

# تجديد







# Masterplan Summary

منطقة العاصمة

Capital District



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Capital District







# Mandate





HH Sheikh Khalifa bin Zayed Al Nahyan  
President of the United Arab Emirates  
Ruler of Abu Dhabi

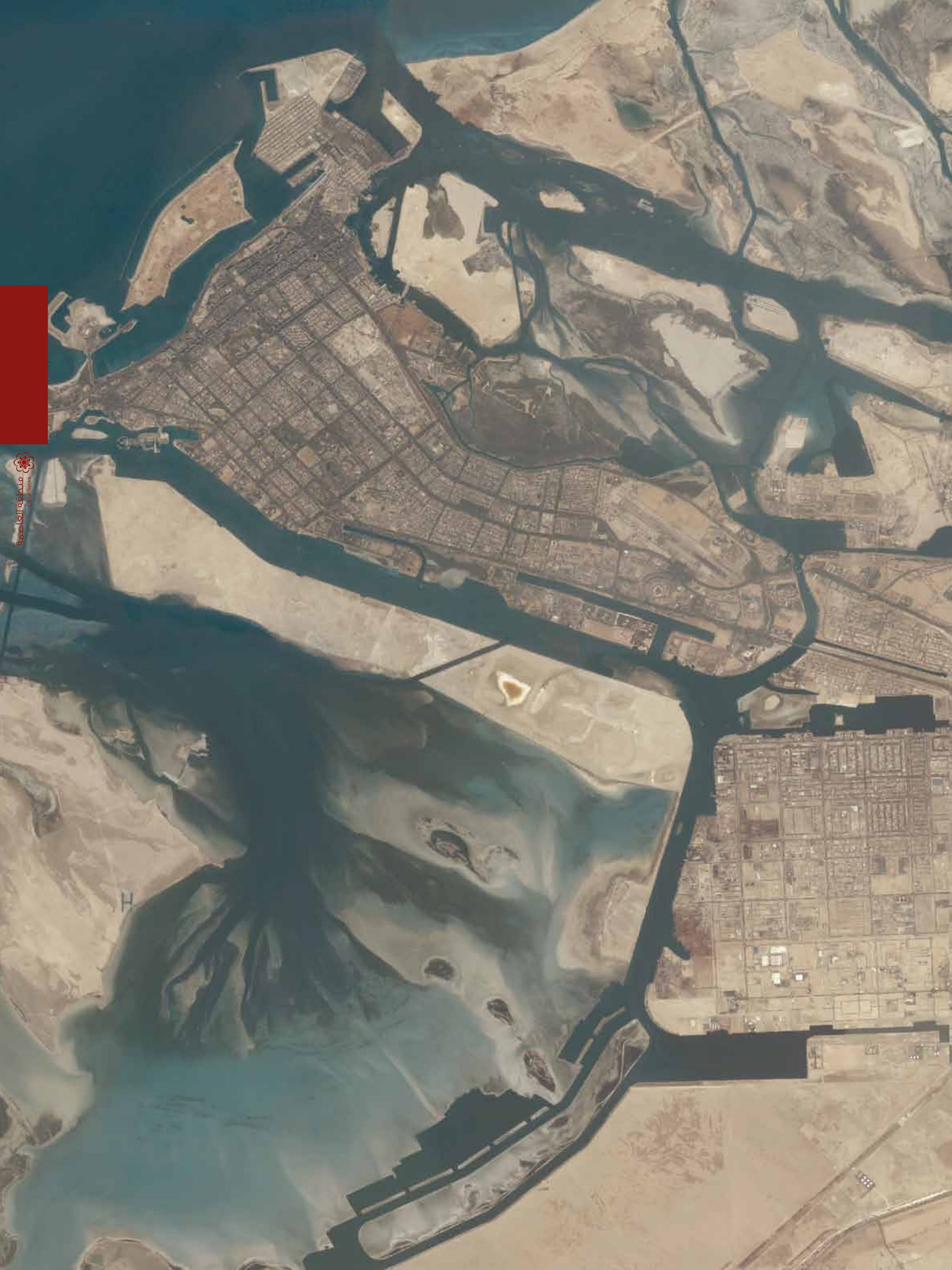
The Abu Dhabi Urban Planning Council was created by Emiri Decree number 23 of the year 2007 and is the agency responsible for the future of Abu Dhabi's urban environments, and the expert authority behind the visionary Plan Abu Dhabi 2030 Urban Structure Framework Plan published September 2007. Chaired by His Highness Sheikh Mohamed Bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Chairman of the Abu Dhabi Executive Council, the Abu Dhabi Urban Planning Council defines the shape of the Emirate, ensuring factors such as sustainability, infrastructure capacity, community planning and quality of life, by overseeing development across the city and the Emirate as a whole. The Abu Dhabi Urban Planning Council ensures best practice in planning for both new and existing urban areas.

The Abu Dhabi Urban Planning Council's primary purpose is to deliver the vision of His Highness Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE, Ruler of Abu Dhabi for the continued fulfilment of the grand design envisaged by the late Sheikh Zayed Bin Sultan Al Nahyan and the ongoing evolution of Abu Dhabi as a global capital city.



The late Sheikh Zayed bin Sultan Al Nahyan  
Founder of the United Arab Emirates.













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# Foreword



# منطقة العاصمة

Capital District





The Capital District is a key project of Plan Abu Dhabi 2030, a monumental planning initiative envisaged by the late Sheikh Zayed bin Sultan Al Nahyan to guide and promote the ongoing evolution of Abu Dhabi as a global capital city.

The Capital District Masterplan, developed by the Abu Dhabi Urban Planning Council, is designed to manage the development of the new city through a long term vision. It represents a unique opportunity to create an authentic sustainable modern Arab capital, which will shape the future of the region by defining a unique and contemporary urbanism.

At the heart of the Capital District will be a Federal Precinct, which will serve as the national seat of government for the United Arab Emirates. At the city's centre, a radial pattern of streets surrounds a central monumental space. From this point, a series of seven grand boulevards, representing the seven emirates, connect this symbolic centre with surrounding districts. Along primary boulevards and at gateways to the city, monuments and public spaces will reinforce the city's ceremonial and symbolic function. The creation of distinct districts and national institutions connected by grand boulevards, walkable streets and monumental spaces will symbolically link national government, city life and Emirati culture.

Central to the Capital District Masterplan is the commitment to create a sense of identity and community. The Masterplan aims to preserve the traditions, heritage and way of life for Emirati's, while being flexible enough to accommodate the needs of the Emirate's diverse population. Each neighbourhood will be well-served by a wide range of community services and amenities.

The Capital District will also become a centre of learning and excellence. New universities, a medical campus and biomedical research facilities offering great potential for synergies with the private sector, will all be housed here. A world-class transportation system will connect neighbourhoods within the Capital District and connect the City to the wider region. An extensive public transit network will provide a focus for high density development, alleviate traffic congestion and reduce reliance on the automobile.

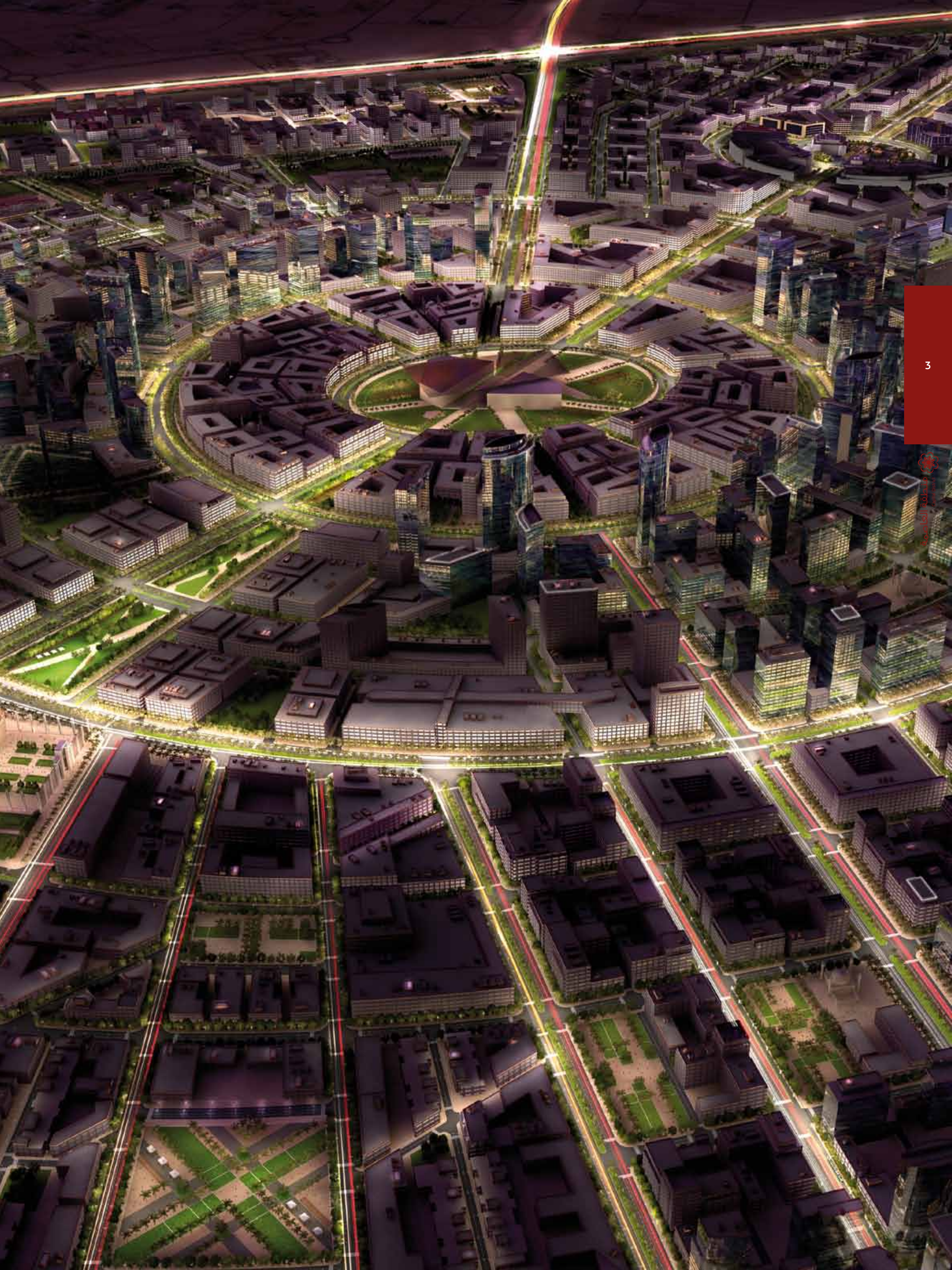
Developed over an eighteen month period between late 2007 and early 2009, the Capital District Masterplan will serve as the foundation upon which all future land use, transportation, and urban planning decisions in this new city will be made. As a road map for the future, the Masterplan establishes quantifiable targets for population, land uses, transportation and pedestrian access. It covers the location and quantity of mosques, parks, schools and utilities, as well as building and open space performance targets for meeting Estidama goals. In addition, the Masterplan describes the design intent and character of individual precincts, districts and neighbourhoods. Design considerations, such as the relationship between buildings and spaces, architectural character, and sense of place are all addressed.

The Masterplan will serve as an evolving tool to assist the UPC, government officials, and land owners to implement the Capital District in keeping with the goals and principles of Plan Abu Dhabi 2030 and its vision for creating a sustainable, world-class Capital City for the United Arab Emirates.

Our ultimate goal is to create a cohesive, contemporary and sustainable urban fabric for this new city. The Masterplan provides the clarity and direction for achieving this goal in a way that serves the various and distinctive community expectations, now and well into the future.

**H.E. Falah Al Ahabbi,**  
General Manager,  
Abu Dhabi Urban Planning Council









# Creating a Global Capital



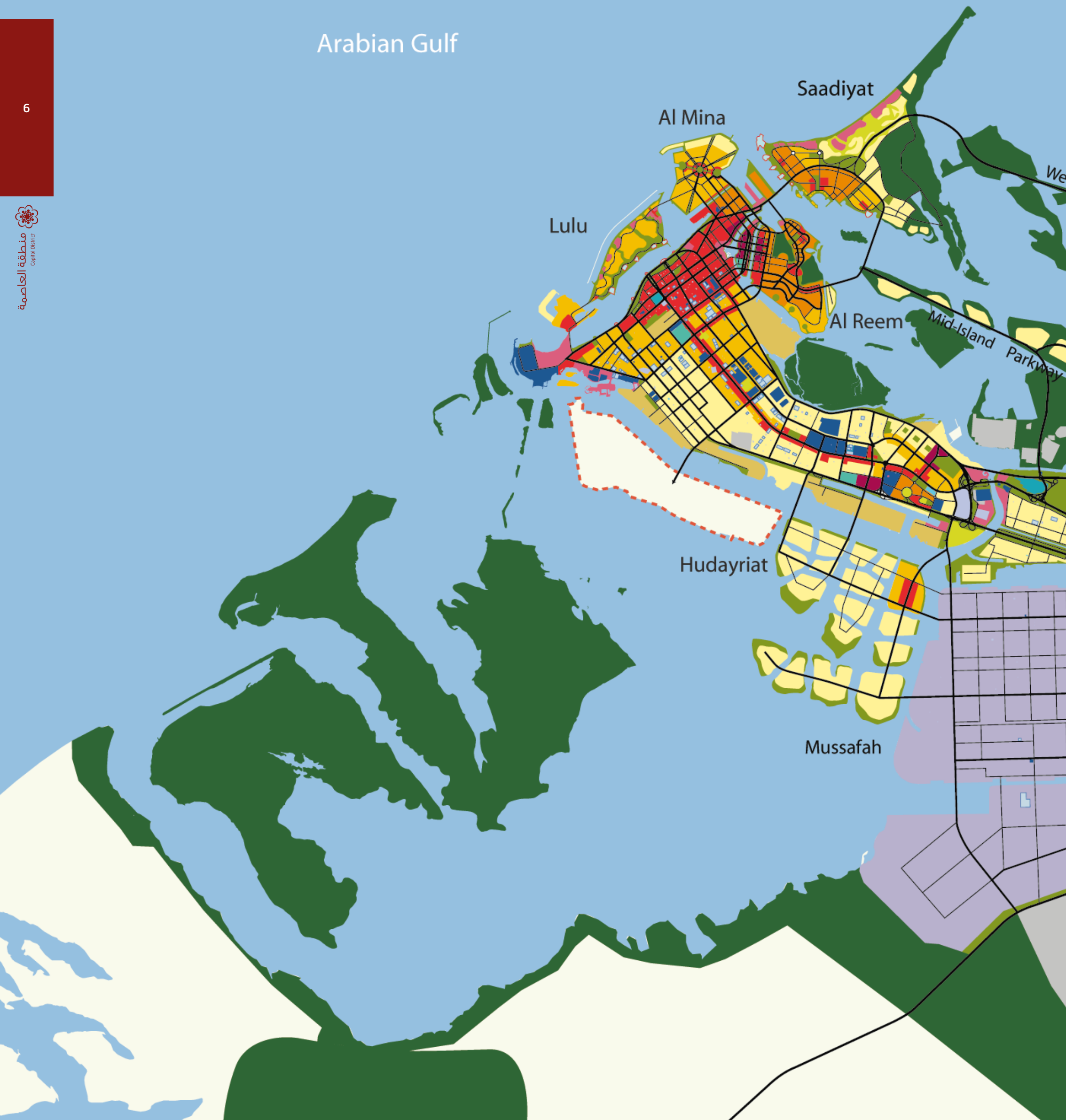
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Capital District

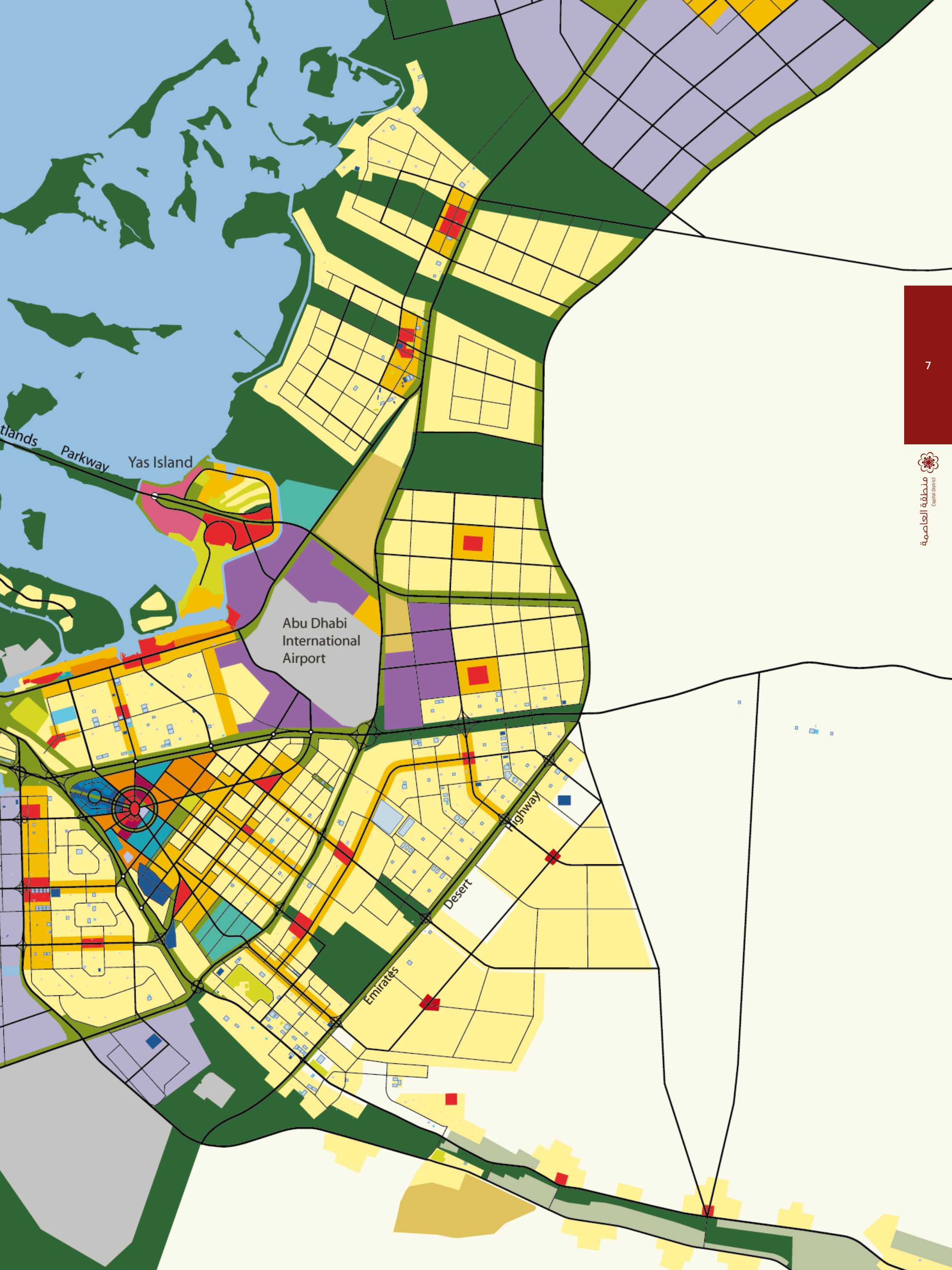




# Arabian Gulf









In 2006, His Highness Sheikh Mohamed Bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Chairman of the Executive Council, mandated the Executive Affairs Authority to design and implement a planning initiative to guide the evolution of Abu Dhabi as a Global Capital City. Trends that influenced this initiative include:

- The continued expansion of the economy
- Rapid population growth
- Liberalized real estate laws
- Significant foreign investment
- Construction projects of unprecedented size

A distinguished Taskforce that included local government leaders and international experts was appointed to create a long term urban plan for Metropolitan Abu Dhabi to the year 2030 based on the following two core objectives:

- Create an attractive/livable and sustainable managed urban environment in which all necessary services and infrastructure are provided.
- Ensure a vibrant mix of cultures is able to flourish in Abu Dhabi's livable spaces, while maintaining the unique traditions and cultures of the Emirates.

The Taskforce was also mandated to recommend the most effective regulatory and institutional framework for managing and implementing the plan.

The resulting Plan Abu Dhabi 2030: Urban Structure Framework Plan and terms of reference for the Urban Planning Council were prepared by the Taskforce and adopted by the Abu Dhabi Executive Affairs Authority in 2007.

Articulating a clear direction and description of future growth, the Plan anticipates a population of 3 million by 2030 centred on the themes of sustainability, economy and environment. In addition to offering far reaching land use proposals, it embodies a framework for the management of Abu Dhabi's future growth according to the following overarching principles:

- Abu Dhabi will be a contemporary expression of an Arab city
- Growth in the city will be measured to reflect a sustainable economy
- Development in the city will respect, be scaled to, and be shaped by the natural environment of coastal and desert ecologies
- Abu Dhabi will manifest its role and stature as a capital city
- The urban fabric and community infrastructure will enable the values, social arrangements and culture of an Arab city

Plan Abu Dhabi 2030 envisions two major urban cores linked by a world-class transit system. The first is the historic centre of Abu Dhabi at the northern tip of Abu Dhabi Island. Together with designated near shore islands currently under development, this area is visualized as an expanded and enhanced Central Business District (CBD) with a concentrated focus of commercial activity surrounded by higher density residential communities.

The second urban core is an entirely new Capital District, located south of Abu Dhabi Island between Mohamed bin Zayed City and Abu Dhabi International Airport. Positioned where the desert meets the sea, and shaped by a rich heritage, the Capital District will serve as a second downtown for Abu Dhabi and be a sustainable, authentic and modern Arab city. It will be planned and designed to manifest Abu Dhabi's role as a capital city, with a Federal Precinct at its heart that will serve as the national seat of government.





# The Human City

**The Gulf**

**The Desert**

**City Heart**

- 1.5 million Population
- Financial Ctr (CBD)
- 50 Million Office SF
- 2-5 MSF Retail
- Lulu Island Urban (U/I)
- Cultural Uses
- Nature Park
- Marina Village
- Presidential Palace

**City Soul**

- Emirati Housing
- Palaces/Embassy District
- Existing Neighborhoods
- Government Institutions
- 200,000 Population

**City Lungs**

- Coastal Villages
- Local Centers

**Capitol City Brain Ctr.**

- Universities/Learning Ctr
- City Medical Ctr/Hospital
- Biomedical Research Ctr
- Technology Research Ctr
- Government Office Focus
- Capitol City Residential
- 1.0 Million Population
- Capitol City Center - Retail Ctr
- Conference Ctr

**Other Features:**

- Wetlands National Park/Preserve
- Al Raha
- Airport
- Capitol City Park Boulevard
- Coastal Villages
- Local Centers





# Masterplan Vision

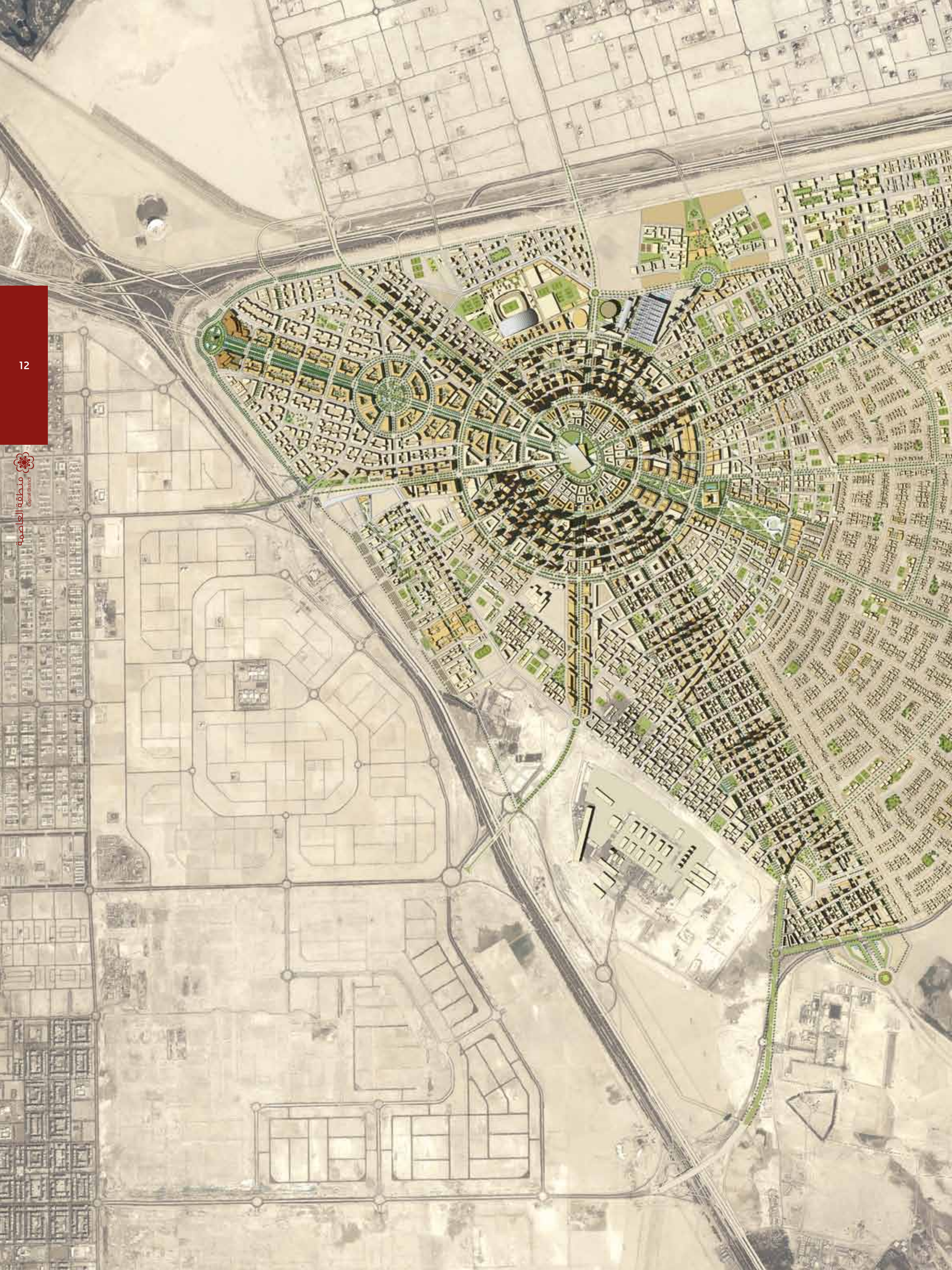


# منطقة العاصمة

Capital District











With an area of forty-five square kilometres, and a projected population of three hundred and seventy thousand residents, the Capital District is one of the most ambitious urban development projects being planned in the United Arab Emirates.

The Capital District Masterplan provides a long term vision toward 2030 for the development of a global, 21st Century capital based on sound planning principles, sustainable criteria toward environmental quality and energy consumption and a desire to provide the highest quality of life possible for all its citizens.

In creating this new city, the Masterplan has capitalized on the site's physical assets - its centrality within the region and accessibility to both Abu Dhabi Island and to emerging developments on the mainland; its proximity to a well-connected highway network; coastal climate and breezes; and its adjacencies to existing residential neighbourhoods. The site's triangular shape provided strong cues for organizing development around proposed high capacity transit lines through the site and in creating a series of symbolic and visual axes that link important civic spaces and landmarks, terminating at a central civic space that will represent the nation.

The Capital District is planned as a sustainable, compact, mixed-use city, comprised of high-density transit-oriented communities, employment, major universities, hospitals and knowledge-based employment sectors, as well as a lower density Emirati Neighbourhood. A central driver behind the Masterplan vision is the symbiotic relationship between land use and transportation in the creation of high quality, attractive district and neighbourhood centres, vibrant streets and public spaces, and well-planned cultural and community facilities, all served by a world-class public transportation system.

The Capital District will be the new seat of national government and house a diplomatic and embassy neighbourhood. It will also serve as the city of Abu Dhabi's second business district, providing over one hundred thousand jobs in a dynamic mixed-use urban core. In addition to a dense network of open spaces and community uses to support the local population, the Capital District will host an Olympic calibre 65,000 seat National Stadium as well as various sports venues and conference facilities. New universities and research facilities will position the city as a hub for education and research. The new city will also be a leader in environmental sustainability, with requirements for the use of highly energy efficient building structures, district cooling systems, water sensitive landscaping and irrigation and an overall urban design plan that promotes connectivity and walkability.





# Masterplan Process



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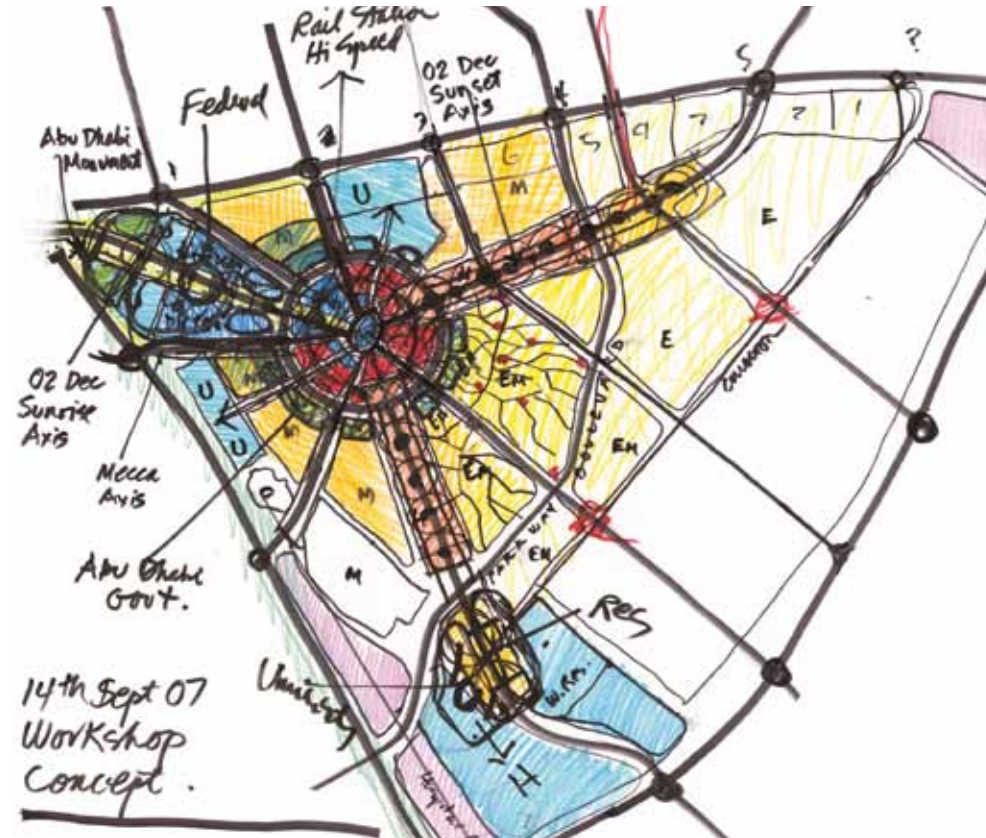
Capital District





While Plan Abu Dhabi 2030 provides the overall context for the project, a number of efforts shaped the principles and design of the Capital District and served as the foundation for the Capital District Masterplan.

## November 2007



### Capital District Concept Plan

The Capital District Concept Plan was developed during a series of workshops during the fall of 2007 and involved UPC staff and a team of international experts including architects, urban planners, urban designers transportation engineers and transportation planners. The goal of these sessions was to brainstorm and work towards a preferred concept plan for the Capital District based on principles of urban livability and high quality urbanism, sustainable transport and infrastructure, cultural vibrancy, and energy efficient landscapes and buildings. The Final Concept Plan was approved in 2007 and provided the blueprint for the Masterplan.

## March 2008



### UAE Capital District Symposium

A UAE Capital District Symposium was held at the Emirates Palace Hotel in Abu Dhabi over three days from March 30th to April 1st, 2008. The Symposium gathered key figures in the local leadership and planning community as well as delegates and experts from around the world, to present, discuss and frame recommendations about issues of importance to contemporary capital cities, with specific focus on creating a sustainable Capital District for Abu Dhabi. A key recommendation of the Symposium was the creation of a Capital Planning Commission to manage UAE Federal assets within the Capital as well as assist in the planning and programming of the symbolic, commemorative, and celebratory aspects of the Capital District.

The Symposium was an officially-sanctioned meeting of the Capitals Alliance, an organization consisting of the capital planning commissions of Australia, Brazil, Canada and the United States of America and is part of an ongoing broader program, initiated by the Abu Dhabi leadership, to bring the most progressive urban planning approaches and practices to the UAE.



# March 2009



## Final Capital District Masterplan

The Capital District Masterplan was initiated in early 2008 based on the final Concept Plan and was developed by a consortium of interdisciplinary consulting teams and international experts.

The preparation of the Masterplan involved extensive consultation with government agencies and stakeholders in all aspects of planning and design including: the definition and refinement of land use and development requirements; architectural, urban design and landscape architectural strategies; the articulation of sustainability criteria and parameters; transportation modelling and intersection analysis; distribution of utilities and infrastructure; and the development of safety and security guidelines.

The Capital District public transport network was also planned in close collaboration with the Department of Transport (DoT) and in parallel with the preparation of the Surface Transport Masterplan (STMP), an initiative commissioned by the DoT to translate the conceptual transport strategy outlined in Plan Abu Dhabi 2030 into a detailed Masterplan and implementation programme.

This Masterplan Summary provides an overview of the background and concept planning process, and distills the key land use, urban design, transportation and sustainability strategies that combine to make up the Capital District Masterplan. The documents that collectively comprise the Capital District Masterplan include:

- **Capital District**
  - Federal Precinct Masterplan and Development Requirements
- **Capital District**
  - City Centre Masterplan and Development Requirements
- **Capital District**
  - Emirati Neighbourhood Masterplan and Development Requirements
- **Capital District**
  - Infrastructure Masterplan (Volume I & Volume II)
- **Capital District**
  - Transit Network Design (Volume I & Volume II)





# Site Location & Context



# منطقة العاصمة

Capital District





Arabian Gulf

Mina Zayed

Saadiyat Island

Lulu Island

Al Sowwah Island

Al Reem Island

Abu Dhabi City

Zayed Sports City

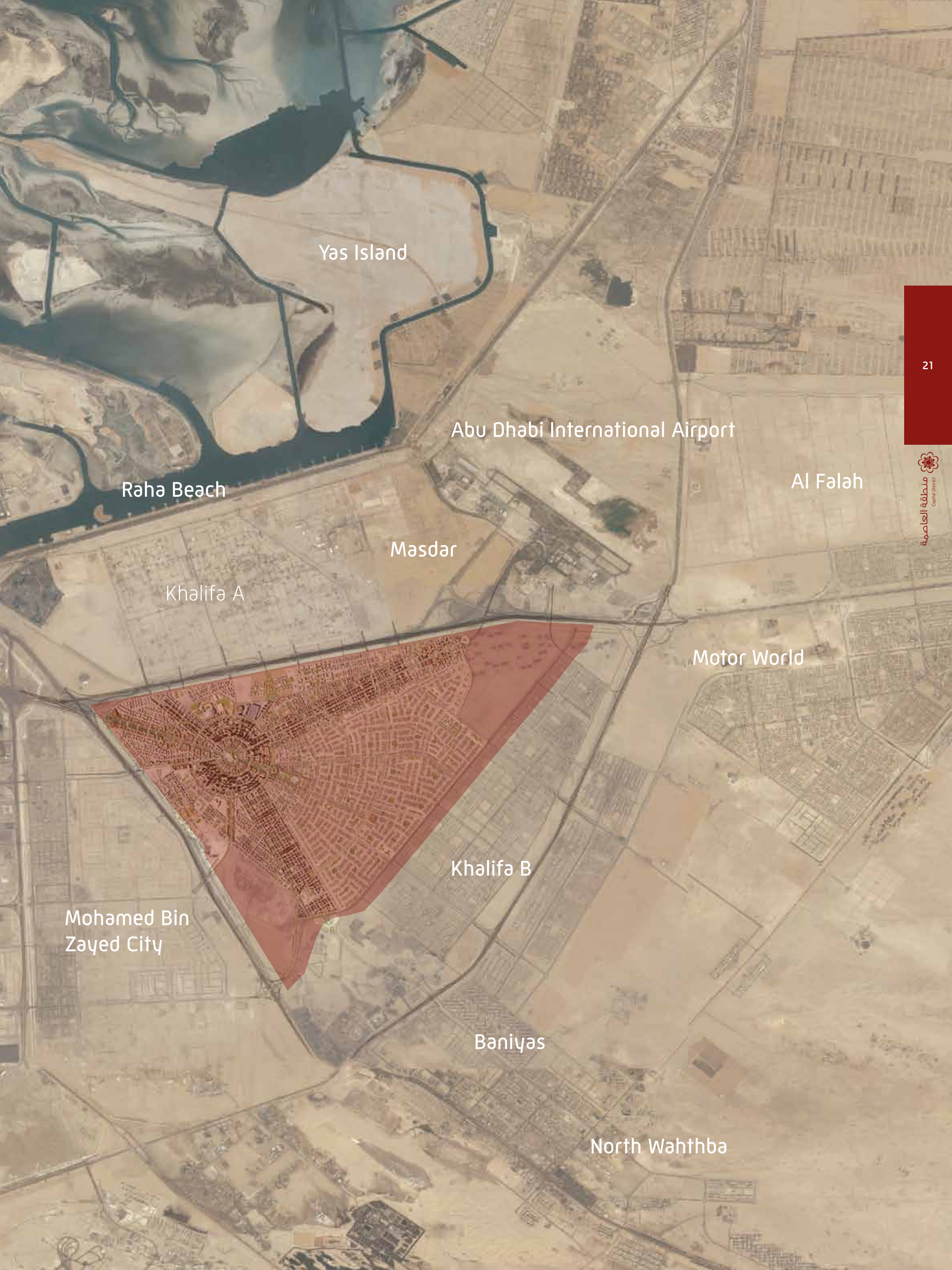
Mussafah

## Location

The current Abu Dhabi CBD is situated at the western tip of Abu Dhabi Island. Plan 2030 proposes that this CBD be revitalised and extended onto near shore islands and connected through a series of bridges. Because of its constrained position, future development growth on the island is restricted.

To accommodate and concentrate future growth in the region, Plan 2030 identified the former Khalifa City C site, a triangular area of land between Abu Dhabi International Airport and Mohamed bin Zayed City, as the second downtown for Abu Dhabi and the new Capital District.





Yas Island

Abu Dhabi International Airport

Al Falah

Raha Beach

Masdar

Khalifa A

Motor World

Khalifa B

Mohamed Bin  
Zayed City

Baniyas

North Wahthba



# Existing Features

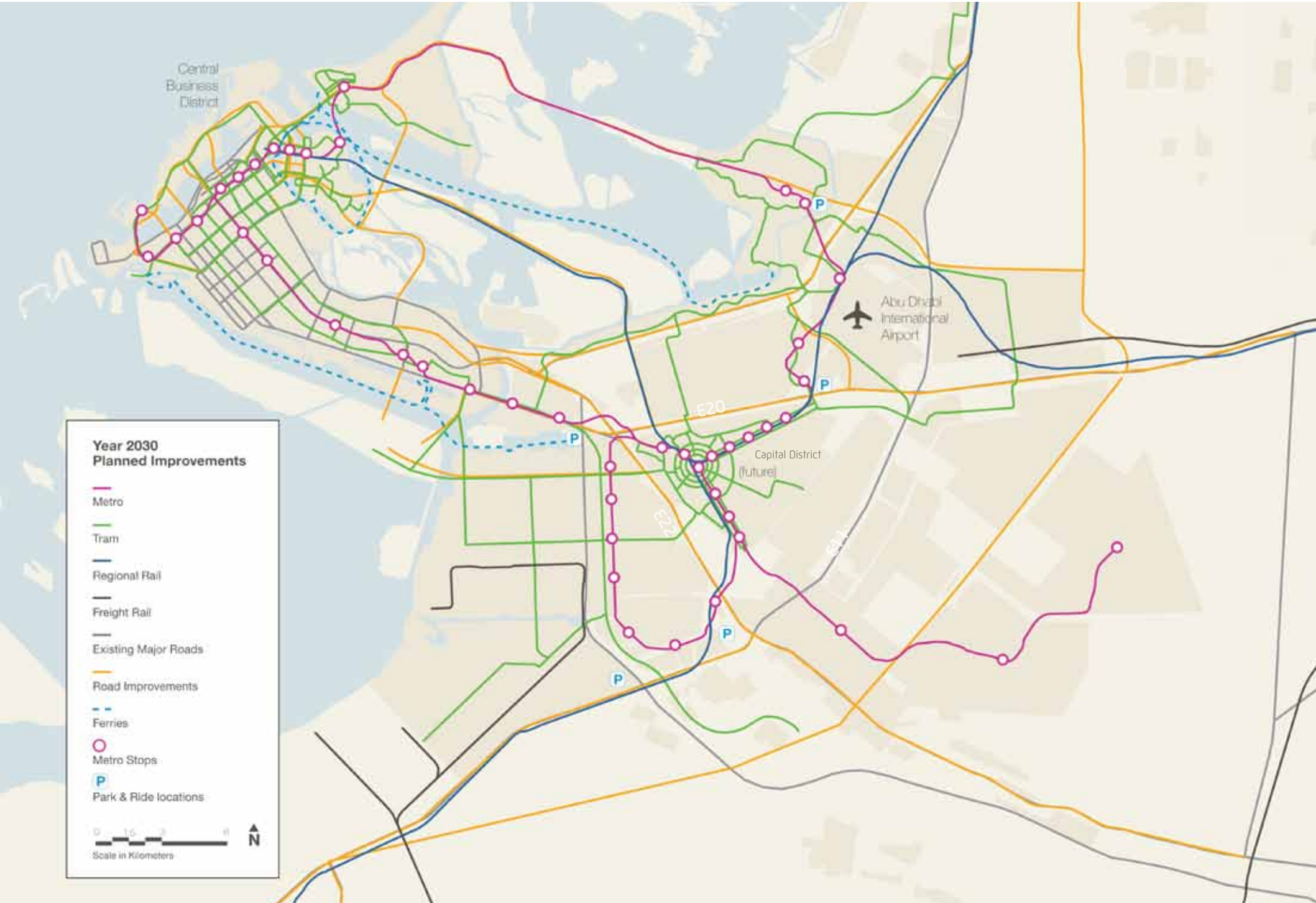
## Transportation Access

At approximately 45 square kilometres, the site is at the centre of development activity on the Abu Dhabi Mainland and has the highest accessibility in the region. Two major highways – the E20 and E22 – bound its north and west sides and intersect at its apex, while highway E11 runs along its south side. The site is strategically located to connect with the key areas of the Abu Dhabi metropolitan area such as the Airport, Al Raha Beach, Emirates Palace, Palaces District, CBD, Corniche District, Cultural District on Sadiyat Island and the new developments on the mainland: Masdar, Mohamed bin Zayed City and Khalifa Cities A and B.

The Surface Transport Masterplan for Abu Dhabi envisions a highly integrated transportation system comprised of improved highway links and connections to surrounding communities; a high-speed rail service to Abu Dhabi; some 131 KM of metro railway; regional rail connections to nearby urban centres, including Al Ain; and a fine-grained network of surface tram and bus service.

The Capital District will benefit from this comprehensive inter-modal network, which will offer residents, employees and visitors convenient and alternative methods of movement and connections throughout the new city and to the surrounding region. And it will encourage pedestrian activity and alleviate traffic congestion as the city and surrounding region undergoes phased development and an increase in population.





Surface Transport Masterplan, Abu Dhabi Department of Transport



# Existing Features

Although the majority of the Capital District site is vacant, there are a number of constraints and opportunities facing development.

## Airport

The Abu Dhabi International Airport is within five kilometres of Capital District CBD and has impacts on building heights due to flight patterns. The airport and highway along the northern edge are also high volume noise sources.

## Existing Land Uses

Existing land uses consist primarily of Abu Dhabi University, a cemetery and military complex along the western edge of the site.

## Subsurface Conditions

Subsurface conditions on the site are characterized by a high water table and high soil salinity. Through evaporation of ground water this condition can result in underground cavities.

## Utility Infrastructure

A number of utility corridors exist along the west edge of the site, including high voltage overhead power lines and gas lines. As part of implementation, these lines will be relocated.

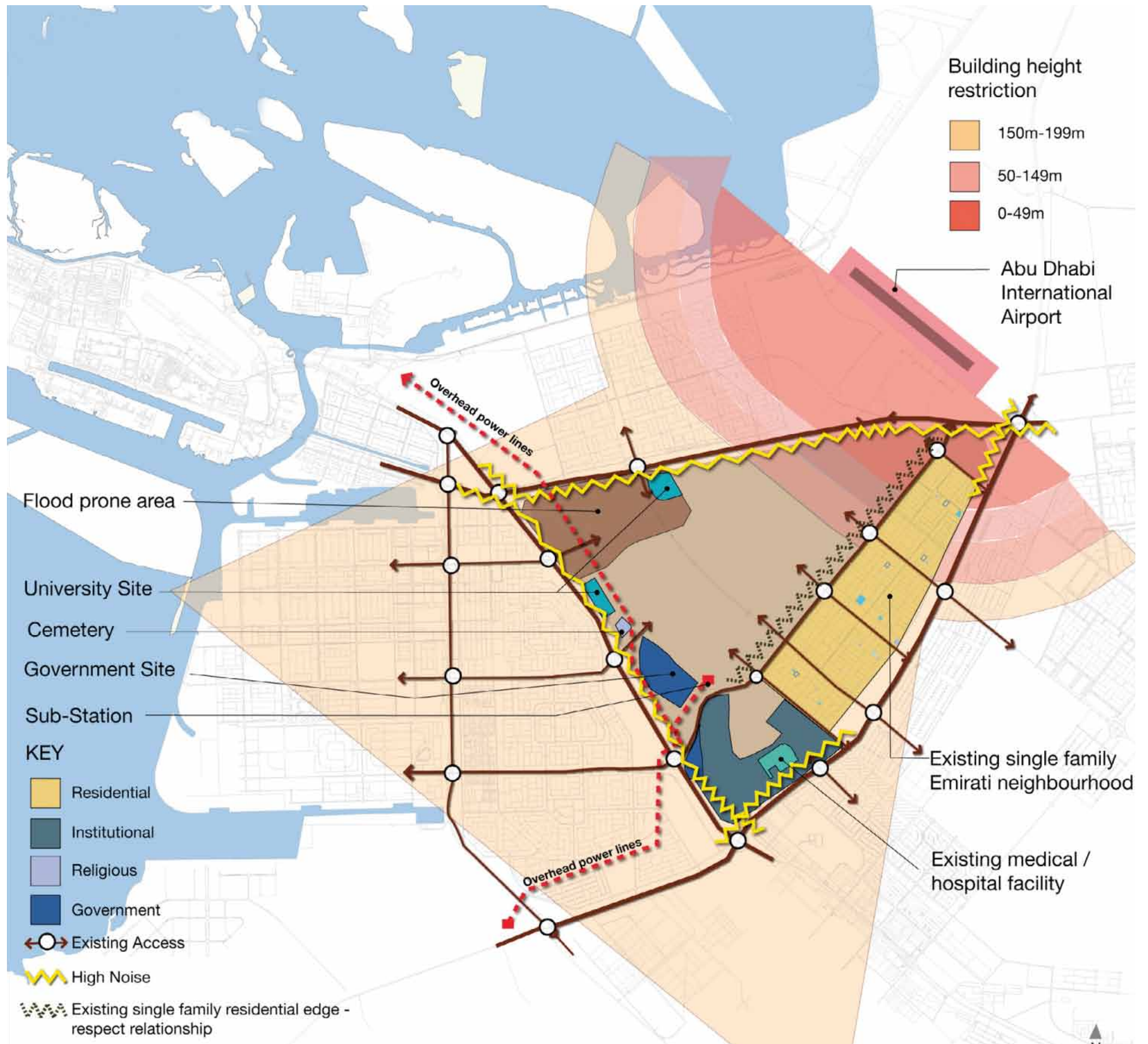
## Climate

Situated at the northwest-facing coastline of the Arabian Gulf, the climate of Abu Dhabi is affected by the sea to the north and the desert to the south. Proximity to the desert results in high solar radiation and high daytime temperatures. During mid-summer months, the sun is almost directly overhead for most of the afternoon, creating a harsh outdoor environment for pedestrians.

Abu Dhabi's location near water provides a northwestern wind occurring from noon until late evening nearly every day. This wind transports fresh air from the sea, purging used and polluted air out of the city and replacing it with fresh air. It also creates a cooling effect even though the air temperature is generally high.

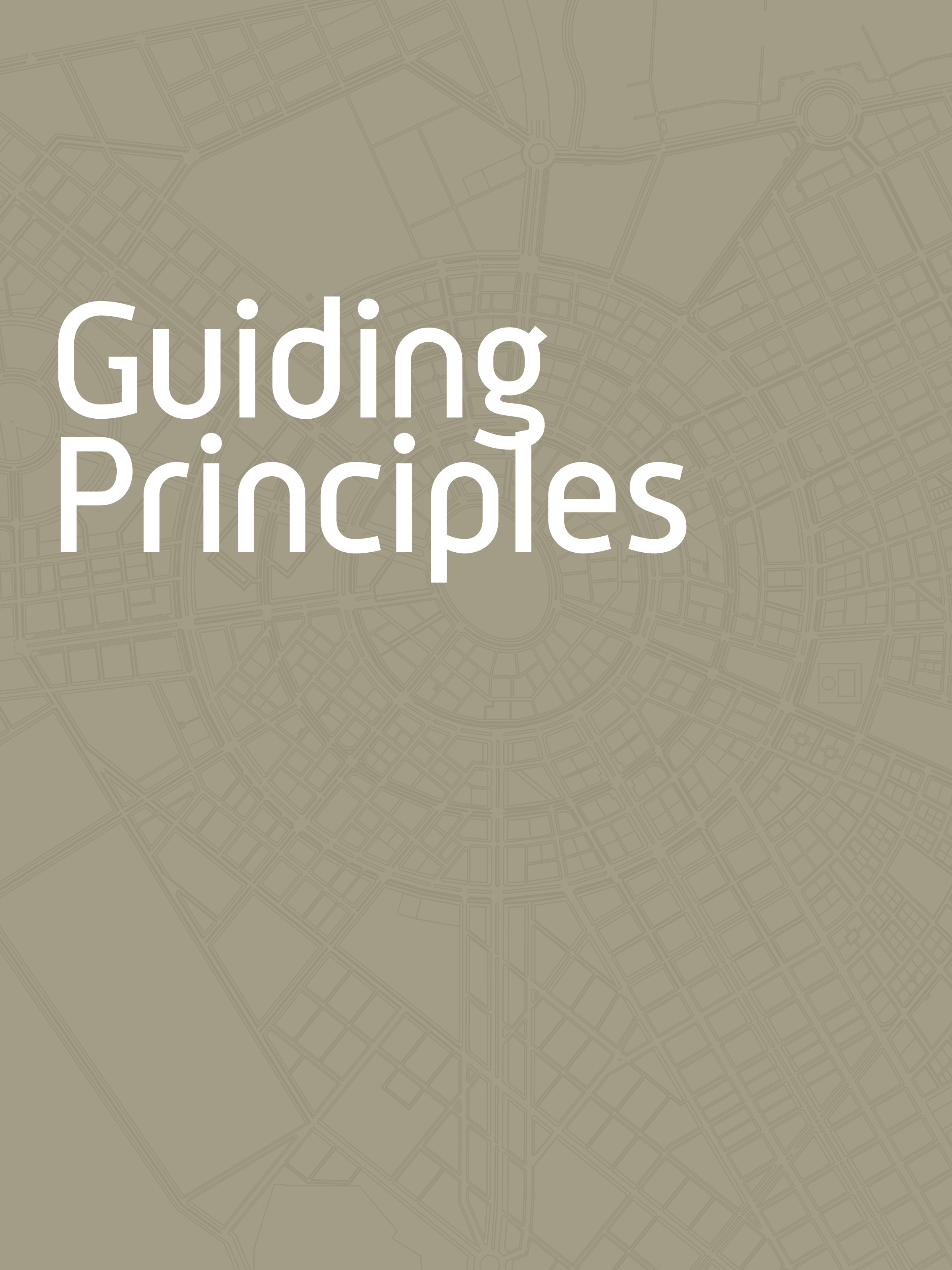






Capital District Site Constraints, Capital District Concept Plan





# Guiding Principles



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Capital District





# Culture

The Capital District is grounded in principles of Estidama, or sustainability, and as such, will be a city where cultural, social, economic and environmental systems thrive, for present and future generations. The following core principles guided the Capital District Masterplan.

## A Livable, and Modern Arab Capital

The structure of the Capital District is based on creating a culturally symbolic, vital, contemporary and distinct Arab urban form for this new city. The plan proposes a high degree of land use mix and diversity, with neighbourhoods linked by walkable streets and a world-class public transport network.





## A Global Capital

At the heart of the Capital District will be a Federal Precinct, which will serve as the national seat of government for the United Arab Emirates and be designed to celebrate the identity, culture and values of the Emirates. Government buildings, national institutions and embassies along grand boulevards will provide a symbolic and memorable approach to the Capital District. Contemporary Arab architecture and a strong international diplomatic presence will reinforce the cultural diversity of the Emirates' population. Along primary boulevards and at gateways to the city, distinct public spaces and commemorative places will reinforce the city's ceremonial and symbolic function and provide the space for the parades, celebrations, and events that are an integral part of the life of a global capital city.





## Complete Communities

Central to the Plan for the Capital District is the commitment to create a sense of community. The plan seeks to preserve the traditions, heritage and way of life of Emirati's and is flexible enough to accommodate the needs of the Emirate's diverse population, ensuring everyone can live and work in peace and harmony.

The Capital District will provide a wide range of housing options for all income levels. Residential neighbourhoods are designed to accommodate the various needs and desires of Abu Dhabi's diverse population including Emirati extended families, -ex-patriot households and guest workers.

Each neighbourhood will be well served by community services and amenities, including cultural centres, youth centres, post offices, women's centres, libraries, and mosques. Mosques have been sited to be within walking distance of nearby residents. Two hospitals will provide quality healthcare to the city and support the vision of creating a healthcare precinct.

In the Capital District, open space is a strategic planning component that greatly contributes to quality of life. Throughout the city there is a hierarchy of open spaces - from large commemorative places, to civic plazas to neighbourhood parks - which will provide a focus for national and local celebrations and be accessible to all residents within a 5 minute walk.

















## Diverse and Healthy Economy

A prosperous economy that benefits all citizens is a primary attribute of all vital cities of the world. The plan for the Capital District is oriented towards facilitating the growth of Abu Dhabi's key economic sectors including healthcare, education and tourism.

The Capital District will host an Olympic calibre 65,000 seat National Stadium as well as various sports venues and conference facilities. New universities and research facilities will position the city as a hub for education and research.

Office zones are poised to accommodate government functions, as well as high end office tenants and multinational corporations seeking presence in the Arabian Gulf.

The strategic placement of land uses is based on maximizing their inherent economic, as well as cultural synergies. The Capital District CBD offers the highest concentration of office use in order to attract commerce and trade oriented towards the global needs of the modern business world. Along the north and south transit spines, local retail and transit-oriented development nodes provide a range of retail and employment opportunities within close proximity to transit and residential neighbourhoods.

## High-quality Development Opportunities

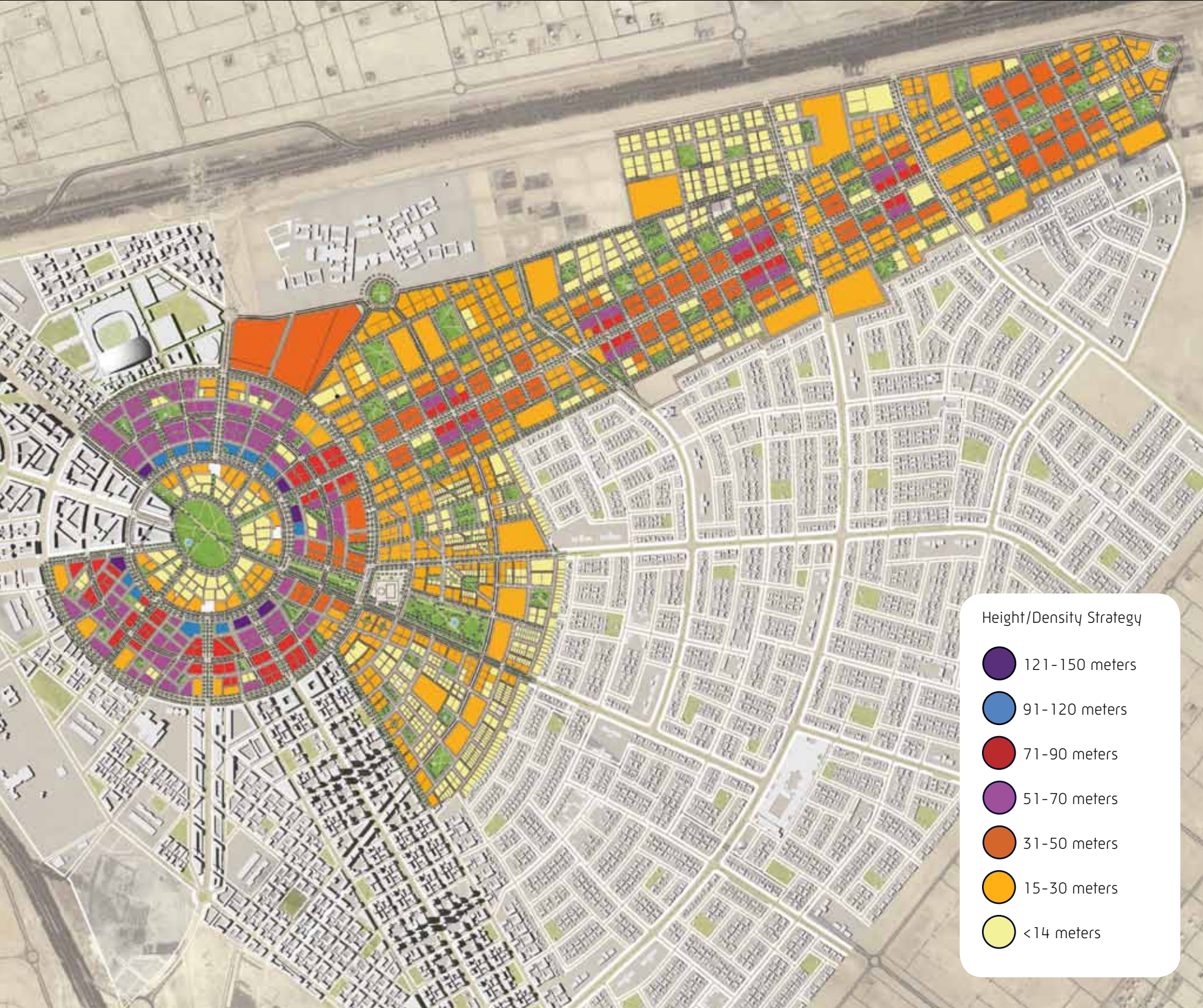
The plan is grounded in the practical and functional aspects of creating high quality development parcels. Each city block and parcel is designed to provide maximum value for its intended use. The block and parcel dimensions are the result of an in-depth study of comparable cities and best practices of modern high rise development around the world. With the intention of rapid development it is important that the land parcels be as efficient and flexible to accommodate the evolution of development requirements over time.

To maximize development value, the majority of parking in the Capital District will be provided in underground parking garages up to four levels. In addition to underground parking, district parking facilities are located to serve the total parking needs of visitors and working population.

Streets in the Capital District have been designed to make the most efficient use of space within the right-of-way. Select utilities have been placed beneath the roadway, and buildings and shading devices will provide maximum street enclosure to create a comfortable, human-scaled streetscape.









## A Connected Capital

As the City of Abu Dhabi plans for regional mobility into the 21st century it is important that this emerging capital district is based on strategic integration of land uses that balance development densities with transportation access. The Masterplan has identified a model split goal of 40% of the trip generation to be accommodated by public transportation by 2030 through the implementation of an extensive network of regional rail, metro rail, street trams and feeder bus systems.

The distribution of land uses and densities in the Capital District is based on Transit Oriented Development (TOD) model that concentrates a mix of transit supported land uses and development densities strategically at transit station locations. This will provide employment opportunities within walkable and relatively short commute distances of residential areas.

## Pedestrian Accessibility

With the predominance of the automobile as the only means of transportation in Abu Dhabi today, the Masterplan promotes a strong pedestrian bias. The development of the proposed transit network will generate more pedestrians on the street in the Capital District. However, it is important that there is an inviting pedestrian oriented network from transit stations to final destinations to ensure adequate ridership of the transit system. The design of the Capital District encourages walking as preferred means of transportation by providing seamless pedestrian accessibility and inviting streetscapes. Dedicated bike routes will be integrated into the streetscape and offer opportunities for safe and convenient travel across the city.

## A Sustainable Capital

Abu Dhabi's desert and coastal climate poses some significant challenges to maintaining human comfort in outside urban environments.

The Plan seeks to mitigate the negative impacts of thermal heat gain through comprehensive systems of shade and ventilation throughout the urban environment. The fundamental planning principles guiding the geometry of the plan seek to naturally ventilate the city by having roadways, block orientation, landscape and building form being oriented towards the prevailing winds.

Shading devices such as arcades, trellis and landscaped canopies are thought of as a complex network of places that allow pedestrian movement, solar protection and refuge from the harsh climatic conditions of Abu Dhabi.

Sustainable practices towards conservation of energy and water are a key stone of the Plan. The plan optimises building energy use and water consumption through the application of "green building" practices as defined by the government's Estidama Program. Recycling centres will be located within the ground floor of public parking facilities and encourage individuals and households to recycle.

Fresh water is a precious resource in the Emirates. The plan offers the best practices for the future through the integration of design strategies and guidelines to ensure that open spaces are designed and managed to reflect the desert environment of Abu Dhabi and to conserve our scarce water resources.





Throughout the planning process, design scenarios were tested in order to understand the implications from a wind and cooling standpoint. Based on the results from this modelling and additional scientific research, strategies were developed to guide decision-making with regard to the orientation of streets and the positioning and dimensioning of buildings in order to best take advantage of the wind.





# Urban Design Layers



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Capital District





# Urban Design Layers

The Masterplan can be broken down into a series of strategic layers that form the basic urban design framework for the Capital District.

## Radial Streets

The city structure links national government, city life and Emirati culture through creation of distinct districts and national institutions connected by grand boulevards, walkable streets, monumental spaces and a world class public transit system.

At the city's centre, a radial pattern of streets surrounds a central monumental space. This radial pattern of streets is the primary framework for identity and place making and provides the structure for neighbourhoods and connectivity within the District.



## Grand Boulevards and Institutions

A series of seven, tree-lined grand boulevards, representing the seven emirates, connect the symbolic centre with surrounding districts, large civic institutions, and regional access routes. The monumental Capital Boulevard provides a beautiful and dramatic connection between the Presidential Palace and the Grand Mosque on Abu Dhabi Island.



## Precinct Identity

The Plan strives to create a coherent sense of place that provides precinct and neighbourhood identity through land use mix, block structure, streetscape design, architectural expression, district amenities, vibrant civic spaces and landscape expression. Within each of the Plan's six precincts are several smaller and neighbourhoods formed around retail and transit streets, community facilities, schools and local parks.

