I he Built Environment Budget FY 2015/16 An Analysis of Spatial Justice in Egypt

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The Built Environment Budget FY 2015/16 An Analysis of Spatial Justice in Egypt

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Introduction

Have you ever wondered whether the government was spending enough on transport? Or whether your governorate got its fair share of public expenditure? Or how strong national policy favoured New Cities?

The Built Environment Budget series, starting with an analysis of the Financial Year (FY) 2015/16, seeks to answer these questions and more, by focusing on public investments in six sectors that make up Egypt's built environment: housing; urban development; water; waste-water; electricity, and transport.

The BE Budget 2015/16 analyses these sectors by looking at both National and sub-national (governorate) level spending, to investigate spatial equity. It also gives a picture based on Egypt's particular duality of local administration. On the one hand, this picture is based on examining the mainstream municipalities that run the Existing Built Environment (Existing BE) where over 98 percent of Egyptians live. On the other it is based on looking at the Ministry of Housing affiliated New Urban Communities Authority (NUCA), a large public corporation that builds and manages so-called New Cities that have been part of the government's policy to redistribute population growth to the desert over the last four decades.¹

Executive Summary and Key Findings

The BE Budget analysed the investment budgets (Chapter 6) of four ministries and 27 governorates, as well 14 agencies affiliated to them. These investments totalled 98.9 Bn EGP, of which only 37% was part of the General State Budget, while the rest were investments by state-owned enterprises (Table 1).²

Administration	State-owned Enterprises	General State Budget	Total		
Ministry of Housing, Utilities & Urban communities	29,885,183	21,384,689	51,269,872	51.8%	
Ministry of Electricity	25,303,400	0	25,303,400	25.6%	
Ministry of Transport	6,840,000	11,694,800	18,534,800	18.7%	
Ministry of Local Development	0	650,000	650,000	0.7%	
Governorates	362,735	2,765,536	3,128,271	3.2%	
Total	62,391,318	36,495,025	98,886,343	100.0%	
TOTAL	63.1%	36.9%	100%		

Table 1: Investments in the built environment by administration ('000s EGP)

¹ For an overview of NUCA's New Cities see http://www.newcities.gov.eg/english/New_Communities/default.aspx 2For more see 1.1 Built Environment Sectors, Public Funds

Total investments represented 3.6% of GDP, while the General State Budget expenditure represented almost half of total Chapter 6 expenditure by the Treasury this year. The largest investor by far was the Ministry of Housing, Utilities and Urban Communities (MOH) with a little over half the budget. The second largest investor was the Ministry of Electricity at a quarter of the budget, followed by the Ministry of Transport with a share of less than 20%. The governorates and Ministry of Local Development administer less than 4% of the built environment budget.

Duality of Managing the Built Environment: an Unexplained Contrast

Around 59% of the BE Budget is spent on local projects (housing, water and waste-water plants and networks, local electricity networks, local transport and urban development), while the rest is spent on projects that cross regional borders (railroads and power stations and grids) (Fig. 1). The BE Budget reveals the stark and unexplained contrast between how a single agency, the New Urban Communities Authority, is responsible for almost a third of the overall built environment budget, and half of the investments in local projects. It invests in all six sectors and operates in 19 governorates through 31 local branches.³ On the other hand, the other half of local project spending goes to the Existing BE across the same six sectors, but is scattered among nine national-level agencies based in three ministries, and 27 offices in 27 governorates, in addition to two local governorate-based agencies.⁴

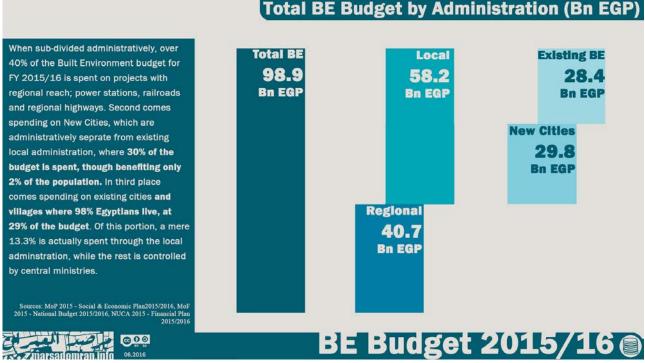


Fig. 1: Total BE Budget by Administration

Favouring Real Estate over Social Investments

This duality has also meant that public spending on the local level has favoured investments in real estate, as well as politically informed rather than needs driven urban development (Fig. 2). The analysis has found

³Each New City has a subsidiary agency, the Gihaz al-Madina that is in charge of construction and management. 4 A further two agencies are responsible for regionally shared investments in electricity and railroads.

that 7% of the BE Budget has been directed solely to two New Cities. The first is the New Administrative Capital in Cairo (5 Bn EGP),⁵ a government city being built from scratch despite there being no demonstrably urgent need to do so. The second is New Alamein in Matruh (2 Bn EGP), a large coastal tourist resort.⁶ These investments are comparable to local investments for all sectors in Cairo's Existing BE (5.8 Bn EGP), and are double those in Matruh (0.9 Bn EGP). They are also one and a half times more than the total investments for much needed waste-water infrastructure across Egypt (4.8 Bn EGP), and over two and a half times more than investments in water plants and networks for millions of Egyptians deprived of them (2.7 Bn EGP).

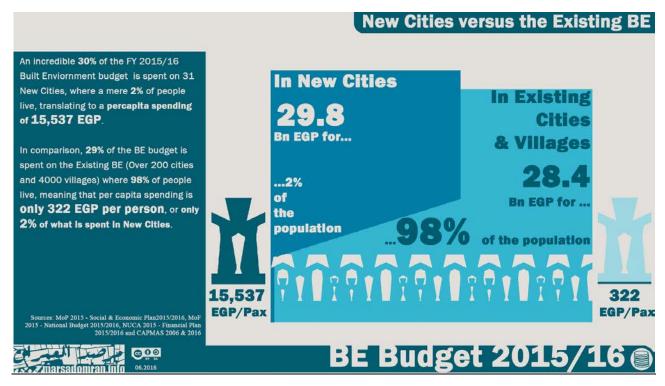


Fig. 2: Investments in local projects; New Cities versus the Existing BE

Spatial Inequality between New Cities and the Existing BE

Besides the stark regional inequality in public spending, there seems to be a conscious decision by officials to spend very little on the Existing BE in regions where there are New City projects. Per capita spending on Greater Cairo more than doubles when New Cities are factored in, while spending rises 70% in Alexandria, 50% in Upper Egypt and 40% in the Delta when New Cities are added (Table 2).

However, in spite of the added spending on New Cities in these four regions, they still lag in per capita terms behind the Suez Canal and Frontier regions' Existing BE investments, where expenditure on New Cities has only been introduced this year. The difference also grows once New City expenditure is added.

⁵For more on the New Administrative Capital see NUCA 2016: New Administrative Capital Implementation Report 04.05.2016 <u>http://newcities.gov.eg/know_cities/NewCapital/default.aspx</u> And; The Capital Cairo 2015. <u>http://thecapitalcairo.com/</u> Ret: 23.05.2016.

⁶For more on New Alamein see NUCA 2016: New Alamein, Implementation Report 04.05.2016 http://newcities.gov.eg/know_cities/alameen_new.aspx Ret: 23.05.2016

Regions	Existing BE (EGP/person)	Existing BE & New Cities (EGP/person)	Ratio
Grater Cairo	63	140	2.2
Alex.	44	73	1.7
Suez Canal	141	148	1.0
Delta	37	52	1.4
Upper Egypt	45	68	1.5
Frontier	440	583	1.3
Average	128	177	1.4

Table 2: Effect of investments in New Cities on per capita spending by region (EGP/person)

Spatial Inequality in the Existing BE: Regional as well as Sub-regional Disparity

On the local Existing BE level, our analysis has shown a wide spectrum of per capita spending across the regions in each sector. The Frontier region received the highest per capita expenditure in all six sectors, an attribute partially explained by their far below average population sizes as well as their above average areas (Table 3). The Suez Canal region came second overall in per capita spending, with generally above average per capita spending throughout. Greater Cairo was third amongst the regions in per capita spending, and generally below average.

In fourth place was the predominantly rural Upper Egypt, with an overall per capita spending of 35% of the national average as most per capita spending was below and well below average across the sectors. Alexandria, an urban governorate and Egypt's third largest city, was, surprisingly, next to last amongst the regions in per capita spending, with consistently below average per capita spending across all six sectors. The Delta was the region with the least per capita spending, at 29% of the average overall per capita share.

	Existing BE								
Regions	Electricity	Transport	Social Housing	Waste- water	Water	Urban Develop.	Average		
Grater Cairo	4	191	72	72	31	9	63		
Alex.	2	66	96	68	22	7	44		
Suez Canal	28	57	551	133	37	41	141		
Delta	3	28	105	58	26	1	37		
Upper Egypt	9	41	142	45	24	6	45		
Frontier	93	329	1556	181	283	198	440		
Average	23	119	420	93	71	44	128		

Table 3: Per capita spending on the Existing BE by Sector and Region (EGP/person)

All regions suffered from internal spending disparities, with one or two governorates receiving above or high above average spending in a number of sectors, while others receiving below or well below average

per capita spending in most if not all sectors.⁷ This large range of per capita spending indicates that spending is not necessarily needs-based. Budgets are similar in a number of governorates regardless of their population, where Damietta, Kafr al-Shiekh and Luxor were assigned identical budgets for their Existing BE Social Housing budget (See Appendix 5).

Spatial Inequality in New Cities: Regional as well as Sub-regional Disparity

There was regional disparity in per capita spending on New Cities, with just one city on its own, New Alamein in Matruh, raising the Frontier governorates to the top of the six regions (Table 4). That is despite very modest spending in Wadi al-Gadid and no New City programmes in the remaining three Frontier governorates. Overall, Matruh received the highest per capita spending amongst all the governorates in four out of the six sectors, with no spending on Social Housing or Urban Development.

Greater Cairo received the second highest per capita spending, and were it not for the anomaly of high spending on New Alamein, would have been NUCA's top region by far, at 2.6 times higher per capita spending than the next region down (Alexandria). Alexandria had the third highest per capita investments, all in New Borg al-'Arab, though generally below average across the sectors. The Delta came fourth in per capita investments, even though it is home to five New Cities in four of its seven governorates. Upper Egypt trailed the Delta by a small margin, even though all its eight governorates are home to 11 New Cities, three of which are still under construction. The Suez Canal region understandably had the least per capita spending as it is the first year of construction for East Port Said and North Suez in Port Said and Suez respectively.

	New Cities									
Regions	Electricity	Transport	Social Housing	Waste- water	Water	Urban Develop.	Average			
Grater Cairo	44	53	62	99	43	177	80			
Alex.	26	20	46	76	11	0	30			
Suez Canal	7	5	0	43	7	0	10			
Delta	12	29	49	37	38	0	27			
Upper Egypt	23	22	64	23	11	0	24			
Frontier	536	321	0	751	537	0	358			
Average	108	75	37	172	108	29	88			

Table 4: Per capita spending in New Cities by Sector and Region (EGP/ Person)

Sectoral Inequality between New Cities and the Existing BE

Per capita spending by sector was more than three times higher in New Cities than in the Existing BE. The biggest difference was in local electricity networks, where spending on new networks and maintenance in the New Cities was 45 times higher than in the Existing BE (Table 5). Urban Development was four times higher and local transport (all roads and bridges) was three times higher, even though investments in the

⁷ For more on spatial equality on the city level see Tadamun 2015, Investigating Spatial Inequality in Cairo http://www.tadamun.info/2015/12/15/investigating-spatial-inequality-cairo/?lang=en#.V07E-OSm0ow

Existing BE included public transit and underground metro lines. New Cities also received double the per capita spending on both water and waste-water infrastructure, and 30% more on Social Housing.

	Local Electricity	Local Transport	Social Housing	Waste- water	Water	Urban Develop.	Average
Existing BE (EGP/person)	7	85	126	54	30	18	53
Existing BE & New (EGP/person)	314	270	169	109	58	73	166
Ratio Existing : New	45.6	3.2	1.3	2.0	1.9	4.0	3.1

Table 5: Effect of investments in New Cities on per capita spending by sector

Numbers Do Not Tell the Whole Story: Evidence of Drastic Modification

In the end, elements of the public budget could be drastically modified, either raised or lowered, within the course of the financial year, rendering it and this analysis more indicative than definitive. In some cases, public investment figures may be over ambitious. For example, there was consistent under-spending for the Social Housing Projetct. Only between 20% and 52% of its planned budget over three consecutive financial years was spent (Fig. 3).⁸

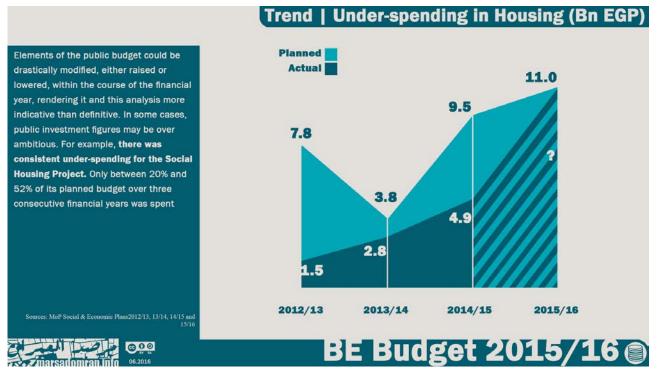


Fig. 3: Under-spending on housing in FY 2012/2013 through 2014/2015

On the other hand, year-end modifications, and not final accounts, show both modest and drastic changes to agency budgets. For example the Ministry of Housing, Utilities and Urban Communities' budget for FY 2013/14 was increased by 13.5Bn EGP, or about 168%.⁹

⁸ This information was based on an exceptional instance where the MoP's Socio-economic Plan for FY 2015/16 outlined this information in a table. See MoP 2015, Chapter 4, p 138

⁹ The original investment budget (Ch 6) for the MoH's offices (diwan 'am) as published in FY 2013/2014 was

1. Methodology

The Built Environment Budget for FY 2015/16 has compiled data and information from several sources to provide its analysis. The project uses publicly available information only, giving a near accurate estimate of how much money the government allocates to the various built environment related sectors: building housing units; developing residential areas; providing roads and transportation for commuting in neighbourhoods and cities; building water and waste-water stations and networks; as well as providing electricity through power stations and grids.

Therefore, data compiled is consolidated to reflect information through six main sectors: 1) Housing Projects, 2) Urban Development, 3) Water, 4) Waste-water, 5) Transportation and 6) Electricity, with more detail within the sectors in the case of multiple projects. Furthermore, the BE Budget categorises public built environment spending according to both local spending on the sub-national governorate level to analyse spatial equality of public spending, as well as National spending for projects that cross sub-national borders such as National highways, rail-roads and electricity generation and networks. Another administrative distinction is made at the sub-national level particular to Egypt, which has dual local administrative structures. The first is the Existing Built Environment, composed of the mainstream municipalities that manage over 200 cities and 4000 villages and where over 98 percent of Egyptians live. The second are the so-called New Cities, composed of around 31 new urban settlements built in desert locations over the last four decades where 20 active, one is a mega tourist resort, and nine are under construction. Most New Cities have been built as satellites to large existing cities, and all constructed and run by a public corporation, the New Urban Communities Authority (NUCA), chaired by the Minister of Housing, Utilities and Urban Development.

1.1 Built Environment Sectors

Six sectors were chosen to represent built environment spending based on a number of criteria (Table 6). The sectors had to make up the physical built environment, have a general public benefit, use public funds, and have budget data available at the national or sub-national levels.

^{8,051,600,000} EGP, however the FY 2014/2015 budget document showed the previous year's modified budget as 21,401,600,000 EGP. See MoF Muwaznat al-gihaz al-idari, Istikhdamat Qita' al-Iskan wal-Marafiq wal-Khadamat, 2013/2014 and 2014/2015.

	Projects						
Sector		Sub-national					
	National	Existing Built Environment	New Cities				
	National Roads and Bridges	Local Roads and Bridges	Local Roads and Bridges				
Roads and	Railways	N/A					
Transportation	NI / A	Underground Metro	N/A				
	N/A	Public Buses					
Electricity	Power Stations and Grids	Local Networks	Local Networks				
Water	N/A	Treatment Stations & Networks	Treatment Stations & Networks				
Waste-water	N/A	Treatment Stations & Networks	Treatment Stations & Networks				
		Social Housing Programme	Social Housing Programme				
		N/A	Middle Income Housing/ Dar Masr				
Housing	N/A	Cooperative Housing Programme	N/A				
		Rural Housing (Desert Villages/Bedouin Housing/	N/A				
		Housing Repair)					
Urban		Most Needy Villages Project					
Development	N/A	Urban Renewal	New Administrative Capital				
Dereiopment		Integrated Urban Development					

Table 6: Built environment sectors by administration and projects

Physical Built Environment

The sectors of Transport, Electricity, Water, Waste-water, Housing, and Urban Development were all chosen because of how they constitute and shape the built environment. While the built environment cannot function without other sectors such as solid waste management and social services (health, education, security, etc.), the BE Budget has focused on sectors where public spending is used to build infrastructure. This is isolated in the public budget as Chapter 6, and does not include any other spending.

Some sectors that partly fit the criteria, but the main purpose of which does not comfortably fit within the everyday built environment sector category have not been selected. These include flood defences, National natural gas networks, airports and sea-ports. The local natural gas network sector was not included because of time constraints.

General Public Benefit

All projects identified in this analysis must be accessible to the public or provide general public benefit. Some exceptions to this are the Cooperative Housing Programme and the Middle Income Housing Programme (Dar Masr), which sell housing to middle and upper middle income groups and are considered profitable. These have been included to highlight how public finance is used, especially public land. The latter project represents a large proportion of spending by a government agency, NUCA, that is supposed to focus on public projects.

Public Funds

Most of the built environment sectors in Egypt depend on public spending through state affiliated agencies. These are classified into; Government (Ministries and their offices/departments, Service Authorities directly affiliated to ministries and Local Administration offices/departments), and State-Owned-Enterprises (Economic agencies, public sector companies). SOEs are defined as publicly owned corporations through which the government undertakes commercial activities for social and economic projects.

State-Owned-Enterprises' investments are included in this research as they play a major role in the Built Environment projects in Egypt. Other than having funding from private sources and collecting payments from companies, there is also a relationship between SOE's and the National Treasury, where funds come in to SOE's through the National Treasury. Revenues from SOE's flow to the National Treasury and to quasifiscal expenditures as well. SOE's budgets are independent of the General State Budget but their investments directly serve the Egyptian Economic and Social Development Program.¹⁰

On the other hand there are a number of SOEs that use public money for mostly profitable construction and real estate activity, and these have not been included. One example is the Holding Company for Construction and Development and its real estate development subsidiaries, the Maadi, Heliopolis and el-Nasr companies.¹¹

And while the private sector through their corporate social responsibility activities, charities, NGOs and donor agencies invest to some degree in the built environment, any of their expenditure that is exclusive to the State Budget and its agencies or that was not part of the agencies covered, is not included in the BE Budget.

Available Data

There are a number of agencies that fit the built environment criteria but that we could not find publicly available data for, and these were also not included. These include;

- The Holding Company for Water and Waste Water. Most public holding companies' budgets are not published regularly or at all. Only the Egyptian Electricity Holding Company (EEHC) is made available as one bulk figure, published through the Ministry of Planning documents.
- So-called private funds, *sanadiq khassa*, investing in public housing and urban development projects and affiliated to government agencies such as the Tahya Masr Fund (Presidency) and Governorate Services' Funds, are excluded, as their budgets are not published.

¹⁰ For a simple introduction to general definitions of State-Owned-Enterprises: Natural Resource Governance Institute, *State Participation and State Owned Enterprises*, <u>http://www.resourcegovernance.org/sites/default/files/nrgi_State-Participation-and-SOEs.pdf</u> For a more understanding of Quasi-Fiscal Activities and their relationship to public budgets: IBP, Guide to Transparency in Public Finances: *Looking Beyond the Core Budget*, <u>http://www.internationalbudget.org/wp-content/uploads/Looking-Beyond-the-Budget.pdf</u> For more general information regarding Egyptian State-Owned-Enterprises: Budgetary and Human Rights Observatory, الموازنة خارج الموازنة خارج الموازنة/bahroegy.org/userfiles/pdf/arabic/Esdarat/AwrakSyasat/2700.pdf

¹¹ For more on the HCCD see http://www.hccd-construction.com/Hccd_main.aspx

1.2 Built Environment Divisions & Regions

Spending has been analysed based on; regional and local projects; two local administration structures particular to Egypt (Existing BE and New Cities); and six geographic regions.

Spatial Spending 1; Regional Projects and Local Projects

Regional projects are those that cross sub-national (governorate) borders and that could not be isolated at the local level such as national highways, rail-roads and electricity generation and grids. Their spending is presented as national totals only. Local projects are those that serve communities within the administrative boundaries of governorates such as local roads and highways, water and waste-water infrastructure, housing, urban development and local electricity networks. Their spending is presented as both a national total as well as per governorate. In some cases some local projects' spending within one sector is not disaggregated, hence there are differences between the sub-national totals and the grand totals.

Spatial Spending 2; Geographic Regions

There is as yet no regional level administration, even though a provision for such a system has existed since 1977 and outlined seven or eight so-called Economic Regions. In this research we have identified six sociogeographic regions that better reveal spatial inequality and are different from the Economic Regions. They are:

- The largely urban capital metropolis of Greater Cairo (Cairo, Giza and Qalyubia)
- Egypt's second largest city/governorate of Alexandria
- The cohesive Suez Canal zone (Port Said, Ismailia and Suez)
- The rural/industrial Delta (Damietta, Daqahlia, Kafr al-Sheikh, Beheira, Munfia, Gahrbia and Sharkia)
- The mostly rural Upper Egypt (Fayoum, Beni Sweif, Minya, Assuit, Sohag, Qena, Luxor and Aswan)
- The sparsely populated desert Frontier (Matruh, Wadi al-Gadid, Red Sea, North Sinai and South Sinai).

Administrative Divisions; Existing Built Environment and New Cities

There is an administrative distinction at the sub-national level particular to Egypt. Within the 27 subnational governorates, Egypt has a dual local administrative structure. There are mainstream local administrations, or municipalities, that manage over 200 cities and 4000 villages where over 98 percent of Egyptians live.¹² This we have termed the Existing Built Environment (Existing BE). And then there are the 31 so-called New Cities that have been built and run by the New Urban Communities Authority (NUCA), a public corporation administered at the national level by the Ministry of Housing, Utilities and Urban Development (MoH). These are referred to simply as New Cities.

1.3 Expenditure Data, Sources and Government Agencies' Information

The BE Budget has focussed only on public investments allocated to built environment projects outlined in the sectors presented in Chapter 6 of the General State Budget and other documents,. This means that the rest of the expenditure budget line items are omitted.¹³

¹² For population numbers at the National, Existing BE and New Cities, please see Appendicies 7 and 8.

¹³ Budget line items are arranged as follows; Salaries and Compensation (Ch 1), Purchase of Goods and Services (Ch 2), Interest, Subsidy (Ch 3), Grants and Social Benefits (Ch 4), Other Expenditures (Ch 5), Investments (Ch 6), Acquisition of Financial Assets (Ch 7), Repayment of Loans (Ch 8).

Given that the General State Budget is not published in a programs budget format, only <u>planned</u> allocations of Chapter 6, Investments, are relevant to this study. This allocation is concerned with investments directed to construction or developing infrastructure across sectors.

These figures provide a picture of how the government plans to spend public money on economic and social development programs, and do not reveal actual spending or information on accessibility of services.

The project has gathered this information through three main data sources all of which were published online, excluding the Official Gazette documents as explained below;

- 1) Mainstream budget documents released by the Ministry of Finance (MoF) and Offical Gazette,¹⁴
- 2) Programmatic and geographic spending as outlined in the Ministry of Planning's (MoP) Economic and Social Development Plan,¹⁵
- 3) Agency specific budgets, in this case NUCA's budget documents.¹⁶

Public Budget: Central administration, Local administration and Services authorities - (MoF)

The General State Budget provides economic expenditure allocations across three divisions of government: Central Administration, Local Administration and Services Authorities. Only Central Administration and Services Authorities' documents are relevant for this study. Data for the relevant sectors of the Built Environment Budget is found through the sectoral sections of the MoF: Economic Affairs Sector, Environment Protection Sector and Housing & Public Infrastructure Sector.

Economic Entities' Budgets – (MoF - Offical Gazette)

The Offical Gazette provides the budgets for Economic Entities: publicly owned corporations. Offical Gazette documents can be accessed through an e-mail mailing list with a paid membership. Seven economic entities are relevant for this study.

Economic and Social Development Plan - (MoP)

The ministry of planning publishes the government's Economic and Social Development Plan annually. This outlines investments across all sectors in some detail. The Housing and Public Infrastructure Sector information in Part 4; Social Equality, Electricity Sector and Transportation Sector in Part 5; Economic Development, local spending of some of the aforementioned sectors were found in Part 6. There is also information on Spatial Development and the Appendices tables.¹⁷

¹⁴MoF 2015. Al-Muwazna al-'Amma lil-Dawla lil-Sana al-Malia 2015/2016. Accessed: 01.11.2015 http://www.mof.gov.eg/Arabic/%D8%B9%D9%86%D8%A7%D9%88%D9%8A%D9%86%20%D8%B1%D8%A6%D9%8A %D8%B3%D9%8A%D9%87/PE/Pages/budget15-16.aspx

¹⁵MoP 2015. Khitat al-Tanmiya al-Iqtisadia wal-Igtimaeya lil-'Am al-Mali 2015/2016. Accessed: 01.11.2015 https://web.archive.org/web/20160510204433/http://mop.gov.eg/plan/Plan2016.aspx?ModID=2&MID=31

¹⁶NUCA website, Khitat al-Hay'a, Al-Khitta al-Moqtaraha 2015/2016, May 3rd, 2015. Accessed: 01.11.2015 https://web.archive.org/web/20160323024252/http://newcities.gov.eg/about/maps/default.aspx

¹⁷A request to a senior official at the ministry of planning resulted in more detailed information for specific government agencies across governorates. Some of this data was present in the publicly published economic and social development plan, but some governorates were missing.

Economic Agencies' information published online (NUCA only)

NUCA publishes programmatic investment plans on its website whereas the MoF and Offical Gazette only publish an accounting budget. The plans can be found for FYs 2012/2013 to 2015/2016 in presentation slide format.

1.4 Data Organization and Results

Data Entry

There are three data entry files for each data source:

- MoF data entry consists of subsidy, investments, public spending and total expenditure for central administration and services authorities for eight-year periods. It also consists of information on economic entities, spending, investment, total capital investment and total budget for eight-year periods.
- MoP data entry file contains data for one financial year. It consists of all relevant tables from relevant parts of the economic and social development plan.
- NUCA data entry file contains two sheets for each financial year from 2012/2013 to 2015/2016. Each sheet consists of new urban cities project investments for each new city across different sectors.

<u>Results</u>

The Built Environment Budget data is presented as a current spatial distribution of built environment projects by sector, government agencies, regional and local projects, and New Cities and the Existing BE.

1.4.1 Sectors and Sub sectors

Table 7 below provides the built environment categorization, sectors and underlying projects, and the government agencies relevant to each as provided in the results. This table is created through the Spatial Distribution data from the Ministry of Planning.

Spatial Distribution		Sector	Project	Government Agency	Budget Classification
			National Roads	Central Agency for Construction (CAC)	General State Budget – Services Authority
	Regional Projects		and Bridges	General Authority for Roads, Bridges and Land Transport (GARBaLT)	General State Budget – Services Authority
Region			Railways	Egyptian National Railways (ENR)	Economic Entity (exclusive to the General State Budget)
		Electricity	Power Stations and Grid	Egypt Electricity Holding Company (EEHC)	Holding Company* (exclusive to the General State Budget)
Local Projects	Existing Built Environment	Water & Waste- water	Treatment Stations & Networks	National Organisation for Potable Water and Sanitary Drainage (NOPWASD)	General State Budget – Services Authority

			Construction Authority for Potable Water and Wastewater (CAPW)	General State Budget – Central Administration
			Ministry of Housing, Utilities and Urban Development	General State Budget – Central Administration
		Local Roads and	General Authority for Roads, Bridges and Land Transport (GARBaLT)	General State Budget – Services Authority
		Bridges	Governorates' Offices	General State Budget – Local Municipalities
	Roads & Transport		Central Agency for Construction (CAC)	General State Budget – Central Administration
	Transport	Underground Metro	National Authority for Tunnels	General State Budget – Services Authority
		Public Buses	Cairo Transport Authority (CTA) Alexandria Public Transport Authority (APTA)	Economic Entity (exclusive to the General State Budget)
	Housing	Social Housing	Ministry of Housing/ Social Housing Fund (SHF)	General State Budget – Central Administration
		Programme	Guarantee and Subsidy Fund (GSF)	General State Budget – Services Authority
		Cooperative Housing Programme	General Authority for Cooperative Construction and Housing (GACCH)	Economic Entity (exclusive to the Genera State Budget)
		Other Housing projects	Ministry of Housing	General State Budget – Central Administration
		(undefined allocations)	Central Agency for Construction (CAC)	General State Budget – Services Authority
	Electricity		Central Agency for Construction (CAC)	General State Budget – Services Authority
	Electricity	ricity Local Networks	Governorates' Offices	General State Budget – Local Municipalities
		1000 Most	Central Agency for Construction (CAC)	General State Budget – Central Administration
	Urban	edy Villages ject	Governorates' Offices	General State Budget – Local Municipalities
	Developm ent	Informal Areas Development	Informal Settlements Development Facility) ISDF(General State Budget – Services Authorities
		Integrated Urban Development	Central Agency for Construction (CAC)	General State Budget – Central Administration
	Water & Waste- water	Treatment Stations & Networks	New Urban Communities Authority (NUCA)	Economic Entity (Exclusive to General State Budget)
Cities	Roads & Transport	Local Roads	New Urban Communities Authority (NUCA)	Economic Entity (Exclusive to General State Budget)
	Electricity	Local Networks	New Urban Communities Authority (NUCA)	Economic Entity (Exclusive to General State Budget)
	Housing	Social Housing	New Urban Communities Authority	Economic Entity (Exclusive to General

	Programme	(NUCA)	State Budget)
	Middle Income Housing/ Dar Masr	New Urban Communities Authority (NUCA)	Economic Entity (Exclusive to General State Budget)

1.4.2 Spatial Distribution

This format utilizes data published by the ministry of planning relating to all the governorates. It includes sectors, government agencies for each sector and the Built Environment categorizations. This data is available for the current financial year 2015/2016 only.

2. Spending by Agency

14 agencies in four ministries and 27 governorates invest in the built environment (Table 8). The largest investor by far was the Ministry of Housing, Utilities and Urban Communities (MoH) with a little over half the budget. The second largest investor was the Ministry of Electricity at a quarter of the budget, followed by the Ministry of Transport with a share of less than 20%. The governorates and Ministry of Local Development administer less than 4% of the built environment budget.

The Ministry of Housings' New Urban Communities Authority made the largest investments by agency at almost a third of the budget. It was followed by the Ministry of Electricity's Egypt Electricity Holding Company, with investments equal to a quarter of the budget. This in turn was followed by the MoH's Social Housing Fund at 11% of the built environment budget. The smallest investor was the MoH's Guarantee & Subsidy Fund (GSF), at one million EGP, or 0.01% of the budget. However it is worth noting that the GSF's main activity is funding the subsidy component of the Social Housing Programme's mortgage units, for which it has allocated 1.5 Bn EGP in FY 2015/16.¹⁸

In terms of sectoral involvement, the MoH was the only ministry to invest in all six built environment sectors, specifically through it's New Urban Communities Authority, which was the only agency to do so.¹⁹ The Central Agency for Construction (part of the MoH) and the offices of the governorates were the only agencies to invest in three of the built environment sectors each, with the rest of the agencies only investing in one or two sectors.

Sec	Sector		Transport	Housing	Waste- water	Water	Other/ Urban Develop.	Total
	New Urban Communities Authority	2,391,890	2,713,394	11,978,225	5,107,087	2,591,087	5,000,000	29,781,683
	Central Agency for Construction	47,500	1,838,000	229,500	0	0	163,000	2,278,000
Ministry of Housing,	Office of the ministry	0	0	25,000	41,100	49,150	0	115,250
Utilities & Urban communities	Social Housing Fund	0	0	10,970,000	0	0	0	10,970,000
	Guarantee & Subsidy Fund	0	0	1,000	0	0	0	1,000
	General Authority for Cooperative Construction and Housing	0	0	103,500	0	0	0	103,500

Table 8: Agency budget by sector ('000s EGP)

18As subsidies are part of Chapter 3 expenditure in the General State Budget, they have not been taken into account in this study. For more see Section **1.1 Built Environment Sectors & Data**

19Most projects in the Urban Development sector require investments in more than one of the other five sectors. However, investments listed here were ones where sectoral division was not made available. It is also worth mentioning that NUCA's investments allocated to this sector are for a lump sum dedicated to one New city, the New Administrative Capital, where investments in the other New Cities were disaggregated, and hence are not mentioned as part of the Urban Development sector in the rest of this study so as not to skew results.

	Informal Settlements Development Facility	0	0	0	0	0	685,840	685,840
	Construction Authority for Potable Water and Wastewater	0	0	0	1,694,465	686,635	0	2,381,100
	National Organisation for Potable Water and Sanitary Drainage	0	0	0	3,017,567	1,935,932	0	4,953,499
	Sub-total	2,439,390	4,551,394	23,307,225	9,860,219	5,262,804	5,848,840	51,269,872
Ministry of Electricity	Egypt Electricity Holding Company	25,303,400	0	0	0	0	0	25,303,400
	General Authority for Roads, Bridges and Land Transport	0	7,635,000	0	0	0	0	7,635,000
Ministry of Transport	National Authority for Tunnels	0	4,059,800	0	0	0	0	4,059,800
	Egyptian National Railways	0	6,840,000	0	0	0	0	6,840,000
	Sub-total	0	18,534,800	0	0	0	0	18,534,800
	Offices of the governorates	560,614	2,109,880	0	0	0	95 ,042	2,765,536
	Cairo Transport Authority	0	177,735	0	0	0	0	177,735
Local Admin.	Alexandria Public Transport Authority	0	185,000	0	0	0	0	185,000
	Sub-total	560,614	2,472,615	0	0	0	95,042	3,128,271
Ministry of Local Development	Office of the ministry	0	0	0	0	0	650,000	650,000
То	tal	28,303,404	25,558,809	23,307,225	9,860,219	5,262,804	6,593,882	98,886,343
Sec	ctor	Electricity	Transport	Housing	Waste- water	Water	Other/ Urban Develop.	Total

3. Spending by Regional or Local Projects

This section gives an overview of public spending on the built environment in Egypt, based on sectoral totals at the National level, as well as comparing spending by administrative division; National spending; projects that cross sub-national borders and that could not be isolated at the sub-national level such as national highways, rail-roads and electricity generation and grids; and sub-national governorate level spending on locally identified projects. This section also analyses the further administrative distinction at the sub-national level particular to Egypt, where sub-national spending is divided and compared between the dual local administrative structures of the Existing Built Environment (BE), and the New Cities.²⁰

Total Spending

Spending on the six built environment sectors totaled 98.9 Bn EGP (Table 9). When sub-divided administratively, over 40% of the Built Environment Budget for FY 2015/16 is spent on projects with National reach: power stations and networks, railroads and highways. Second comes spending on New Cities, which are administratively separate from existing local administration, where 30% of the budget is spent. This spending is mostly for real estate investments where new subdivisions are prepared and sold, as well as spending on both for profit housing schemes and public housing within the New Cities. Only two percent of the population benefits from this spending. In third place, at 29% of the budget, comes spending on the Existing BE where 98% Egyptians live. Of this portion, a mere 13.3 percent is actually spent through the local administration. The rest is controlled by central ministries.

		Local P	rojects					
Sector	Existing BE		New Cities		Regional Pr	ojects	Tota	I
	'000s EGP	%	ʻ000s EGP	%	'000s EGP	%	ʻ000s EGP	%
Electricity	608,114	2.1%	2,391,890	8.5%	25,303,400	89.4%	28,303,404	28.6%
Transport	7,477,415	29.3%	2,713,394	10.6%	15,368,000	60.1%	25,558,809	25.8%
Housing	11,329,000	48.6%	11,978,225	51.4%	0	0.0%	23,307,225	23.6%
Waste- water	4,753,132	48.2%	5,107,087	51.8%	0	0.0%	9,860,219	10.0%
Urban Dev.	1,593,882	24.2%	5,000,000	75.8%	0	0.0%	6,593,882	6.7%
Water	2,671,717	50.8%	2,591,087	49.2%	0	0.0%	5,262,804	5.3%
Total	28,433,260	28.8%	29,781,683	30.1%	40,671,400	41.1%	98,886,343	100.0%

Table 9: Total spending on the BE by sector and administration

Total Per Capita Spending

Total BE spending translated to a national per capita spending of 1098 EGP per person (Table 10). Per capita spending fluctuated greatly between the different administrative divisions, where spending on New Cities was highest at 15,537 EGP per person, or about 15 times the national average. This was followed by National projects at 451 EGP per person, and then the Existing BE at 322 EGP per person, or about a third of the national average.

²⁰ For more on administrative divisions, please see section 1.2 Built Environment Divisions & Regions

		Local	Projects					
Sector	Existing	BE	New C	ities	Regional Pro	ojects	Tota	al
	'000s EGP	EGP/ pax	'000s EGP	EGP/ pax	'000s EGP	EGP/ pax	'000s EGP	EGP/pax
Electricity	608,114	7	2,391,890	1248	25,303,400	281	28,303,404	314
Transport	7,477,415	85	2,713,394	1416	15,368,000	171	25,558,809	284
Housing	11,329,000	128	11,978,225	6249	0	0	23,307,225	259
Waste- water	4,753,132	54	5,107,087	2664	0	0	9,860,219	109
Urban Dev.	1,593,882	18	5,000,000	2608	0	0	6,593,882	73
Water	2,671,717	30	2,591,087	1352	0	0	5,262,804	58
Total	28,433,260	322	29,781,683	15,537	40,671,400	451	98,886,343	1098

Table 10: Per capita spending on the BE by sector and administration

Total Per Capita Spending on the Sub-national Level

Looking only at the sub-national Built Environment Budget (only Existing BE and the New Cities) and dividing it by the total population produces an average per capita spending of 1140 EGP per person across the governorates. However, spending is very uneven (fig 4). Almost all Delta and Upper Egyptian governorates fall below the national average with Daqahlia receiving almost a tenth of the average. On the other hand only five governorates received near average spending. Cairo received almost double the average spending, and the Frontier governorates were all much higher than average, a fact emphasised by their very small populations. Matruh for example receiving five and a half times the national average spending. This is possibly explained by these governorates' importance to the tourism sector.

Per Capita Spending on the Existing BE

Isolating spending on only the Existing BE shows an average per capita spending of 322 EGP per person, or about a third of the national average from the total BE Budget. Only seven governorates received spending close to that average (fig 5): Qalubia in Greater Cairo; Alexandria, Egypt's second largest city; Damietta, a largely urban governorate; Munufia in the Delta, and Luxor and Aswan, the two tourism oriented governorates in Upper Egypt. By contrast, most Delta and Upper Egyptian governorates received less than average spending. Meanwhile urban governorates such as Cairo, Port Said and Suez received double to triple the average spending, while the frontier governorates' per capita spending was between 6 to 16 times the national average, possibly because of their very small populations as well as being important for tourism.

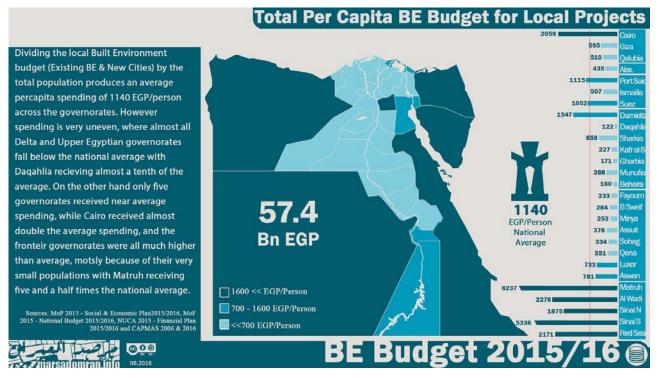
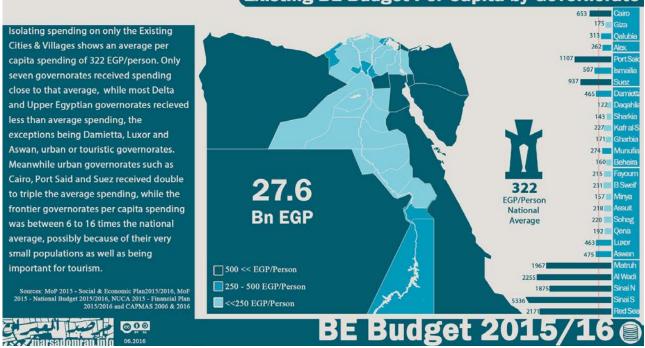


Fig. 4: Total sub-national per capita spending on local projects



Existing BE Budget Per Capita by Governorate

Fig. 5: Sub-national per capita spending on local projects in the Existing BE

		Popula	ation		Per Ca	apita (EGP/	person)
Regions	Gov	Egypt	New Cities	Investments ('000 EGP)	Based on NC pop	Based on Gov pop	Based on NC/Gov pop
	Cairo	9,440,374	550,825	13,637,431	24,758	1445	24,758
Grater Cairo	Giza	7,762,792	506,318	3,348,231	6,613	431	6,613
	Qalubia	5,215,446	107,462	1,058,164	9,847	203	9,847
Alex.	Alexandria	4,901,910	98,305	877,516	8,926	179	8,926
	Port Said	678,564	0	5,000	0	7	7
Suez Canal	Ismailia	1,209,663	_	_	_	_	_
•••••	Suez	636,841	0	73,200	0	115	115
	Damietta	1,359,643	64,291	1,500,200	23,334	1103	23,334
Delta	Daqahlia	6,074,446	_	_	_	_	_
	Sharkia	6,640,664	354,947	3,477,174	9,796	524	9,796
	Kafr al- Sheikh	3,249,268	_	_	_	_	_
	Gharbia	4,852,968	_	_	_	_	_
	Munfia	4,035,137	68,554	479,706	6,998	119	6,998
	Beheira	5,959,050	99,444	82,738	832	14	832
	Fayoum	3,280,103	0	58,848	0	18	18
	Beni Sweif	2,943,740	45,314	165,623	3,655	56	3,655
	Minya	5,309,254	11,647	509,600	43,752	96	43,752
Upper	Assiut	4,364,111	4,462	700,065	156,906	160	160
Egypt	Sohag	4,734,676	144	539,341	0	114	114
	Qena	3,128,194	0	498,336	0	159	159
	Luxor	1,173,753	5,134	318,850	62,111	272	272
	Aswan	1,466,965	0	447,660	0	305	305
	Matruh	468,218	0	1,999,000	0	4269	4,269
	Wadi al- Gadid	230,591	0	5,000	0	22	22
Frontier	Sinai N	445,811	_	_	_	_	_
	Sinai S	169,822	_	_	_	_	_
	Red Sea	354,263	_	_	_	_	_
Sul	b-total	90,086,267	1,916,846	29,781,683	17,876	481	7,198

Table 11: Calculating per capita expenditure for the New Cities in each governorate

Per Capita Spending on New Cities

Gross per capita spending on New Cities amounted to 15,537 EGP per person, or about 15 times the national average.²¹ Cairo governorate received the highest spending by NUCA (13.6 Bn EGP, or 46% of NUCA's budget), that spending translated to 24,758 EGP per person based on population in its New Cities, and 1445 EGP per person based on Cairo's total population (Table 11). This makes it the second highest per capita spending after Minya, which had per capita spending of 43,752 EGP per person, even though actual spending was only 510 Mn EGP, or about 1.7% of NUCA spending.

Total Governorate Level Spending to Population Ratio

When viewed as a ratio between spending and population, only six governorates were within the 1:1 ratio (0.8 to 1.2) (Table 12). Most Delta and Upper Egyptian governorates were below, ranging between a high of 0.6 for Assiut, Qena and Munfia, and a low of 0.2 for Daqahlia. Meanwhile almost all urban governorates were higher: between 1.7 for Suez and Port Said, to 3.2 for Cairo with the highest share of spending at 21% of the budget for 10.1% of the population. The exception was Alexandria, which was a low 0.7. Frontier governorates all had very high spending to population ratios, ranging from 2.9 for North Sinai, to a staggering 9.8 for Matruh.

Existing BE Governorate Level Spending to Population Ratio

When governorate level spending is isolated to show only spending on Existing BE, only three governorates, Qalubeya, Alexandria and Mufia are near a 1:1 ratio (Table 12). Again, almost all Delta and Upper Egyptian governorates are below that, ranging from a high of 0.7 for most, to a low of 0.4 for Daqahlia. Once again we see also that only Damietta in the Delta, and Luxor and Aswan in Upper Egypt were higher than 1, all receiving 1.5 times more spending than their population. Urban governorates were also much higher than 1, with Cairo, Suez and Port Said at 2.1, 3 and 3.5 times respectively. Alexandria was the exception at only 0.8. Frontier governorates all ranged from a low of 6 for North Sinai, to an overall high of 17 for South Sinai.

New Cities' Governorate Level Spending to Population Ratio

New City spending ignored local governorate populations even more. Only two governorates received near 1:1 spending, Luxor and Aswan at 0.8 and 0.9 respectively, while the rest of the Upper Egyptian New Cities received spending of between 0.1 in Fayoum to 0.5 in Qena and Assuit (Table 12). Cairo was the highest of the Urban Governorates at 4.4, while Giza was 1.3 and Alexandria a mere 0.5. Most Delta governorates do not have New Cities, but the ones that do received between less than 0.1 for Beheira, and 3.3 for Damietta. 2015/16 is also the first year where one of the Frontier governorates will have a New City. New Alamein is a New City in Matruh, which will lead the governorates with a 12.9 spending to population ratio

²¹ Sub-national per capita spending primarily uses the populations of New Cities within the governorate boundaries, unless where the population numbers drop below 5000 people where a number of them have not gained any meaningful population, or are still under construction, in which case the total governorate population has been used. For more information please see **Appendicies 7 and 8**.

Region	Gov	Total BE	New Cities	Existing BE
	Cairo	3.2	4.4	2.1
Grater Cairo	Giza	0.9	1.3	0.6
	Qalubia	0.8	0.6	1.0
Alex.	Alexandria	0.7	0.5	0.8
	Port Said	1.7	0.0	3.5
Suez Canal	Ismailia	0.8	_	1.6
	Suez	1.7	0.3	3.0
	Damietta	2.4	3.3	1.5
	Daqahlia	0.2	0.0	0.4
	Sharkia	1.0	1.6	0.5
Delta	Kafr al-Sheikh	0.4	_	0.7
	Gharbia	0.3	_	0.5
	Munfia	0.6	0.4	0.9
	Beheira	0.3	0.0	0.5
	Fayoum	0.4	0.1	0.7
	Beni Sweif	0.4	0.2	0.7
	Minya	0.4	0.3	0.5
Unner Frunt	Assiut	0.6	0.5	0.7
Upper Egypt	Sohag	0.5	0.3	0.7
	Qena	0.6	0.5	0.6
	Luxor	1.1	0.8	1.5
	Aswan	1.2	0.9	1.5
	Matruh	9.8	12.9	6.3
	Wadi al-Gadid	3.6	0.1	7.2
Frontier	Sinai N	2.9		6.0
	Sinai S	8.4	_	17.0
	Red Sea	3.4		6.9
Av	erage	1.8	1.4	2.5

Table 12: Spending to population ratios per governorate and administration

Governorate Level Spending on New Cities versus Existing BE

Over half (51.9%) of the local BE budget was spent on New Cities (Fig 6). In some governorates, spending on New Cities was almost triple the spending on their existing BE where most of their populations live. For example in Sharkia, Giza, Damietta and Cairo, the government designated 79.4%, 72.5%, 71.3% and 70.1% respectively of their local spending on their New Cities. By contrast, the lowest rate was in Fayoum at 7.7%. Port Said, Suez and the New Valley were even lower. However this is the first year they receive funds to build New Cities, while another seven governorates do not have a New City programme.



Fig. 6: Total local spending; New Cities versus the Existing BE

4. Spending by Sector

Six sectors were chosen to represent spending on the built environment in Egypt: Transport; Electricity; Water; Waste-water; Housing, and Urban Development. This section analyses overall spending on a sectorby-sector basis, as well as the administrative shares between National and Sub-national sectors. The section also analyses the spatial equality of sub-national sectors as the per capita share of each governorate in each sector, as well as comparing spending in the Existing BE with spending on New Cities.

Total Sectoral Spending

Egypt's total built environment budget for FY 2015/16 was 98.9 Bn EGP. The highest spending was on electricity (mostly power stations), where 29% of the budget is allocated (fig. 7). Transport, including National highways and railroads, is second at 26% of the budget. Housing projects for both social and middle income housing are third with almost a quarter of the budget. Spending on waste-water infrastructure accounted for 10%. 6.6 % was spent on Urban Development (projects that include more than one sector), where most of it was for the New Administrative Capital in Cairo (5%), while the rest were designated for Informal Area Upgrading and the Most Needy Villages programmes. Finally, about 5.3% went to drinking water plants and networks.

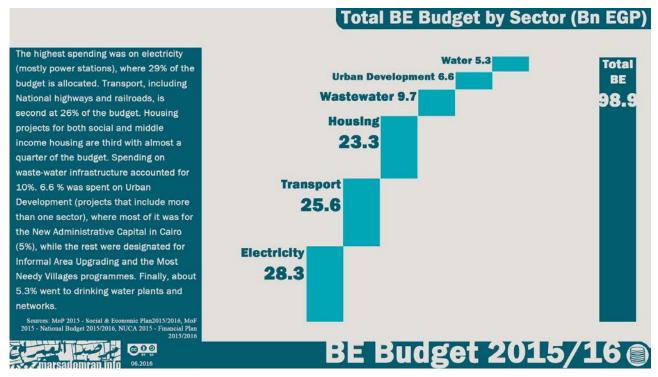


Fig. 7: Total BE Budget by sector

Per Capita Sectoral Spending

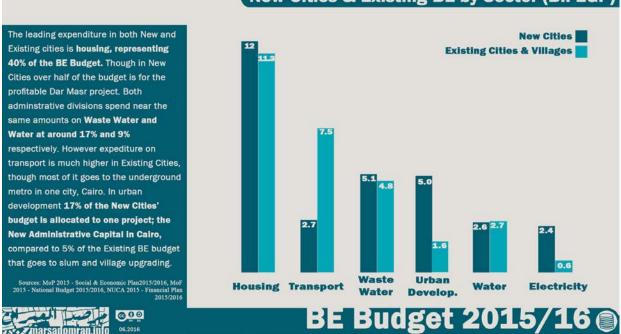
In per capita terms, the national share for built environment projects ranged from 314 EGP per person, for electricity projects, to 18 EGP per person for urban development projects (Table 13). When isolated on the sub-national level for the Existing BE, per capita spending ranges from 128 EGP per person for housing projects, to 7 EGP for electricity (local networks). On the other hand in New Cities, per capita spending ranges from a high of 6249 EGP per person for housing projects, which include the profitable Dar Masr, to 1352 EGP per person for projects in the water sector.

		Local	Projects					
Sector	Existing	BE	New C	New Cities		ojects	Tota	al
	'000s EGP	EGP/ pax	'000s EGP	EGP/ pax	'000s EGP	EGP/ pax	'000s EGP	EGP/pax
Electricity	608,114	7	2,391,890	1248	25,303,400	281	28,303,404	314
Transport	7,477,415	85	2,713,394	1416	15,368,000	171	25,558,809	284
Housing	11,329,000	128	11,978,225	6249	0	0	23,307,225	259
Waste- water	4,753,132	54	5,107,087	2664	0	0	9,860,219	109
Urban Dev.	1,593,882	18	5,000,000	2608	0	0	6,593,882	73
Water	2,671,717	30	2,591,087	1352	0	0	5,262,804	58
Total	28,433,260	322	29,781,683	15,537	40,671,400	451	98,886,343	1098

Table 13: Total and per capita sectoral spending

Total Sectoral Spending on Local Projects

The leading expenditure in both New Cities and Existing BE is housing, representing 40% of the BE Budget (fig 8). In New Cities over half of the budget is for the profitable Dar Masr project. Both administrative systems spend approximately the same amounts on Waste Water and Water at around 17% and 9% respectively. However, expenditure on transport is much higher in the Existing BE, though most of it goes to the underground metro in one city, Cairo. In urban development 17% of the New Cities' budget is allocated to one project; the New Administrative Capital in Cairo, compared to 5% of the Existing BE budget that goes to slum and village upgrading.



New Cities & Existing BE by Sector (Bn EGP)

Fig. 8: Spending in New Cities and the Existing BE by sector

4.1 Transport

Programmatic Spending on Transport

Total expenditure on transport was EGP 24.3 Bn. Of that amount, 58% was spent on projects with a regional reach and 42% on local projects, two thirds of which were assigned to the Existing BE (fig. 9).

On the project level, 30% went to National highways, 28% to railroads, while 24% was assigned to local highways, roads and bridges. Of this, 65% was in the Existing BE. The remaining 18% of the transport budget was for public transport (underground metro, tram and buses), of which a staggering 90.7% was in Cairo alone.

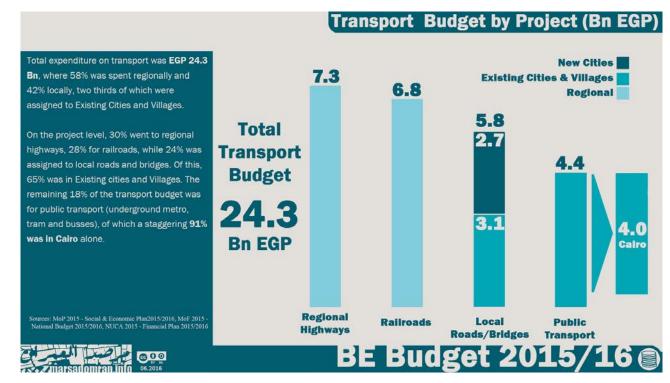


Fig. 9: Spending by project and administration in the Transport sector

National Per Capita Spending on Transport

While total per capita spending on transport averaged 284 EGP per person, it was highest in New Cities where spending on local roads and bridges translated to 1416 EGP per person (Table 14). This was followed by regional projects (highways and railroads), at 171 EGP per person. The least per capita spending was for local roads and public transport, at 85 EGP per person in the Existing BE.

Sub-national Per Capita Spending on Transport

Per capita spending on transport fluctuated greatly between the governorates, from a high of 1005 EGP per person in Matruh, mostly due to New Alamein which is under construction, down to 12 EGP for Beheira. Most Delta and Upper Egyptian governorates received far less than the national average of EGP 270 per person. Even though Cairo received 50% of the local transport budget, it was second in per capita spending at 534 EGP per person after South Sinai. The latter received 588 EGP per capita even though it received only 1.3% of spending.

	Local P	rojects	Regional		
	Existing BE	New Cities	Projects	Total	
Roads & Bridges	3,054,880	2,713,394	8,528,000	14,296,274	55.9%
Railroads	_	_	6,840,000	6,840,000	26.8%
Public Transport	4,422,535	_	_	4,422,535	17.3%
Total	7,477,415	2,713,394	15,368,000	25,558,809	100%
rotar	29.3%	10.6%	60.1%	100.0%	
Per Capita	85	1,416	171	284	
(EGP/pax)	65	1,410	1/1	204	

Table 14: Total and per capita spending on Transport projects by administration ('000s EGP)

Spending on Local Public Transport

The BE Budget only found three agencies that provide local public transport in Egypt based in four governorates with investments totalling 4.4 Bn EGP, of which 90.7% was in Cairo governorate alone, translating to 451 EGP/pax (Table 15). Expenditure on the underground metro in Greater Cairo accounted for 91.8% of the public transport budget, where 81% of that was in Cairo governorate. On the other hand spending on public buses through the Cairo Transport Authority and the Alexandria Public Transport Authority accounted for only 8.2% of the Public Transport budget, while Qalubia received the least per capita spending at 4 EGP per person.

Table 15: Total and per capita investments in Public Transport

	Underground Metro	Public Buses	Total		Per capita
	'000 EGP	'000 EGP	'000 EGP	%	EGP/pax
Cairo	3,831,000	177,735	4,008,735	90.7%	451
Giza	205,000	0	205,000	4.6%	28
Qalubia	20,000	0	20,000	0.5%	4
Alexandria	0	185,000	185,000	4.2%	39
Total	4,056,000	362,735	4,418,735	100.0%	50
	91.8%	8.2%	100.0%		

Transport Spending; New Cities Versus Existing BE

Spending on transport in New Cities exceeded that in the Existing BE in six out of the 20 governorates that have a New Cities programme, with Sadat City in Munufia receiving 4.4 times more funding than it's ten cities and towns and 381 villages (fig. 10). Spending on New Cities in another six governorates was between 50% to 100% of spending on existing BE, while Beheira had the least New City-to-Existing BE ratio at 7.4%.

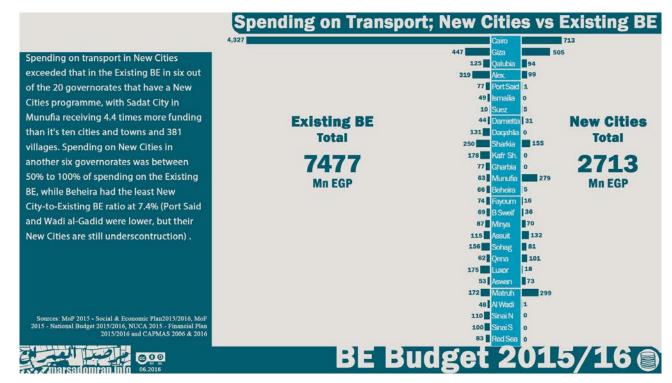


Fig. 10: New Cities' percentage of spending on local transport

4.2 Electricity

Total Spending on Electricity

About 90% of the electricity budget went to power stations and National networks (Table 16). Of the remainder, most (8.5% of the total) was spent on the construction or replacement of local networks in New Cities, while 2.1% of the total was spent on maintaining local networks in the Existing BE.

When translated to per capita spending, the gross total was 314 EGP per person. The highest per capita spending was in New Cities at 1248 EGP/ person, followed by National spending at 281 EGP per person, and then existing BE at a paltry 7 EGP per person.

Table 16: Total and	non conita on o	ndina an naaianal	landlood	ala atri aite e ma i a ata
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	Local Ne	etworks	Regional	
	Existing BE	New Cities	Power Stations & Grid	Total
Investments	608,114	2,391,890	25,303,400	28,303,404
('000s EGP)	2.1%	8.5%	89.4%	100%
Per Capita (EGP/Pax)	7	1248	281	314

Sub-national Spending on Electricity

Matruh had the highest per capita spending by far at 1209 EGP per person, or roughly four times the national average of 314 EGP per person, though most of it for New Alamein (fig. 11). Spending in the Greater Cairo region ranged from a high of 80 EGP per person in Cairo, down to 12 EGP per person in Qalubia. In the Delta it ranged from a high of 27 EGP per person in Sharkia to a low of one EGP per person in Beheira. Upper Egypt fared a little better, with a high of 85 EGP per person in Aswan to a low of 12 EGP per person in Fayoum. There was no spending in the Red Sea.

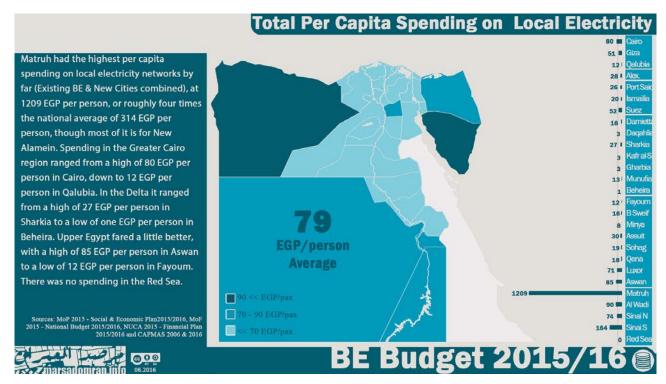


Fig. 11: Local per capita spending on electricity networks

Electricity Spending; New Cities Versus Existing BE

Isolating sub-national spending between New Cities and existing BE greatly reduces the overall per capita spending for the latter. For example spending drops in Greater Cairo to a range of 4 to 3 EGP per person in Cairo, Giza and Qalubia, while in their New Cities it is 1309 to 466 EGP per person (fig. 12). It is the same in the Delta where spending drops to between 5 EGP per person and 1 EGP per person in existing BE, but is between 254 and 10 EGP per person in the Delta's New Cities. In Upper Egypt spending in the existing BE drops to a high of 16 EGP per person in Aswan to a low of 5 EGP per person in Sohag. By comparison New City spending ranges from a high of 1159 EGP per person in Minya to 6 EGP per person in Fayoum.

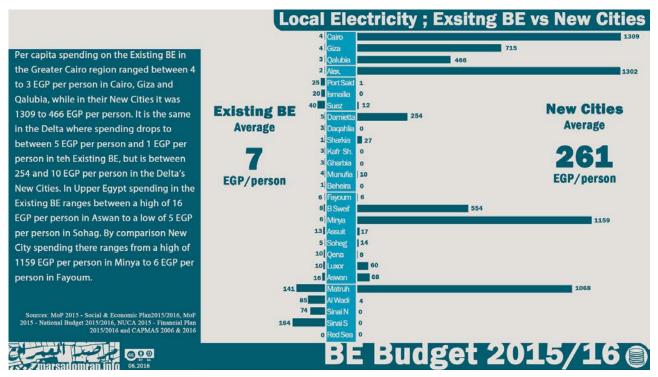


Fig. 12:Per capita local spending on electricity

4.3 Housing

Total Spending on Housing

A total expenditure of EGP 23.3 Bn translates to a national per capita spending of 259 EGP per person (Table 17). Over half of that is spent in New Cities, however, where per capita spending shoots up to 6249 EGP per person, dropping to 128 EGP per person in the Existing BE.

Table 17: Total and p	er capita :	spendina on	housina by	v proiect and	administration
Tuble 17. Total and p	ci cupitu i	spending on	nousing by	y project unu	uummisti utton

	Social Housing Proejct	Rural Housing (Desert Villages/ Bedouin/ Repair)	Cooperative Housing	Middle-income Housing (Dar Masr)	Total	Per Capita
	ʻ000s EGP	'000s EGP	'000s EGP	ʻ000s EGP	'000s EGP	EGP/ pax
	10,971,000	254,500	103,500	0	11,329,000	128
Existing BE	72.6%	100.0%	100.0%	0%	48.6%	
	4,145,495	0	0	7,832,730	11,978,225	6249
New Cities	27.4%	0.0%	0.0%	100.0%	51.4%	
Tatal	15,116,495	254,500	103,500	7,832,730	23,307,225	259
Total	64.9%	1.1%	0.4%	33.6%	100.0%	

Programmatically, there are two types of government-built housing: subsidised and for profit. About two

thirds of the housing budget is earmarked to subsidised housing, with the lion's share spent on the Social Housing Project (SHP), of which 73% is spent in the Existing BE, and the rest in New Cities (fig. 13). Other subsidised housing includes Rural Housing and Repair projects (just 1.1% of the budget), and Cooperative Housing (0.4% of the budget), most of which are in the Existing BE. The profitable Dar Masr project accounted for a full 34% of the housing budget, all of which is in New Cities.

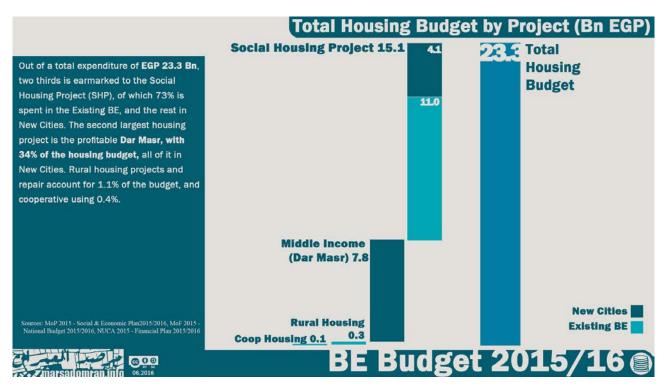


Fig. 13: Spending on housing by project and administration

Sub-national Spending on Subsidised Housing

Isolating the subsidised housing projects drops total per capita spending to 177 EGP per person (fig. 14). The highest per capita spending is in South Sinai, at 3716 EGP per person, and the Frontier governorates, which all receive much higher than average per capita amounts. The Canal governorates all received higher than average spending, with Port Said and Suez almost four and a half times the average. Greater Cairo and Alexandria, however, were around average: between 165 and 95 EGP per person. Delta governorates range between an above average 270 EGP per person in Damietta, to a two-thirds less than average 59 EGP per person in Daqahlia. The contrast was similar in Upper Egypt, with a high of 406 EGP per person in Aswan (or about three times the average) to a low of 74 EGP per person in Minya (or half the average).

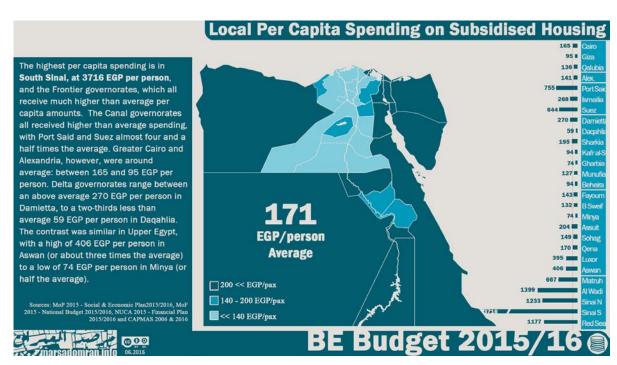


Fig. 14: Local per capita spending on subsidised housing

Sub-national Spending on the Social Housing Project; New Cities versus the Existing BE

Overall per capita spending on the Social Housing Project contrasted sharply: a high of 2163 EGP per person in New Cities, versus a low of 127 EGP per person in the Existing BE (fig. 15). Per capita spending on the SHP in New Cities was higher in 9 out of 14 governorates with active New Cities. The biggest contrast was in Minya: New Minya received funding 116 times greater than all the cities and villages of Minya. In Sharkia, Alexandria, Qalyubia and Cairo, New Cities received funding between 18 to 51 times more than for their existing cities and villages. These figures are a stark indication of how the government is focusing on relocating people to New Cities.

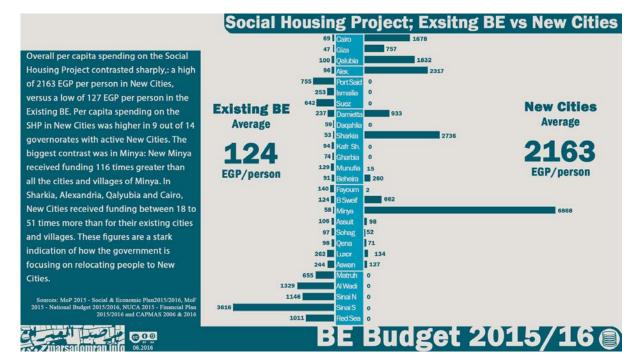


Fig. 15: Per capita spending on the Social Housing Project; Existing BE vs New Cities

Sub-national Spending on Housing; Subsidised versus For Profit Spending

Comparing the two leading housing projects on the sub-national level, we find public spending on the profitable Dar Masr project in three of the seven governorates to be far higher than spending on Social Housing (fig. 16). In Damietta and Cairo it is 3.6 and 2.5 times greater respectively, while the Greater Cairo region as a whole is assigned 70% of the Dar Masr budget.

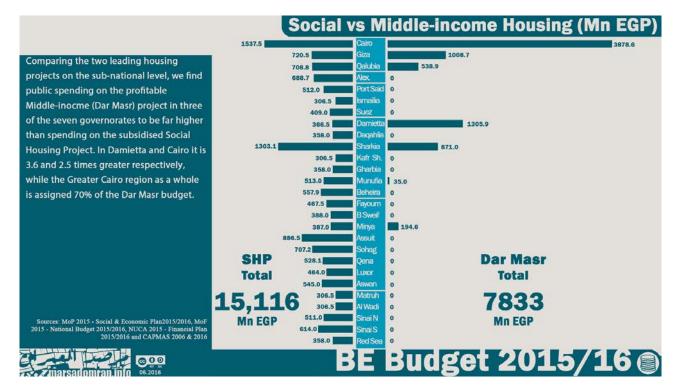


Fig. 16: Local spending on the Social Housing Project vs the Middle-income Housing Project

4.4 Water

Total Sub-national Spending on Water

Public spending on drinking water treatment stations and networks totalled 5.3 Bn EGP. This translates to a total per capita share of 58 EGP per person (Table 18).

Table 18: Total and per capita expenditure on water by adminis
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	Existing BE	New Cities	Total
Investments	2,671,717,000	2,591,087,000	5,262,804,000
('000s EGP)	50.8%	49.2%	100%
Per Capita (EGP/pax)	30	1352	58

Per capita spending in the Frontier governorates was highest, ranging from a low of 64 EGP per person in North Sinai (just above average) to a national high of 1397 in Matruh, (about 24 times the national average) (fig. 17). Spending in the Greater Cairo region was all just above average and mostly below or even well below average for all the other regions. Some exceptions to this are Sharkia and Damietta in the Delta, Ismailia in the Canal zone, and Sohag in Upper Egypt.

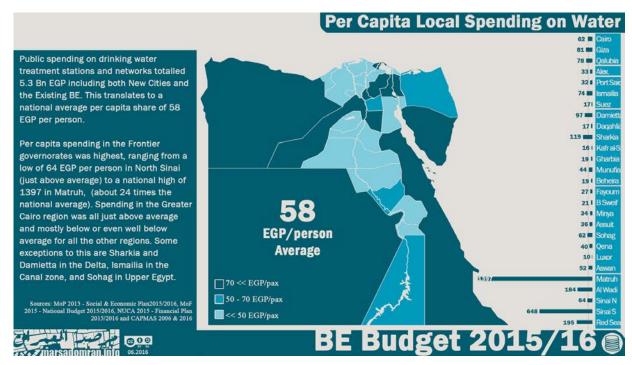


Fig. 17: Total local per capita spending on water

Sub-national Spending on Water in the Existing BE

When isolated, spending on the Existing BE, which was almost identical to spending on New Cities, translated to 30 EGP per person for the latter (fig. 18). For the Existing BE, the Frontier governorates still had the highest spending, though with South Sinai receiving the highest per capita rate at 648 EGP per person. In Greater Cairo spending was almost half the national average for the Existing BE (30 EGP per person), for Cairo and Giza, though almost double that for Qalubia. Spending was mostly below average in the Delta except in Damietta and Munufia, as well as in Upper Egypt, except for Assuit and Sohag.

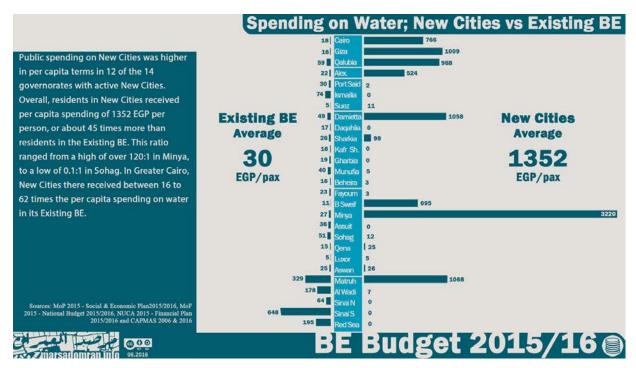


Fig. 18: Per capita spending on water in New Cities and the Existing BE

Sub-national Spending on Water in New Cities

Minya had the highest per capita share of all the New Cities at 3220 EGP per person (fig. 18). The rest of New Cities in Upper Egypt received well below average spending. Greater Cairo received around average spending, while Damietta led the Delta at around average. Sharkia, Munufia and Beheria were well below average. New Burg al-'Arab in Alexandria received half the average, while New Alamien in its first year of construction brought per capita spending in Matruh to 1068 EGP per person, or around average. This is a stark contrast to the other New Cities still under construction in Port Said, Suez, and al-Wadi al-Gadid. Each of these has a per capita spending of between 2 and 11 EGP per person, or well below average.

Spending on Water; The Existing BE vs New Cities

Public spending on New Cities was higher in per capita terms in 12 of the 14 governorates with active New Cities (fig. 18). Overall, residents in New Cities received per capita spending of 1352 EGP per person, or about 45 times more than residents in the Existing BE. This ratio ranged from a high of over 120:1 in Minya, to a low of 0.1:1 in Sohag. In Greater Cairo, New Cities there received between 16 to 62 times the per capita spending on water in its Existing BE.

4.5 Waste-water

Total Sub-national Spending on Waste-water

Public spending on waste-water treatment stations and networks totalled 9.9 Bn EGP. This translates to a per capita spending of 109 EGP per person (Table 19). With a little over half the budget, per capita spending in New Cities was 2664 EGP per person, or about 24 times the national average. In contrast, per capita spending in the Existing BE was 54 EGP per person, or about half the national average.

	Existing BE	New Cities	Total
Investments	4,753,132,000	5,107,087,000	9,860,219,000
('000s EGP)	48.2%	51.8%	100%
Per Capita (EGP/pax)	54	2664	109

Table 19: Total and per capita local spending on waste-water by administration

Combining spending on both New Cities and the Existing BE at the local level, Matruh led the Frontier governorates with the highest local per capita spending of 1882 EGP per person, or about 18 times the national average (fig. 19). The rest of the Frontier governorates were mostly above average, except for North Sinai at a third of the national average. Suez received the second highest per capita spending at 309 EGP, or about three times the average, with the two other Canal zone governorates just below average. Cairo had the third highest per capita spending, leading the Greater Cairo region, with both Qalubia and Giza receiving slightly higher than average spending at 138 and 114 EGP per person respectively. Alexandria received almost 1.5 times the average per capita spending. All the Delta governorates, except Damietta, Sharkia and Munufia (all with New Cities), received half the average spending or less. Again, the Upper Egypt governorates received well below average spending, except Aswan at 1.5 times the average.

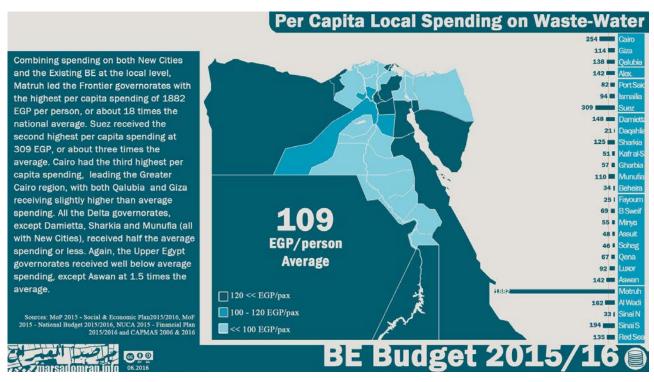


Fig. 19: Total per capita spending on waste water

Sub-national Spending on Waste-water in the Existing BE

Isolating spending on the Existing BE halves the sub-national per capita average to 54 EGP per person. Matruh still has the highest sub-national per capita spending at 387 EGP per person, with the rest of the Frontier governorates much higher than average, except North Sinai at 33 EGP per person, which is below average (fig. 20). Suez remained second at 225 EGP per person (about four times the average), with the two other Canal zone governorates almost double the average. Spending in Greater Cairo's Existing BE drops significantly when the New Cities are excluded. Thus, Qalubia receives 1.2 times the average, and Cairo and Giza just less than average. Two Delta governorates received higher than average spending, another two around average, and the remaining three less than average. Upper Egyptian governorates received below average spending, with only Beni Sweif receiving near average spending at 55 EGP per person, and Aswan twice the average.

Sub-national Spending on Waste-water in New Cities

Average per capita spending in New Cities was 2664 EGP per person (fig. 20). Minya had the highest per capita spending at 9788 EGP per person, or over three times the New Cities average. The other New Cities in Upper Egypt received far below the average spending. New Burg al-'Arab received the second highest per capita spending. New Cities in Cairo were third, and the other two Greater Cairo governorates received less than half the average. Delta New Cities all received well below average spending on waste-water.

Spending on Waste-water; The Existing BE vs New Cities

Public spending on waste-water projects in New Cities was higher in per capita terms in 9 of the 14 governorates with active New Cities (fig. 20). Overall, residents in New Cities received per capita spending of 2664 EGP per person, or about 49 times more than residents in the Existing BE. This ratio ranged from a high of 294:1 in Minya, to a low of 0.1:1 in Fayoum. In Greater Cairo, New Cities there received between 5.5 to 76.5 times the per capita spending on waste-water in its Existing BE.

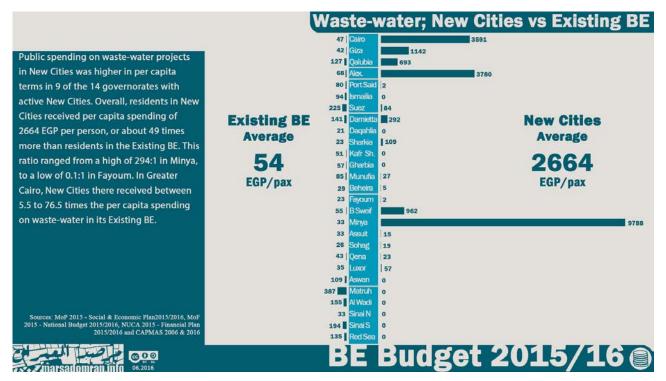


Fig. 20: Local per capita spending on waste-water; New Cities versus the Existing BE

4.6 Urban Development

Total Sub-national Spending on Urban Development

While total spending on Urban Development was 6.6 Bn EGP, three quarters of that spending was for one New City in Cairo; the New Administrative Capital (Table 20). The rest was for urban renewal, slum clearance and upgrading housing and infrastructure in poor urban neighbourhoods and villages in 23 governorates.

Two projects made up 90% of urban development spending in the Existing BE: the Neediest Villages Programme's infrastructure upgrading scheme accounted for 47% of the urban development budget, while the National Programme to Upgrade Unsafe Areas(Urban Renewal) accounted for 43% of that budget. The rest were spent on so-called comprehensive development projects, mostly in the Red Sea and Sinai.

	Neediest Villages	Urban Renewal		Comprehensive Urban Dev. Capital		Per Capita	
Ī	EGP	EGP	EGP	EGP	EGP	EGP/pax	
Existing	748,042,000	685,840,000	160,000,000	0	1,593,882,000	10	
BE	46.9%	43.0%	10.0%	0.0%	24.2%	18	
New	0	0	0	5,000,000,000	5,000,000,000	2000	
Cities	0.0%	0.0%	0.0%	100.0%	75.8%	2608	
Tatal	748,042,000	685,840,000	160,000,000	5,000,000,000	6,593,882,000	70	
Total	11.3%	10.4%	2.4%	75.8%	100.0%	73	

Table 20: Spending on Urban Development projects by project and administration

Sub-National Spending on Urban Renewal

The National Programme to Upgrade Unsafe Areas was the only one of the programmes to be implemented in a large number of governorates, as well as provide sub-national budgets for those governorates. With a national per capita of 8 EGP per person it has the lowest per capita spending of any of the BE programmes. Per capita spending varied greatly between the regions, with the Frontier region's Red Sea receiving the highest per capita share at 429 EGP per person (fig. 21). This was followed by Wadi al-Gadid at 229 EGP per person. The Canal Zone had the third highest spending, with Port Said receiving 109 EGP per person. In relative terms, spending in Greater Cairo was low, with Cairo receiving 20 EGP per person, even though it received the highest absolute funding of any governorate at 177 Mn EGP. Meanwhile, in Giza spending was one EGP per person. Qalubia received no funding.²² Only two governorates in the Delta, and four in Upper Egypt, received any funding for upgrading. All were below average except for Beni Sweif.



Fig. 21: Per capita spending on Urban Renewal by governorate

It is worth mentioning that Cairo governorate's slum clearance and urban upgrading programmes received funding more than the grand total of the ISDF's budget for all of Egypt, through the Tahya Masr Fund (One Bn EGP), the Cairo Governorate's Services' Fund (Around 200 Mn EGP), and the large charity Ma'an (Around 300 Mn EGP), this despite the fact that they are not part of this analysis for the reasons outlined in the Methodology Section **1.1 Built Environment Sectors & Data**

5. Conclusions and Recommendations

There are two main conclusions that can be drawn from the analysis of the Built Environment Budget for FY 2015/16. The first is the stark administrative inconsistency in investing in and managing the built environment. The work of 12 national agencies in four ministries, 2 sub-national agencies and 27 governorates largely overlaps, while the strict duality between New Cities and the Existing BE has created an exclusivity of urban development that ignores the local needs.

The other main conclusion is that information on the budget has been both extremely hard to gather, and very time consuming to analyse. Over 30 documents and almost one hundred tables from three main data sources were digitised and analysed. Sub-national spending was also not publicly available for most sectors. This is a regression from previous years, which required a special request to the Ministry of Planning to acquire the information.

5.1 Spatial In-equality of Sectoral Spending in the Existing BE

On the local Existing BE level, our analysis has shown a wide spectrum of per capita spending in each governorate and in each sector. The Frontier region received the highest per capita expenditure in all six sectors (Table 21). This is partially explained by their far below average population sizes. The tourism-oriented South Sinai received the most spending per capita in four out of the six sectors. In contrast, in neighbouring North Sinai, which has been the scene of armed conflict, investments ranged from above average to below average.

The Suez Canal region came second overall in per capita spending, with generally above average per capita spending throughout. Port Said led the region in two out of the six sectors, Suez received high above average spending in two sectors, and Ismailia in one.

Greater Cairo was third among the regions in per capita spending, and spending was generally below average. Qalubia led the region in two out of the six sectors, though with below average spending in the other four. Cairo received far above average spending on Transport, coming in second overall, below South Sinai. Giza received consistently below average spending in all six sectors.

Upper Egypt came in fourth with an overall per capita spending of 35% the national average as most per capita spending was below and well below average across the sectors. There was a large disparity within the region. Both Aswan and Luxor, the two tourism oriented governorates, received the highest per capita spending among the region in two sectors each. Spending on Social Housing and Water in Aswan was twice the national average. Fayoum, Minya and Qena all received less than average spending in five out of the six sectors.

Alexandria, an urban governorate and Egypt's second largest city, surprisingly came in next to last amongst the regions in per capita spending, with consistently below average per capita spending across all six sectors.

The Delta was the region with the least per capita spending at 29% of the average overall per capita share. There was some regional disparity as Damietta, a largely urban governorate and port city received the highest per capita spending in four out of the six sectors. In three of those, spending was

high above the national average. Munfia was a distant second with average to above average spending in three out of the six sectors. In contrast, spending was below or well below average in the remaining five Delta governorates.

				E	xisting BE			
Regions	Governorates	Electricity	Transport	Social Housing	Waste- water	Water	Urban Develop.	Average
a .	Cairo	4	487	71	47	18	27	109
Grater Cairo	Giza	4	62	49	42	16	1	29
cano	Qalubia	3	24	100	127	59	0	52
Alex.	Alexandria	2	66	96	68	22	7	44
	Port Said	25	114	755	80	30	104	185
Suez Canal	Ismailia	20	40	268	94	74	10	84
Canar	Suez	40	16	644	225	5	7	156
	Damietta	5	34	237	141	49	0	78
	Daqahlia	3	22	59	21	17	0	20
	Sharkia	1	40	53	23	26	0	24
Delta	Kafr al-Sheikh	3	55	94	51	16	7	38
	Gharbia	3	16	74	57	19	2	29
	Munfia	4	16	129	85	40	0	46
	Beheira	1	11	91	29	16	0	25
	Fayoum	6	22	140	23	23	0	36
	Beni Sweif	8	24	124	55	11	10	39
	Minya	6	16	59	33	27	16	26
Upper	Assiut	13	26	107	33	36	3	36
Egypt	Sohag	5	33	97	26	51	7	37
	Qena	10	20	100	43	15	4	32
	Luxor	10	149	262	35	5	1	77
	Aswan	16	36	278	109	25	11	79
	Matruh	141	367	667	387	329	76	328
	Wadi al- Gadid	85	208	1,399	155	178	230	376
Frontier	Sinai N	74	247	1,233	33	64	224	313
	Sinai S	164	588	3,716	194	648	27	889
	Red Sea	0	235	1,177	135	195	430	362
Α	verage	7	85	128	54	30	18	54

Table 21: Per capita spending in the Existing BE by sector and governorate

5.2 Spatial Inequality of Sectoral Spending in New Cities

There was regional disparity in per capita spending on New Cities. A single city, New Alamein in Matruh, raised the Frontier governorates to the top of the six regions (Table 22). That is despite very modest spending in Wadi al-Gadid and no New City programmes in the remaining three Frontier governorates. Overall, Matruh received the highest per capita spending amongst all the governorates in four out of the six sectors, with no spending on Social Housing or Urban Development.

Greater Cairo received the second highest per capita spending. Were it not for the anomaly of high spending on New Alamein, it would have been NUCA's top region by far, at 2.6 times higher per capita spending than the next region down (Alexandria). Cairo itself led spending in five out of the six sectors, and had the most and only spending on Urban Development: a lump sum designated to the New Administrative Capital. Giza was second with around average spending and at a mere 30% of the spending on Cairo, while Qalubia received consistently below average spending across the sectors at barely 10% of Cairo spending.

Alexandria had the third highest per capita investments, all in one city, New Borg al-'Arab, though generally below average across the sectors.

The Delta came fourth in per capita investments. This, even though it is home to five New Cities in four of its seven governorates. Sharkia was top of the region overall, leading in four out of six sectors regionally, and in one sector, Social Housing, nationally. Overall per capita spending in Sharkia was 2.7 times higher than the next governorate down, Damietta, and a full 32.5 times more than the governorate with the least per capita spending in the region and nationally, Beheira.

Upper Egypt trailed the Delta by a small margin, despite the fact that all its eight governorates are home to 11 New Cities, including three of which are still under construction. Aswan received the highest per capita spending by far, and led in three out of the six sectors. Luxor was a very close second, while Beni Sweif and Fayoum trailed the region. The latter received 6% of the per capita share of Aswan.

The Suez Canal region understandably had the least per capita spending as it is the first year of construction for East Port Said and North Suez, in Port Said and Suez respectively.

					New Cities			
Regions	Governorates	Electricity	Transport	Social Housing	Waste- water	Water	Urban Develop.	Average
<u> </u>	Cairo	76	76	98	210	45	530	172
Grater Cairo	Giza	47	65	49	74	66	0	50
cuiro	Qalubia	10	18	38	14	20	0	17
Alex.	Alexandria	26	20	46	76	11	0	30
	Port Said	1	1	0	2	2	0	1
Suez Canal	Ismailia	_	-	-	-	-	-	-
Cantar	Suez	12	8	0	84	11	0	19
	Damietta	12	23	44	14	50	0	24
	Daqahlia	-	-	-	-	I	_	_
	Sharkia	26	23	146	103	94	0	65
Delta	Kafr al-Sheikh	1	Ι	Ι	Ι	Ι	_	_
	Gharbia	-	-	-	-	I	_	_
	Munfia	9	69	0	26	5	0	18
	Beheira	0	1	4	5	3	0	2
	Fayoum	6	5	2	2	3	0	3
	Beni Sweif	9	12	10	15	11	0	9
	Minya	3	13	15	21	7	0	10
Upper	Assiut	17	30	98	15	0	0	27
Egypt	Sohag	14	17	52	19	12	0	19
	Qena	8	32	71	23	25	0	27
	Luxor	60	15	134	57	5	0	45
	Aswan	68	50	127	33	26	0	51
	Matruh	1,068	639	0	1,495	1,068	0	712
_	Wadi al- Gadid	4	4	0	7	7	0	4
Frontier	Sinai N	_	Ι	-	Ι	Ι	_	_
	Sinai S	_	-	-	-	-	_	-
	Red Sea	_	_	_	_	_	_	_
Α	verage	74	56	47	115	74	26	65

Table 22: Per capita spending in New Cities by sector and governorate

5.3 Recommendations

Administrative Restructuring towards Equitable and Needs-based Sub-national Investment

The spatial inequality revealed through the BE Budget for FY 2015/16 on both the regional and sub-regional levels, as well as across the dual administrative structures governing the Existing BE and New Cities, can only be addressed through massive administrative restructuring. Overall, none of these agencies implements projects directly. Their primary role is in coordinating and overseeing public or private specialised contractors. Therefore it is recommended that:

1. Short Term Solutions: Local Plans & Improved Transparency

• Draw a yearly, comprehensive and needs-based socio-economic plan for each governorate

- Improve budget transparency and accessibility by releasing budget data by programme and disaggregated by governorate and city/village three months prior to FY
- Releasing Final Accounts data for each agency within three months of end of FY

2. Medium to Long Term Solutions: Administrative Restructuring

- Central Government ministries should play a strictly monitoring vis-avis the national, regional and sub-national agencies' performance, as well as governing standards and overseeing regional and sub-regional equity.
- National agencies in charge of regionally shared services such as rail-roads, regional highways, power stations and the national electricity grid should continue to operate that way (ENR and EEHC). Those that engage in both regional and local operations should be restructured to operate on one level or the other, but not both (CAC and GARBaLT).
- National agencies with strictly local operations should be redrawn across geographic rather than sectoral lines. Sub-national investments in all six sectors should be merged into five or six regional agencies with 27 local branches in order to streamline planning and implementation.
- The duality between New Cities and the Existing BE should also be merged at the local level to balance investments between needs based investment and real estate investments. These can then cross subsidise and support each other in a local and transparent manner.

Appendices

Appendix 1: Per capita expenditure on local projects for the total BE (New Cities & Existing BE) by governorate and sector (EGP/person)

					Total BE			
Regions	Gov	Electricity	Transport	Social Housing	Waste- water	Water	Urban Develop.	Average
	Cairo	80	534	163	254	62	555	274
Grater Cairo	Giza	51	123	93	114	81	1	77
cuiro	Qalubia	12	42	136	138	78	0	68
Alex.	Alexandria	28	85	141	142	33	7	73
_	Port Said	26	115	755	82	32	104	186
Suez Canal	Ismailia	20	40	253	94	74	10	82
Canar	Suez	52	24	642	309	17	7	175
	Damietta	16	55	270	148	97	0	98
	Daqahlia	3	22	59	21	17	0	20
	Sharkia	27	61	196	125	119	0	88
Delta	Kafr al- Sheikh	3	55	94	51	16	7	38
	Gharbia	3	16	74	57	19	2	29
	Munfia	13	85	127	110	44	0	63
	Beheira	1	12	94	34	19	0	27
	Fayoum	12	27	143	25	27	0	39
	Beni Sweif	16	35	132	69	21	10	47
	Minya	8	30	73	55	34	16	36
Upper	Assiut	30	57	203	48	36	3	63
Egypt	Sohag	19	50	149	46	62	7	56
	Qena	18	52	169	67	40	4	58
	Luxor	71	164	395	92	10	1	122
	Aswan	85	86	372	142	52	11	124
	Matruh	1,209	1,005	655	1,882	1,397	76	1,037
	Wadi al- Gadid	90	213	1,329	162	184	230	368
Frontier	Sinai N	74	247	1,146	33	64	224	298
	Sinai S	164	588	3,616	194	648	27	873
	Red Sea	0	235	1,011	135	195	430	334
Av	erage	314	284	172	109	58	73	168

Appendix 2: Per capita expenditure on local projects for the Existing BE by governorate and sector (EGP/person)

				E	xisting BE		I	
Regions	Gov	Electricity	Transport	Social Housing	Waste- water	Water	Urban Develop.	Average
•	Cairo	4	487	71	47	18	27	109
Grater Cairo	Giza	4	62	49	42	16	1	29
	Qalubia	3	24	100	127	59	0	52
Alex.	Alexandria	2	66	96	68	22	7	44
	Port Said	25	114	755	80	30	104	185
Suez Canal	Ismailia	20	40	268	94	74	10	84
00115	Suez	40	16	644	225	5	7	156
	Damietta	5	34	237	141	49	0	78
	Daqahlia	3	22	59	21	17	0	20
	Sharkia	1	40	53	23	26	0	24
Delta	Kafr al- Sheikh	3	55	94	51	16	7	38
	Gharbia	3	16	74	57	19	2	29
	Munfia	4	16	129	85	40	0	46
	Beheira	1	11	91	29	16	0	25
	Fayoum	6	22	140	23	23	0	36
	Beni Sweif	8	24	124	55	11	10	39
	Minya	6	16	59	33	27	16	26
Upper	Assiut	13	26	107	33	36	3	36
Egypt	Sohag	5	33	97	26	51	7	37
	Qena	10	20	100	43	15	4	32
	Luxor	10	149	262	35	5	1	77
	Aswan	16	36	278	109	25	11	79
	Matruh	141	367	667	387	329	76	328
	Wadi al- Gadid	85	208	1,399	155	178	230	376
Frontier	Sinai N	74	247	1,233	33	64	224	313
	Sinai S	164	588	3,716	194	648	27	889
	Red Sea	0	235	1,177	135	195	430	362
Av	erage	7	85	128	54	30	18	54

				Ν	lew Cities			
Regions	Gov	Electricity	Transport	Social Housing	Waste- water	Water	Urban Develop.	Average
	Cairo	76	76	98	210	45	530	172
Grater Cairo	Giza	47	65	49	74	66	0	50
cano	Qalubia	10	18	38	14	20	0	17
Alex.	Alexandria	26	20	46	76	11	0	30
	Port Said	1	1	0	2	2	0	1
Suez Canal	Ismailia	_	-	_	-	I	_	_
Cultur	Suez	12	8	0	84	11	0	19
	Damietta	12	23	44	14	50	0	24
	Daqahlia	_	-	_	-	I	_	_
	Sharkia	26	23	146	103	94	0	65
Delta	Kafr al- Sheikh	_	_	_	_	-	_	-
	Gharbia	_	_	_	_		_	_
	Munfia	9	69	0	26	5	0	18
	Beheira	0	1	4	5	3	0	2
	Fayoum	6	5	2	2	3	0	3
	Beni Sweif	9	12	10	15	11	0	9
	Minya	3	13	15	21	7	0	10
Upper	Assiut	17	30	98	15	0	0	27
Egypt	Sohag	14	17	52	19	12	0	19
	Qena	8	32	71	23	25	0	27
	Luxor	60	15	134	57	5	0	45
	Aswan	68	50	127	33	26	0	51
	Matruh	1,068	639	0	1,495	1,068	0	712
_	Wadi al- Gadid	4	4	0	7	7	0	4
Frontier	Sinai N	_	-	-	-	_	_	-
	Sinai S	_	-	-	-	_	_	-
	Red Sea	_	_	_	_		_	_
Av	erage	74	56	47	115	74	26	65

Appendix 3: Per capita expenditure on local projects for New Cities by governorate and sector (EGP/person)

Appendix 4: Local and Regional (not sub-nationally allocated) investments in the Total BE (Existing BE & New Cities) by sector and governorate ('000s EGP)

					Total BE			
Regions	Governorates	Electricity	Transport	Housing	Waste- water	Water	Urban Develop.	Total
Custon	Cairo	754,842	5,039,987	5,432,122	2,395,747	580,907	5,237,290	19,440,895
Grater Cairo	Giza	394,784	952,286	1,749,230	883,967	628,810	7,043	4,616,120
	Qalubia	64,727	218,436	1,247,742	720,752	405,635	0	2,657,292
Alex.	Alexandria	136,047	418,094	688,726	696,491	159,500	35,876	2,134,734
_	Port Said	17,724	78,197	512,000	55,877	21,996	70,788	756,582
Suez Canal	Ismailia	24,453	48,626	324,500	113,376	90,065	12,240	613,260
Callal	Suez	32,993	15,300	410,000	196,734	10,593	4,602	670,222
	Damietta	22,252	75,197	1,672,400	201,195	131,632	201	2,102,877
	Daqahlia	19,016	131,289	358,000	125,000	105,200	2,048	740,553
	Sharkia	181,707	404,844	2,174,170	827,370	788,664	1,500	4,378,255
Delta	Kafr al-Sheikh	10,368	177,943	306,500	167,100	53,500	23,584	738,995
	Gharbia	15,331	77,362	358,000	277,290	92,510	10,305	830,798
	Munfia	53,766	341,873	548,000	444,862	177,788	0	1,566,289
	Beheira	7,160	70,336	557,899	203,600	115,500	0	954,495
	Fayoum	39,069	89,696	467,500	80,936	88,000	0	765,201
	Beni Sweif	48,151	104,399	388,000	203,487	62,391	30,110	836,538
	Minya	43,171	156,990	585,600	290,250	178,550	87,297	1,341,858
Upper	Assiut	133,087	246,854	891,500	211,000	157,600	11,461	1,651,502
Egypt	Sohag	90,137	237,213	707,200	216,575	295,778	33,577	1,580,480
	Qena	56,735	162,775	533,136	208,503	125,897	11,242	1,098,288
	Luxor	82,895	192,194	464,000	107,897	12,153	908	860,047
	Aswan	123,962	125,875	595,000	208,160	76,150	15,961	1,145,108
	Matruh	566,234	470,743	312,500	881,000	654,000	35,776	2,920,253
	Wadi al-Gadid	20,710	49,050	322,500	37,300	42,500	53,068	525,128
Frontier	Sinai N	32,879	110,255	549,500	14,800	28,485	100,000	835,919
	Sinai S	27,804	99,932	631,000	32,950	110,000	4,526	906,212
	Red Sea	0	83,263	417,000	48,000	69,000	152,429	769,692
Sub Total		3,000,004	10,179,009	23,203,725	9,850,219	5,262,804	5,941,834	57,437,595
Not sub-n	at. allocated	25,303,400	15,379,800	103,500	10,000	0	653,000	41,449,700
Total		28,303,404	25,558,809	23,307,225	9,860,219	5,262,804	6,594,834	98,887,295

					Existing BE			
Regions	Governorates	Electricity	Transport	Housing	Waste- water	Water	Urban Develop.	TOTAL
Custou	Cairo	33,862	4,326,842	629,000	417,470	159,000	237,290	5,803,464
Grater Cairo	Giza	32,609	446,894	357,500	305,843	118,000	7,043	1,267,889
Cano	Qalubia	14,633	124,608	512,000	646,252	301,635	0	1,599,128
Alex.	Alexandria	8,097	319,345	461,000	324,900	108,000	35,876	1,257,218
<u> </u>	Port Said	16,724	77,197	512,000	54,377	20,496	70,788	751,582
Suez Canal	Ismailia	24,453	48,626	324,500	113,376	90,065	12,240	613,260
Callal	Suez	25,593	10,000	410,000	143,334	3,493	4,602	597,022
	Damietta	5,952	43,997	306,500	182,395	63,632	201	602,677
	Daqahlia	19,016	131,289	358,000	125,000	105,200	2,048	740,553
	Sharkia	9,227	249,544	332,000	145,347	163,463	1,500	901,081
Delta	Kafr al- Sheikh	10,368	177,943	306,500	167,100	53,500	23,584	738,995
	Gharbia	15,331	77,362	358,000	277,290	92,510	10,305	830,798
	Munfia	15,510	63,373	512,000	338,212	157,488	0	1,086,583
	Beheira	7,160	65,497	532,000	171,600	95,500	0	871,757
	Fayoum	19,361	73,556	460,500	75,936	77,000	0	706,353
	Beni Sweif	23,067	68,938	358,000	159,900	30,900	30,110	670,915
	Minya	29,671	86,990	311,000	176,250	141,050	87,297	832,258
Upper	Assiut	58,722	115,354	465,500	144,900	155,500	11,461	951,437
Egypt	Sohag	25,539	156,023	460,500	124,650	240,850	33,577	1,041,139
	Qena	30,735	61,575	312,000	136,003	48,397	11,242	599,952
	Luxor	11,895	174,694	306,500	41,047	6,153	908	541,197
	Aswan	23,962	52,725	408,000	159,400	37,400	15,961	697,448
	Matruh	66,234	171,743	312,500	181,000	154,000	35,776	921,253
	Wadi al- Gadid	19,710	48,050	322,500	35,800	41,000	53,068	520,128
Frontier	Sinai N	32,879	110,255	549,500	14,800	28,485	100,000	835,919
	Sinai S	27,804	99,932	631,000	32,950	110,000	4,526	906,212
	Red Sea	0	83,263	417,000	48,000	69,000	152,429	769,692
Sub Total		608,114	7,465,615	11,225,500	4,743,132	2,671,717	941,834	27,655,912
Not sub-r	nat. allocated	0	11,800	103,500	10,000	0	653,000	778,300
Total		608,114	7,477,415	11,329,000	4,753,132	2,671,717	1,594,834	28,434,212

Appendix 5: Local investments in the Existing BE by sector and governorate ('000s EGP)

					New Cities			
Regions	Governorates	Electricity	Transport	Housing	Waste- water	Water	Urban Develop.	Total
Custou	Cairo	720,980	713,145	4,803,122	1,978,277	421,907	5,000,000	13,637,431
Grater Cairo	Giza	362,175	505,392	1,391,730	578,124	510,810	0	3,348,231
cano	Qalubia	50,094	93,828	735,742	74,500	104,000	0	1,058,164
Alex.	Alexandria	127,950	98,749	227,726	371,591	51,500	0	877,516
	Port Said	1,000	1,000	0	1,500	1,500	0	5,000
Suez Canal	Ismailia	_	_	-	_	_	_	_
Callal	Suez	7,400	5,300	0	53,400	7,100	0	73,200
	Damietta	16,300	31,200	1,365,900	18,800	68,000	0	1,500,200
	Daqahlia	I	I	l	_	_	_	_
	Sharkia	172,480	155,300	1,842,170	682,023	625,201	0	3,477,174
Delta	Kafr al- Sheikh	_	_	_	_	_	_	_
	Gharbia	_	_	_	_	_	_	_
	Munfia	38,256	278,500	36,000	106,650	20,300	0	479,706
	Beheira	0	4,839	25,899	32,000	20,000	0	82,738
	Fayoum	19,708	16,140	7,000	5,000	11,000	0	58,848
	Beni Sweif	25,084	35,461	30,000	43,587	31,491	0	165,623
	Minya	13,500	70,000	274,600	114,000	37,500	0	509,600
Upper	Assiut	74,365	131,500	426,000	66,100	2,100	0	700,065
Egypt	Sohag	64,598	81,190	246,700	91,925	54,928	0	539,341
	Qena	26,000	101,200	221,136	72,500	77,500	0	498,336
	Luxor	71,000	17,500	157,500	66,850	6,000	0	318,850
	Aswan	100,000	73,150	187,000	48,760	38,750	0	447,660
	Matruh	500,000	299,000	0	700,000	500,000	0	1,999,000
	Wadi al-							
Frontier	Gadid	1,000	1,000	0	1,500	1,500	0	5,000
	Sinai N							
	Sinai S							
Red Sea		_	_	_	_	_	_	
Sub Total		2,391,890	2,713,394	11,978,225	5,107,087	2,591,087	5,000,000	29,781,683
-	nat. allocated	0	0	0	0	0	0	0
Total		2,391,890	2,713,394	11,978,225	5,107,087	2,591,087	5,000,000	29,781,683

Appendix 6: Local investments in New Cities by sector and governorate ('000s EGP)

Region	Gov	New City	2006 Population			
		New City	New Cities	Gov.	%	
Greater Cairo	Cairo	New Cairo	118,678			
		Shorouk	20,983			
		Badr	17,172			
		May-15	90,324		1	
		Total	247,157	8,471,859	2.9%	
	Giza	th October6	157,135			
		Sheikh Zayed	29,553		1	
		Total	186,688	5,724,545	3.3%	
	Qalubia	Obour	43,802	4,251,672	1.0%	
Alexandria	Alexandria	Borg al-'Arab	41,351	4,123,869	1.0%	
	Port Said	None	/	570,603	0.0%	
Suez Canal	Ismailia	None	/	953,006	0.0%	
	Suez	None	/	512,135	0.0%	
Delta	Damietta	New Damietta	25,944	1,097,339	2.4%	
	Daqahlia	None	/	4,989,997	0.0%	
	Kafr al- Sheikh	None	/	2,620,208	0.0%	
	Gharbia	None	/	4,011,320	0.0%	
	Beheira	New Nubaria	39,611	4,747,283	0.8%	
	Munufia	Sadat	27,781	3,270,431	0.8%	
	Sharkia	Ramadan th of10	124,120		•	
		New Salhiya	18,968			
		Total	143,088	5,354,041	2.7%	
Upper Egypt	Fayoum	New Fayoum	0	2,511,027	0.0%	
	Beni Sweif	Sweif New Beni	17,638	2,291,618	0.8%	
	Minya	New Minya	4,570	4,166,299	0.1%	
	Assuit	New Assuit	1,761	3,444,967	0.1%	
	Sohag	New Sohag	57	3,747,289	0.0%	
	Qena	قنا الجديدة	0	3,001,681	0.0%	
	Luxor	طيبة	1000	457,286	0.2%	
	Aswan	New Aswan	0	1,186,482	0.0%	
Fronteir	Matruh	None	/	323,381	0.0%	
	Wadi al- Gadid	None	/	187,263	0.0%	
	Red Sea	None	/	288,661	0.0%	
	Sinai N	None	/	343,681	0.0%	
	Sinai S	None	/	150,088	0.0%	
Total			, 780,391	72,798,031	1.1%	

Appendix 7: Governorate, Existing BE and New City Populations in 2006²³

²³ CAPMAS 2016, Egypt in Numbers, Population (as of January 1st 2016. New City populations were projected from 2006 census data (see Appendix 7) by calculating their proportion of the governorate population and then doubling it to reflect their higher than average growth rate.

Region	Gov	Egypt*	Existing BE**	New Cities***		
		Count	Count	Count	2006 % of Gov	2016 % of Gov
Grater Cairo	Cairo	9,440,374	8,889,549	550,825	2.9%	5.8%
	Giza	7,762,792	7,256,474	506,318	3.3%	6.5%
	Qalubia	5,215,446	5,107,984	107,462	1.0%	2.1%
Alex.	Alexandria	4,901,910	4,803,605	98,305	1.0%	2.0%
Suez Canal	Port Said	678,564	678,564	0	0.0%	0.0%
	Ismailia	1,209,663	1,209,663	0	0.0%	0.0%
	Suez	636,841	636,841	0	0.0%	0.0%
Delta	Damietta	1,359,643	1,295,352	64,291	2.4%	4.7%
	Daqahlia	6,074,446	6,074,446	0	0.0%	0.0%
	Sharkia	6,640,664	6,285,717	354,947	2.7%	5.3%
	Kafr al-Sheikh	3,249,268	3,249,268	0	0.0%	0.0%
	Gharbia	4,852,968	4,852,968	0	0.0%	0.0%
	Munfia	4,035,137	3,966,583	68,554	0.8%	1.7%
	Beheira	5,959,050	5,859,606	99,444	0.8%	1.7%
Upper Egypt	Fayoum	3,280,103	3,280,103	0	0.0%	0.0%
	Beni Sweif	2,943,740	2,898,426	45,314	0.8%	1.5%
	Minya	5,309,254	5,297,607	11,647	0.1%	0.2%
	Assiut	4,364,111	4,359,649	4,462	0.1%	0.1%
	Sohag	4,734,676	4,734,532	144	0.0%	0.0%
	Qena	3,128,194	3,128,194	0	0.0%	0.0%
	Luxor	1,173,753	1,168,619	5,134	0.2%	0.4%
	Aswan	1,466,965	1,466,965	0	0.0%	0.0%
Frontier	Matruh	468,218	468,218	0	0.0%	0.0%
	Wadi al-Gadid	230,591	230,591	0	0.0%	0.0%
	Sinai N	445,811	445,811	0	0.0%	0.0%
	Sinai S	169,822	169,822	0	0.0%	0.0%
	Red Sea	354,263	354,263	0	0.0%	0.0%
Total		90,086,267	88,169,421	1,916,846		

Appendix 8: Governorate, Existing BE and New City Populations in 2016²⁴

²⁴ CAPMAS 2016, Egypt in Numbers, Population (as of January 1st 2016. New City populations were projected from 2006 census data (see Appendix 7) by calculating their proportion of the governorate population and then doubling it to reflect their higher than average growth rate.

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