

**Update**

Ministry

**Describe: Basic Job Details****Position**

Position ID

Position Name (30 characters)

Current Class

Job Focus

Supervisory Level

Agency (ministry)

**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****Changes Since Last Reviewed**

Date yyyy-mm-dd

Responsibilities Added:

Responsibilities Removed:

**Job Purpose and Organizational Context**

Why the job exists:

Reporting to the Director, Network and Highway Planning, the Highway Planning Engineer is essential in addressing planning pressures across the province to ensure the cost-effective delivery of major transportation infrastructure.

The Highway Planning Engineer uses their transportation and data management knowledge to lead or support activities related to highway planning, maintaining highway network data, guidelines, policies, legislation, and

processes in alignment with best practices and department direction.

This position is also responsible for provision of timely technical advice on planning matters to internal and external clients.

## Responsibilities

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

### **1. Use technical knowledge to lead planning projects and support the Network and Highway Planning team, Branch, and other teams.**

#### **Activities:**

- Lead or participate in network, corridor, and highway planning;
- Provide input into the development of technical options and recommendations related to network and highway questions;
- Collaborate with other team members to research, analyze, or resolve complex transportation issues;
- Lead or participate in the development and analysis of various transportation guidelines and performance measures to support long-term planning activities; and
- Provide design and functional plan review for major projects.

### **2. Network Management / Transportation System Governance.**

#### **Activities:**

- Lead or participate in activities to ensure highway classifications, city bylaws, and highway designations are current;
- Interpret and advise stakeholders regarding highway classifications for project planning and design;
- Use or identify highway network assumptions to support the Alberta Spatial Economic and Travel model;
- Maintain guidelines and standards relative to network, corridor, conceptual and functional planning; and

### **3. Support department decision making.**

#### **Activities:**

- Provide advice to the Director of Network and Highway Planning, Executive Director of the Capital Planning and Program Management Branch, as needed, to inform their decision-making and to shape responses to internal and external stakeholders (e.g., briefing notes and letters);
- As required, prepare or support the preparation of reports to inform department decisions and adoption of technically-related policies; and
- Inform department-approved future network requirements.

### **4. Lead the prioritization of investments in support of Capital Planning.**

- Ensure that network data accurately reflects planning outcomes to support construction project scope and prioritization.
- Lead study prioritization to focus the annual planning budget.
- Develop, in collaboration with other department teams, and maintain the prioritization process for interchanges, safety rest areas, and bypasses.

### **5. Identify transportation requirements to inform the Ministry's short and longer-term investment plans.**

#### **Activities:**

- Work with regional stakeholders to identify infrastructure/transportation needs for community sustainability to support population/economic growth and labour force needs;

- Facilitate discussion on the identification and development of strategic dedicated corridors to support the movement of goods and services related to specific sectors of Alberta's economy (e.g., wide and/or heavy loads); and
- Support the development of sub-regional network plans by working with municipal and regional partners.

### Problem Solving

Typical problems solved:

- Provide input on defining the strategic function of each highway segment.
- Provide input on the classification of each highway.
- Help to define study scopes including questions to be answered and how.
- Determine benefits and impacts of developing and updating of legislation and policies by soliciting stakeholder input.
- Defining key measures to support prioritizing of investments.

Types of guidance available for problem solving:

- Provincial, national and international technical best practices, guidelines, and policies.
- Other internal and external subject matter experts.
- Government and department priorities and direction.

Direct or indirect impacts of decisions:

- Direct impact on defining highway network project needs by implementing planning and technical advances, standards, design, and review. Results achieved, directly impact investment decisions in support of a safe and efficient highway network.
- The Highway Planning Engineer supports the GoA to be a "knowledgeable owner".
- Ministry design and highway standards, maintained by the planning engineer are used by other designers, governments, and authorities.
- Guidelines and processes impact how other department teams complete their work.

### Key Relationships

Major stakeholders and purpose of interactions:

- Works with and informs direction to head office and regional staff as well as consultants and other stakeholders.
- May work with teams from other ministries and external stakeholders (e.g., municipalities).

### Required Education, Experience and Technical Competencies

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

If other, specify:

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

- Possess a Bachelor of Science in Civil Engineering or other comparable degree.
- Transportation planning experience of 4 or more years.
- Must be eligible for membership as a Professional Engineer with APEGGA.

- Requires strong data analysis and geographic information systems (GIS) skills. ArcGIS preferred.
- Requires strong writing skills to present material for information or decision in a concise and neutral fashion. This includes the ability to take engineering concepts and apply them for a non-technical audience.
- Working knowledge of highway classification, design standards, specifications and guidelines currently in use in Alberta. Knowledge of practices from other jurisdictions in Canada, the United States, and other countries is an asset.
- Working knowledge of Alberta and Transportation Association of Canada (TAC) Highway Geometric Design Guide.
- General knowledge of American Association of State Highway & Transportation Officials (AASHTO) standards.
- General knowledge of Highway Capacity Manual and software.
- General knowledge of Benefit/Cost analysis.
- General knowledge of traffic modelling and trip generation.
- General knowledge of legislation (Highways Development and Protection Act, Highway Traffic Act, Municipal Government Act, etc.).
- General knowledge of municipal and land use planning is desirable.
- Abilities required include the following:
  - Ability to use general direction to further develop work plans and lead projects to completion;
  - Ability to deal with a team of engineers and technologists;
  - Ability to manage consultants;
  - Ability to handle a number of multi-faceted tasks simultaneously and meet deadlines;
  - Ability to work within an organizational structure that is constantly changing;
  - Ability to influence external stakeholders on issues that are of benefit to the organization; and
  - Ability to deal with the public in a business-like and polite manner.

### 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		
Systems Thinking	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Considers inter-relationships and emerging trends to attain goals: <ul style="list-style-type: none"> <li>• Seeks insight on implications of different options</li> <li>• Analyzes long-term outcomes, focus on goals and values</li> <li>• Identifies unintended consequences</li> </ul>	Systems thinking balances technical requirements with stakeholder perspectives, and department direction. Requires making oneself aware of different perspectives.
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Engages the community and resources at hand to address issues: <ul style="list-style-type: none"> <li>• Engages perspective to</li> </ul>	Use input from internal and/or external stakeholders to define problems, break them

		<p>seek root causes</p> <ul style="list-style-type: none"> <li>• Finds ways to improve complex systems</li> <li>• Employs resources from other areas to solve problems</li> <li>• Engages others and encourages debate and idea generation to solve problems while addressing risks</li> </ul>	<p>down to individual decisions, develop options and identify criteria to support recommendations.</p>
Drive for Results	○ ○ ● ○ ○	<p>Takes and delegates responsibility for outcomes:</p> <ul style="list-style-type: none"> <li>• Uses variety of resources to monitor own performance standards</li> <li>• Acknowledges even indirect responsibility</li> <li>• Commits to what is good for Albertans even if not immediately accepted</li> <li>• Reaches goals consistent with APS direction</li> </ul>	<p>Develops work plans by defining decision makers, outlining scope, required decision points, adequate lead times, resourcing and milestones.</p>
Build Collaborative Environments	○ ○ ● ○ ○	<p>Collaborates across functional areas and proactively addresses conflict:</p> <ul style="list-style-type: none"> <li>• Encourages broad thinking on projects, and works to eliminate barriers to progress</li> <li>• Facilitates communication and collaboration</li> <li>• Anticipates and reduces conflict at the outset</li> <li>• Credits others and gets talent recognized</li> <li>• Promotes collaboration and commitment</li> </ul>	<p>Through the development of work plans, identifies required decisions.</p> <p>Uses unbiased understanding of issues and collaboratively develops options with supporting rationale to support department decision-making.</p> <p>This effort often requires sharing and receiving information electronically, holding meetings and hosting presentations.</p>
Develop Self and Others	○ ○ ● ○ ○	<p>Plans according to career goals and regular development:</p> <ul style="list-style-type: none"> <li>• Aligns personal goals with career goals</li> <li>• Leverages strengths; attempts stretch goals</li> <li>• Provides feedback and openly discusses team performance</li> <li>• Values team diversity, and supports personal</li> </ul>	<p>Identifying and sharing learning opportunities with team.</p> <p>Hosting and participating workshops for obtaining department support for long-term highway network decisions.</p>

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<b>Assign</b>
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The signatures below indicate that all parties have read and agree that the job description accurately reflects the work assigned and required in the organization.

_____	Date yyyy-mm-dd	Employee Signature
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_____	<b>2025-03-10</b>	
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_____	Date yyyy-mm-dd	Supervisor / Manager Signature
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_____	<b>2025-03-13</b>	
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_____	Date yyyy-mm-dd	
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_____	<b>2025-03-13</b>	
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ADM Name	Date yyyy-mm-dd	
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