

# The comprehensive development plan for the city of Luxor

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## Abstract

This paper reviews the principles that guided the Comprehensive Development Plan for the City of Luxor (CDCL), the growth targets for the region, site-specific development proposals, the six Investment Projects, employment opportunities, and the region-wide recommended initiatives.

## Introduction

The purpose of the CDCL was to recommend strategies for Luxor that would address:

- Preservation and protection of the unique antiquity settings, cultural resources, and heritage of the Luxor region
- Expanding opportunities for tourist and visitor activities
- A regional development strategy that will create new economic opportunities for the citizens of the region
- Planned regional growth to promote sustainable economic development by preventing further urban sprawl and the deleterious effects of unplanned development on Luxor's heritage

The need for the project was prompted by increasing numbers of tourist visitors to Luxor. In the tombs, their presence has become detrimental to the quality and preservation of the paintings. In the temples, their increasing number and the virtual lack of any effective crowd management means waiting and jostling, elements that detract from the cultural experience. At the same time, the virtual absence of facilities for other tourist activities locally means very short stays in the area, lessening both the benefits to the local economy and the flexibility in scheduling visits to the cultural sites. The increasing number of tourists visiting Luxor has also provided the impetus for accelerated growth in Luxor and its surrounding areas. Growth pressures in turn have resulted in encroachments on the tombs and monument areas, thereby jeopardizing the

cultural heritage and impairing their value as a tourist attraction. Additionally, regional growth pressures threaten productive agricultural lands as an expanding population seeks space for living in a constrained environment.

To respond to these trends, the Ministry of Housing, Utilities and Urban Communities in Cairo sponsored Abt Associates Inc. to develop a 20-year comprehensive development plan for Luxor. The project was developed through an iterative process that engaged several working groups composed of representatives from public and private sectors. Several plenary meetings were convened so participants could react to work in process and assess the overall progress of the CDCL. In conjunction with the work of these groups, a “fast track” group met regularly to assess priority proposals and projects within the Luxor region to insure that these were consistent with the directions, findings, and recommendations of the overall planning effort.

The CDCL project was conceived to have three distinct types of products that would combine both long-range planning and immediate action:

The Structure Plan, which provides an overall strategy for the 20-year growth of the Luxor region, focuses on planned growth within Luxor City and several target development areas across the region. This plan encompasses strategies for how the region should grow, where population growths should be concentrated, and how growth opportunities can be addressed to meet the CDCL project objectives.

Six Investment Projects have been defined in the course of the work as the most critical elements in the overall plan that should be implemented to effect its successful outcome:

- Investment #1. Restoration of the Avenue of the Sphinxes
- Investment #2. Development of The Destination Resort of El-Toad
- Investment #3. Development of the New Community of New Luxor
- Investment #4. Infrastructure Services for New Luxor and El-Toad
- Investment #5. Establishment of High-Value Agriculture
- Investment #6. Development of the Open Museum and Heritage District in Luxor City

The Heritage Plan, which provides an inventory of the cultural heritage and story of Luxor, includes recommendations for improvements to the settings and tourist infrastructure associated with the key monument venues.

### **1.1 Development principles for a sustainable region**

- Principle 1:       Protect Luxor’s Antiquities during an Era of Tourism Growth  
Protect the sites and settings of antiquities.  
Recognize and plan for monument capacity.  
Manage the growth of tourism facilities, services, and related uses.
- Principle 2:       Direct Development in Accordance with a Regional Strategy  
Develop systems for pro-active regional growth management.  
Identify and support action areas where the region’s growth will be directed.
- Principle 3:       Conserve and Effectively Use the Region’s Resources

- Protect the region's environment.  
 Maintain and expand agricultural lands and use them productively.  
 Develop the region's human resources.
- Principle 4: Provide Economic Opportunities for Luxor's Inhabitants  
 Create jobs.  
 Offer small-scale business assistance.  
 Invest in the regional tourism industry infrastructure.  
 Expand agricultural products markets.
- Principle 5: Improve Living Conditions for Luxor Residents  
 Coordinate utility services with planned development.  
 Provide transportation facilities and services that are efficient and allow regional residents convenient access to employment, municipal services, and other urban activities across the region.  
 Provide recreation facilities and "green" spaces that can serve a growing urban population at contemporary standards.  
 Provide public and private services to areas where growth is desired, at neighborhood, district, and citywide levels.  
 Provide increased educational and training opportunities for Luxor's residents.
- Principle 6: Build the Capacity to Implement the Plan  
 Establish mechanism for high-level government coordination.  
 Secure funding for plan implementation.  
 Engage private sector participation and cooperation.  
 Create a plan implementation structure.

## 1.2 Growth targets for the region

Assumed growth for the Luxor region is based on the facilities and services needed to accommodate the natural growth resulting from new tourism and agricultural reclamation.

Table 1. Development summary

	New Luxor	El-Toad Plateau	Luxor City	Remainder of Markhaz	Total
<b>Population</b>					
Existing	0	0	175,000	185,000	360,000
Proposed, 2020	200,000	2,000	225,000	307,000	734,000
New, 1999-2020	200,000	2,000	50,000	122,000	374,000
New Thebes				35,000	
Three Villages (on East Bank)				18,000	
El Tarif				8,000	
Mrs. Mubarak Village				3,000	
Other Markhaz				58,000	
<b>New Housing Units</b>	48,077	481	12,019	29,327	89,904
<b>Hotel Rooms</b>	700	4,500	500	900	6,600
<b>Feddan of New Agricultural Land</b>				25,000	25,000

The tourism growth is assumed to be at levels that will be feasible and consistent with monument capacities. Hotel rooms to be developed are based upon the level of tourism that can be supported without exceeding the substantial capacities of the monument, taking account of the existing supply of hotel rooms and planned additions. Agricultural growth is associated with an additional 25,000 feddans (acres) of reclaimed land. Table 1 presents a summary of the key growth sectors from the Structure Plan, allocated to sub-areas in the Luxor study area.

## 2 Site-specific development proposals

### 2.1 Luxor city

Key recommendations for the Luxor City:

1. *Conservation of Heritage Resources* – Luxor and Karnak temples and their surrounding areas will be protected, and the restoration of the Avenue of the Sphinxes will be completed.
2. *Tourism Development* – The “Open Museum” will be defined, preserved, and developed to reduce density, expand open space, and attract appropriate tourist services. A new visitor and information center will be developed. Improvements within the Open Museum district, in conjunction with the excavation and restoration of the Avenue of the Sphinxes project, will enhance the character and appeal of the Corniche and traditional markets. Tourism support services will be developed near attractions, without harming heritage resources.
3. *Limited New Development* – Population growth in Luxor City will be limited to 50,000 new residents (natural growth) through 2020. Informal settlements within monument areas and along transportation corridors will be discouraged. Development will be directed to planned areas well-served by utilities and public facilities, including: (a) North Karnak area, to define city edge and protect nearby antiquity sites; (b) East Luxor area, to define city edge and coordinate with planned city growth to the south; (c) South Luxor area, to define city edge and coordinate with planned city growth to the south.
4. *Improved Circulation & Access* – The roadway systems will be improved to reflect the defined city boundaries and to reinforce the planned new growth areas of the city. New arterial roads are recommended as part of the Avenue of the Sphinxes project to relieve Corniche traffic, and along the eastern perimeter of the city. The street network will be extended to serve planned new development areas, along with improvements to appearance and function of major intersections.
5. *Enhanced Living Environment* – In conjunction with planned new development in the peripheral neighborhoods of the city, a network of open spaces and parks will be formed, including major new District Service Centers. The District Centers will contain a mix of public facilities in areas north, east, and south of the city, to serve new and existing residents. Utilities will be extended to serve planned

development neighborhoods. However, no utility expansion will be allowed within the protected area surrounding Karnak Temple.

## **2.2 New settlement zones - New Luxor**

Key recommendations for the new community of New Luxor:

1. *Location and Concept* – The community will be located east of substantial agricultural lands, insuring an attractive, green entry. Major development will be located on three elongated east-west plateaus, linked with major arterial streets. The city axis and city center, on the central plateau, will be oriented to the Theban Necropolis, which is the most characteristic landmark in the region and highly visible from this location.
2. *Neighborhoods* – Each neighborhood will accommodate 8,000-10,000 residents, with central services, minimal through-traffic, and close proximity to larger service centers.
3. *Parks and Open Spaces* – Many city parks and open spaces will be located on the valleys between the plateaus, providing an effective use of land and supporting green spaces to city activities. A greenway system will link neighborhoods to one another.
4. *Public Services* – Each neighborhood will be served by a neighborhood service center, containing primary school and day care services, a mosque, the village square, and other local services within walking distance of the neighborhood. District Service Centers will each serve three neighborhoods, containing secondary and specialized educational and other public services, as well as commercial uses, compatible workshops, and public spaces.
5. *Transportation* – Early connections with New Luxor will be achieved by upgrading existing roadways, while the long-range connection to Luxor City will be provided through a new arterial boulevard leading to the southerly edge of Luxor City.
6. *Relationship to Agricultural Lands* – The northwest corner of the city, in close proximity to agricultural lands and potential irrigation resources associated with tertiary treatment of the new wastewater plant, will be devoted to agricultural processing. This neighborhood, with nearby agro-processing industries, will provide an initial employment base and investment rationale for the City's growth.

## **2.3 New touristic activities – El-Toad Touristic Zone, the cruise ship port, and Khuzam area**

Key recommendations for the new touristic zone near El-Toad:

1. *The El-Toad Site* – The El-Toad Touristic Zone is proposed to be located outside agricultural and antiquities lands, south of the Nile River Bridge. The site includes several plateaus, separated by wadis, east of the railroad corridor. Development through the 2020 period will occur on the southern plateau, which can be strongly linked to the proposed cruise ship

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- port. A small plateau containing commoner tombs will be left undisturbed and can provide a site of interest for the development.
2. *Scale of Development at El-Toad* – Approximately 18 hotels, with 4,500 rooms, are planned for the twenty-year period. Accommodations will vary in quality and type. Attractions such as an 18-hole golf course and botanical garden are incorporated into El-Toad to broaden the types of tourism experiences possible in the Luxor Region. A visitor center with a museum interpreting regional local life customs will be located along the formal entrance boulevard to El-Toad, serving as a staging point for shuttle bus service within the El-Toad area and for tour bus traffic to regional destinations.
  3. *Relationship Between El-Toad Touristic Zone and Proposed Cruise Ship Port* – The El-Toad plan will be closely coordinated with the new cruise ship port development to create an integrated tourism zone that promotes more joint cruise-hotel stays and improved connectivity.
  4. *Transportation Linkages Between El-Toad Area and the Region* – An inter-modal transportation facility will be built at the intersection of the Cairo-Aswan Highway and the El-Toad entrance road, adjacent to the proposed new cruise ship port. The facility will become the primary transfer point between water and surface transportation in the area. A new road between El-Toad and New Luxor, east of the highway, will be developed to provide a direct connection that bypasses local area settlements. Regular shuttle bus service should be established to provide convenient access among the cruise ship port, destinations within El-Toad, and regional destinations on the East Bank and West Bank.
  5. *El Khuzam and New Thebes Related Touristic Areas* -- North of the New Thebes development is the area of Khuzam, which is a plateau with excellent views overlooking agricultural lands and the Nile. The CDCL assumes completion of New Thebes and suggests the addition of small hotel complexes to the south of New Thebes (in conjunction with the golf course) and to the north of New Thebes (to take advantage of the Khuzam site).

#### **2.4 Existing settlement expansion areas, outside of Luxor City**

Key recommendations for the planned growth of Luxor City and the surrounding urban edges are highlighted below:

1. *New Thebes Area* – New Thebes is being developed by the New Communities Authority and is intended to accommodate an eventual population of 35,000. The structure plan assumes that this planned development is completed to serve its intended population, and that related touristic and agricultural support uses may be attracted to the north and south of New Thebes.
2. *Areas to North and South of Antiquities Zone on West Bank* – Outside the delineated antiquities zones, the CDCL recommends reinforcement of existing settlements to allow modest growth in this area and to reinforce

investments and improvements that have been made in existing communities.

## 2.5 Support agricultural communities

There is a need for “central” communities that offer services not available to existing small rural communities and can support planned agricultural expansion and related business development. Each central agricultural community will include core services that will support smaller settlements in its vicinity. The proposed central support agricultural communities include:

1. *Mrs. Mubarak Village* – This community is located south of the Supreme Council of Antiquities (SCA) protected area, where significant improvements in infrastructure have already been initiated. The target population, 3,000 persons, will provide the minimum required for certain facilities (such as a primary school), in addition to demand generated by nearby smaller settlements,
2. *El-Tarif* – The village north of the Pharaonic tombs area on the West Bank which has seen significant recent investment can serve areas to the north of the SCA protected area. The target population will remain at 8,000, as originally planned, given the close proximity to the Necropolis and the adverse impacts larger communities will have.
3. *The Northwesterly Neighborhood within New Luxor* - The location of agro-industry and agro-processing facilities for high-value crops will be ideally sited in New Luxor because it is close to new major transportation (rail, air, highway) and in the likely initial development area for a new city, which will offer significant services.

## 3 Six investment projects

### 3.1 Investment #1: Restoration of the avenue of the Sphinxes

During the Pharaonic period, the Avenue of the Sphinxes connected the Temples of Luxor and Karnak, a processional avenue lined on both sides by 1,200 statues of sphinxes. Both temples were substantially completed during the New Kingdom period, over 3,000 years ago. Successive rulers altered and added to the temples; Amenhotep III built the Temple of Luxor during the 18<sup>th</sup> Dynasty, adding gardens between the Temple of Luxor and the complex of temples at Karnak. The ram-headed sphinxes lining the avenue bore his likeness. The centuries since have buried this processional avenue and its statues under 2 meters of silt and sand, and urban development covered it with housing, asphalted streets, and other structures, obscuring its route and interrupting this dramatic connection.

Over the last 50 years, portions of the Avenue of the Sphinxes (also known as Kebash Avenue) have been excavated, revealing remnants of the sphinxes and the roadbed. Short segments near each temple have been fully excavated and are now integral parts of the antiquities settings. Test excavations at segments along



the 2.4-Km avenue have verified its location and underlined its archaeological potential.

The investment project focuses on the renovation of the Avenue of the Sphinxes to improve the touristic experience, increase the vitality of the city center, and form the centerpiece of an open museum. The emphasis of the project at all times is on the accommodation of the living needs of the permanent population (mitigating the effects of congestion in a growing city center) with an active effort to increase job and entrepreneurial opportunities.

The restoration project comprises a number of major actions:

1. Purchase of land where necessary to a width of 76 meters
2. Relocation housing for the residents of over a hundred housing units on top of the Avenue of the Sphinxes
3. Phased demolition of housing, commercial buildings, and government and religious buildings intruding on the Avenue of the Sphinxes
4. Excavation to a depth of 2 meters, restoration of the sphinx statues and landscaping, and provision of visitor amenities
5. Modification of the adjacent street layout and street crossings of the Avenue of the Sphinxes

### **3.2 Investment #2: Development of the destination resort of El-Toad**

The El-Toad Tourism Zone will include both tourism accommodations and attractions with regional appeal. Commercial and recreational attractions will make El-Toad a major tourism destination, thereby promoting longer stays in the Luxor region, which will help to relieve the visitor volumes at area monuments and will increase economic opportunities for local residents. Amenities will include a golf course, theater, museum, large-scale gardens, tennis, and equestrian facilities. Concentrating hotel development in a well-planned zone will also achieve economies of scale for provision of superior amenities, maintenance, events planning and security.

The Plan for the El-Toad Tourism Zone has been developed to create a desirable area of both attractions and accommodations that serves regional tourists. Its key features include:

1. El-Toad is located outside agricultural and antiquities lands. Development on the plateau will be oriented to capture the dramatic views of the Nile River Valley and distant Necropolis.
2. Approximately 18 hotels, with 4,500 rooms are planned for the twenty-year period. Accommodations will vary in quality and type, including three, four and five star hotels and villa complexes.
3. The El-Toad plan will be coordinated with the new cruise ship port development in order to create an integrated tourism zone that promotes more joint cruise-hotel stays and improved connectivity.
4. An inter-modal transportation facility will be built at the intersection of the inter-regional highway and the El-Toad entrance road, adjacent to the new cruise ship port. The facility will become the primary transfer point between water and surface transportation in the area.



5. A visitor center with museum interpreting regional local life customs will be built along the formal entrance boulevard to El-Toad. The visitor center will also serve as a staging point for shuttle bus service within the El-Toad area and tour bus traffic to regional destinations.

### **3.3 Investment #3: Development of the new community of New Luxor**

The fast-growing Luxor region is expected to at least double in population over the next 20 years. In order to reduce development pressures on the historic Luxor City area and protect the agricultural zone from encroachment, the Egyptian Government has advocated the development of new settlements outside the existing urbanized area to absorb the majority of new inhabitants over the next 20 years. One new town, New Thebes, located 15 Kms northeast of Luxor city, has already been started. However, with the recent completion of the Luxor Bridge and the anticipated nearby expansion of a port for cruise ships south of Luxor City, informal, unplanned development will favor the southern part of the area. Unplanned development already is claiming substantial agricultural lands to the south and east of Luxor City. If a new town is not planned for in the south of Luxor City, unplanned sprawl in that part of the region is likely to result in negative consequences for the future prosperity of the region. Timely action to stem this undesirable growth is essential. An attractive new town is needed to become the magnet for new development in the Luxor region.

The new city is designed to be a pleasant place to live and work, setting a new standard for development in the Luxor region with its high-quality infrastructure, open spaces, and public facilities. With an eventual population of approximately 200,000, New Luxor has the potential to emerge as the major commercial, governmental, and residential location in the region. New Luxor's attractive urban environment for an economically diverse mix of residents will make it a magnet for new development, thereby relieving the growth pressures on Luxor City. New Luxor can become a model for the region to show how development planning can help create a high quality living environment.

The Plan for New Luxor has been developed to achieve a livable and attractive community that takes advantage of its regional setting, incorporating the following key features:

### **3.4 Investment #4: Infrastructure services for New Luxor and El-Toad**

This investment project forecasts the needs of New Luxor, the El-Toad tourism zone, and the new cruise ship port in terms of infrastructure (water, wastewater, transportation, energy, and telecommunications). It uses these demand forecasts as basis for assessing the investment needs in infrastructure facilities, focusing on opportunities in these sectors for private sector participation.

### **3.5 Investment #5: Establishment of high-value agriculture**

High-value crop production and agro-processing industries are key elements in the strategy to meet contemporary needs of Luxor residents. There is substantial

poverty in Luxor. The majority of Luxor residents depend on small agricultural plots (the average plot size is a modest 1.84 feddans) to sustain their families. These agricultural families have substantial needs to expand agricultural lands to support future generations and to increase household incomes. Reclamation of substantial lands in Luxor is essential for the growing population. Introduction of high-value agriculture and agro-processing will provide a means for farmers to improve their prospects for the futures.

### 3.6 Investment #6: Development of the open museum in Luxor City

The Luxor Open Museum and Heritage District is a cohesive and enhanced historical zone that will protect resources and accommodate additional tourists. The open museum and heritage district will encompass the area roughly defined from the souq to the Nile and between Karnak Temple and Luxor Temple. At present, this significant historical zone is being negatively impacted with ad-hoc development. There is a distinct opportunity to create a 3-Km long historical zone that will include completing the Avenue of the Sphinxes restoration and extending the restoration of Karnak Temple to include lands around it to the Nile and around the Temple of Mut. Resource protection will be coupled with arrangements for voluntary relocation of structures encroaching on monument areas and the introduction of new compatible uses within the Luxor Open Museum and Heritage District to establish a unique, extensive tourism zone.

## 4 Anticipated employment opportunities

The implementation of the six investment projects anticipates the creation of numerous employment opportunities. Table 2 summarizes these opportunities. These figures comprise both long- and short-term jobs.

Table 2 Employment Opportunity Summary

INVESTMENT PROJECTS	Employment Opportunities
Investment #1: Restoration of the Avenue of the Sphinxes	5,000
Investment #2: Development of The Destination Resort of El-Toad	18,000
Investment #3: Development of the New Community of New Luxor	58,840
Investment #4: Infrastructure Services for New Luxor and El-Toad	9,968
Investment # 5: Establishment of High-Value Agriculture	7,600
Investment #6: Creation of an Open Museum and Heritage District in Luxor City	9,710
TOTAL	109,118