



# Cumulative Impact Model Summary 2025





# About Karratha

Karratha, in Western Australia's Pilbara, is known for its mining industry, stunning landscapes, and Indigenous heritage. It serves as the gateway to Murujuga National Park, the Dampier Archipelago, and Roebourne's arts hub. With modern infrastructure and a growing community, Karratha is a key hub for industry and lifestyle in the northwest.

## Purpose of the Model

The Cumulative Impact Model (CIM) forecasts industrial expansion in Karratha, assessing its impact on population, housing, infrastructure, and essential services. By analysing multiple construction projects, the CIM provides insights into workforce demand, infrastructure needs, and future services. Developed with regional stakeholders, it supports businesses, policymakers, and planners in making informed decisions for sustainable growth and community well-being.

## Economic context

### Economic Output



**3.22%**

CONTRIBUTION TO WA'S  
GROSS STATE PRODUCT (GSP)

## Labour Market (2021 Data)



**77.6%**

OF PEOPLE (AGED 15+)  
WERE EMPLOYED



**19.4%**

WERE NOT IN THE  
LABOUR FORCE



**2.1%**

UNEMPLOYMENT  
RATE



**14,910**

TOTAL JOBS

## Top Employing Sectors



**27.2%**

MINING  
(3,617 JOBS)



**11.5%**

CONSTRUCTION  
(1,536 JOBS)



**6.9%**

EDUCATION &  
TRAINING  
(920 JOBS)

## Cost of Living – Regional Price Index

**115.9** IN 2021

**111.1** IN 2023

## Statistics from Cumulative Impact Model

**\$34.53 billion**

TOTAL  
INVESTMENT  
PIPELINE



PROJECTS  
TRACKED

**49**



UNDER  
CONSTRUCTION

**\$24.62b**

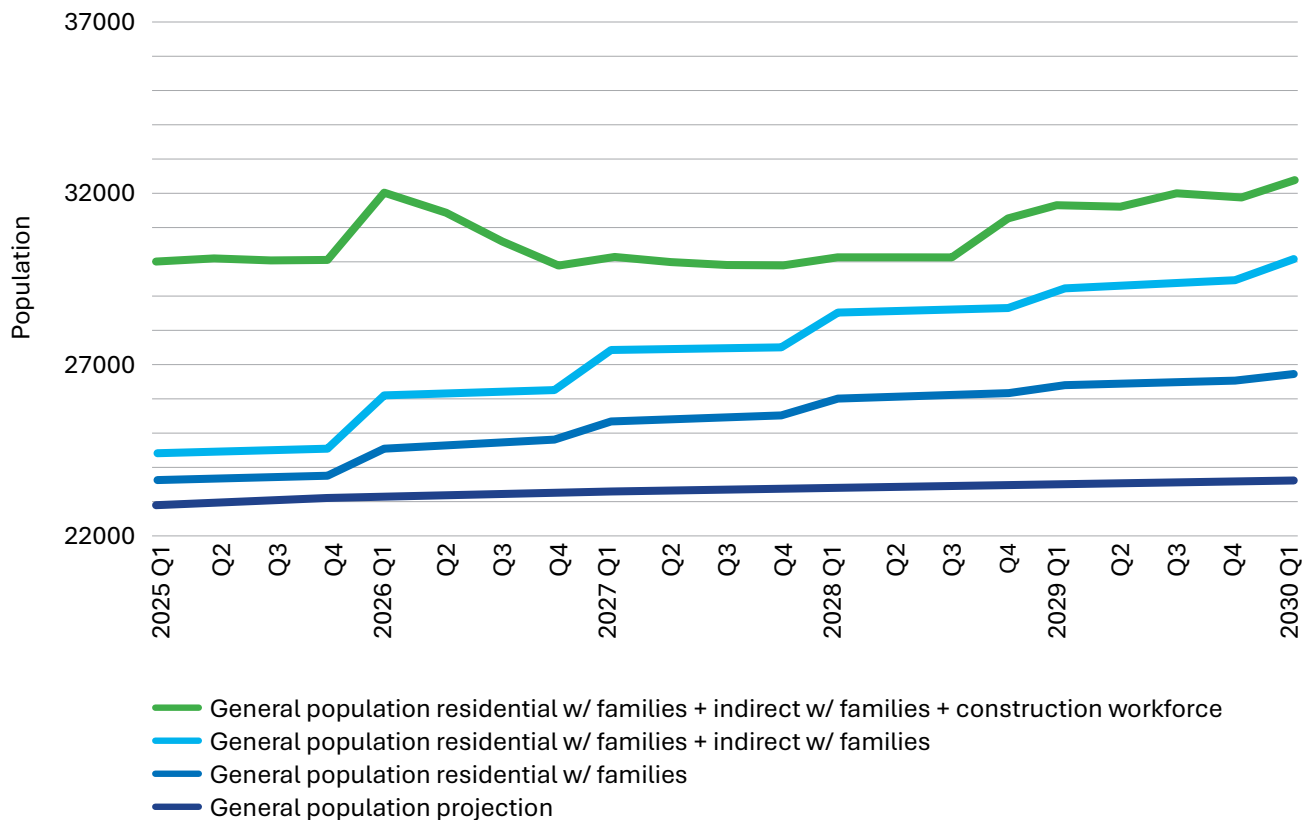


UNDER  
CONSIDERATION

**\$9.93b**

# Karratha Population Forecast

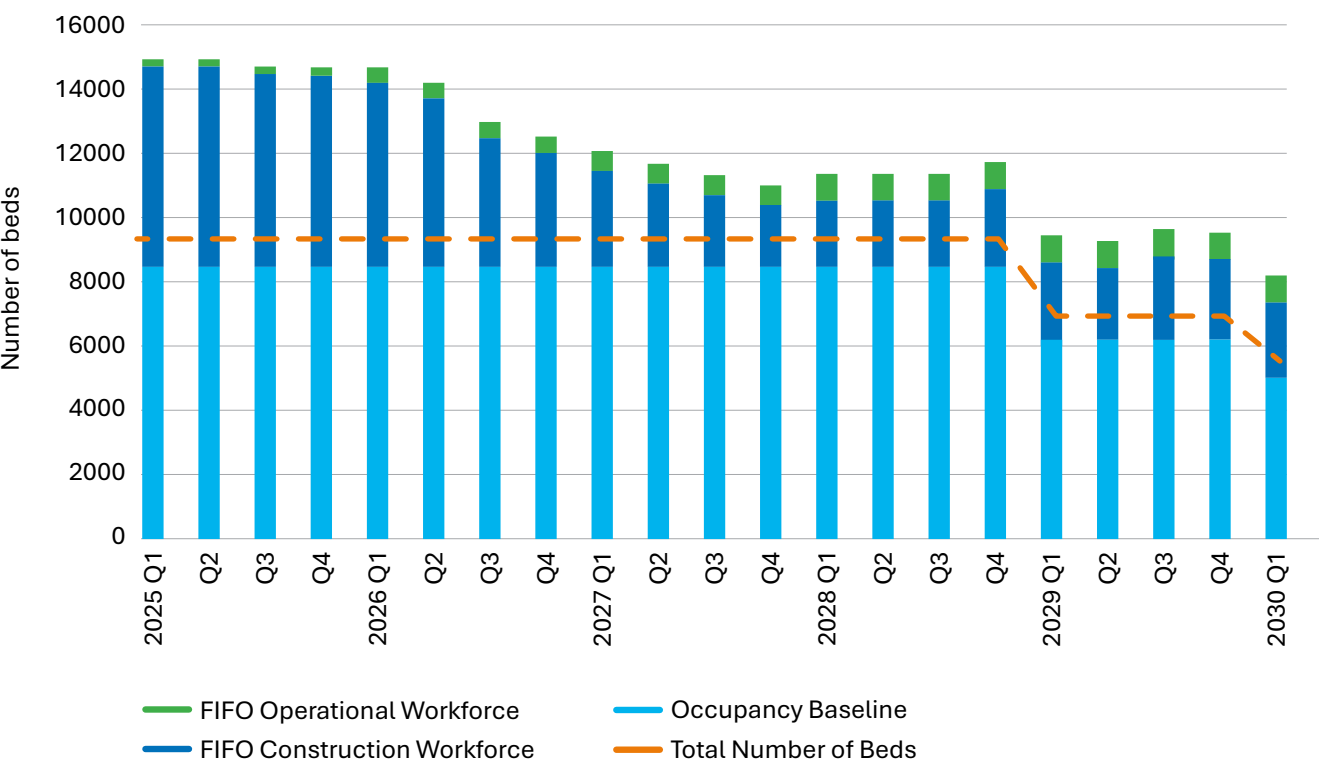
Significant growth in the residential and indirect workforce is expected from Q1 2023 to Q4 2029, with a peak population of 32,018 by Q1 2026. This growth is driven by the ongoing construction projects and workforce influx.





# Short-term accommodation supply analysis

The accommodation shortfall is particularly severe between Q3 2023 and Q4 2030, with a peak deficit of 5,563 beds in Q1 2024. This shortfall starts to level off after Q2 2031 as construction projects complete.



# Long-term housing supply analysis

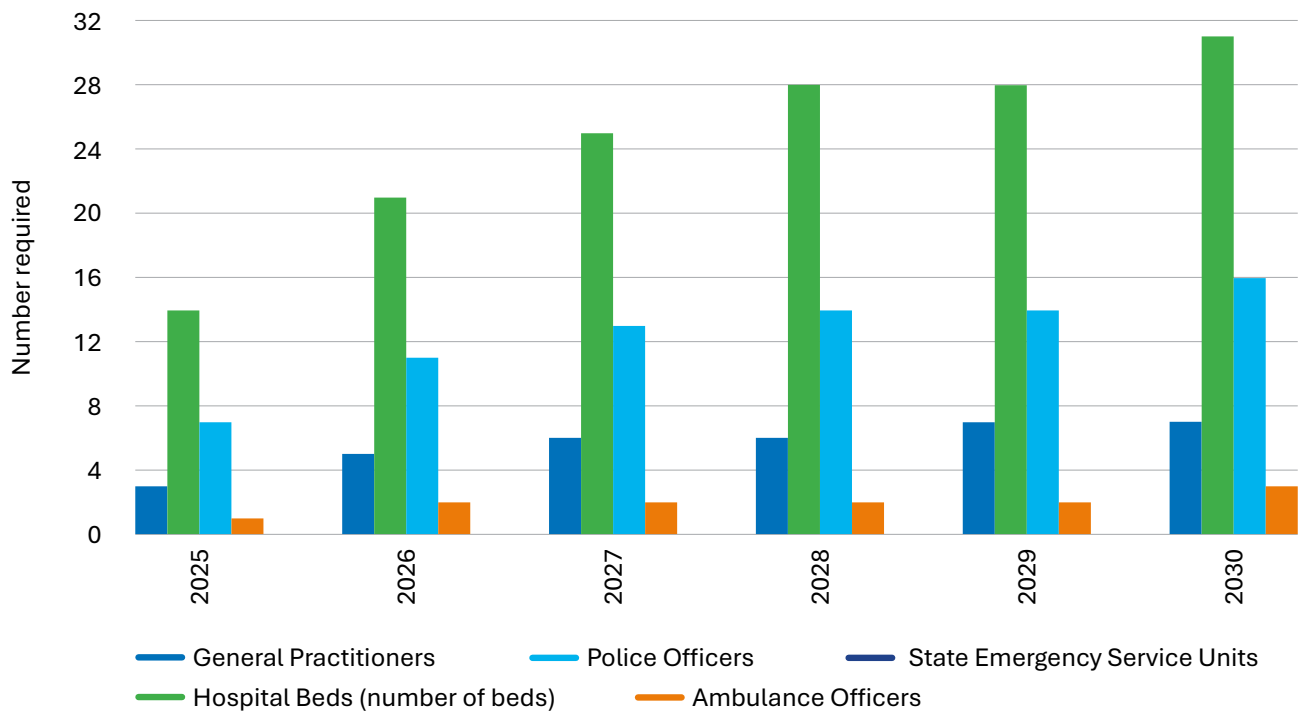
The city faces a continual housing shortfall driven by rising population and workforce numbers. The shortfall increases as the demand for housing continues to grow.





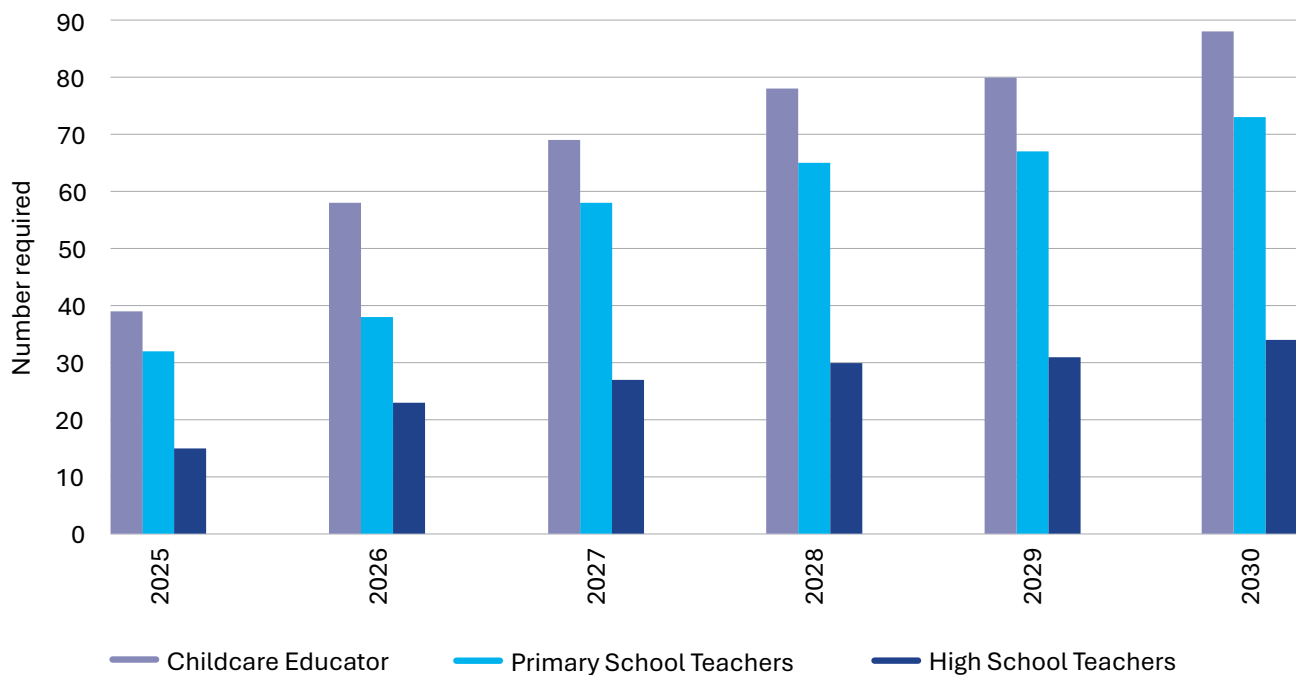
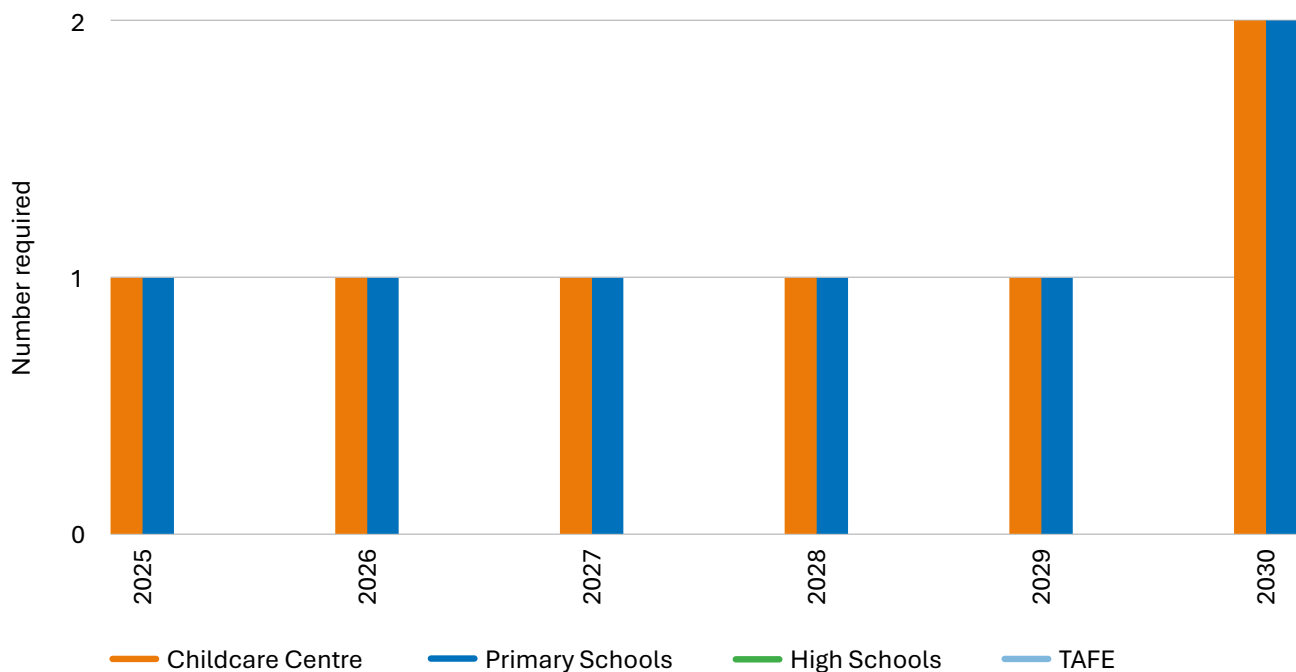
# Projected demand increase – Health and emergency services

The demand for GPs increases, reaching 7 GPs from 2029, and hospital bed requirements rise sharply, peaking at 21 beds in 2026. Police officer requirements rise to 16 officers by 2030.



# Projected demand increase – Education

There is a need for one primary school between 2025 to 2029, with two needed by 2030. Teacher demand grows significantly, especially between 2025 and 2030, and the demand for childcare centres increases starting in 2025.

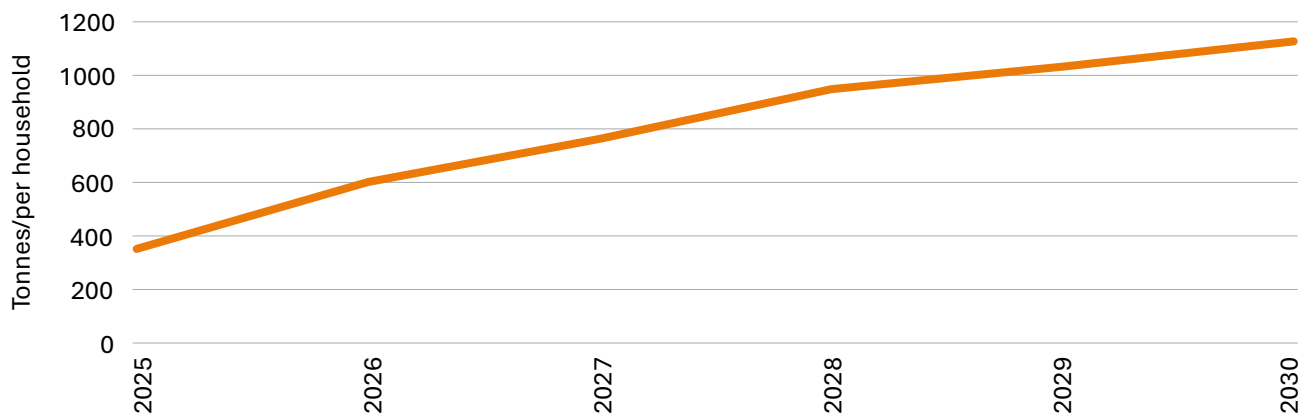




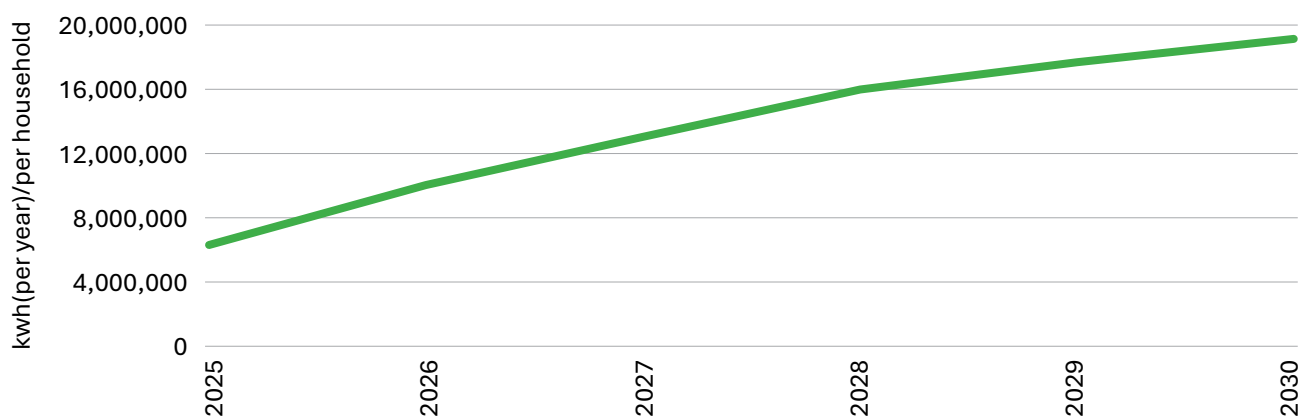
## Projected demand increase – Utilities

The waste generation peaks at 595.2 tonnes in 2026, and electricity consumption rises steadily to 19.5 million kWh by 2040. Water usage increases significantly, peaking at 422,265.9 kilolitres in 2026.

### Additional waste generation



### Additional electricity consumption



### Additional water usage

