



# Data Scientist

## CANDIDATE INSTRUCTION SHEET

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*You are NOT being assessed on any knowledge of NSW Department of Planning, Industry and Environment Policies and Procedures. The Task and the information provided to you is property of the Strategy and Innovation and the Department of Planning and Environment. It is important that you keep this information confidential.*

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### Purpose

This activity is designed to assess the following capabilities:

- **Manage Self:** Show drive and motivation, an ability to self-reflect and commitment to learning
- **Communicate Effectively:** Communicate clearly, actively receive information from others and respond with respect
- **Deliver Results** Achieve results through efficient use of resources and a commitment to quality outcomes
- **Think and Solve Problems:** Think, analyse and consider the broader context to develop practical solutions
- **Technology:** Understand and use available technologies to maximise efficiencies and effectiveness
- **Project Management** Understand and apply effective planning, coordination and control methods

### Your Task

You will be asked to:

- Read through the Scenario Information
- Deliver your response: You are invited to present your approach to this problem and are welcome to use a PowerPoint presentation to support your response.  
You will have 10 minutes to present at the start of the interview.
- **Please email an electronic version of your response to Kieren-lea Fergusson – Talent Acquisition Specialist - [kieren-lea.fergusson@dpie.nsw.gov.au](mailto:kieren-lea.fergusson@dpie.nsw.gov.au) by 9am Wednesday 12<sup>th</sup> May 2021.**  
**Please ensure the subject line is: 'Data Scientist: Assessment Task – Candidate Name'**

## The Scenario

The Department has a responsibility for determine the future population of NSW and its localities through population projections.

As part of this process it is important to understand how age structures vary across different locations in the State. Service provision is very frequently tied to age – for example location of schools should be near children, aged-care near older persons, transport infrastructure where students and the workforce live.

Part of the preparation for population projections is determining which localities in NSW have similar age structures.

### Task

Using ABS Estimated Resident Population for 30 June 2019, for ABS Statistical Area 2 (SA2) spatial units, demonstrate which NSW SA2s have similar age structures. Explain the methodology employed and the rationale for the similarities.

**You will have 10 minutes at the start of the interview to talk through your approach and present your findings. You may use presentation slides to support your response.**