

# Transforming CITIES

AECOM is at the forefront of urban transformation across the world. We engage cities to plan and design the urban environments of the future.



In the past five years our team has worked in Armenia, Australia, China, Egypt, France, India, Iraq, Italy, Jordan, Kazakhstan, Kingdom of Saudi Arabia, Malaysia, Morocco, Oman, Philippines, Portugal, Qatar, Romania, Russia, Senegal, South Africa, The Netherlands, Turkey, United Arab Emirates, United Kingdom. We have also worked in the State of Palestine.



A depth of expertise to support our cities work

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As part of 100 Resilient Cities (100RC) — an organisation pioneered by Rockefeller Foundation — we have helped 31 cities build resilience to social, economic and physical challenges

## **100** Resilient Cities

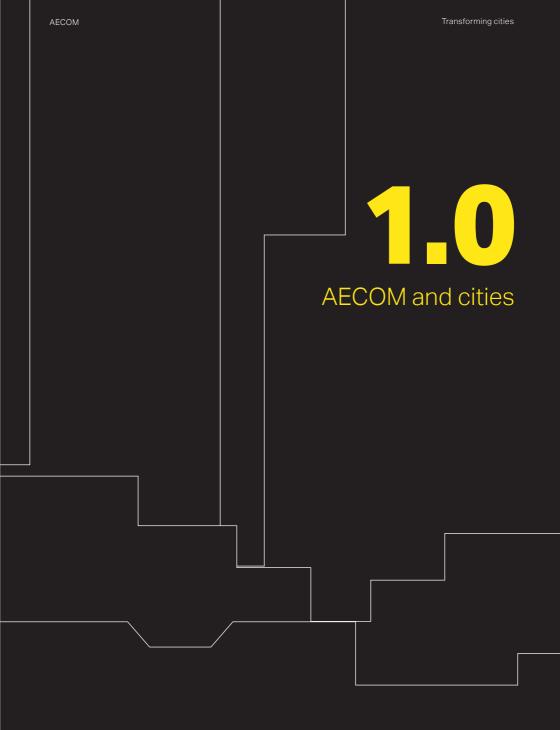
Cities we are working with are Bangkok, Berkeley, Cali, Chicago, Christchurch, Colima, Cuidad Juarez, Dallas, Greater Miami and The Beaches, Honolulu, Jakarta, Lisbon, Medellin, Melbourne, Mexico City, Montreal, Oakland, Paris, Quito, Ramallah, Rotterdam, Salvador, Santiago De Caballeros, San Francisco, San Juan, Seattle, Singapore, Sydney, The Hague, Vancouver, Wellington.

## "

The three days of workshop demonstrated the city wants to participate, and give its contribution to the Milan of tomorrow. The more shared through a participative process, the better will be the agreement on Milan's future.

Pierfrancesco Maran, councillor for City Planning, Green and Agriculture Municipality of Milan, Italy

# scali milano **Q&A**



# 66

I would highly recommend AECOM for similar planning urban design, landscape and infrastructure design projects, where an integrated cross discipline approach leads to practical and creative solutions. 0

BILLING

General Manager, Strategic Planning Department, Jeddah Municipality

## **Partnering with cities**

Cities have never been more important, nor the competition among them more intense.

AECOM works with urban leaders to help tackle city issues. We help with the challenges around major population shifts and structural economic changes by leveraging connectivity and evolving infrastructure in order to create prosperity and employment, enhance the quality of life and bring communities together.

Each city is undeniably unique however they all share a common set of urban systems with similar challenges and opportunities.

#### An integrated approach

In delivering transformational initiatives for cities, AECOM looks at city systems as a whole. Our integrated approach means we can better prioritise projects and resources, plan ahead, protect vulnerable assets and provide sustainable growth. We work as a partner to the city and use our tried and tested methodology to understand the interrelationship and synergies between each system in the city to set a clear vision coupled with a spatial plan to manage the challenges and realise future opportunities.

From whole cities and regions to urban districts and projects; across urban revitalisation, resilience planning and the development and delivery of major urban plans, we simplify complexity to deliver urban transformation.

AECOM Cities Europe, Middle East, India and Africa

AECOM helped Dubai create a more sustainable and livable spatial vision — coupled with better governance to implement change.

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Transforming cities

# 2.0

## How to plan and design cities

## The integrated city design process

Our five phase process to successful city planning and design. Our process helps cities and their stakeholders drive a preferred and successful outcome for city planning.

#### Making the plan

Our planning process provides a stable platform for the delivery of the most complex city designs.

It starts with analysis and projection of a city's demographic, environmental and economic data. The growth scenarios developed from this informs the spatial options in the city. We then use big city themes to explore these scenarios and create a collective vision and objectives.

With the objectives set we are then able to explore and evaluate spatial plan options, develop a preferred spatial plan and bring together delivery platforms for coordinated development of the city.

#### **Delivering the plan**

This is the implementation phase of the plan process and is key to the long-term outcomes for the city — ensuring all key stakeholders are engaged.

After understanding the existing conditions for delivery and the key platforms that underpin the plan, we examine the existing institutional structures and processes — set against international benchmarks — in order to clearly and objectively determine if any modifications to the existing framework for governance are required.

This process means we can test alternative approaches to implementation tailored to the context and specific institutional needs as well as reflect best global practice.

Finally, a framework to implement and monitor the successful delivery of the plan, and defining the regulatory role that will be undertaken by an appropriate governing body is developed. This can include an engagement programme for stakeholders, establishment of long term delivery mechanisms, and the preparation of delivery plans for catalyst and quick win projects.

#### **Phase 1: Analysis**

**Baseline analysis:** analysing the city's existing conditions (spatial and non-spatial) to understand its limitations and potential for growth.

#### **Phase 2: Establishing a vision**

Vision: developing a vision, objectives and indices for the city.

#### **Phase 3: Options**

**Option development:** exploring possible spatial scenarios for growth within the context of the city's objectives, parameters and vision.

**Options testing:** evaluating the spatial scenarios against the city's vision and objectives.

#### **Phase 4: Preferred plan**

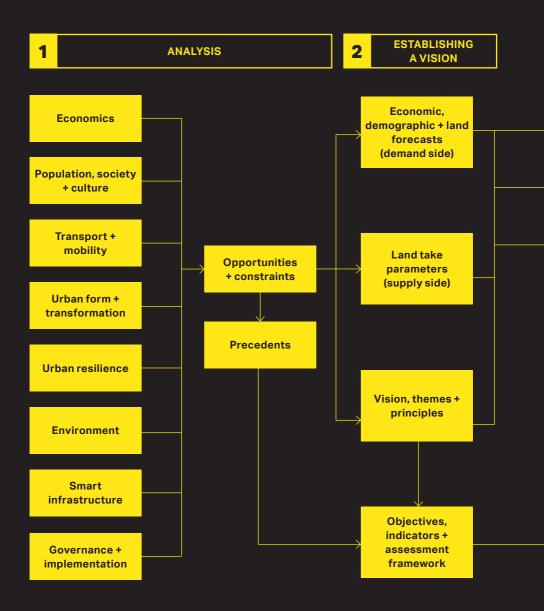
**Recommended plan:** refining the preferred spatial scenario and developing its spatial structure, and developing strategies for its centres, green infrastructure, land use, transport systems and infrastructure.

**Final plan:** refining and confirming the final plan, incorporating feedback from stakeholders.

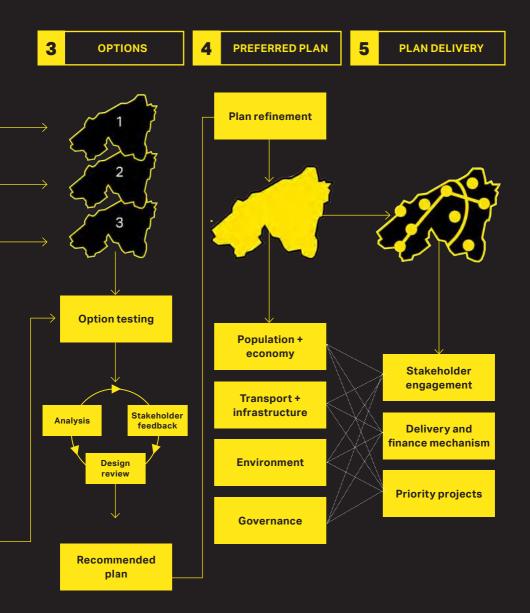
#### **Phase 5: Plan delivery**

**Implementation:** providing a framework to implement and monitor the successful delivery of the plan, and defining the regulatory role that will be undertaken by an appropriate governing body. This can include an engagement programme for stakeholders, establishment of long term delivery mechanisms, and the preparation of delivery plans for catalyst and quick win projects.

# AECOM Cities has a robust and tested methodology for integrated city design...



# ... that draws on AECOM's full breadth of services to deliver integrated city solutions



## The big city themes

Cities share a set of common urban systems; we call these big city themes. The interrelationships between them offer both challenges and opportunities in the integrated city design process.





## Integrating the big cities themes

The greatest synergies are achieved where the big city themes are integrated within the framework plan. For example, pedestrian and cycle routes are aligned to natural recreational areas which in turn are irrigated from treated waste water. Housing growth is planned within the centres to preserve natural boundaries, these in turn offer protection from climactic changes.

#### Integrated infrastructure

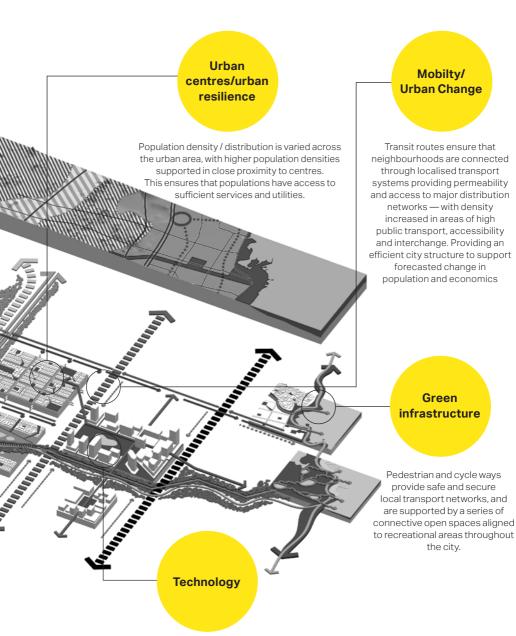
Ensuring efficient and integrated infrastructure networks. For example, through ensuring treated waste water can be fed into the green infrastructure network and used for sustainable irrigation.

## Natural environment

Areas of sensitivity are reserved so that naturally occurring systems and conditions prevail. The natural environment is afforded protection through an urban growth boundary that ensures urban sprawl is prevented.

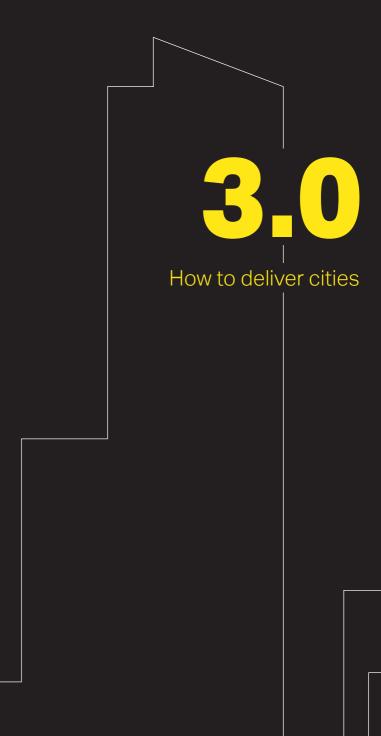
#### Celebrating assets

Celebrating unique characteristics to ensure they are safeguarded and capitalised on.



Optimised quality of urban areas through dynamic digital infrastructure and predictive modelling.

The Amsterdam International Workshop proposes an integrated comprehensive project to leverage the connectivity of the Schiphol / Amsterdam corridor.



## The city context

As cities and regions face unprecedented challenges there are winners and losers. Cities pursuing broad, integrated strategies are ensuring their city remains competitive, liveable and resilient.

#### The city-region

Size matters and larger urban cities can draw on a bigger pool of labour and talent; develop more complex and specialised economies; support larger and more effective infrastructure; and more readily become hubs for global connectivity. This is leading to the dominance of city regions. In some cases these regions cover entire countries or even span across national borders.

Positioning a city within the city-region is key: forming a strategy for cities to work together, share talent, infrastructure and assets and complement each other. With a robust strategy these cities will perform better together than alone and reach development targets easier and quicker.

The strategy could define a city's specific function or economic focus; look for ways to optimise economic and social synergies; and deliver integrated transportation networks. While territorial boundaries will always remain, networked cities across a region allow economic, social and environmental cooperation: enabling them to position themselves globally.

#### The city and its projects

Critical to the success of each city is positioning it in the context of the city-region plan allowing it to attract investment and realise growth and development. Individual projects and catalyst plans, positioned in the context of the broader plan, are able to achieve greater outcomes together as opposed to being delivered in isolation.

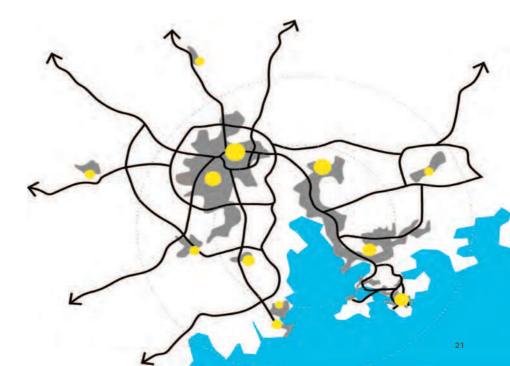
## Positioning the city in the city-region

The AECOM cities team see that the growth and development prospects of a city and other cites in a region are tied to their ability to engage in greater economic and social cooperation.

In this urban age, size matters. Larger cities can draw on a bigger pool of labour and talent; develop more complex and specialised economies; support larger and more effective infrastructure; and more readily become hubs for global competitiveness. This is leading to the increasing global dominance of cityregions: groups of nearby cities which work together as part of a larger system. In some cases, city-regions cover entire countries, or even span across national borders effectively acting as transnational city regions.

Positioning the 'city' within its respective city-region is a key part of our approach to delivering cities. By forming a strategy for cities to work together; cities can share talent, infrastructure and assets, and specialise to develop in different but complementary ways. In doing so, the constituent cities perform more strongly together than they could on their own and development outcomes are achieved easier and quicker.

Each city within the interconnected city region may fulfil a specific function, whether that be specialisms around finance, commerce, tourism, manufacturing, transportation, government, as well as smaller service centres. Such regions do not undermine nations, but instead allow for the optimisation of economic and social synergies between their cities. An integrated transportation network can bring major urban centres within shorter travel times to each other. We see that the future success and delivery of cities and their neighbours is tied to their ability to reconfigure themselves into cityregions. While territorial boundaries will always remain, networked cities across a region allow economic, social and environmental cooperation. Together, city-regions can stand on a global stage.



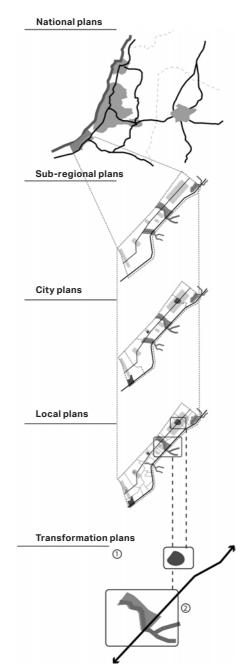
## Positioning projects within the city

Effective positioning of a city and associated projects through the plan is not only important for successful delivery, but critical to the success of each city meeting its intended vision and achieving its stated economic, social, environmental goals.

For AECOM, positioning cities in this sense means matching 'The Plan' with robust strategies around the built and natural environment, culture and heritage, economic development and employment, housing, social services, open space, transportation, utilities and infrastructure — covering global to local scales.

This allows us to identify and programme additional relevant and realistic projects to support the broader plan's intended vision and outcomes over the life of the plan. Moreover, the projects themselves are positioned in the context of the plan.

With a detailed understanding of a city's core strengths and opportunities across various scales, an understanding of the context of the plan, and a programme of development projects and additional plans; AECOM are able to position the city for smart growth and development through 'The Plan' and 'The Projects'. The plan is able to market the city and attract investment by providing a clear spatial vision supported by a robust evidence base. Individual projects and catalyst plans, positioned in the context of the broader plan, are able to achieve greater outcomes together as opposed to being delivered in isolation.



## Good governance: a framework for delivery

Good governance for cities is imperative it is key to coordinating the implementation of the framework and greater city-wide growth and development. Good governance relies on collaboration between public and private sector to deliver the successful outcome of any city plan. Some structures already work well but often, when developing a major city plan they all benefit from a review. We have a focus on governance which takes its cue from our global expertise and experience working with governments and cities as well as our own research. And we often take a custodial role helping clients in the long term by acting as a trusted advisor. From encouraging investment to balancing planning functions with commercially-driven development requirements, we negotiate and broker outcomes to the benefit of the plan, our clients and the wider community.



## Implementation for delivery

#### **Funding mechanisms**

Implementation of the plan needs to be underpinned by sustainable and resilient investment strategies. Speculative-based investment does not result in long term positive outcomes for cities; rather, a coordinated understanding of city-wide investment is critical in interlinking all citymaking investment streams.

In developing investment strategies we build consensus around public funding and securing private investment, generating opportunities for value capture and cost recovery through growth. We also work with cities to establish clear ground rules to give developers confidence in available sites and annual quantums for delivery.



Dubai Planning and Governance Framework

#### **Precedents of success**

We have extensively researched and been involved with numerous successful implementation frameworks for large scale mega projects. Our experience includes:

- Jeddah Plans Implementation Framework, KSA
- Dubai 2020 Smart Planning and Legislative Framework, UAE
- Ebbsfleet Development Corporation The London Docklands Authority, United Kingdom
- Citywest Development Authority, Australia
- Olympic Park Legacy Corporation, United Kingdom.



Jeddah Plans Implementation Strategy

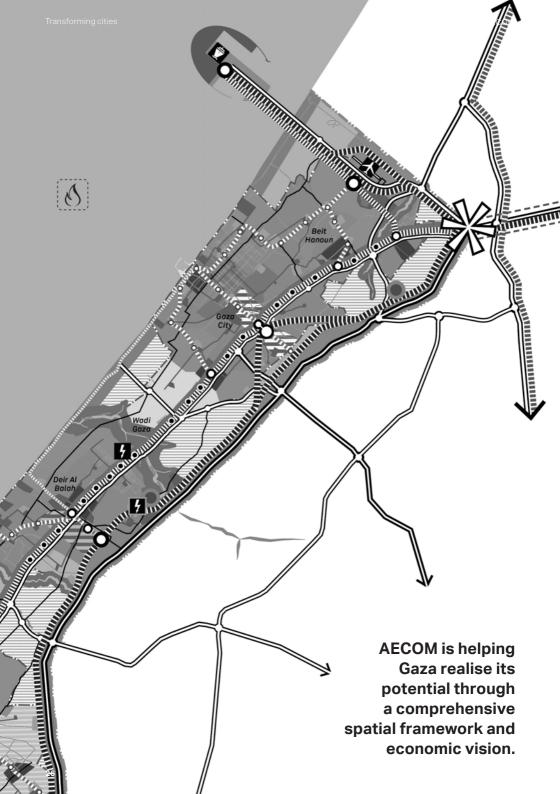
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Bringing stakeholders together to agree good governance for the future.





Cities workshop



## Unlock opportunities: the city workshop

Government, mayors, developers and investors are all focused on ensuring their city remains competitive, liveable and resilient. To foster this, opportunities in technology, infrastructure and the community need to be prioritised and unlocked.

Whether the challenge is city-wide or sitespecific, AECOM provides a platform for collaboration and interaction: between cities and regions, across public and private sectors, and within communities.

Our two-day integrated planning and design workshops are a first step towards this and bring together clients, stakeholders, local decision makers and AECOM's international expertise.

#### How does it work?

Facilitated by an AECOM expert, the workshop generates significant and early understanding of key components, project scope, and feasibility issues affecting a specific site or area.

A desktop study and gathering of initial objectives, visions and thoughts is first undertaken and then following by a two-three day strategic workshop. Outcomes from the workshop include:

- Site visit (where appropriate and practical)
- Context review
- Precedent review

- Vision setting
- Interactive technical process to develop sketch alternatives
- Development of evaluation criteria
- Understanding of preferred direction for future work
- Establishment of onward scopes of work and priorities
- Consolidation of workshop conclusions and outcomes in the form of a slide presentation.

#### What is the benefit?

- Desktop published integrated city vision, including supporting drawings, workshop notes and photos as generated through the process.
- 2. An equal platform for all stakeholders and team member to contribute ideas and knowledge.
- Inspiring common goals and targets for collaboration — encouraging better communications.
- 4. Garnering support for downstream projects identified through the workshop and integrated city vision.

Transforming cities

We are thought leaders in integrated, sustainable and resilient cities...

An accessible community for city structure

> ...we combine traditional and cutting edge approaches to plan making.

Step

## AECOM's 'Cities Workshop'

#### Data

Gathering key facts, figures and plans for the city. AECOM issues a proforma which includes 50 structured questions.



### Step

#### Preparation

After reviewing information we prepare base maps and other resources for the workshop.





#### Workshops

Over a five day visit, two of which are dedicated to the workshop, our team will visit the city. Following a tested process the workshop draws on information gathered.



#### Step

#### Documentation

A city vision document will be issued post-workshop, highlighting key issues, opportunities and providing a spatial vision.



We are experts in community + stakeholder engagement

> Close collaboration is central to our approach

## We simplify complexity to deliver urban transformation.



#### **01 United Kingdom**

- London Manifesto
- Thames Estuary Vision 2050
- Ebbsfleet Garden City
- Lower Lea Valley
   Regeneration Framework
- London 2012 Olympic Legacy Masterplan Framework
- North West Cambridge Master Plan
- West Cambridge Master Plan
- Brent Cross Cricklewood
   Development Framework
- Brixton Central Master Plan
- Hackney Wick Vision
   Framework
- Mill Hill East Area Action Plan
- Barton Park Master Plan
- Canning Town Master Plan
- Woolwich Town Centre Master Plan

#### **02 Western Europe**

- Milan Scali Ferroviari
   Rail Lands Transformation
- 100 Resilient Cities Programe, Rotterdam
- Amsterdam International

#### **03 Eastern Europe**

 Bucharest General Master Plan

#### **04 Turkey**

- Istanbul Urban
   Transformation Plan
- Istanbul Seaport Master Plan

#### **05 Armenia**

- Armenia Tourism Framework Southern Corridor

#### 06 Egypt

- Cairo Airport City

- Downtown Cairo Regeneration
- North West Gulf of Suez Special Economic Zone, Sukhna

#### **07 Jordan**

Aqaba Special
 Economic Zone

#### **08 Iraq**

- Governorate Structure Plans (x4)

#### 09 Kingdom of Saudi Arabia

- Jeddah Plans
- Jeddah Unplanned
   Settlements Regeneration
- Jeddah Metro Alignment & station Design Review (PMO)
- Jazan Economic City
- King Khalid Smart Airport City

#### **10 Bahrain**

- Manama Central Market Vision Framework
- Marassi Master Plan

#### **11 Qatar**

- Qatar Economic Zone 1 Master Plan, Doha
- Msheireb, Heart of Doha
- Qatar Public Realm Guidelines
- Qatar Public Realm, West Bay North
- Provision of Draft Planning Legislation and Institutional Reform, Qatar

#### **12 United Arab Emirates**

- Dubai 2020 Emirate-Wide Master Plan
- Dubai Waterfront
   Development Strategy
- Dubai Al Bastikaya Cultural Master Plan
- Dubai Expo 2020 Master Plan

- Dubai Bluewaters Island Master Plan
- Masdar Site Wide Public Realm Strategy
- Masdar Phase 1 and 5 Master Plans
- Lulu Island Master Plan
- Saadiyat Island Master Plan
- Yas Island Zone K Master Plan
- Yas South Master Plan
- Abu Dhabi Housing Guidelines

#### 13 Oman

- Musandam Tourism Strategy
- The Wave, Muscat



#### AECOM

#### Transforming cities

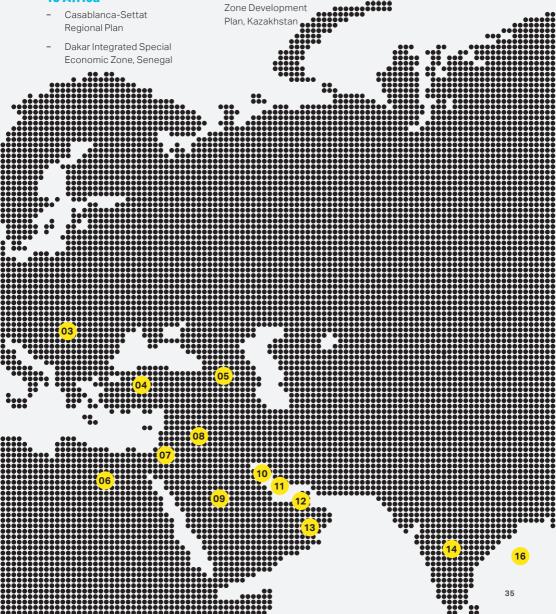
#### 14 India

- Delhi-Mumbai Industrial Corridor (DMIC)
   Economic Zone
- Dholera Special Investment Region Plan
- Vadarevu and Nizampatnam
   Port & Industrial Corridor

#### **15 Africa**

#### **16 Asia**

- River of Life Masterplan, Kuala Lumpur, Malaysia
- Sino-Singapore Tianjin
   Eco-City Implementation
   Framework, Tiajin, China
- Subic Bay Freeport Economic Zone, Phillipines
   Khorgos Special Economic
- Jinji Lake Landscape Master Plan, Suzhou, China
- Shenzhen Eastern Coastal Landscape Plan, China
- Haihe River Revitalisation Master Plan, China



## Gaza Spatial Vision

Gaza faces extraordinary challenges, including restrictions on trade and movement, a severely constrained economy, deficient infrastructure, and the threat of permanent damage to its coastal aquifer.

Yet with the resolution of current political constraints, it has all the assets to become a thriving and successful city - including a strategic location on a coastal corridor, 40 kilometers of beautiful coastline, a rich history, and densities comparable to many of the region's most successful urban centres. This location plays a key role in the broader super-region and its economic future will be linked within the broader framework.

On behalf of the private sector and in collaboration with the National Authority and an array of national and international stakeholders, AECOM developed a comprehensive spatial and economic vision for this state. The initiative looks forward to 2050 with a series of intermediate phases, assuming a progressive increase in regional openness and co-operation.

It provides a spatial strategy to use its limited land to best effect, consolidating into successful metropolitan area while doubling its population to 3.6 million people.

Based on this, the initiative identifies a series of over 70 Catalytic Projects by the private sector, donors and other stakeholders, that urgently-needed short-term investments are aligned with a larger vision.

By providing a much-needed framework for investment, the initiative has the potential for significant impact on living conditions, whilst seeking to challenge perceptions of Gaza and make a case for resolving the current political impasse and realising the area's potential.

#### Client

Private sector and Non Government Entity

#### Services

- Strategic planning
- Urban planning
- Economic development
- Urban form and landuse zoning
- Transportation

#### **Project dates**

2015-2016



### London Manifesto

In 2065, the success of London, its surrounding city region, and the rest of the UK will be dependent upon how we respond today to challenges facing the capital.

The way that we look at London, plan for its future and deliver infrastructure is becoming rapidly outdated. We are also failing to make the most of current infrastructure investment and future opportunities.

We believe London deserves a new vision for the coming generation of development that goes well beyond the M25. AECOM has looked at London and its surrounding region through the same lens with which we analyse and deliver large-scale, integrated city strategies and plans globally.

We have developed ideas for the next generation of growth. Identifying a series of challenges affecting London and its city region now and in the coming decades. Our manifesto advocates actions to address these challenges. Alongside the Mayor's London Infrastructure Plan 2050, and London First's long term Economic Plan, our manifesto is intended to add to the debate over London's long term future, calling for a strategic, spatial and integrated approach to managing growth and infrastructure investment across a much bigger London City Region.

This document sets out ideas, serving as a starting point for engagement between government, local authorities, infrastructure providers, investors, developers and communities in ensuring the London City Region's ongoing success in the 50 years ahead.

### Client

#### Thought Leadership

### Services

- Masterplanning
- Strategic planning
- Urban planning
- Socio-econo
- Economic and demographic forecasting

### **Project dates**

2015



### Istanbul Urban Transformation Master Plan

Istanbul sits at the geographic centre of the world — a city that bridges Europe and Asia. It has been the capital of empires and is a melting pot of cultures.

The past 50 years has seen Istanbul rapidly expand, and today the city is home to a population of nearly 15 million people. This rapid growth has led to a multitude of urban challenges — including housing a growing population, limiting environmental impacts of development, addressing traffic congestion, and embedding resilience — particularly against earthquake risk and climate change.

In response to these challenges, AECOM worked in collaboration with the Istanbul Metropolitan Municipality to prepare the Istanbul Urban Transformation Master Plan. This provides a ground-breaking framework to guide the growth and development of the city to 2036. The plan seeks to ensure a holistic approach is adopted in planning for urban resilience, transformation and regeneration of Istanbul, raising the quality of life and prosperity of existing and future residents.

Together with the client and other stakeholders, a single integrated strategy was developed to drive the following outcomes:

- A detailed understanding of existing issues and opportunities, and the development of a detailed geo-spatial database that covers the entire Istanbul Municipality.
- Long term economic and population forecasting to 2036 and resulting land use requirements.
- A city-wide
   Transformation Plan
   setting out the vision
   and spatial approaches
   to regeneration and
   transformation including
   new models for urban
   regeneration responding
   to challenges and
   opportunities.
- Preparation of Development Implementation Masterplans for specific areas with opportunities for real estate and infrastructure investment.

### Client

Istanbul Metropolitan Municipality

### Services

- Strategic planning, urban planning, governance and urban design
- Economic development
- Transportation and infrastructure
- Environment
- Architecture
- GIS

### Project dates

### 2016-2017



# Casablanca-Settat Regional Plan

Following the establishment of twelve new regions in 2015, the Moroccan government is pursuing an ambitious programme of regional planning with the aim of providing more equitable development and autonomy across the country. This new direction has been driven by a desire to move away from a historically insular and fragmented process, in favour of a more integrated approach to territorial planning with a strong emphasis placed on implementation.

The first region designated to pilot this new approach was Casablanca-Settat, the largest and most important of Morocco's regions in terms of population size, economic output and national strategic importance. AECOM, in association with our local partner Valyans, prepared the Regional Plan, Regional Transport Vision and Implementation Strategy for Casablanca-Settat.

Following an extensive technical analysis, we, facilitated a series of interactive workshops with the Ministry of Interior, the Regional Governor and a wide range of local stakeholders to collaboratively identify strategic directions for the region — including the development of a vision framework, a series of spatial options, and preparation of preferred spatial plan to guide the growth and development of the region.

As part of the undertaking, the Implementation and Delivery Framework was also developed in order to realise the plan and demonstrate its tangible benefits. The framework included the identification and definition of a series of catalyst projects to be delivered over short to long term timeframes. These projects range from being focussed region-wide to local, targeting specific outcomes in terms of urban development; population and housing; employment and economics; environment and open space; agriculture; tourism; transportation, and infrastructure.

### Client

### Ministry of Interior

### Services

- Strategic planning
- Urban planning
- Transport planning

### Project dates

### 2016–2017



Amsterdam promotes itself as an inclusive, sociallyminded city. Amsterdam's Schiphol International Airport is also one of Europe's largest aviation hubs. In this context, an important challenge for Amsterdam is to determine how the airport and the whole development corridor can specialise more effectively as a global gateway for the Netherlands.

AECOM facilitated the Amsterdam International Workshop which proposed an integrated comprehensive project to leverage the connectivity of the Schiphol/ Amsterdam corridor.

Following the workshop, we prepared a vision that positions Amsterdam International as a model for a progressive urban development zone; including how Amsterdam could create the best social, economic and environmental value for:

- The concentrated development corridor
- The Amsterdam Metropolitan Region
- Other cities in the Randstad
- The Netherlands as a whole

Amsterdam International promises to be a powerful and productive initiative for the Amsterdam Region in an age of evolving urbanisation and globalisation.

### Client

Municipality of Amsterdam

### Services

- Strategic planning
- Workshop facilitation

### **Project dates**

2016



### Milan Scali Ferroviari Rail Lands Transformation



Milan is the main industrial and financial centre of Italy. Located in one of the most industrialised regions in Europe, it is positioned to become one of the most important global cities in the coming decades.

The Scali Ferroviari are seven derelict rail yards in Milan's city centre and represent a key opportunity to shape the future of the city. Once forming important pieces of infrastructure for Milan's economy, the Scali Ferroviari now form fractures within the city.

In the context of a highly competitive urban world, the sites represent a key opportunity to shape the future of the city of Milan and reinforce Milan's leading position in Italy and Europe. AECOM were initially engaged by FS Sistemi Urbani FS SU to investigate and prepare Precedent Report to document a number of international urban rail land regeneration precedents, to inform FS SU's master planning and asset disposal activities.

We were subsequently engaged to provide strategic advice on the positioning of the sites within the urban and regional context; the production of Development Briefs for other design consultants involved; leadership and facilitation of a Strategic Workshop in Milan; and the preparation of a Synthesis Report. The outcomes of the process are documented at www.scalimilano.vision.

### Client

Italian National Railway Group – FS Sistemi Urbani

### Services

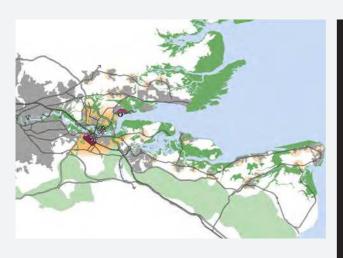
- Strategic planning
- Masterplanning
- Implementation and governance
- Workshop facilitation

### Project dates 2016–2017

The process and the wealth of indications on future directions that arose from the workshop represent a highly innovative methodology and process for the national context and the future of Milan, setting out a strong, participated basis for the process of regeneration of the Scali Ferroviari.

AECOM is supporting FS SU, the asset management agency of the Ferrovie dello Stato Group (Italian National Railway Group), as technical and strategic advisor in the process towards the agreement with the municipality of Milan, for the regeneration of Scali Ferroviari.

# Thames Estuary Vision 2050



The Thames Estuary 2050 Growth Commission was announced by the UK Government in 2016 and tasked with developing an ambitious vision and delivery plan for North Kent, South Essex and East London up to 2050. The Commision issued a "Call for Ideas" to develop a new vision for the Thames Estuary.

The vision needed to provide a comprehensive plan for growth, integrating new homes and employment with transport infrastructure, connected across the wider London City Region. AECOM responded with a Vision document to help frame and continue the discussion. This was framed by our London Manifesto — our ideas for next generation growth to ensure the London City Region's ongoing success.

We see the Estuary in the context of global London and its wider region, to which it is connected economically and functionally. The Thames Estuary is a central component of the region's future, with both thriving communities and connections across the Thames, and also to the capital, with a focus on

### Client

Thought Leadership

### Services

- Master planning
- Strategic planning
- Urban planning
- Socio-economics
- Economic and demographic forecasting

# Project dates

environmental protection. Our vision supports the development of high productivity clusters in specific locations that will develop, attract and retain skilled workers. It also takes advantage of opportunities from planned infrastructure, such as the Lower Thames Crossing.

## Visakhapatnam Smart City Framework Plan



AECOM was selected by the Government of Andhra Pradesh to develop a Smart City Framework Plan for Visakhapatnam and its surrounding 5,500 km<sup>2</sup> region.

The AECOM-led team is developing benchmarks, frameworks, processes, and implementation for the state of Andhra Pradesh to build on Visakhapatnam's thriving logistics, software, education, tourism, and health industries and create a framework for achieving ambitious economic development and quality of life goals. AECOM is expanding on previous projects in Visakhapatnam to address social, economic, mobility, energy, transport, and water concerns and aspirations at the regional scale as well as through ICTenabled sector-specific urban infrastructure projects.

AECOM's urban analytics insights and consultation with local government, citizens, NGOs, industry, and educational bodies are supporting Visakhapatnam in making the state of Andhra Pradesh's high economic growth more resilient while conserving the city's high livability and protecting the city's expansive beach and ecological corridors. The Smart City Plan extends and improves trunk infrastructures and public transit networks, upgrades water supply and sewage treatment systems, mitigates climate changerelated risks, and develops a disaster preparedness plan for the city.

### Client

Government of Andhra Pradesh, India

### Services

- Smart city planning
- ICT planning
- Urban analytics
- Energy, water and transport infrastructure projects
- Implementation planning

### **Project dates**

2016-ongoing

# Ebbsfleet Garden City



### Client

Ebbsfleet Development Corporation

### Services

- Masterplanning
- Town planning
- Transport planning
- Environment
- Engagement

### **Project dates**

2015–2016

Ebbsfleet was the first Garden City to be designated by Central Government to be built in over 60 years. The Garden City label resents a benchmark and commitment to quality place-making, community building and sustainability, as well as changing perceptions about Ebbsfleet as a place to live and invest.

AECOM to prepared the Implementation Framework which sets out the 'Vision' and statement of intent for Ebbsfleet Garden City. It defines a flexible growth framework that identifies how more homes can be delivered, at pace and to an enhanced level of quality as part of an all-inclusive 21st Century Garden City. The plan identified the key directions and locations for change identified through baseline data collection and site analysis, stakeholder and community engagement, and scenario development to establish a clear, bold and ambitious 'Vision' for Ebbsfleet to be delivered by Ebbsfleet Development Corporation (EDC) and its partners.

The Implementation Framework was prepared in partnership with local stakeholders to identify how EDC and its partners can deliver the Garden City utilising the resource put forward by Central Government, and taking regard of both local and national policy.

### Dubai 2020 – Emirate-Wide Master Plan



The Dubai 2020 Emirate Wide Plan is a major part of the Dubai Government's strategy for sustainable economic recovery and city governance. Key to the plan is the definition of a preferred spatial direction for the city that responds to the city's long-term needs, while enabling immediate priorities for investment and recovery.

AECOM prepared a Strategic Plan for Dubai Emirate to address integrated approaches for urban infill and growth, environmental management, social and economic development, mobility and urban management.

Preparation of the plan involved an analysis of

existing conditions within Dubai, the forecasting of future population and workforce, and a comparison of alternative spatial development scenarios. The plan established a "Smart approach towards sustainable and competitive urban planning". The plan describes:

- Urbanisation parameters

   including areas for future urban expansion and consolidation
- General land use the proposed general distribution of land uses and major activities
- Public open space system
   the planned public urban open space network

### Client

Dubai Municipality

### Services

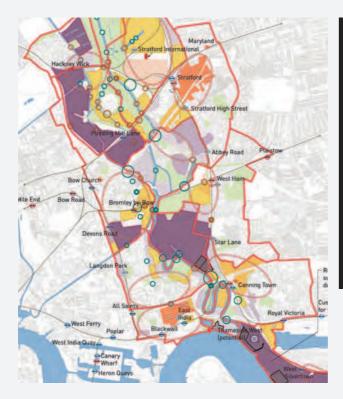
- Masterplanning
- Strategic and urban planning
- Socio-economics, economic and demographics
- Environment and sustainability

### **Project dates**

#### 2011–12

- Mobility and acessibility network – the planned movement network and hierarchy for the Emirate
- Infrastructure networks
   including primary
   networks for water, power
   stormwater
   and sewerage
- Distributions of densities and heights the general distribution of population densities and building heights
- Staging plan report the strategic staging and implementation requirements up to 2020

### London Lower Lea Valley Regeneration Framework



London Development Corporation

### Services

Client

- Masterplanning
- Strategic planning
- Urban planning
- Socio-economics
- Economic and demographic forecasting

# Project dates

Strongly associated as the service entrance to London, the Lower Lea Valley was characterised as a run-down and melancholic place. It also provided one of Europe's largest regeneration projects, a home for the 2012 Olympic Park, and a new park for London. AECOM was instrumental in bringing about a remarkable transformation of the Lower Lea Valley by putting in place a series of interconnected plans at varying scales that collectively addressed economic, environmental and social issues, the area is experiencing positive change. The Lower Lea Valley represented one of London's biggest opportunity areas. It focussed on economic and sustainable development, and the quality of green and blue infrastructure.

Crucially, the framework is underpinned by a strategy for investment, supported by National Government, the Mayor and Borough leaders.

# London 2012 Olympic Legacy Master Plan Framework



AECOM prepared masterplans for the Games and for the parkland that would be their legacy. The legacy ambition is for a new piece of well-connected and well-served city in the east of London. The design for the 230 hectare site has transformed the near-derelict site into a significant green space for public use, with new community facilities, arts and leisure destination, smart infrastructure, business centres, public spaces, and livable housing. From the outset, the London 2012 Olympic and Paralympic Games and their legacy were planned together. The Legacy Masterplan Framework for the park underpins the development and further regeneration of the area.

### Client

London Development Agency

### Services

- Regional plan making
- Planning
- Sustainability

### **Project dates**

2007-13

# Jeddah Plans

Jeddah is experiencing significant population growth and housing pressures, which have led to unplanned settlements poorly served by supporting infrastructure. The plans will make the most of investment to give residents better access to amenities and jobs.

AECOM prepared four spatial planning documents, each facilitating governance, management and implementation at differing spatial scales. The plans provide an integrated and holistic approach to long term growth responses.

To be utilised by multiple levels of stakeholders, the plans integrate national, regional and local agendas:

- The sub regional plan contextualises and sets out a long term spatial strategy for growth and development.
- The strategic plan provides an overarching vision and planning framework for the Jeddah Governorate, informing the development of the Structure and Local Plan.



- The structure plan defines an appropriate growth boundary for the Jeddah Urban Area.
- The local plan guides development at the local level, within the framework established by the Structure Plan.

Individually these four plans establish blocks that collectively provide a multilayered and integrated set of plans, to direct and manage future growth and sustainable economic development in the Jeddah Governorate.

### Client

Jeddah Governorate Municipality

### Services

- Strategic and urban planning
- Transportation planning
- Infrastructure and utilities planning
- Economic and demographic forecasting
- Urban design
- Urban form and land use planning
- Environmental planning

### **Project dates**

2011–15

# Dholera Special Investment Region Master Plan Framework

Dholera Special Investment Region (SIR) is a major project under the Delhi Mumbai Industrial Corridor (DMIC) Project, with an aim to make it a global manufacturing hub supported by world class infrastructure.

The city will be built as a world-class city, with a 10lane expressway running between the city from the state capital, Ahmedabad, to the container port. It will be the world largest urban development project worth \$12 billion.

Program management / project management included review of DPRs, policy reforms, financial management. Environmental and resettlement and rehabilitation along with tendering, contract management and construction supervision. The major Infrastructure components covered under the project included:

 Transportation infrastructure – strategic roads (state highways and port roads), city roads, rail, inter-city public transport, airport.

- Power infrastructure power (transmission), power (distribution) and renewable energy (solar, wind and geo-thermal)
- Wet utilities water supply (transmission), water supply (distributionpotable and non-potable water), water treatment, flood management, waste water treatment, sewerage network and industrial effluent network with intermediate pumping stations
- ICT and telecom infrastructure – all projects identified under Phase-1 of the ICT masterplan.
- Other urban infrastructure – solid waste management, administrative and business centre for Dholera, intra-city public transport etc.

### Client

Delhi Mumbai Industrial Corridor Development Corporation Limited

### Services

- Detailed masterplan
- Infrastructure project management

### **Project dates**

2013-16







# Special Economic Zone Planning



AECOM's economists and planners have helped plan a number of special economic zones in various locations around the world. These include:

- Delhi-Mumbai Industrial Corridor (DMIC) Study, India
- Aqaba Special Economic Zone, Jordan
- Subic Bay Freeport, Philippines
- Dakar Integrated Special Economic Zone, Senegal
- North West Gulf of Suez Special Economic Zone at Sukhna, Egypt
- Khorgos Special Economic Zone Development Plan, Kazakhstan

We prepared a robust masterplan and delivery frameworks for these employment-led mixed use zones. The commissions involved a detailed benchmarking exercise, robust market assessment and business planning - including viability assessment. The projects set out development frameworks, spatial options, concept masterplans to support funding bids, delivery recommendations and bankable business plans that will serve and support continued implementation of the Special Economic Zones.

### Client

Main Development Company and other clients

### Services

- Economics
- Business planning
- Urban planning
- Governance

### **Project dates**

Various

# Jazan Economic City



The Jizan province of the Kingdom of Saudi Arabia required a new city to focus on the energy and manufacturing industries. The city will provide a range of heavy industry plants (including oil refinery, steel mill, aluminium smelter), and light and medium industrial units – as well as a new residential, commercial and leisure area to accommodate the city workforce.

AECOM prepared the masterplan for the new city comprising residential, commercial, industrial zones, and includes a port. This port will provide facilities for liquid bulk loads, containerized loads and dry bulk loads. It will accommodate large and modern vessels in a modern port environment. Jazan Economic City Port will allow access to the city and surrounding areas by the Jeddah-Jazan Expressway currently under construction. A new railway link which will connect other regions and cities to the new port.

We also prepared the ICT masterplan to provide strategic insight into the development of "smart" city policies and solutions. The role includes undertaking traditional ICT masterplans with reviews of core infrastructure for network and communications (ducting, cables, fixed line telephony, mobile communications, data networking and data centres).

As part of this work we advised on "smart city" strategies and the practical implementation of smart solutions/digital services.

### Client

Saudi Aramco

#### Services

- Urban planning
- Detailed design services
- Programme management
- ICT masterplanning
- Project management
- City management, HSE support
- Quality assurance and quality control

### **Project dates**

2011–Present and Ongoing



The King Khalid Airport land holdings represent an opportunity for a new major growth corridor for metropolitan Riyadh. The 280 sq km airport city masterplan creates a mixed-use, highly connected urban development within the airport and emerging high-speed rail connectivity, in coordination with two new metropolitan alignments, generates powerful value for both airport and city. AECOM leads the masterplanning process, integrating a linear free-zone directly into the heart of the large airport lands. These areas include mixed-use, high-density, transit-oriented development; specialised industry clusters around healthcare and education; and a major international exhibition centre.

### Client

King Khalid International Airport (KKIA)

### **Project location**

Riyadh, Saudi Arabia

### Services

- Masterplanning
- Infrastructure and utilities
- Economics
- Governance
- Transport

### **Project dates**

Current

# Qatar Economic Zone



QEZ-1 is the first of three economic zones to be delivered by the Qatar Government. The masterplan covers approximately 396.7 hectares across two separate sites, and encompasses predominantly light industrial and warehousing business operations with various supporting residential, commercial, retail and community facility activities.

AECOM provided a multidisciplinary masterplanning, engineering, environmental, transport and cost services to realise MANATEQ's vision for the development. We undertook comprehensive data collection and analysis, and optioneering studies across the site in close collaboration with our client. We also developed the concept masterplan across the entire site and the further detailed masterplans (and final masterplans) for Phase 1 and 2 of the development.

### Client

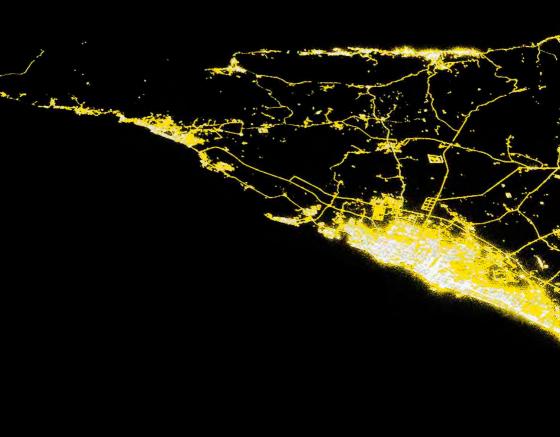
MANATEQ

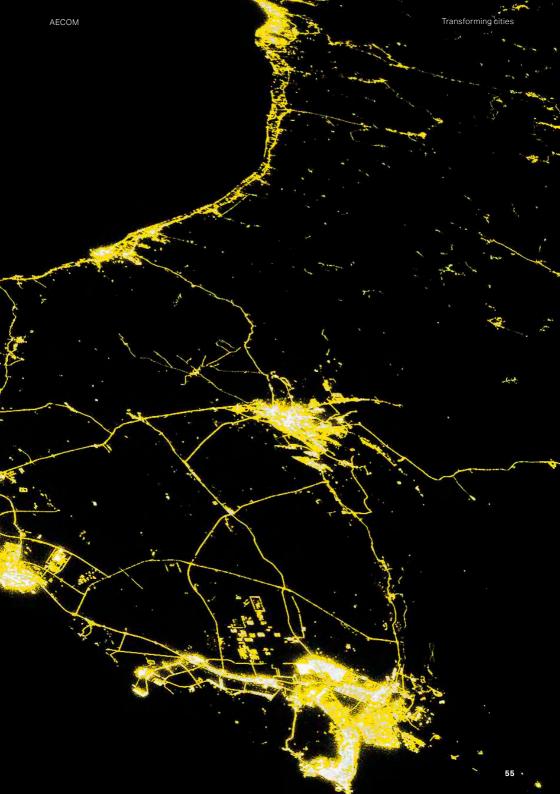
### Services

- Economics
- Masterplanning
- Civil infrastructure design
- Contract documentation

### **Project dates**

2015





#### About AECOM

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A *Fortune 500* firm, AECOM had revenue of approximately \$17.4 billion during fiscal year 2016. See how we deliver what others can only imagine at aecom.com and @AECOM.



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