

New

Ministry

Treasury Board and Finance

Describe: Basic Job Details

Position

Position ID

Position Name (30 characters)

Senior Analyst

Requested Class

Job Focus

Supervisory Level

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Vacant

Organizational Structure

Division, Branch/Unit

Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

As the province's designated statistical focal point, the Office of Statistics and Information (OSI) represents the province at the Federal-Provincial-Territorial (FPT) Consultative Council on Statistical Policy and its various technical subject matter committees. This role is responsible to represent Alberta's interests on the Census and Demography FPT committees to ensure the quality and accuracy of population statistics, which impact the appropriateness of the province's share of federal transfers. The Senior Demographer is part of the team responsible for population projections that form the basis of TBF's economic and fiscal forecast program. These have significant implications for government revenue forecasts and fiscal policy decisions, as population is often a key driver for both costs and revenue. The role is responsible to produce current population estimates of subprovincial areas in Alberta (e.g., municipalities), which are used extensively for planning and per-capita funding allocations. Reporting to the Manager of Demography/Social Statistics, this role is critical to providing accurate and reliable socio-demographic data, analysis and expert advice to support policy analysis, planning, and decision-making for Treasury Board and Finance, other ministries and other governments (e.g., municipal). Operating under little supervision, the position utilizes expert knowledge of demographic and social trends, modeling techniques, analytical methods and relevant data sources to produce estimates and projections of key socio-demographic indicators and to develop new statistics required in a fast-paced and dynamic policy environment.

Responsibilities

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

1. Employing specialized knowledge of demographic theory/methodologies, strong analytical skills, and an in-depth understanding of socio-economic characteristics of the province, this role is responsible to develop sound and timely population estimates, forecasts/projections and other demographic statistics to meet the fiscal, economic and policy planning needs of the GoA.
 - Producing deliverables under tight timelines for projects often set in conjunction with stakeholders (Statistics Canada, Economic and Fiscal Policy Division), such as Budget and quarterly fiscal update forecasts, population estimates of municipalities, and long-term projections, which are fundamental for GoA economic and fiscal planning for Alberta and its sub-provincial regions.
 - Synthesizing information from multiple sources (e.g. news, policy announcements, administrative data) and consulting with subject matter experts to develop population forecasting assumptions.
 - Regularly evaluating results and methods and adjusting as necessary to ensure that the quality of Alberta's official population statistics are maintained at the highest standard.
 - Using innovative analytic methods, leveraging new and existing data sources, identifying data gaps and developing new socio-economic analyses and statistics (e.g., Indigenous people, household projections), to improve the quality and alignment of provincial and sub-regional socio-demographic analyses with GoA needs.
 - Partnering with fellow experts (managers, technical staff etc.) and external users to produce custom demographic analyses and projections to meet special requests that are of significant, recognized value to GoA goals and initiatives (e.g., Land Use Framework, Economic Regions, Provincial Electoral Divisions).
 - Staying up-to-date with leading edge analytical and statistical research techniques, as well as economic factors, trends, policy changes and world events which may impact population change.
 - Developing and maintaining programming code to automate the production of population estimates and other analysis to enhance efficiency.
2. Provide advice, expertise and assistance on subject areas of specialization to ensure decision making and policy analysis utilizes the most current and appropriate demographic information.
 - Proactively briefing senior officials, managers and staff on the latest demographic trends and issues.
 - Reflecting service excellence by responding to a variety of demographic information requests originating from the public, within government or from the media.
 - Initiating, developing and completing socio-economic and demographic analyses using data from primary and secondary sources to ensure socio-demographic information that is timely, accurate and meet the needs of both Treasury Board and Finance and other GoA departments for fiscal and policy planning initiatives.
 - Developing reports, visualizations and presentations to disseminate demographic information widely and ensure decision-makers have access to the information they need.
 - Advising on the appropriate use and limitations of demographic and social data, population estimates and forecasts.
3. Maintain liaisons with appropriate federal and GoA counterparts to ensure the quality of Alberta data and statistics, and to keep apprised on new developments in the area of demographic statistics and data development.
 - Maintaining a high level of awareness of current and emerging demographic priorities within the province through ongoing research and participation on cross-government working groups and committees as required.
 - Collaborating closely with Statistics Canada on the quality of their demographic data products and the appropriateness of their methodology as it relates to Alberta. Evaluating work-in-progress quarterly population estimates and providing regular feedback to Statistics Canada on any identified issues.
 - Effectively advocate for Alberta's interests in the context of accurate and timely demographic statistics through active participation in Statistics Canada demographic methods workshops, and Census and Demography FPT meetings.
4. Work mainly independently to lead and manage projects, ensuring deliverables are completed under tight

timelines.

- Engaging in planning through the creation of project timelines, milestones, and contingencies.
- Ensuring project dependencies are procured and processed in a timely manner.
- Coordinating tasks and meetings, and liaise with stakeholders.
- Monitoring tasks to ensure milestones are achieved and adjustments are made on an as needed basis.
- Proactively brief Manager on progress, including any risks to project completion.

Problem Solving

Typical problems solved:

- Under the general supervision of the Manager, Demography, the Senior Demographer is part of the team responsible for developing the population projections that form the basis for the departments economic and fiscal forecast program. These have significant implications for government revenue forecasts and fiscal policy decisions, since in many cases population is the key cost driver of program services. The Demography unit is also mandated to develop and maintain a small area population estimation program.
- The development of standard and custom demographic estimates and projections requires the position to maintain a broad range of demographic expertise to ensure users are fully aware of all potential caveats and appropriate uses for the data. The position is expected to consult with both government and non-government users, demographic researchers and advise on the incorporation of Treasury Board and Finance's demographic information in various policy and programming initiatives.
- While the projections are developed using standard demographic techniques, the wide latitude afforded the Senior Demographer regarding the incorporation of social and geographic trends is largely under the discretion of incumbent. This requires expert knowledge of demographic trends, including relevant data sources and quantitative techniques. It can also require the development of new and creative analytical techniques to develop new sources of socio-economic data. The quality and scope of these inputs has a significant impact on the resulting projections and analyses.
- The Senior Demographer is also accountable as the expert on population statistics and advises the public and private sector leaders on demographic trends and issues. The incumbent is expected to initiate, develop and complete socio-economic research projects that are relevant to the development and assessment of socio-economic policy within the GoA (e.g., production of reports on Indigenous population, immigrant population, racialized population). The incumbent is also expected to provide expert advice and guidance on use of demographic data and analytical products to internal and external stakeholders.
- Population projections and demographic analyses are heavily scrutinized by both departmental and GOA users as they often form the basis for additional demographic research and major policy decisions. The ability to validate all estimates and projection scenarios produced and have them recognize as demographic standards requires the position to maintain not only a high level of expertise but an extensive understanding of the various demographic data usages throughout government. This includes an expert knowledge of sub-population such as seniors, children and transients/shadow populations on which special economic and social programs are based.
- Besides developing population estimates and projections for standard geographic areas, the Senior Demographer may need to collaborate with colleagues to investigate and design innovative, complex population models for non-standard geographic areas.

Types of guidance available for problem solving:

Overall, effective problem solving requires the Senior Demographer to maintain a high degree of technical, statistical, and subject matter expertise as well as a professional and rigorous approach to challenges.

- Consultation with colleagues from the demography team, as well as colleagues from the rest of OSI and the EFP division or Statistics Canada, who can aid with specialized subject matter expertise related to methods and economic and regional trends and analysis.
- Utilization of a repository of programming code as well as various templates to aid in calculations and automate process flows.

- Utilization of various methodological standards in the literature by accessing journal articles, books, and other online resources.

Direct or indirect impacts of decisions:

The Senior Demographer has primary responsibility for provision of expertise on demographic data, trends, and analysis. In this role, the Senior Demographer must take the initiative to achieve goals and act to resolve problems before they arise. The Senior Demographer works with considerable independence in dealing with high profile work, that is often technical and complex with numerous ambiguities (e.g., development of forecasting assumptions, development of growth scenarios). Considerable expert judgment is required. As well the Senior Demographer requires a high degree of latitude and responsibility in order to address the responsibilities of the job. Knowledge of, and relationships with, numerous internal and external clients and stakeholders are required. Due to the high degree of latitude/independence required, the work of the Senior Demographer directly impacts the quality of official statistics, which consequently impacts the quality of economic and fiscal planning and decision making across the GOA.

Key Relationships

Major stakeholders and purpose of interactions:

Internal Stakeholders

- Executive Team: Provide data and information, analytical brief and response to Action requests as needed (Frequency: As required)
- Director: Provide information as needed (Frequency: Regularly)
- Supervisor: Consult and obtain direction on project priorities and initiatives (Frequency: Daily)
- Team: Collaborate on data development, analysis, and management within the team (Frequency: Daily)

External Stakeholders

- Cross-Government (Other ministries across GoA, other municipal, provincial and federal governments): Participates on projects and teams (Frequency: Frequently)
- Contractors/Businesses/ Researchers: Provide data and information, advice and consult on projects (Frequency: As required)
- Public: Provide data and information, insight, and advice (Frequency: As required)

Required Education, Experience and Technical Competencies

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

If other, specify:

Social sciences (i.e. demography, sociology, economics, statistics)

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

- An in-depth knowledge of demographic theory, methodologies, and population forecasting models to develop population projections for Alberta and sub-provincial levels.
- Extensive knowledge of current social, economic and demographic trends, and their influence on Alberta.
- Excellent knowledge of existing and emerging sources of socio-economic and demographic data and an understanding of their limitations.
- Excellent ability to apply demographic theory and employ quantitative and qualitative methods to create reports and visualize data to improve understanding of population statistics and demographic trends.
- Advanced knowledge of statistical and methodological techniques to evaluate and enhance existing data sources and models.

- Experience using statistical programming languages (e.g. SAS, Python, R) to analyze large datasets, build statistical models, and automate tasks is essential.
- Ability to communicate verbally and in writing, with individuals at all levels within government and other key stakeholders, such as management and policy developers to effectively provide assistance and advice in the use and development of population data and statistics.
- Strong organizational and project management skills, with the ability to prioritize multiple requirements and define a detailed process to complete required tasks.
- Excellent time management skills to optimize resources and to achieve results within tight deadlines, and high level of flexibility to deal with rapidly emerging situations.
- Ability to initiate, develop and complete research projects within area of responsibility.
- Ability to work independently and as part of a team.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Engages the community and resources at hand to address issues:</p> <ul style="list-style-type: none"> • Engages perspective to seek root causes • Finds ways to improve complex systems • Employs resources from other areas to solve problems • Engages others and encourages debate and idea generation to solve problems while addressing risks 	<ul style="list-style-type: none"> • Key projects including demographic estimates, forecasts, and projections require close consultation with internal and external stakeholders to develop assumptions and model scenarios. • The incumbent must utilize new and existing data using innovative analytical techniques to create novel solutions to problems. Data gaps and limitations must be addressed. • Broad consultation with both government and non-government users, researchers, and subject matter experts is required to build and enhance data resources and models.
Agility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<p>Proactively incorporates change into processes:</p> <ul style="list-style-type: none"> • Creates opportunities for improvement • Is aware of and adapts to changing priorities • Remains objective under pressure and supports others to 	<ul style="list-style-type: none"> • This role involves the undertaking of multiple concurrent projects, as well as sudden high profile requests, where effective time management, the ability to maintain composure under pressure, as well as

		<p>manage their emotions</p> <ul style="list-style-type: none"> • Proactively explains impact of change on roles, and integrates change in existing work • Readily adapts plans and practices 	<p>the ability to shift priorities is required. In such circumstance, the impact on stakeholders must be anticipated and mitigated. The incumbent works closely with other team members and proactively flags issues to ensure multiple projects are delivered on time.</p> <ul style="list-style-type: none"> • This role requires continual streamlining of existing and new processes to efficiently deliver results.
Drive for Results	○ ○ ● ○ ○	<p>Takes and delegates responsibility for outcomes:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Ensures delivery of high quality data and estimates. • Seeks to enhance data and models to fill gaps and address limitations. • Minimizes the chances of errors through rigorous quality control checks and processes.
Develop Networks	○ ○ ● ○ ○	<p>Leverages relationships to build input and perspective:</p> <ul style="list-style-type: none"> • Looks broadly to engage stakeholders • Open to perspectives towards long-term goals • Actively seeks input into change initiatives • Maintains stakeholder relationships 	<ul style="list-style-type: none"> • Consult broadly with internal and external stakeholders to acquire and enhance data resources and improve analytic models.