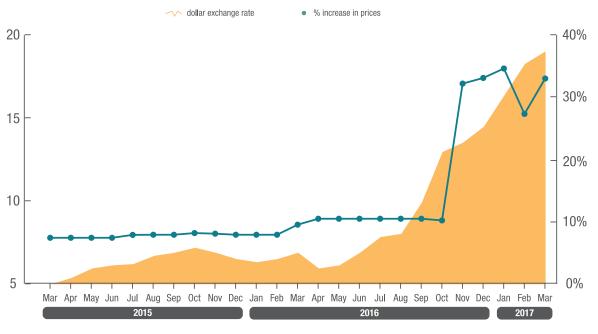


Source: salarvexplorer.com



EXTERNAL FACTORS

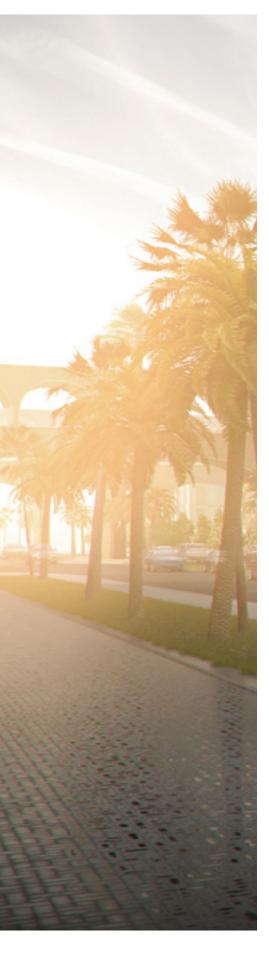
Dollar Impact on Prices



Sources: Central Bank of Egypt (CBE) & Agarmap

There are also many external factors that could possibly hinder the project's advance, amongst those are mainly a possible future devaluation of the EGP, which drives real estate prices up and consequently negatively affects the sector's demand, as has been the case following the 2016 devaluation of Egypt's local currency, between March 2016 and March 2017, the formal market's dollar value grew from EGP 8.49 to EGP 18.08 (an almost 113% surge), while real estate prices have soared by 32%, a little more than seven times the maximum increase in prices the previous

twelve months had witnessed from March 2015 to March 2016. Such a fear of potential loss of wealth invested in real estate drives the price of real estate constantly up without showing any sign of slowing, but only showing signs of more rapid increase in prices as the price curve goes from being flat to being steeper with time.



SUMMARY

We can confidently assert that the real estate market in Egypt is a booming one, in which the NAC is at the heart of its demand and supply dynamics. Not only have people invested in NAC as early as possible on for the purpose of having a good return on investment (ROI), but in fact, many seem to be investing in the new capital because of their assuredness that the project will be a successful one, given the progress in it so far and its inescapable inhabitation by state institutions, which will generate very high levels of activities in the other cities whether on the economic, political, or even social fronts.

On a side note, the multitude of choices have allowed - in the greater context of increased demand - the general supply to address demand gaps found in the country (unit types, payment plans, etc.). Fears of the presence of a bubble in the whole market seem to be unjustified and the result of buyers' sentiments of uncertainty of a complexing economic environment; a bubble in a specific portion of the market does not justify one in the whole market and the bubbling of a sector does not necessarily mean its bursting.

COMMENTS

Learning from previous case studies such, as that of Brasília, urban planning should include regulatory reforms to improve people's urban manners like pedestrian walking alternatives to reduce jaywalking, greener transportation (i.e. electric cars' charging stations) and abundant (open) parking spaces for residential, commercial, and administrative buildings. The infrastructure is an issue of its own: rain disasters should be accounted for, as their consequences can be avoided with greater and more intelligent designs that are seen worldwide such as storm drainage systems between streets and sidewalks that allow excess rainwater to orderly flush through them.

Other than that, and perhaps in complement to what has been read above, a regulatory authority for the real estate market should be established to regulate, monitor, oversee, and perhaps even moderate the sector. Proper research as well as forecasting solutions will immeasurably allow real estate developers and researchers alike to prepare for the arrival of a bubble and ease some of the pressure the market would witness, amongst many things; and thus, braking the construction fever down.

REFERENCES

CAPMAS, 2017 Census https://www.capmas.gov.eg/party/party.html

Ministry of Planning, Monitoring and Administrative Reform http://mpmar.gov.eg

Central Bank of Egypt http://www.cbe.org.eg/en/Pages/default.aspx

Administrative Capital for Urban Development http://www.acud.eg

New Urban Communities Authority http://www.nuca.gov.eg

Aqarmap. (2018, March). *Egypt Real Estate Trends 2018*. Retrieved from https://www.aqarmap.com/trends/aqarmap-trends-2018-en.pdf

Aqarmap. (2017, March). *Egypt Real Estate Trends 2017*. Retrieved from https://aqarmap.com/trends/aqarmap-trends-2017-en.pdf

World Bank. (2014, May). Cairo Traffic Congestion Study Executive Note. Retrieved from

http://www.worldbank.org/content/dam/Worldbank/TWB-Executive-Note-Eng.pdf

National League of Cities. (2017, January). *Trends in Smart City Development*. Retrieved from

https://www.nlc.org/sites/default/files/2017-01/Trends%20in%20Smart%20City%20 Development.pdf

Mueller, Glenn. (2018). *Predicting Long-Term Trends and Market Cycles in Commercial Real Estate*. Wharton School Samuel Zell and Robert Lurie Real Estate Center, University of Pennsylvania, Zell/Lurie Center Working Papers.

Aelenei, Laura & Ferreira, Ana & Monteiro, Claudia & Gomes, Ricardo & Gonçalves, Helder & Camelo, Susana & Silva, Carlos. (2016). Smart City: A Systematic Approach towards a Sustainable Urban Transformation. Energy Procedia.ww

Faria, João & Ogura, Laudo & Sachsida, Adolfo. (2013). *Crime in a planned city: The case of Brasília. Cities*.

Ministry of Housing, Utilities and Urban Communities. *Diplomatic District At The New Administrative Capital Report*.



