New

Ministry

Assisted Living and Social Services

Describe: Basic Job Details

Position

Position ID

Position Name (200 character maximum)

Data Management Specialist

Requested Class

Program Services 4

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

Housing, Continuing Care Capital/Planning and Data

☐ Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Director, CC Capital Planning

Supervisor's Current Class

Senior Manager (Zone 2)

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

The Continuing Care Capital Planning and Data Strategy unit is responsible for the planning and prioritization of new and modernized continuing care infrastructure, as well as oversight of government owned continuing care home capital assets. This work is guided by the province's continuing care transformation strategy and supports targeted capital grant funding streams under the Continuing Care Capital Program (CCCP).

Reporting to the Director, the Data Management Specialist is responsible for developing and implementing the unit's data strategy to support evidence-based capital planning for continuing care infrastructure. This position ensures that accurate, timely, and integrated data is available to inform decisions on grant funding under the CCCP, investment priorities and management of government owned continuing care infrastructure.

The Data Management Specialist leads the design and maintenance of data systems and processes that enable efficient collection, organization, and analysis of large and complex datasets. This includes using, maintaining and potentially building predictive models to forecast demand and capacity, developing automated data pipelines, and creating reporting tools that provide actionable insights for senior decision-makers. The position also explores

innovative approaches such as artificial intelligence and advanced analytics to improve long-term planning and provide options to address complex challenges.

This position requires the development and maintenance of a strong network of collaborative relationships with division and ministry representatives and internal and external stakeholders. This includes aligning with division-wide data and information processes, while ensuring consistency and integration with cross-ministry continuing care data systems. Through this work, the Data Management Specialist supports transparency, accountability, and effective stewardship of public resources in the delivery of continuing care capital programs.

Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

1) Develop and implement a comprehensive data strategy to enable evidence-based continuing care capital planning:
- Lead the creation and execution of a data strategy that supports long-term capital planning objectives and aligns with ministry priorities.
- Define standards for data governance, security, and quality assurance to ensure compliance with government policies and privacy/information requirements.
- Establish processes for integrating the data strategy into division data system and planning workflows to support decision-making for continuing care capital planning.
- Implement data validation, reconciliation, and quality assurance processes; identify gaps and discrepancies and develop solutions to improve data integrity.
- Standardize data collection and storage practices across the unit, maintaining comprehensive documentation for transparency and compliance with information and privacy standards.

2) Collect, transform and store data required for continuing care capital planning and analytics:
- Extract and consolidate data from within the ministry and from data systems in other ministries to provide a source of truth for continuing care capital planning purposes
- Identify and resolve data discrepancies or anomalies through collaboration with divisional program areas and perform data cleansing, validation and transformation.
- Identify opportunities to improve data systems, automate reporting processes and enhance analytical capabilities.
- Design and implement data collection projects to support capital planning initiatives.
- Design and maintain normalized data models, metadata, and dictionaries to ensure datasets are structured for efficient analysis and auditability.

3) Conduct analytics and forecasting and provide reporting products to inform grant programs, investment decisions and capital prioritization:
- Conduct descriptive and inferential statistical analyses to uncover trends and predict program outcomes.
- Manage processes to conduct cross-jurisdictional research and environmental scanning related to best practices, principles and developments relevant to continuing care infrastructure and capital programs.
- Develop innovative dashboards and reporting tools (e.g., Power BI) that provide actionable insights for capital planning and CCCP grant decisions.
- Produce regular reports and visualizations on facility capacity, condition, and investment priorities for senior leadership, budget submissions and ministry performance measurement process.
- Provide specialist support to others in the department to contribute to the development of feasible and effective solutions to continuing care capital issues.

4) Apply predictive modeling and innovation analytics to improve planning and prioritization:
- Use, maintain and potentially build forecasting models to project demand, capacity, and cost scenarios for continuing care infrastructure.
- Apply advanced analytics, including AI/ML techniques and simulation, to improve prioritization and decision-making.
- Conduct scenario analysis and sensitivity testing to support strategic planning and risk management.

5) Manage continuing care facility registry and coordinate cross-system:
- Manage and maintain the continuing care facility registry, ensuring accurate and up-to-date information on facility/ownership, capacity, condition, and modernization status.
- Support data gathering and reporting of bi-annual bed audit with other ministries and the provincial health agency and provide ad-hoc reporting and response to information requests.
- Integrate registry data with division data and information systems and asset management platforms to

support lifecycle planning.
- Develop and maintain data exchange standards and APIs for cross-ministry integration.

6) Engage with stakeholders and represent the division and ministry on cross-ministry and external teams and working groups:
- Work with division teams, other ministries and the provincial health agency to align data solutions with operational and strategic needs.
- Participate in cross-ministry committees and working groups to advance data strategy and integration initiatives.
- Provide data and information products to support cross-ministry or cross-jurisdictional initiatives.
- Lead and provide guidance and supervision to professional consultants recruited to work on ministry projects, ensuring alignment with ministry objectives and business processes.

Problem Solving

Typical problems solved:

The Data Management Specialist operates with a high degree of independence in applying advanced technical judgment to the design of data architecture and models for meeting complex and evolving capital planning requirements. Problems often involve consolidating data from disparate sources, addressing gaps, and applying predictive analytics and AI/ML techniques to forecast demand and prioritize investments. Solutions require creativity, innovation, and the ability to balance technical rigor with practical application under tight timelines.

This position demands excellent interpersonal relationship skills to ensure effective execution of complex projects. It requires collaboration across departments and with external partners to access alternative data sources, share knowledge and co-develop solutions that maximize impact with available resources.

Types of guidance available for problem solving:

Works within established legislation, directives, policies, strategies and standards (Treasury Board/Finance, procurement/contract management, information and privacy acts, safety codes/building standards). The Director provides strategic goals, risk appetite, and priorities and guidance is available from other team members and within division. The Senior Capital Planner also collaborates with ministry staff and the provincial health agency when identifying information and data requirements, clarifying goals and expected outcomes, planning and managing projects and developing input and recommendations for the consideration of decision-makers. Within these parameters, the Data Management Specialist exercises independence to select methods and tools to recommend improvements to data processes and governance.

Direct or indirect impacts of decisions:

High-quality data systems, models, and analytics enable evidence-based capital decisions, support CCCP grant streams, strengthen auditability, and improve public accountability. Outputs influence provincial capacity planning, modernization sequencing, and fiscal submissions across the continuing care portfolio.

Key Relationships

Major stakeholders and purpose of interactions:

Internal:
- Director, Continuing Care Capital Planning and Data Strategy: receive direction, provide information, advice, updates and recommendations on capital plan, outcomes and risks.
- Divisional leadership team and other divisions: consultation, collaboration and/or information/advice related to capital planning and strategic direction to ensure broader alignment with ministry initiatives.
- Other ministries: coordinate to ensure capital planning, project planning and delivery, reporting, and approvals are consistent with government processes, funding frameworks and fiscal strategies.

External:
- Provincial health agency: collaboration, information sharing and alignment on continuing care home capacity tracking, operational planning and commissioning.
- Stakeholders (municipalities, continuing care home providers, for-profit and not-for-profit organizations, industry associations, federal/provincial counterparts): consult, share information, respond to inquiries and represent the ministry on committees or working groups to advance modernization and expansion of continuing care homes.

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Economics	Other	

If other, specify:

computer science, information management, statistics, engineering or related; 4 years experience

Job-specific experience, technical competencies, certification and/or training:

Experience
- Experience compiling, organizing and managing large datasets to translate data into actionable insights and information products that support solutions to complex challenges.
- Strong analytical skills and expertise in statistical modeling, demand forecasting, and data visualization tools (e.g., Power BI, Tableau).
- Proficiency in SQL, Python or R, and experience with ETL frameworks and data warehousing.
- Experience with research methods, techniques and procedures, including the application of qualitative and quantitative research methods and data analysis.

Skills and Competencies
- Proficiency in AI techniques, expert systems, data analytics, and programming for decision-making model development.
- Advanced written and verbal communication skills for briefings and presentations to effectively convey complex information to senior officials, team members and stakeholders.
- Strong interpersonal, collaboration and relationship-building skills.
- Strong organizational and project management skills.
- Knowledge of Alberta's continuing care acts, regulations, policies, design and service standards, building codes, and capital planning frameworks.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level A B C D E	Level Definition	Examples of how this level best represents the job
Systems Thinking	○ ○ ◉ ○ ○	Takes a long-term view towards organization's objectives and how to achieve them: • Takes holistic long-term view of challenges and opportunities • Anticipates outcomes and potential impacts, seeks stakeholder perspectives • Works towards actions and plans aligned with APS values • Works with others to identify areas for collaboration	Positions and develops data strategy to support broader continuing care transformation goals.
Creative Problem Solving	○ ○ ◉ ○ ○	Engages the community and resources at hand to address issues: • Engages perspective to seek root causes • Finds ways to improve complex systems • Employs resources from other areas to solve	Applies innovative techniques to address complex data challenges and improve decision-making.

						problems • Engages others and encourages debate and idea generation to solve problems while addressing risks	
Agility	○	○	○	◉	○	Proactively incorporates change into processes: • Creates opportunities for improvement • Is aware of and adapts to changing priorities • Remains objective under pressure and supports others to manage their emotions • Proactively explains impact of change on roles, and integrates change in existing work • Readily adapts plans and practices	Adapts to changing priorities and evolving data requirements, making decisions in uncertain situations using the information available and establishing backup plans.
Drive for Results	○	○	◉	○	○	Takes and delegates responsibility for outcomes: • Uses variety of resources to monitor own performance standards • Acknowledges even indirect responsibility • Commits to what is good for Albertans even if not immediately accepted • Reaches goals consistent with APS direction	Delivers high-quality outputs under tight timelines to support strategic decisions.
Build Collaborative Environments	○	○	◉	○	○	Collaborates across functional areas and proactively addresses conflict: • Encourages broad thinking on projects, and works to eliminate barriers to progress • Facilitates communication and collaboration • Anticipates and reduces conflict at the outset • Credits others and gets talent recognized • Promotes collaboration and commitment	Works effectively with internal and external stakeholders and sustains cross-functional progress to achieve shared objectives.