

STATE OF URBAN DEVELOPMENT IN AL-QASSIM

KEY STATISTICS IN 13 URBAN AREAS, 2020



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KEY STATISTICS IN 13 URBAN AREAS, 2020

*Qassim Urban Observatory, a global model for Local Urban
Observatories*

القاسم
أمانة القصيم



المركز الحضري
لمنطقة القصيم
QASSIM URBAN OBSERVATORY

رؤية
2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

UN HABITAT
FOR A BETTER URBAN FUTURE

Acknowledgments

Al-Qassim Municipality

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Data Source: The data used for maps, graphs and tables in this report are from Al Qassim Urban Observatory 2018 Indicators Database, otherwise the sources are indicated



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Photo of Buraidah by siobh@n / Flickr.

Al Qassim Urban Observatory, supporting local data collection and data-driven decisions and investments

Al Qassim Local Urban Observatory (QUO) was founded in 2009, at a time when Buraidah city was expanding rapidly, and accessing timely and relevant city level data was a huge challenge, adversely affecting decision making and investment processes. Through the vision and leadership of His Royal Highness The Prince of Al-Qassim Region, Chairman of Urban Observatory Council, QUO was formed with an objective to produce data at the local city level in line with the local, national and global development agenda and priorities, and to promote the use of data for decision making as well as investment processes.



© Launching Buraidah's Voluntary Local Review (VLR), 25 Dec. 2018 .

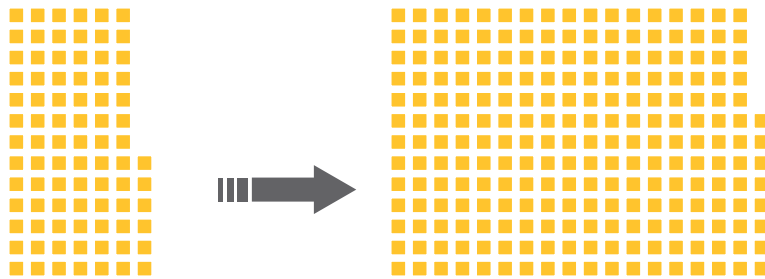
HRH the Governor of Qassim and Chairperson of Qassim's Urban Observatory Council Launches Voluntary Local Review (VLR) report on SDG 11 for the city of Buraidah, the first of its kind in the Middle East.

Over the last 10 years, QUO has grown significantly, both in terms of the number of indicators it covers, and the spatial scope of its activities. At inception for example, QUO only monitored 84 indicators, which has today increased to 229 indicators. The indicators cover a wide range of sectors including economy, infrastructure, social inclusion, transport, housing, environment, governance, tourism, agriculture among others. In 2019, after 10 years of focused monitoring in only Buraidah City, and following the directive of His Royal Highness The Prince of

Al Qassim Region Chairman of Urban Observatory Council, the mandate of QUO was expanded to cover the whole of Al Qassim Region, an action that today ensures consistent collection, collation and comparison of urban data across all cities and urban centres in the region. This not only makes it possible to track progress and inform region-wide decision-making processes, but also presents a uniform approach to collecting data, and tracking performance against local, national and global agendas within the region.

Throughout its existence, QUO has sought to innovate and consistently adopt the latest methods in producing the urban indicators on national and international levels, continuously align its data activities to decision making processes, and to promote partnerships with local and international agencies. Through its innovativeness, the observatory produced the first Voluntary Local Report in the Kingdom of Saudi Arabia, through which it reported progress against SDG 11 - "Make cities and human settlements inclusive, safe, resilient and sustainable" - in Buraidah City. The 2018 report, not only put Buraidah city at the global picture in terms of local level reporting, but also gave a solid baseline against which monitoring and progress towards achieving urban goals/targets in the city could be tracked.

Data and evidence generated through QUO have informed several decisions and investments in Al Qassim over the last decade. For example, between 2009 and 2019, QUO's studies and data on the main urban and social issues affecting cities in the region have been used by the urban authorities, through the relevant committees, to propose policies and actions to respond to the



84 Indicators
(2009)

229 Indicators
(2019)

Number of indicators monitored by the Qassim Urban Observatory

emerging urban challenges. These have resulted in investments that have directly contributed to improved quality of life for the region's urban residents.

The commitment of QUO is to continue the production of accurate, timely, and up to date data and information throughout Al Qassim Region, and to promote use of such data to inform decisions and actions in response to the 2030 agenda where no one and no place is left behind. Within the observatory, data for indicators is sourced directly from the Kingdom's General Authority for Statistics, Government departments, civil society institutions and the private sector, or computed using data from censuses and surveys. The collected data generally falls within two broad categories: a) indicators which respond to the local city and national development priorities (eg KSA's Vision 2030 and National Transformation Program Quality of Life program 2023), and b) indicators which respond to global commitments (eg the SDGs, Paris Agreement on climate change, etc.).

QUO's commitment is to continuously produce accurate, timely and up to date urban statistics for data-driven decisions and investments throughout Al Qassim

This report presents an analysis of the state of urban development in 13 cities and urban areas in Al Qassim region, using data produced by Al Qassim Urban Observatory during the period 2016-2018. Each of the 13 cities represent the biggest urban areas in each governorate, and include Buraidah (the region's capital), Unaizah, Ar-Rass , Mithnab, Al-Bakiriyah, Al-Badaya'a, Riyadh Al-Khabra, Al-Asyah , Nabhanya, Uyun Al-Jiwa, Al Shamasiya, Oklat AlSkoor and Daria. The report provides insights into the urban performance of the entire Al Qassim region and also undertakes a comparative analysis of performances of all cities in the territory, against nationally and globally set benchmarks. The report also makes recommendations on key investment areas (policy and physical) for enhanced prosperity and sustainability.



Saudi Vision 2030 is a plan to reduce Saudi Arabia's dependence on oil, diversify its economy, and develop public service sectors such as health, education, infrastructure, recreation and tourism.



The National Transformation Program (NTP) aims at Achieving Governmental Operational Excellence, Improving Economic Enablers, and Enhancing Living Standards through: 1. Accelerating the implementation of primary and digital infrastructure projects. 2. Engaging stakeholders in identifying challenges, co-creating solutions, and contributing to the implementation of the program's initiatives.

Overview of Al Qassim Region

73,000 Km² (3.2%)

Area of Al Qassim in relation to the Kingdom of Saudi Arabia



Al Qassim population				
		Overall	Citizens	Non-Residents
	Total	1,423,935	1,009,543	414,392
	Men	821,310	511,037	310,273
	Women	602,625	498,506	104,119

Al Qassim region is one of the 13 administrative regions of the Kingdom of Saudi Arabia. The region, which is located almost at the centre of the Kingdom and the Arabian Peninsula covers 73,000 km², accounting for about 3.2% of the Kingdom's area. The region is divided into 13 governorates: Emara_Buraidah (the capital governorate), Al-Asyah, Uyun Al-Jiwa, Al-Badaya'a, Al Bakiriyah, Daria, Al Mithnab, Al Nabhanya, Ar Rass, Riyadh Al-Khabra, Al Shammasiya, Unaizah and Oklat AlSkoor (Figure 1).

Al Qassim borders Hail Region to the north and north-west, the Northern border region to the northeast, Riyadh region to the south and east and Medina region to the West and southwest (Figure 1). The centrality of Al Qassim within KSA makes it an important transit route between different parts of KSA, which is augmented by the interconnected mesh of highways, railways and air-routes.

Al Qassim is the most agriculturally productive region of KSA (and is commonly referred to as KSA's alimantal basket), mostly because it has a relatively high level of ground water and receives an average rainfall of 100 mm per annum - which is higher than the average precipitation for KSA

(recorded at 59 mm/annum). The main agricultural products from Al Qassim include dates, wheat, fruits and vegetables. The region also hosts one of the biggest cattle markets in the world, due to its central location, surrounded by Aldahna and ALnfoud deserts.

The population of Al Qassim region in 2018 was 1,423,935 people, which represented about 4.3% of KSA's total population. Majority of this population (1,009,543 - 70.9%) were Saudi citizens, which was split into 511,037 males (50.6%) and 498,506 females (49.4%). The number of non-Saudi residents was 414,392, with males representing a much higher proportion than females (74.9% of males - 310,273 and 25.1% of females - 104,119).

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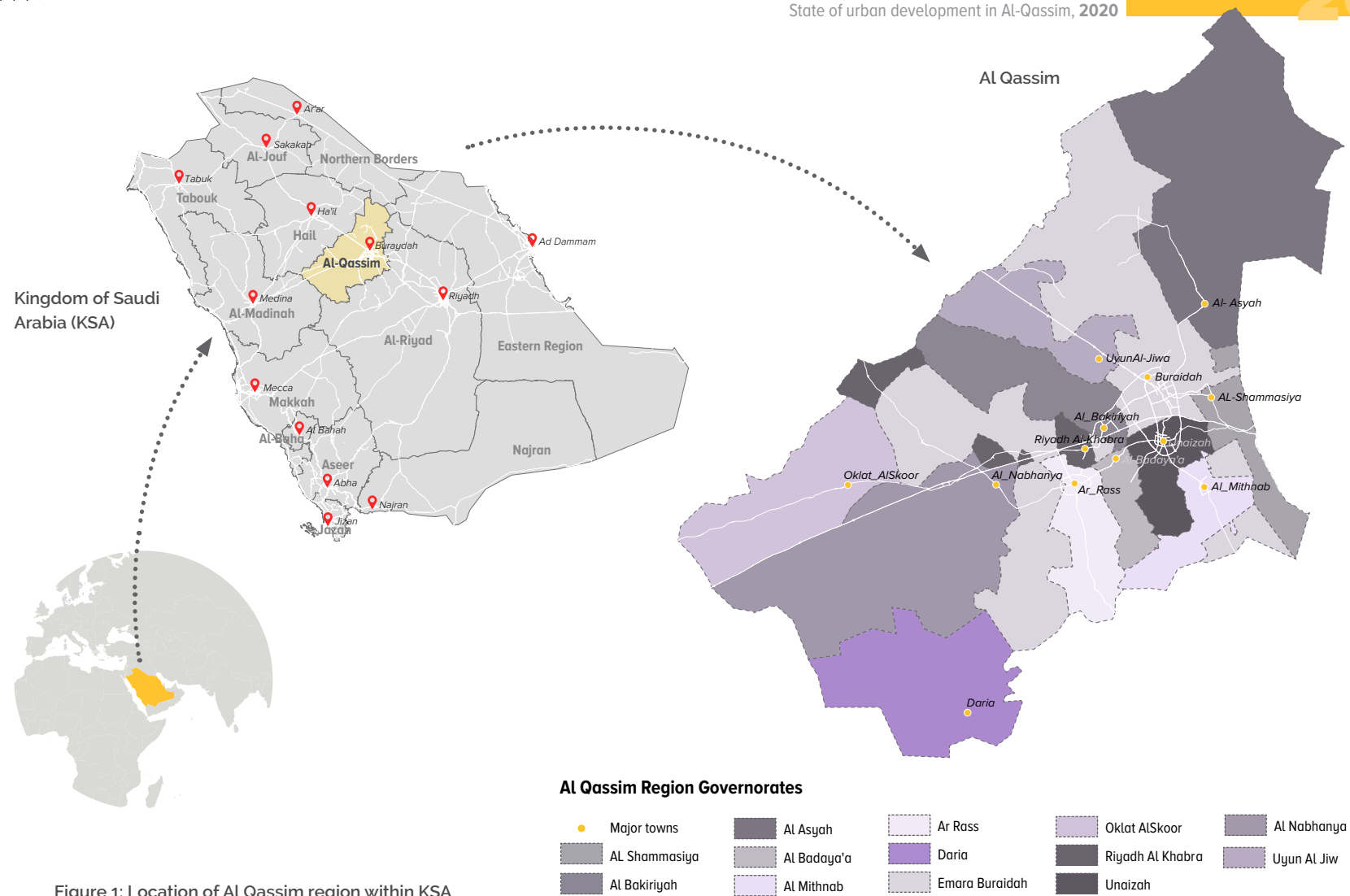
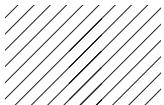


Figure 1: Location of Al Qassim region within KSA

Demographic and Spatial Development Trends

Part 1

AL QASSIM, A REGION IN TRANSITION

Al Qassim is a region at the cross-roads between history and modernity. From ancient villages and merchant and pilgrimage routes dating back centuries to modern urban settlements, Al Qassim is the manifestation of centuries of innovation and perhaps the most unique interactions between human and natural ecosystems in the whole of Saudi Arabia.

The history of Al Qassim region dates back to the 9th Hijri century. Due to its important location at the junction of major trade routes, the region witnessed a wide range of historical events. Many revolve round the Zubaidah route, which begins in Iraq and ends in Makkah Al Mukaramah; it has been used by Hajj caravans. Zubaidah, wife of the Caliph Haroon Al Rasheed, dug wells along this route to supply pilgrims with water.¹

There are more than 400 settlements in Al Qassim region, which consist of cities, towns, villages and Bedouin settlements.

As a region, Al Qassim was formed in 1992, when the administrative territorial structure in Saudi Arabia was changed from six provinces to 13 regions.² Overall, there are more than 400 settlements in the region, which consist of cities, towns, villages and Bedouin settlements. Today, different governorates and cities therein depict unique characteristics, which are connected to the region's history, the local populations, economic activities or intra and inter-regional linkages (Box 1).

1. Demographic transitions in Al Qassim region

Demographically, Al Qassim is the seventh most populated region in KSA. Between 1992 and 2017, the population of Al Qassim averaged about 4.4% of the total population of KSA, and was consistently about one fifth of the population of the two most populous regions – Riyadh and Makkah (Figure 2).

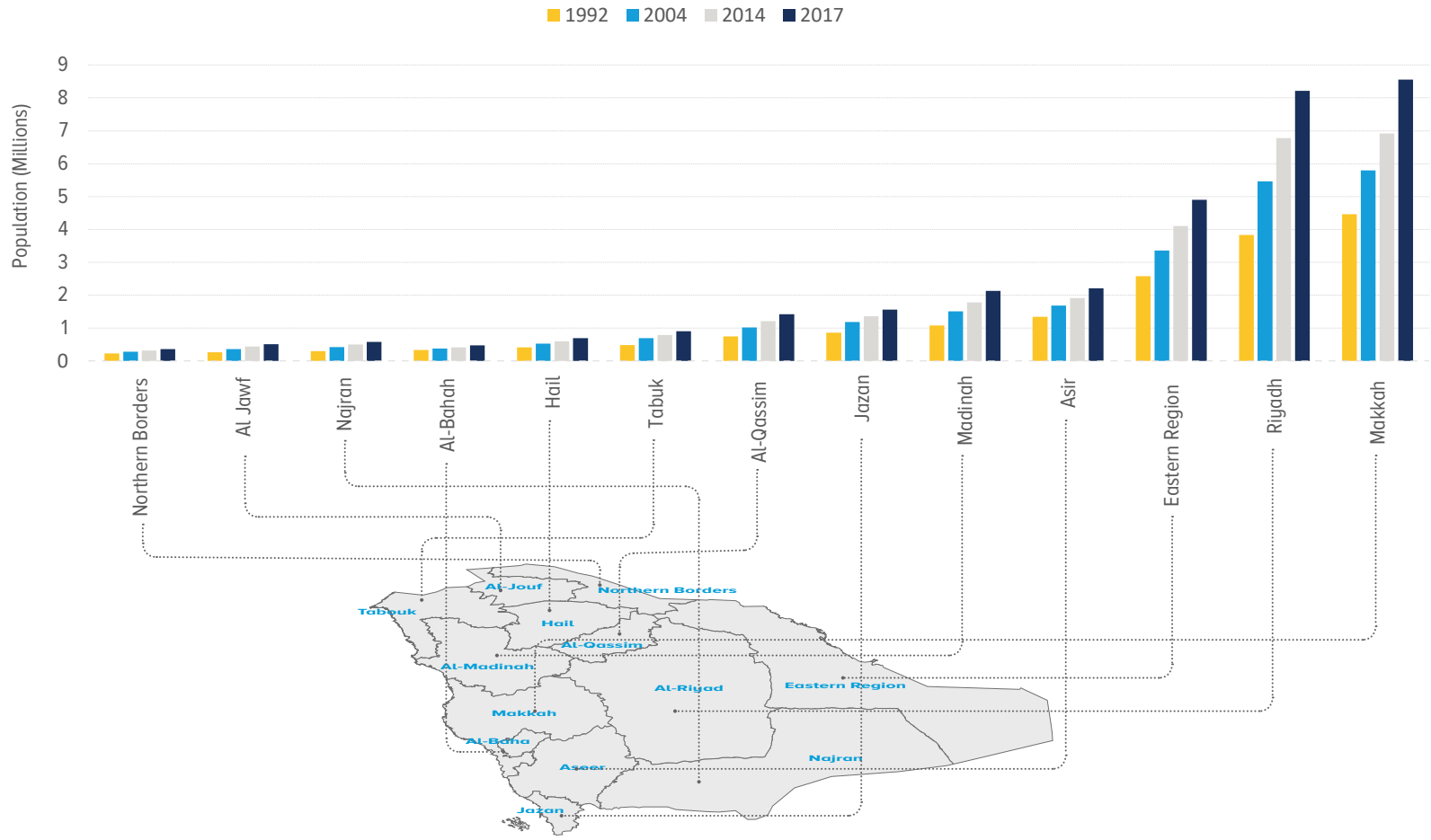


Figure 2: Population by region in Kingdom of Saudi Arabia

Majority of the population in Al Qassim region live in the urban areas, with Buraidah, the region's capital accounting for the highest population. According to statistics from the Qassim urban observatory, in 2018, the Buraidah city area (which is smaller than the Buraidah governorate) had a population of 668,525 people, which accounted for about 47% of the population of the entire Al Qassim region. This population was more than three times that of Unaizah, the second largest city in the region, and more than the combined populations of all other 12 main urban areas in the region, making Buraidah a primate city within Al Qassim (Figure 3). Spatially, Buraidah is also the largest city in the region, covering a total area of 913.6 km², which is 6 times the area of Unaizah (150 km²) and is greater than the combined areas of all other 12 cities. Due to these variations in the population and spatial extents of the cities in Al Qassim, Unaizah is the most densely populated city, followed by Al Badaya'a and Ar Rass, while Buraidah is the 8th most dense city in the region (Figure 3).

As a region, Al Qassim enjoys a youthful population, with majority of its population (35.1%) being youth aged 15 – 34 years. This, in addition to a high population share of the population aged 35 – 59 years (35.2%) implies a high workforce

throughout the region, which is key for enhanced productivity in the different sectors of the economy. The largely youthful population will also ensure steady supply of labour in the region over the next few decades.

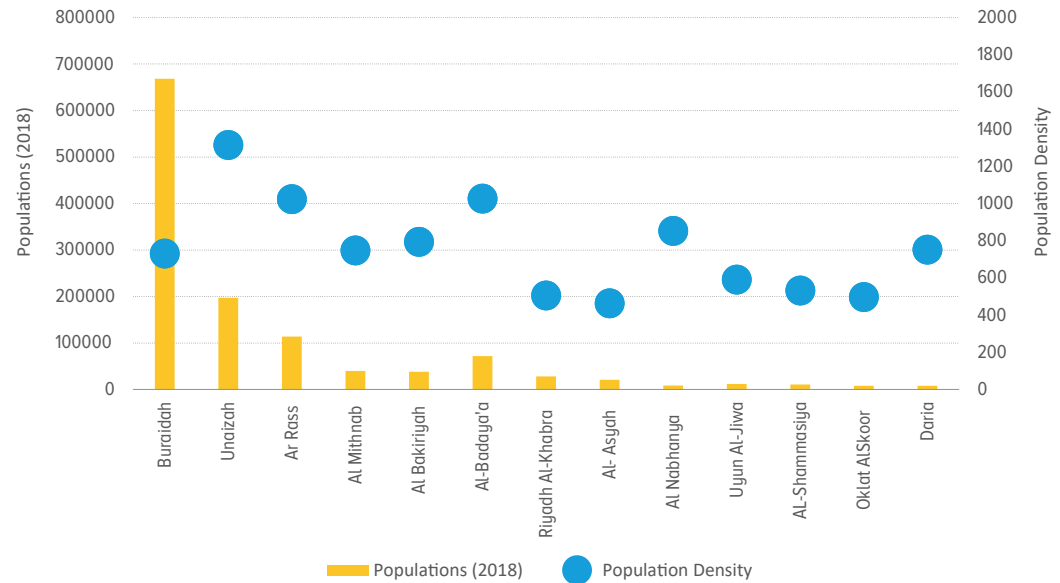


Figure 3: Population distribution in Al Qassim region cities

2. Trends in spatial growth in Al Qassim region

The spatial growth of Al Qassim region has remained relatively close to the average growth reported in the Kingdom of Saudi Arabia. According to UN-Habitat analysis, between 1990 and 2000, cities in KSA consumed land (converted land from other uses to urban activities) at an annual rate of 5.08%, which almost halved to 2.36% per annum

between 2000 and 2015. Such trend is observed in several cities in Al Qassim region, where for example the city of Ar Rass recorded an annual land consumption rate of 7% during the 1990 and 2000 period, which more than halved to 2.9% per annum between 2000 and 2015 (UN-Habitat, 2018). Figure 4 illustrates the change in built up area in Ar Rass between 1990 and 2015.

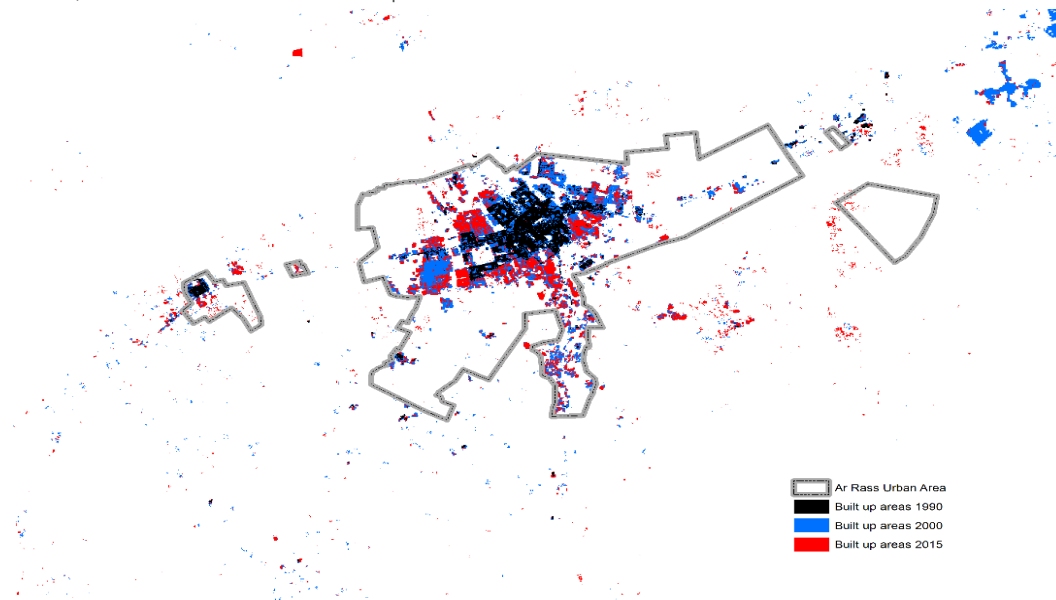


Figure 4: Changes in built up area in Ar Rass urban area

Kingdom of Saudi Arabia's rate of urban land consumption per annum



5.08% 1990

2.36% 2000

The growth trend reported in Ar Rass is common in most urban areas in Al Qassim, where built up areas are consistently increasing, often eating into the available agricultural land. This trend is likely to increase over the next decade, particularly given

that most land within the urban area of majority of the cities is either vacant or planned vacant land which is available for development. In Buraidah for example, 61.2% of the urban area constitutes of vacant land (planned and unplanned), a situation

that is not different from the smallest city, Al Nabhanya, where vacant land represents 82% of the total urban area. Ar Rass has the least vacant land within the urban area, which represents 31% of the total city area.

Table 1: Land use distribution by city in Qassim region (%)

	Total urban area (Km2)*	Residential	Planned vacant land	Commercial	Parks, roads and spaces	Services & public utility	Industrial	Unplanned vacant lands	Agricultural lands	Total
Buraidah**	913.6	6.9	15.2	1.4	11.2	3.7	1.2	46	11.2	96.8
Unaizah	150	10.3	26.9	1.95	18.68	8.1	3.1	13.1	17.87	100
Ar Rass	111.5	12.59	15.5	3.55	47.78	3.47	1.34	15.5	0.27	100
Al Mithnab**	53.2	11.93	24.24	2.44	18.51	2.24	0.85	26.16	12.14	98.51
Al Bakiriyah	48.5	8.26	31.18	1.95	22.31	2.54	0.91	27.68	5.19	100
Al-Badaya'a	70.9	6.53	28.8	1.09	20.07	3.04	0.46	35.24	4.77	100
Riyadh Al-Khabra***	55.9	3.96	22.73	0.23	21.62	2.66	0.73	38.66	9.4	100
Al- Asyah	45.3	4.6	24	0.3	17.52		0.04	53	0.58	100
Al Nabhanya	10.3	3.2	29	0.51	14		0.01	53	0.29	100
Uyun Al-Jiwa	20.3	6	35.53	0.53	29.96	2.27	0.62	24.99	0.1	100
AL-Shammasiya	20.7	8.4	4	0.57	13.11		0.06	69	5.42	100
Oklat AlSkoor	16.3	6.7	24	1.41	23		0.03	44.86	0.004	100
Daria	11.1	6.02	4.65	0.77	16.13		0.42	72.07		100

Source: QUO, 2018:

* Represents the physical city area within which QUO collects data;

** Other land uses include marshes, valleys and quarries which account for 3.1% of the land in Buraidah and 1.5% of land in Al Mithnab;

*** Riyadh Al-Khabra data for 2016

3. Evolution of the economy in Al Qassim region

In the main cities and urban areas in Al Qassim, the average proportion of population below the international poverty line is below one per cent, while the average share of population below the national poverty line is 12.7%. In 2018, Buraidah, the region's capital had 0.6% of its population below the international poverty line, while 14.3% were below the national poverty line, which was the third highest value after Al Nabhanya (20%), Daria (17%) and Ar Rass (14.8%) (Figure 5).

Despite the relatively low proportion of population below the international poverty line, urban unemployment in Qassim ranges from a low of 14% in Uyun Al-Jiwa to a high of 18% in Unaizah, which is higher than the nationally reported average of 6% (World Bank Urban indicators database, 2019). In all cities, unemployment is higher among females than males in 2018 (at least double in all cities). In Alsyah, about three-quarters of women (73.5%) were unemployed in 2018. Also, in all the cities within the region, youth unemployment accounts for the highest shares of unemployed populations as at least half of youth aged 15 - 24 were unemployed in each city in 2018 (Figure 5). The highest unemployment rate was observed in Al-Badaya'a (74.2%).

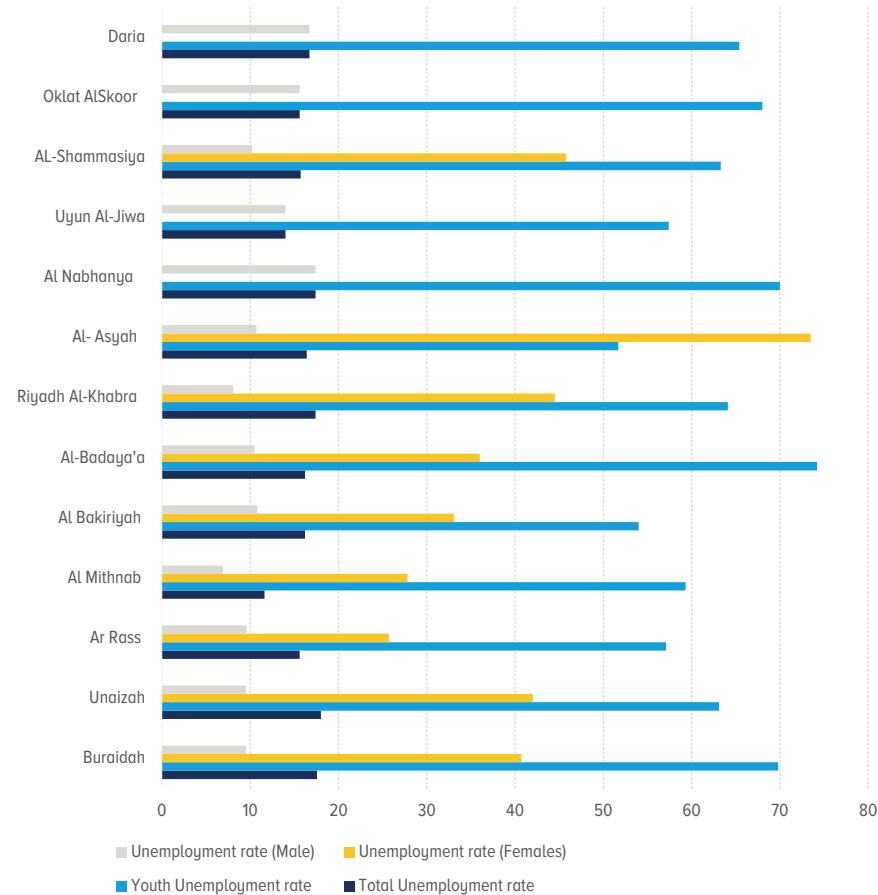


Figure 5: Unemployment trends in Al-Qassim region cities

The reported employment trends translate to a male dominated labour force, both in the government and private sectors. Within the government sector for example, the average of women working in the different departments averaged only about 1.4% across all 13 cities, with city-specific values ranging from no female employees in Al Nabhanya and Daria to a high of

only 4.6% in Ar Rass city (Figure 6). The situation is even more dire in senior roles in the government departments. Only two cities – Buraidah and Unaizah had females in senior roles, which represented 0.9% and 3.13% of the total female employees in the government departments respectively. All the other cities did not have any women in senior roles (grades 11 and above)

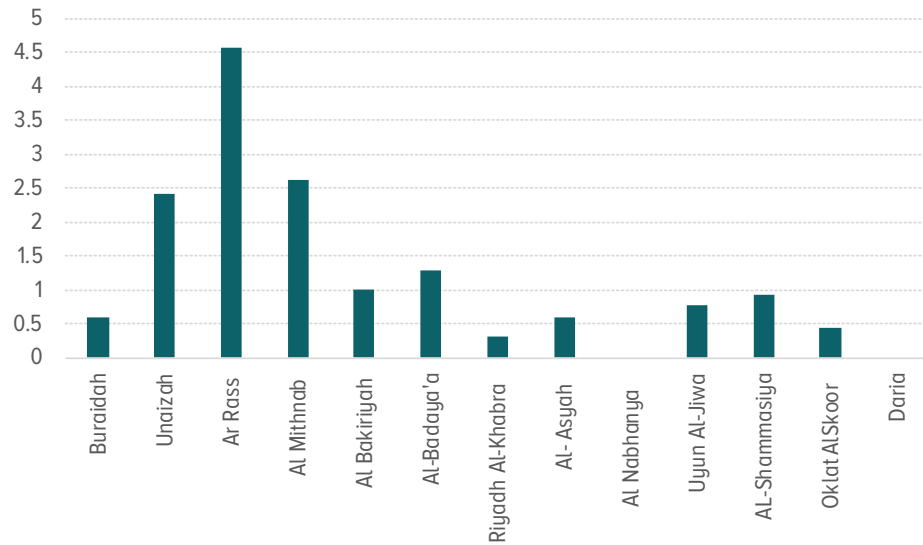
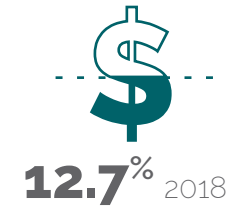


Figure 6: Percentage of female employees in government departments

On average, 35.1% of population in Al Qassim cities is youth aged 15 - 34 years. At least half of this population is unemployed.

Al-Qassim's average proportion of population below the national poverty line



The average proportion of women working in different departments



In all cities, the public sector accounts for the highest employment, with the total employees in government departments averaging about 79.7% of the total employees (Figure 7).

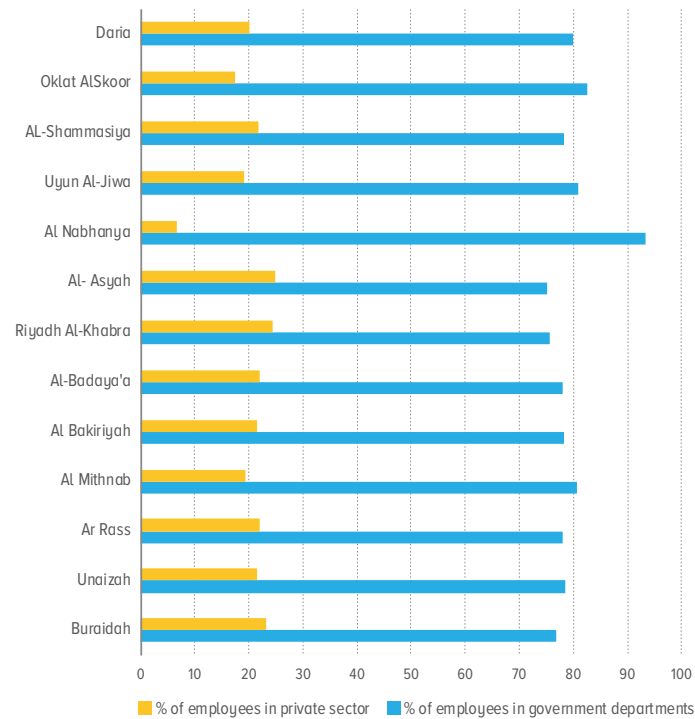
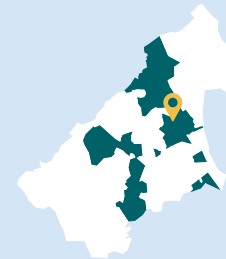


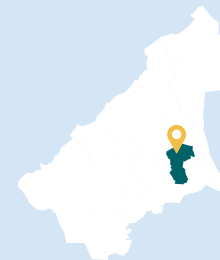
Figure 7: Distribution of employment by sector

BOX 1 Main cities in Al Qassim region



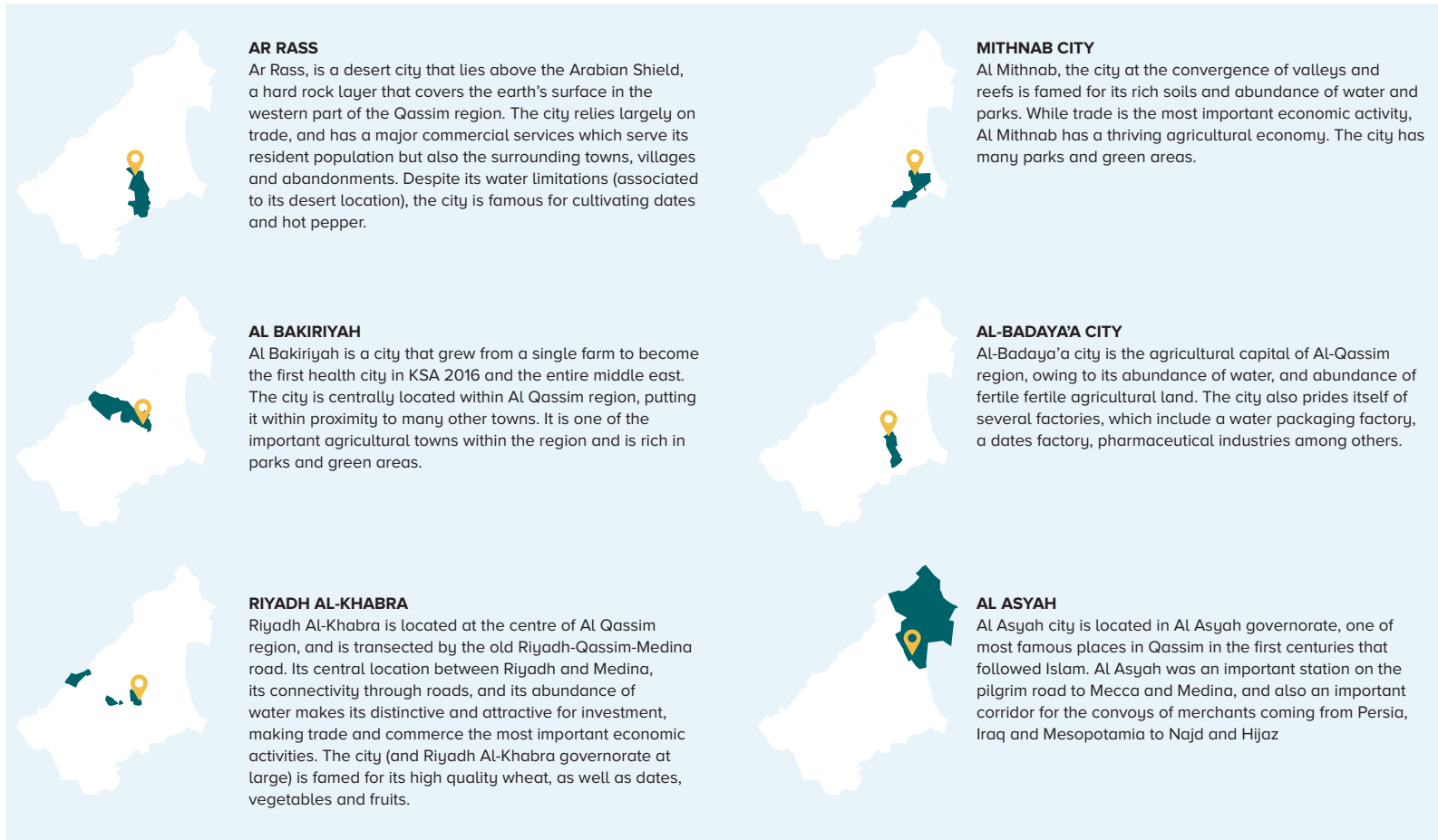
BURAIDAH

Buraidah, Al Qassim region's capital is the biggest city in the region, and is located along the important link between Medina and Riyadh. The main economic activities in Buraidah include administrative functions, trade and commerce. Despite a low share of contribution of agriculture to the economy, Buraidah is the main producer of best-quality dates.



UNAIZAH

Unaizah city is located in the water rich and highly agricultural Unaizah governate. The city has a rich history, with archeological surveys indicating that there were intensive settlements since the third century BC, and was a key resting place for pilgrims coming from Iraq.





NABHANYA

The city of Nabhanya is located in an area that is famous for palm cultivation. The city is considered the main financier for neighboring markets, and a main link to export markets for dates. Water is very rare in Nabhanya due to the city's location in the Arabian Shield.



UYUN AL-JIWA

Uyun Al-Jiwa city is an old settlement located at the center of Qassim region, only 30km from the region's capital Buraidah, making it a key trading area. The people of Uyun Al-Jiwa are distinguished by their distinctive dialect from other governorates of Al-Qassim, and are also known for their trade activities and honesty.



AL SHAMASIYA

Al Shamsiya city, the green valley and the Eastern Gate of Qassim region is marked by its unique landscape, which extends between agricultural lands and sandy hills, that had an impact in determining the city's urban formation and growth trends. "Al-Jal park is an important attraction for the city, with some residents of the surrounding cities such as Buraydah city (which is only 23km away) reported to visit it over the weekends to enjoy the nature and uniquely designed seats which safeguard the privacy of both families and youth.



OKLAT ALSKOOR

Oklat Alskoor, the western gateway to Qassim region is located on the Riyadh – Medina road, about 220 km from the region's capital Buraidah. The city is characterized by its proximity to the "cotton" tourist mountains and its proximity to the "Skhirat" gold mine and the famous Mount "Tamiya". It is also penetrated by the Valley of Rumah, which is one of the largest and most historically rich valleys of the Kingdom. The city's central location between a group of centers and villages, and its proximity to the borders of Hail and Medina regions make it an important trading center.



DARIA

Daria, the city between mountains is considered to be one of the most important centers of the pilgrimage of Basra road. The city is characterized by its many mountains and valleys and charming areas that attract hikers.

LINKED SETTLEMENTS FOR SUSTAINABLE AND PROSPEROUS DEVELOPMENT

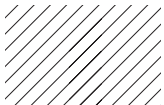
In a highly globalized world, good infrastructure such as efficient transport networks and modern information and communications technology enable cities to attract investment, increase their competitiveness and ultimately reap the benefits of globalization. This chapter highlights the existing physical and virtual infrastructure in cities in Al Qassim region, focusing on linkages between cities in Al Qassim region, with other urban areas within KSA, and other countries in the Middle East and the rest of the world.

Al Qassim's central location within KSA makes it an important transit zone between Riyadh and Medina and a resting point for pilgrims from Iraq and Kuwait en route to Mecca.

1. Transport and road networks in Al Qassim region

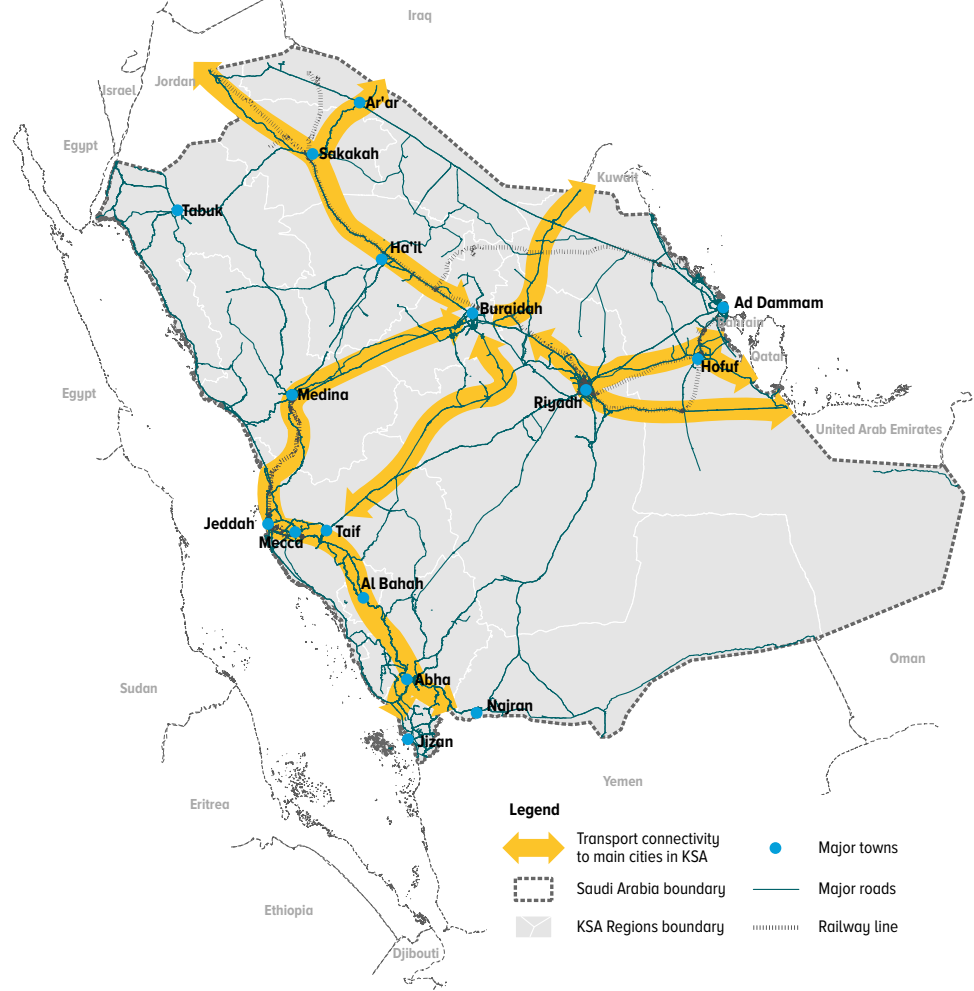
Al Qassim region is highly connected to all parts of the Kingdom of Saudi Arabia and the world both physically and virtually. Within KSA, a network of roads, railways and air routes connect Al Qassim to other regions, facilitating the movement of people, agricultural produce and other goods to and from the region. The region's location around the center of the kingdom makes it an important transit zone between Riyadh and Medina, as well as a resting point for pilgrims from Iraq and Kuwait en route to Mecca.

Highway 65 (popularly known as the Riyadh-Al Qassim Highway) is a major transport route that cuts through central Saudi Arabia. The 1200 kilometers highway connects Buraidah to the Kingdom's capital Riyadh, other cities like Ha'il, Sakakah and Al-Kharj, and ultimately to Jordan and Iraq to the North. Highway 60, which connects to highway 65 at Buraidah city cuts horizontally through Al Qassim and traverses many cities in the region. The 812 kilometers highway connects Buraidah and other cities in Al Qassim region



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to Jeddah, the commercial capital of KSA, as well as to the holy cities of Medina and Mecca. Highway 60 is an important route for tourism and pilgrimage in all of KSA. In addition to these two main highways, the North-South railway line, which measures a total of 2,750 Km connects AL Qassim to four other regions in KSA - AL Jawf, Northern Borders, Ha'il and Riyadh, and further to Jordan in the North (Figure 8). This interlinked web of highways and railway lines connect AL Qassim and its populations to trade, commerce and agricultural produce export opportunities throughout KSA and the Gulf Cooperation Council (GCC) region at large.



Length of asphalt roads in Al Qassim region.



Length of the North-South railway line that connects AL Qassim to four other regions in KSA



Figure 8: Road and rail connectivity between AL Qassim and other major cities in KSA

A rich network of roads connects all cities and settlements inside Al Qassim region. This network is made up of 7,984 km of asphalt roads/streets, which comprises 3,929 km of internal city roads (roads located within cities and urban areas) and 4,055 km of external/link roads (roads located outside cities and urban areas). Within the 13 cities in Al Qassim, the road lengths per capita vary significantly, and range from a low of 6.6km per 1000 population in Unaizah to a high of 48.4km per 1000 population in Al Bakiriyah city (Figure 9). Data from other countries shows huge variations in the length of highways per 1000 population, which ranges from a low of 0.277 km to a high of 139.13, with at least 150/ 195 countries recording less than 10km of highway per 1000 population.³

On average, the share of the land in streets in the 13 main cities in Qassim is 29.5% of the total urban area, which is close to the average of 30% recommended by UN-Habitat for a city that aims to become highly productive and prosperous. Intra-city variations are however observed, with Al Mithnab recording the highest share of urban land allocated to streets, while Buraidah allocates 24.1% of its urban land to streets (Figure 10). Some cities in Al Qassim also record a high intersection density, even though the overall average (60 intersections/km²) is below the 100 intersections/km² recommended for a highly productive and livable city (Figure 10).

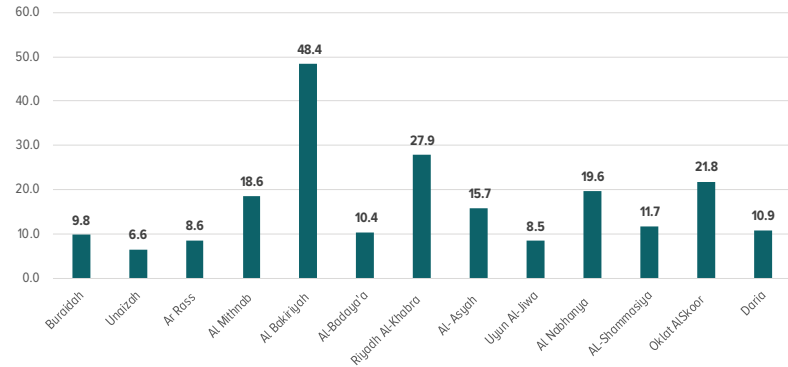


Figure 9: Length of road per 1000 population by city

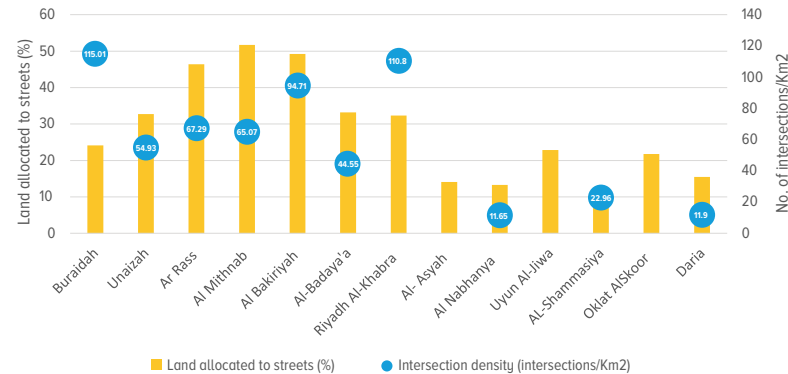


Figure 10: Share of land allocated to streets and intersection densities in Qassim cities

Some positives that can partly be associated with the existing street system in Al Qassim cities is the short time spent to reach work, as well as the average time spent in traffic. According to 2018 data from Al Qassim urban observatory, in the 13 biggest cities in Al Qassim, the average time to reach work is only 9.5 minutes, while the time passengers spend stuck in traffic averages about

11.5 hours per annum (Figure 11). The amount of time wasted in traffic in Al Qassim cities is significantly smaller than the averages for cities in the United States (54 hours/year)⁴, United Kingdom (45.73 hours/year) and Finland (18.13 hours/year)⁵, implying more opportunities for higher productivity in Al Qassim cities.

On the downside however, the availability and use of public transport in cities in Al Qassim remains a major challenge, with private cars accounting for about 84% of the trips to work in 2018. Without proper investment in public transport modes, the region is likely to experience increases in traffic congestion, and in turn more time wasted in traffic jams.

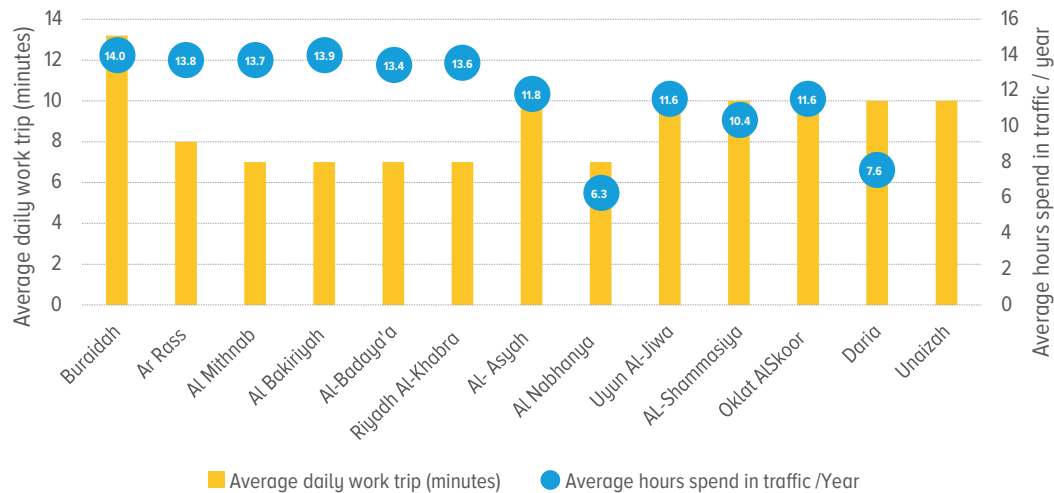


Figure 11: Time spend in transport network by city

The average time to reach work in Al Qassim cities



9.5 Mins

The average time spent in traffic per annum



11.5 Hrs

Al Qassim is also connected to other regions in KSA and the rest of the world through a network of air routes. Figure 12 shows the main air connections between Al Qassim (Prince Nayef bin

Abdulaziz Regional Airport) and other regions in KSA, as well as to other destinations outside the Kingdom.

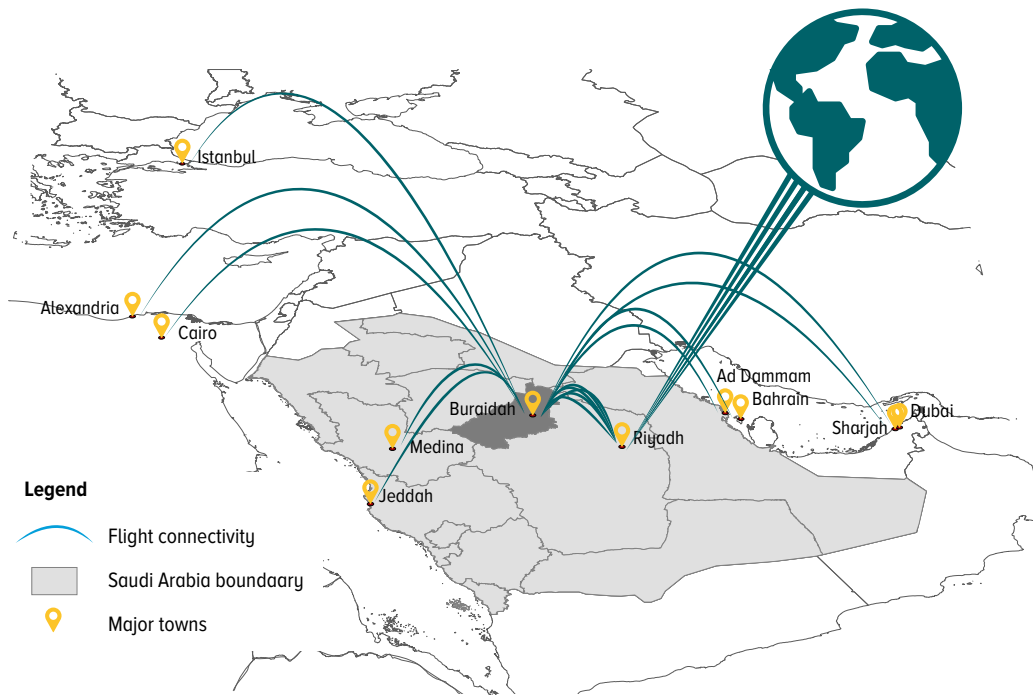


Figure 12: Major flight destinations from Al Qassim Region

Investment in public transport is a major policy priority in Al Qassim cities and one third can contribute to reduced reliance on private cars

2. Virtual connectivity in Al Qassim region

Beyond the physical linkages, the populations in all cities in Al Qassim region are highly connected virtually to each other as well as to the rest of KSA and the world. On average, 87% of the urban population in the 13 main cities in Al Qassim were internet users in 2018 (Figure 13). Majority of households in the urban areas are also connected to the internet, with Ar Rass, Al Mithnab and Riyadh Al-Khabra recording universal connectivity, while Buraidah, Al Bakiriyah and Al-Badaya'a recorded 99.2%, 99.8% and 97.3% connectivity in 2018 respectively. The share of social media users to the total urban population is equally large (averaging 81.7%), implying high virtual linkages of populations in Al Qassim with the world (Figure 13).

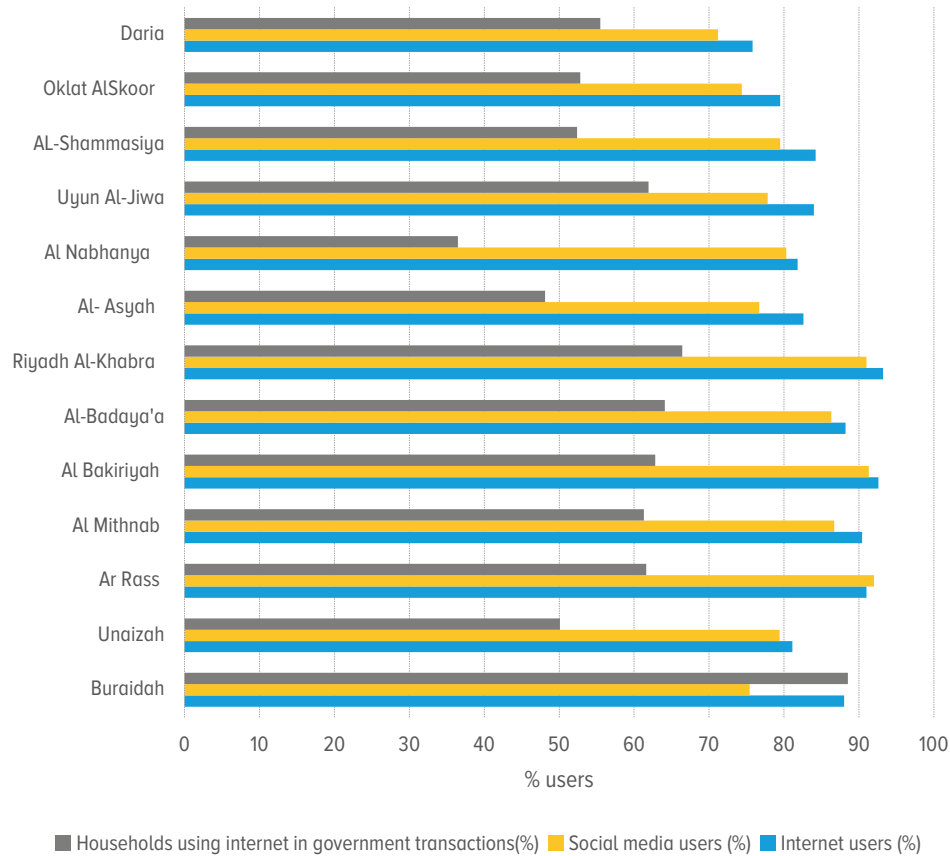


Figure 13: Internet usage in Qassim Cities

With the increase in internet uptake and the digitization of many government services in Al Qassim, there is an increase in the number of people undertaking transactions with the government digitally, which is likely to continuously contribute to a reduction in the need for physical interactions in service delivery, promote smart service delivery systems, and improve service delivery. In Buraidah city for example, 88.5% of households use the internet in government transactions (Figure 13).

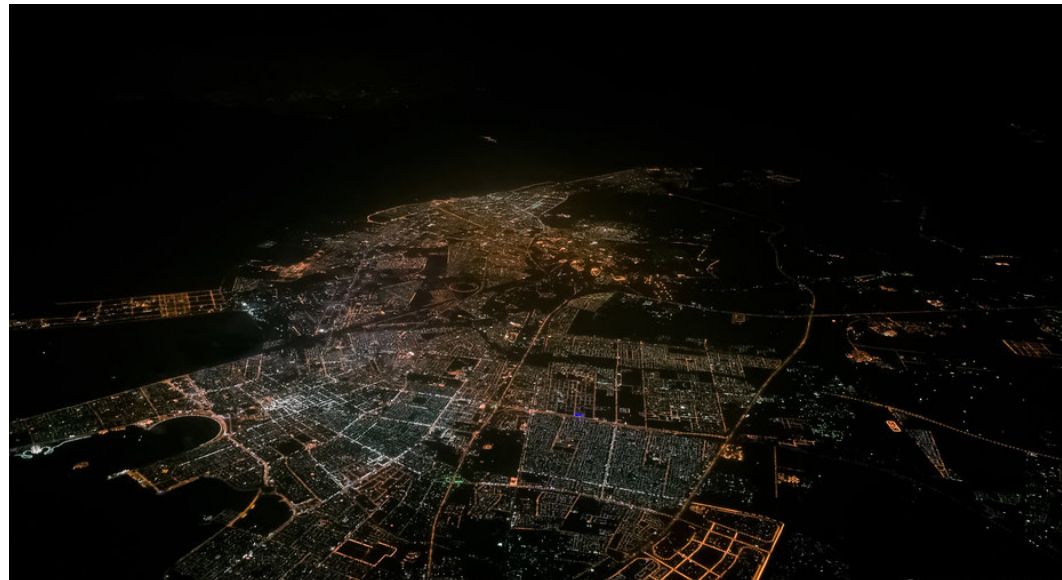
The central location of Al Qassim and its high connectivity to other parts of KSA and the world not only enables the region to export its agricultural produce and undertake trade with other regions and countries, but also makes it an important tourist destination in KSA. This, coupled with a highly educated population and fondness of the people for trade and commerce has significantly contributed to Al Qassim's economic prosperity.

SOCIAL CAPITAL FOR SUSTAINABLE AND PROSPEROUS DEVELOPMENT

A city's future sustainable growth and prosperity depends upon its investment in education, health, peace, security and other social capital stocks. Successful cities create a peaceful and secure environment for investment; encourage high human capital development through well-educated and healthy citizens; and such cities report lower

levels of inequalities and poverty (Ndugwa et al, 2017).⁶

Al Qassim region performs very well in most social capital indicators, which enhances its prospects of prosperous development.



Buraidah City, Al Qassim © Jon / Flickr

Health status and access to health services

The average life expectancy at birth in Al Qassim is 74.4 years, with females having a higher life expectancy (75.7 years) than males (73.1). The region's average life expectancy is similar to that of the entire KSA, which averages 74.9 years, split into 73.7 years for men and 76.5 years for females (World Bank 2019)

Maternal and child health indicators vary greatly between cities in Al Qassim, suggesting different health conditions between cities.

Health-care resource including number of beds or health-care professionals is one of the key factors which contribute to the health status of a population. For example, adequate supply of hospital beds to meet population needs is key of efficient access to hospital-based care. Data shows that availability of hospital beds varies greatly between Al Qassim cities. While Oklat AlSkoor and Daria cities have more than 60 beds per 1000 population, Al-Badaya'a has only about 17 beds per 1000 population. Buraidah, the capital city only has about 26 hospital beds for 1000 population.

The doctor-population ratio also varies between cities, ranging from a high of 3.9 doctors per 1000 people in Oklat AlSkoor to 0.8 per 1000 people in AL-Shammasiya. It is commendable to see that 12 out of 13 cities have at least 1 doctor for 1000 population, which is the WHO recommended

doctor-population ratio. In general, Al Qassim cities record high levels of skilled attendance at birth in 2018, with all cities having levels above the international target of 90% and 9 out of 13 cities recording universal access to skilled birth attendance.

Table 2: Health indicators by city

	Low birth weights* / 1000 live births	Hospital Beds / 1000 population	Doctors/ 1,000 population	Skilled doctor at delivery (%)
Buraidah	24.3	25.9	2.3	100
Unaizah	51.91	21.5	2.2	99.8
Ar Rass	75.9	21.9	3.2	100
Al Mithnab	65.8	32.7	3.5	100
Al Bakiriyah	80.4	35.1	3.6	100
Al-Badaya'a	27.9	16.7	1.3	100
Riyadh Al-Khabra	37.7	17.7	2.6	100
Al- Asyah	52.45	23.8	2.7	98.3
Al Nabhanya	46.51	56.8	3.7	100
Uyun Al-Jiwa	25	22.5	3.2	100
AL-Shammasiya	0	0 (no hospital in city)	0.7	100
Oklat AlSkoor		61.7	3.9	95.7
Daria	21.43	60.1	3.8	97.9

* (No. of babies born with less than 2500 gram /1000 live births)

Access to Education

Cities in Al Qassim record a relatively higher adult literacy rate than both the KSA and global averages. In 2018, the total adult literacy rate in the 13 main cities in Al Qassim region ranged from 92.3% in Daria city to 99% in Al Mithnab and Riyadh Al-Khabra cities. The total literacy rate in Buraidah city was 95.9%, with a slightly higher value (96.2%) recorded among the Saudis. Only two cities, Oklat Alskoor and Daria recorded total

literacy levels lower than the national average of 95.3% (World Bank 2019 - 2017 values), which was also higher than the global average of 86.3% ⁷. With the exception of Oklat Alskoor, males were slightly more literate than females in the main cities in Al Qassim, which is consistent with the KSA and global trends as shown in Figure 14.

Cities in Al Qassim record a relatively higher adult literacy rate than both the KSA and global averages.

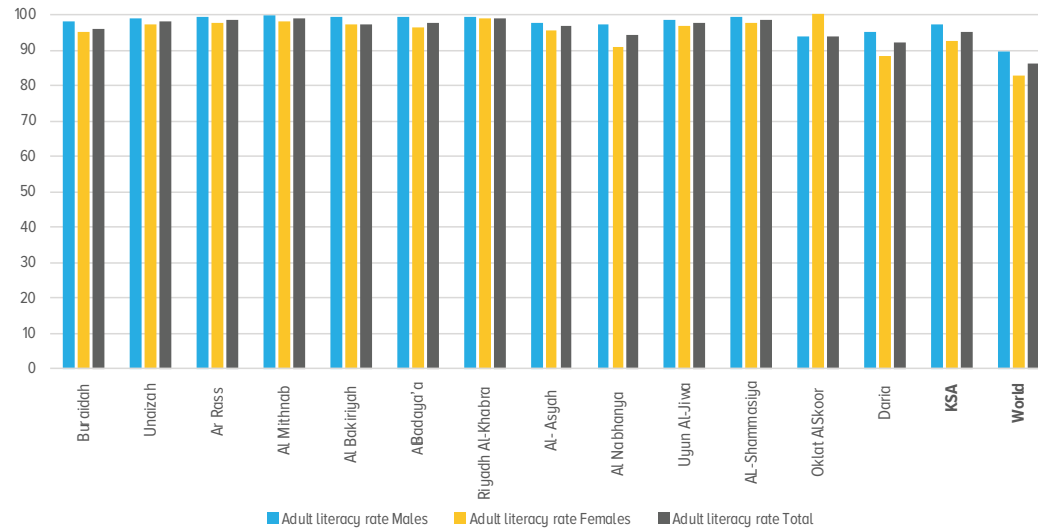
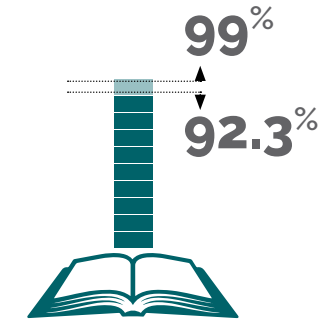


Figure 14: Literacy levels in Al Qassim



Adult literacy ranges from 92.3% to 99%

The high literacy levels recorded in cities in Al Qassim can be related to the school enrollment rates, which range from 73.3% to 100% in primary school, 88.1% to 100% in secondary school and 43.2% to 60.4% for higher education (table 3.2). The student-teacher ratio in primary school varies from 5.9 students per teacher in Al Bakiriyah and Daria to 13.7 students per teacher in Unaizah. These are very low ratios, very much below the recommended norm of 40 students per teacher, which is conducive to good performance by the students. Indeed, a low pupil-teacher ratio is likely to result in the long run in a better performance of the pupils as the teacher manages smaller classes and is able to deliver good quality education and pay more attention to individual students. In secondary school, the student-teacher ratio varies from 6.1 students per teacher in Al Bakiriyah to 12.8 students per teacher in Unaizah. This is also low and suggests that students in Al Qassim cities are likely to receive good quality education. Finally, on average, people spent between 10.2 years (Oklat AlSkoor) and 12.7 years in school (Al Mithnab).

Table 3: Education indicators in Al Qassim cities

	Primary school enrollment rate	Secondary school enrollment rate	Higher education enrollment rate Total	Students per Teacher primary school	Students per Teacher secondary school	Mean years of schooling
Buraidah	95.8	94.1	46.3	11.1	9.2	11.3
Unaizah	95.1	100	46.2	13.7	12.8	12.5
Ar Rass	100	100	59.6	9	8.1	12.4
Al Mithnab	83.6	89.1	56.4	8.8	7.5	12.7
Al Bakiriyah	100	100	58.5	5.9	6.1	12.4
Al-Badaya'a	86.8	89.1	60.3	8.3	7.7	11.6
Riyadh Al-Khabra	89.9	88.1	60.4	8	10	12.3
Al- Asyah	-	90.7	44.4	7.4	6.6	11.9
Al Nabhanya	73.3	94.1	49.6	8	9.6	10.7
Uyun Al-Jiwa	100	100	42.9	10	10.9	12.1
AL-Shammasiya	-	-	49.5	6.2	6.9	11.7
Oklat AlSkoor	-	-	46.7	9.7	9.5	10.2
Daria	81.4	100	43.2	5.9	7.9	10.5
KSA	97.7(2013)	85.69(2013)		13.81 (2018)	10.96 (2014)	

Access to Housing

In all cities in Al Qassim except Al Nabhanya, Oklat AlSkoor and Daria, majority of households live in owned houses, majority of which houses are single dwelling villas. In these 3 cities, the majority of households either rent their houses or got through other means.

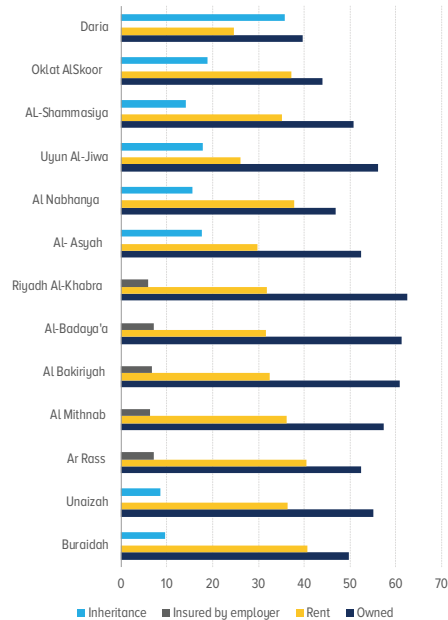


Figure 15: Type of housing tenureship in Al Qassim Cities

All cities in Al Qassim also enjoy a high allocation of housing space per person, with the floor area per person averaging about 60 m² per person. This, when coupled with a room occupancy rate that averages about 0.8 persons per room indicates that all cities in Al Qassim enjoy adequate housing. Cities in Al Qassim also enjoy a moderate to high housing production rate, which

is a ratio of the number of new houses in a year to the number of new households in the same year (Table 4). The housing ownership and development trends are likely to be contributing factors to the declining rental values in the region, which while good for the renters could have a negative effect on the long-term investments in the cities.

	Floor area per person (m2 per person)	Sufficient living area (%)	rooms occupancy rate (persons per room)	housing production rate to household formation (new houses per new households)	variation in rental value (2017 – 2018) (%)
Buraidah	60	100	1.1	0.9	-3.9
Unaizah	65.4	100	0.8	0.66	-2.1
Ar Rass	49.4	100	0.7	0.64	-0.8
Al Mithnab	55.6	100	0.6	0.73	2.3
Al Bakiriyah	57.7	100	0.8	0.66	-2.04
Al-Badaya'a	57.9	100	0.7	0.99	-2.2
Riyadh Al-Khabra	56.2	100	0.7	1.85	-0.2
Al- Asyah	65.8	100	0.68	0.28	-3.91
Al Nabhanya	65.64	100	0.78		-0.76
Uyun Al-Jiwa	62.7	100	0.8	0.47	-1.15
AL-Shammasiya	64.65	100	0.75	1.09	-1.11
Oklat AlSkoor	59.25	100	0.8	0.3	-1.23
Daria	58.66	100	0.76		-2.13

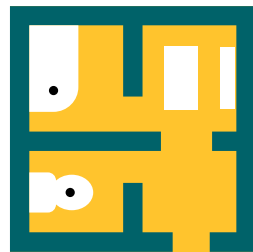
Table 4: Housing indicators in Al Qassim Cities (2018)

Access to Basic services

The good performance in housing indicators in Al Qassim cities points towards adequate housing throughout the region, which is an important prerequisite for increased productivity, high quality of life and a healthy population.

The provision of basic services in cities in Al Qassim varies significantly. All cities in the region for example enjoy universal connection of households to electricity, while the share of households connected to water ranges from a low of 12.2% in Al Nabhanya to universal connectivity in Al Mithnab city. Similar trends are observed in household connectivity to sanitation services,

with reported variations from a low of 42.8% in Unaiza city to a high of 98.6% in Al Mithnab city (Figure 16). However, despite the disparities in water connectivity in Al Qassim cities, all households in each city have access to potable water within 200 meters from their house, which contributes significantly to a high quality of life.



Housing floor are per person in Al Qassim cities

60 m²

Average room occupancy

<1 Person/room

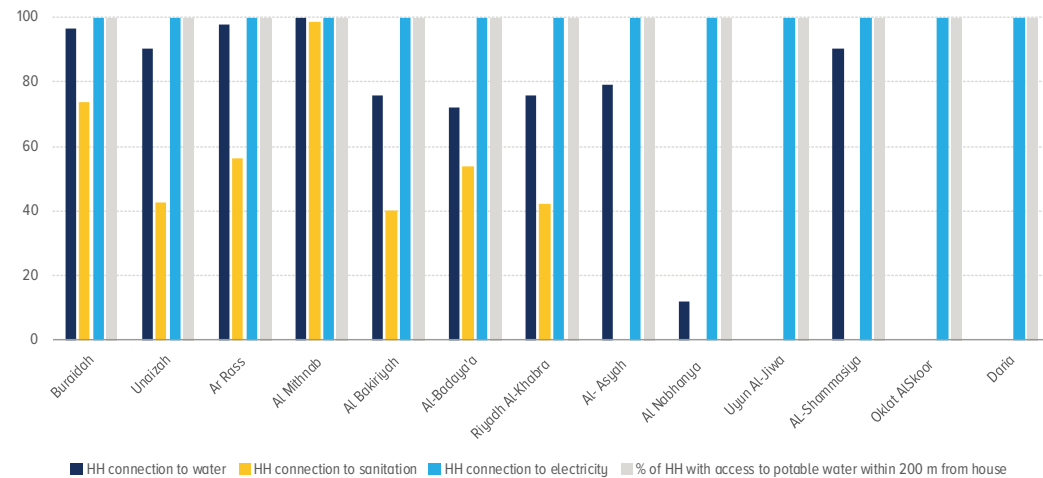


Figure 16: Household access to basic services

*In cities without a sewer network, other sanitation options such as septic tanks provide residents with adequate sanitation services

Most cities in Al Qassim record a high level of water usage. The daily water usage per person per day ranges from 139 liters to 371.6 liters, which is relative to water consumption trends in developed countries, and higher than the estimated basic daily requirements of 50 – 100 liters/person/day⁸. In addition, annual water wastage that exceeds 9.5% of the total water produced per annum

in most cities poses a significant sustainability challenge in a region where water is a scarce commodity (Table 5). The waste generation trends in Al Qassim cities follow a similar trend to that reported for water usage. Cities in Al Qassim generate more waste than the global average of 0.26 tonnes per person per year. The waste generation in Al Qassim cities, which ranges

from 0.21 tonnes/person/year in Al- Asyah to 0.7 tonnes/person/year in Al Bakiriyah is however within the global waste generation range of 0.039 – 1.6 tonnes/person/year (table 3.4).⁹ An equally significant challenge remains that of solid waste management: six¹⁰ out of 12 cities in Al Qassim dispose all their solid waste through burying, while recycling is barely adopted by the others – from 1% in Al-Badaya'a to 7.4% in Buraidah (Table 3.3).

Table 5: Access to basic services in Al Qassim cities (2018)

		Buraidah	Unaizah	Ar Rass	Al Mithnab	Al Bakiriyah	Al-Badaya'a	Riyadh Al-Khabra	Al- Asyah	Al Nabhanya	Uyun Al-Jiwa	AL-Sham-masiya	Oklat AlSkoor	Daria
Water consumption (liters/person/day)		269.3	254.9	262.8	154	210.5	139.3	-	371.6	319.6	-	266	210	
Solid waste generated (tonnes/person/year)		0.42	0.37	0.48	0.41	0.7	0.59	0.55	0.21	0.57	0.58	0.4	0.34	0.3
Solid waste disposal (%)	Burying	92.6	97.5	95	96.4	100	99	99.9	100	100	100	100	100	
	Recycling	7.4	2.5	5	3.6		1	0.1						
Annual wastage of water (%)		10	27.8	15.5	21.9	10	18.5	9.5	16.5	10	27.8	9.9	-	

BOX 2

Local governance

Local government revenues (Management of local government revenues?)

The distribution of financial resources between capital and recurrent expenditure is key to a city's long term infrastructure and services investment. A city that allocates most of its financial resources to recurrent expenditure is likely to be less prosperous than one that allocates more resources to its capital expenditure development.

Majority of cities in Al Qassim allocate less than half of their total budgets on recurrent expenditure, which can be a good pointer to availability of financial resources for investment in capital expenditure. Oklat Alskoor city allocates the least amount of its budget to recurrent expenditure (24.4%), while Buraidah city has the highest budgetary allocations on recurrent expenditure (79.8%) (Figure 17).

This budgetary allocation/distribution pattern, if not well balanced could have an effect in the long term infrastructure development, and in turn the prosperity of the cities.

Time to start a business

In 2018, the average number of days required to start a business in cities in Al Qassim is lower than the national average of 17.8 (world bank), with the recorded numbers ranging from only one day in Al Bakiriyah and Al-Badaya'a to 14 days in Ar Rass (Figure 18)

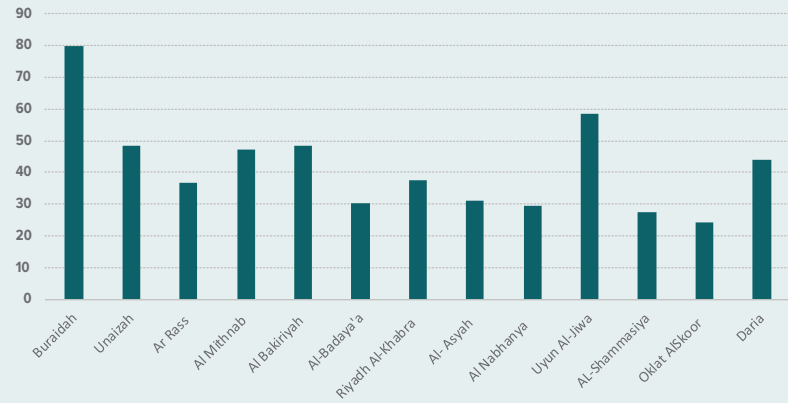


Table 17: Percentage recurrent expenditure to total budget expenditure in Al Qassim cities (2018)

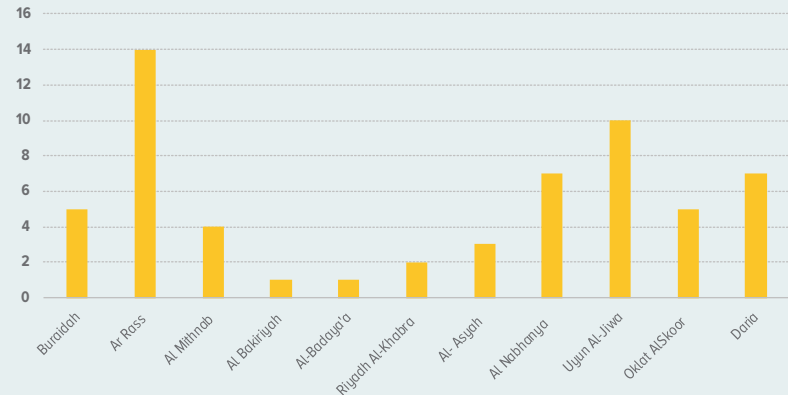


Figure 18: Number of days to start a business (2018)



Summary and Conclusion

The Qassim Urban Observatory was set up to respond to the need for timely and relevant data at city level to inform local decision-making and investments in Buraidah city. Over the last decade, the most important achievement of QUO has been increased investment in local data collection and management systems, increased availability of local data across sectors and more reliance on data in policy and decision-making processes. The success of the urban observatory in Buraidah led to the expansion of the observatory's operational scope and mandate to the entire Al Qassim region covering all the major cities. Today, QUO produces data on 229 indicators in 13 cities, providing city authorities with previously unavailable timely and relevant data for policy and decision-making.



“Al Qassim Urban Observatory is an instrumental mechanism for evidence-based decision-making as it generates various urban indicators in support of development across sectors”

- HRH Dr. Faisal Bin Mashal Al-Saud, Governor of Al Qassim and Chairperson of Qassim Urban Observatory Council

Over the last decade, data generated and/or compiled by QUO has also been instrumental in analyzing and communicating to policy makers performances in different thematic areas/sectors. Examples include the production of the Buraidah Voluntary Local report 2018, which outlined the status of performance against SDG 11 indicators and the required actions to accelerate attainment of sustainable urbanization in the city. Some specific actions that have been implemented as a result of recommendations from QUO reports and data include installation of environmental monitoring stations to continuously track air quality, investments in the number of children beds in response to identified infant mortality rates within the cities, and general support for broad policy and decision making processes within the municipalities .

From analysis of data on select indicators presented in this report, cities in Al Qassim region perform differently across indicators. Data points to 5 key priority areas for investment and/or policy interventions:



1. Urban growth

Like many cities in KSA and the larger Arab States region, cities in Al Qassim experience rapid outwards expansion. This is a major challenge in Al Qassim, where a significant share of the land is agriculturally productive. A rapid rate of urban expansion will not only continuously convert agricultural land to urban land uses, but will also make it more expensive to connect households to basic services such as water and sewerage. Policies on urbanization which encourage densification and reduced sprawl should be developed, in line with local development priorities, KSA urbanization strategies and the global urbanization models.



2. Public transport

Cities in Al Qassim largely rely on private cars, and barely integrate green (eg walking) and public transport modes. This demands regular expansion of roads to cater for an ever-increasing number of private cars, which in turn translates to more (and regular) capital investments, as well as increased air pollution. While traffic congestion is currently not a major challenge in most cities within the region, Buraidah, the largest city records the highest amounts of time spend in traffic each year, a situation that may become more dire in the future. In their bid to become more prosperous and sustainable, all cities in Al Qassim need to invest in public transport and green transport infrastructure systems in the short to long terms.



3. Natural resource conservation

Water is scarce resource in Al Qassim and the entire Kingdom of Saudi Arabia. Despite this scarcity, cities in Al Qassim consume water at rates equivalent to those of water rich countries. This, combined with an annual water wastage that exceeds 9.5% of the total water produced in the cities is a worrying trend for the sustainability

of the scarce resource, as well as the amount of energy required to desalinate water. To safeguard Al Qassim underground water reserves and enhance its long-term agricultural productivity, there is need for a water management strategy (including recycling) and associated regulations for all cities in Al Qassim.



4. Waste management

Cities in Al Qassim produce more waste per capita annually than the global average, yet the waste management strategies rarely incorporate recycling. The waste disposal methods, which largely comprise burying pose a major environmental concern, and actions to both reduce waste production and to promote re-use and recycling should be put in place. These should be integrated into all the current and future developments for all cities within the region, and into the local and regional development strategies and policies for enhanced uptake.

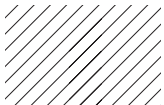


5. Employment opportunities/distribution and economic diversification

Cities in Al Qassim record both a high reliance on the public sector for employment, and high youth and female unemployment rates. This is despite high literacy rates among youth and women. There is need for programmes on economic diversification to create more employment outside the public sector, as well as deliberate programmes on youth and women employment to ensure inclusive and equitable development where no one is left behind.

Endnotes

- 1 <http://www.the-saudi.net/saudi-arabia/qaseem/Qaseem%20City%20-%20Saudi%20Arabia.htm>
- 2 <http://www.statoids.com/usa.html>; https://en.wikipedia.org/wiki/Regions_of_Saudi_Arabia
- 3 <https://www.nationmaster.com/country-info/stats/Transport/Highways/Total/Per-capita>
- 4 <https://edition.cnn.com/2019/08/22/us/traffic-commute-gridlock-transportation-study-trnd/index.html>
- 5 https://ec.europa.eu/transport/facts-fundings/scoreboard/compare/energy-union-innovation/road-congestion_en
- 6 Ndugwa, R., R. Opiyo, D. Mwaniki, O. Odhiambo, 2017. Social Development and Security for Smart Economic Development, in Kumar T.M.V (Eds), Smart Economy in Smart Cities, Springer, Singapore.
- 7 <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS>
- 8 https://ec.europa.eu/echo/files/evaluation/watsan2005/annex_files/WHO/WHO5%20-%20Minimum%20water%20quantity%20needed%20for%20domestic%20use.pdf
- 9 https://datatopics.worldbank.org/what-a-waste/trends_in_solid_waste_management.html
- 10 These include Al Bakiriyah, Al- Asyah, Al Nabhanya, Uyun Al-Jiwa, AL-Shammasiya and Oklat AlSkoor



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