

New Nuclear at Wesleyville Project  
Impact Assessment Agency of Canada  
160 Elgin Street, 22nd Floor  
Ottawa, Ontario  
K1A 0H3

**RE: Northumberland County Comments and Recommendations- Draft Integrated Tailored Impact Statement Guidelines (ITISG) for the Proposed New Nuclear at Wesleyville Project**

On behalf of Northumberland County Council, I am pleased to submit the County's comments and recommendations regarding the draft Integrated Tailored Impact Statement Guidelines (ITISG) for the proposed New Nuclear at Wesleyville Project.

As the upper-tier municipality for a region comprised of seven member municipalities, including the Municipality of Port Hope where the project is proposed, Northumberland County plays a central role in the planning, delivery, and coordination of regional infrastructure and services that will be directly and indirectly affected by the project over its full lifecycle. The County recognizes the importance of a comprehensive, transparent, and evidence-based impact assessment process and supports the Government of Canada's commitment to informed and meaningful engagement.

The County's submission reflects our regional responsibilities related to infrastructure, transportation, housing, workforce capacity, emergency management, paramedic services, land use planning, social services, and economic development. The submission emphasizes the need for a regional assessment framework that reflects the realities of a two-tier municipal system and recognizes that many project-related pressures and cumulative effects will extend beyond the immediate project site and host municipality.

The County's recommendations are intended to strengthen the draft ITISG by ensuring the assessment appropriately considers regional infrastructure and service capacity, housing and workforce pressures, emergency preparedness, cumulative effects, and long-term financial and operational impacts on municipal systems. The submission also underscores the importance of clear governance, coordination, and funding mechanisms to support sustainable growth management and informed decision-making throughout the assessment and licensing process.

Northumberland County has also submitted comments regarding the draft Public Participation Plan. Together, these submissions are intended to provide a coordinated municipal perspective to support a robust and effective impact assessment process.

Thank you for the opportunity to provide input.

Sincerely,



Bob Crate  
Warden, Northumberland County

# **NORTHUMBERLAND COUNTY**

---

## **RECOMMENDATIONS ON THE DRAFT INTEGRATED TAILORED IMPACT STATEMENT GUIDELINES**

### **NEW NUCLEAR AT WESLEYVILLE PROJECT**

---

The following represents Northumberland County's formal submission to the Impact Assessment Agency of Canada (IAAC) regarding the draft Integrated Tailored Impact Statement Guidelines (ITISG) for the proposed New Nuclear at Wesleyville Project (NNWP), released April 7, 2026. The County appreciates the opportunity to provide input at this early stage of the federal impact assessment process.

Ontario Power Generation Inc. (OPG) is proposing the development of a new nuclear generating station at the Wesleyville site in the Municipality of Port Hope, with a potential generating capacity of up to 10,000 megawatts and an anticipated operating life of approximately 78 years. Given its scale, duration, and complexity, this project represents a generational infrastructure development with significant and long-term implications for communities, infrastructure, and public services across Northumberland County and the broader region.

Northumberland County is an upper-tier municipality comprised of seven local (lower-tier) municipalities, including the Municipality of Port Hope. The County holds legislated responsibility for regional infrastructure, paramedic services, land use planning, economic development and social services (Ontario Works, Early Years and Child Care, Housing and Homelessness). In this capacity, the County is not solely a participant in the impact assessment process, but a governance partner responsible for managing the direct, indirect, and cumulative effects of growth and major projects across the region.

Given this, the County requests that the ITISG formally recognize the role of Northumberland County, as an upper-tier municipality, as a distinct participant within the assessment framework, with clearly defined roles in engagement, data sharing, technical review, and long-term coordination.

This submission focuses on the County's regional responsibilities and is intended to support a comprehensive assessment of potential project effects on infrastructure systems, housing and workforce capacity, emergency services, community well-being, and economic conditions. Emphasis is placed on the identification and management of cumulative effects, recognizing that project-related pressures will extend beyond the immediate project site and host municipality and will be absorbed across the broader regional system. In a two-tier municipal structure, Northumberland County will function as the primary point of integration for these broader pressures, including spillover effects related to housing demand and affordability, workforce mobility, infrastructure use, and service delivery.

The County notes the significant level of public and stakeholder interest expressed to date. It is understood that the ITISG remains a draft document and that IAAC, the Canadian Nuclear Safety

Commission (CNSC), and any future review panel may refine scope, methodology, and engagement approaches in response to input.

The recommendations provided in this submission are offered in that context - grounded in the principles and requirements of the Impact Assessment Act - and are intended to strengthen the ITISG to ensure it effectively captures the scale, complexity, and regional nature of project effects.

Northumberland County remains committed to ongoing, coordinated engagement with IAAC, Indigenous communities, the proponent, local municipalities, and residents throughout the impact assessment and licensing processes. Ensuring that municipal systems are appropriately assessed, planned, and resourced, will be critical to supporting informed decision-making and protecting long-term community well-being.

Northumberland County has also provided a separate submission on the draft Public Participation Plan; the comments contained here are intended to complement that submission and collectively support a coordinated, transparent, and effective impact assessment process.

## **OVERALL SUMMARY**

---

Northumberland County's review of the draft ITISG identifies a key gap in recognizing regional governance, service delivery structures, and the full geographic extent of project effects within a two-tier municipal system.

While the draft ITISG outlines a comprehensive assessment framework, it remains largely focused on the immediate project area and host municipality. This does not reflect the regional scale of integrated infrastructure, housing and labour markets, emergency services, and economic systems.

Northumberland County will serve as an absorber of project-related pressures, including spillover effects associated with housing demand, workforce mobility, infrastructure use, and service delivery across the region.

The County's key positions are as follows:

- **Recognition of Upper-Tier Governance:** The ITISG must formally recognize Northumberland County as an upper-tier municipality and required partner in the assessment process.
- **Regional Scope of Assessment:** Study areas must extend beyond the local project footprint to a clearly defined Regional Study Area (RSA) capturing cross-boundary and cumulative effects.
- **Use and Updating of Municipal Data:** Municipal and regional plans and data must inform the assessment, supported by updated modelling that reflects project-driven growth.
- **Infrastructure and Service Capacity:** The assessment must evaluate the ability of regional systems – including transportation, economic drivers, land use planning, paramedic services, housing, and emergency management - to absorb project-related demand.
- **Housing, Workforce, and Economic Impacts:** The draft ITISG must require analysis of housing availability, labour market impacts, and economic conditions, including risks related to workforce displacement, housing market volatility and affordability, and economic impacts.

- **Emergency Management and Public Safety:** A regionally executable emergency management framework must be required, including evacuation modelling, surge capacity analysis, and defined roles and funding commitments.
- **Financial Implications and Cost Responsibility:** The assessment must identify full municipal cost impacts, with clear attribution and funding mechanisms.

The current draft ITISG reflects a risk that the Impact Statement will underestimate regional effects, mitigation measures will fall short, and result in the transfer of unplanned costs and responsibilities to municipal governments.

A strengthened ITISG that reflects a regional, two-tier municipal lens will support more accurate assessment, protect community well-being, and enable sustainable economic outcomes over the full project lifecycle.

## **INTRODUCTION (1)**

---

Northumberland County acknowledges that the federal impact assessment process established under the Impact Assessment Act (IAA), is intended to prevent or mitigate significant adverse effects - including direct and incidental effects - through the early identification, assessment, and consideration of project impacts to inform decision-making.

The County recognizes that the ITISG are intended to define the scope of studies and information required to assess the potential effects of the proposed project, including the determination of significance. Given the scale and duration of the proposed NNWP, it is essential that the scope of assessment extends beyond the immediate project site and host municipality to reflect regional conditions, service delivery structures, and cumulative pressures and the realities of a two-tier municipal system in which upper-tier governments are responsible for critical infrastructure, social services, and long-term growth management. Accordingly, studies and methodologies must be explicitly regional in scope and designed to capture cross-jurisdictional and system-wide impacts.

The County notes that while the draft ITISG references engagement with a range of participants, upper-tier municipalities are not explicitly identified as distinct participants with governance responsibilities. Northumberland County’s role extends well beyond that of the general public; it is a service provider, infrastructure owner, and planning authority responsible for managing the broader and cumulative effects of growth and major projects for the region.

As a municipal corporation established under the *Municipal Act, 2001* we are a “jurisdiction” as defined in s. 2 of the IAA, and consideration of our submission is required under s. 22(1)(o) of the IAA. The County requests that the ITISG formally recognize the upper-tier municipality as key partners in the assessment process, with clearly defined roles in engagement, data sharing, technical review, and ongoing coordination.

### **PREPARING THE IMPACT STATEMENT (1.4)**

Northumberland County supports the direction within the ITISG that encourages the proponent to consider information, studies, and experiences from other jurisdictions in assessing potential project effects. Given the scale of the proposed project, it is appropriate to apply a regional lens to better understand potential impacts, mitigation approaches, and long-term outcomes.

Of particular interest to Northumberland County and local municipalities:

- Housing, Workforce, and Land Use Planning
- Economic Conditions and Regional Impacts
- Health and Social Systems (including infrastructure and paramedic services)
- Emergency Management
- Methodology (Valued Components and Cumulative Effects)

The County's existing studies, plans, and data at both upper and lower-tier levels represent critical inputs to the impact assessment process. These include, but are not limited to, growth management strategies, infrastructure master plans, emergency preparedness and management, housing and homelessness plans, transportation studies, and economic development strategies. The County will continue to collaborate and provide these materials to support the preparation of the impact statement and encourages IAAC, the CNSC, and the proponent to formally incorporate and rely on these sources as foundational inputs.

At the same time, the County notes that many of these studies have been prepared based on baseline growth assumptions and current service levels. These plans will require updating and scenario-based modelling to account for the scale, timing, and cumulative impacts associated with the proposed project. This should include overlaying project-related growth, workforce demands, and service pressures to accurately assess capacity constraints and infrastructure needs.

Northumberland County's strategic approach is to manage growth with intent, grounded in proactive planning, coordinated service delivery, and long-term financial sustainability. The impact assessment process should align with this approach by ensuring that all reviews reflect realistic growth scenarios and clearly identify the investments and mitigation measures required to maintain service levels and community well-being.

The Provincial Planning Statement (PPS), 2024 sets out Ontario's land-use planning policy framework and directs that development in proximity to natural and human-made hazards be appropriately assessed and managed in accordance with provincial policy. Land-use compatibility is guided by provincial planning policy, while nuclear safety, radiation protection, and operational risk are governed through the CNSC regulatory framework. Given the scale and nature of the proposed NNWP, these frameworks are relevant to ensuring land-use compatibility, risk management, and long-term health and safety considerations for surrounding communities are appropriately addressed within the impact assessment process.

The assessment should also identify associated financial implications, including capital and operating costs, and establish clear expectations for funding and cost recovery to support municipal service delivery.

**NOTE:** A table of relevant County and municipal plans, studies, and data sources is provided at the end of this submission.

## **PROJECT OVERVIEW (2.5)**

The draft ITISG do not reference Northumberland County, nor do they define a regional scope of engagement. This omission is significant and does not reflect the two-tier municipal governance structure within which the project is situated nor recognize that many valued components (VECs) extend beyond host municipal boundaries.

As the upper-tier municipality, Northumberland County plays a complementary role alongside the Municipality of Port Hope, representing public interest across the region including housing, workforce requirements, infrastructure, and emergency services.

## **PLANT PARAMETER ENVELOPE APPROACH (2.6.1)**

As a host and neighbouring jurisdiction, Northumberland County has a direct interest in ensuring the Plant Parameter Envelope (PPE) approach incorporates clearly defined boundaries conditions across the full lifecycle of the project. The PPE approach must account for cumulative environmental, infrastructure, and community to ensure that mitigation measures, infrastructure planning, and service capacity remain valid over time.

## **RECEIVING ENVIRONMENT (2.7)**

The assessment must reflect the full regional context, extending beyond the project site to capture interconnected infrastructure, services, economic systems, and natural features across the county.

This includes transportation networks, municipal and administrative boundaries, land use patterns, and regional economic activity, as well as the County's two-tier governance structure, where core services are delivered at the upper-tier level.

## **ENGAGEMENT WITH FIRST NATIONS AND OTHER INDIGENOUS COMMUNITIES (3)**

The County acknowledges that the proposed project is located within the traditional and treaty territory of the Michi Saagiig Anishinaabeg, collectively known as the Williams Treaties First Nations. Northumberland County recognizes the importance of Indigenous rights, interests, and knowledge systems in the impact assessment process and that these must be meaningfully reflected in both process and outcomes. The County supports the inclusion and consideration of these perspectives as essential to developing a comprehensive, credible, and effective impact statement and ensuring Indigenous perspectives are not treated as supplementary to the federal process, but as integral to the overall assessment framework.

## **ASSESSMENT METHODOLOGY (4)**

---

The assessment methodology must reflect the full regional scale of project effects and the realities of a two-tier municipal system and be grounded in existing municipal and regional plans, studies, and data. Key areas of interest include:

- Human health and well-being, and economic conditions
- Housing and infrastructure,
- Labour and workforce availability; and

- Education and training.

The cumulative impacts should ensure:

- The Regional Study Area (RSA) extends beyond the project site to capture cross-jurisdictional and regional impacts.
- Use of municipal and regional plans, studies, and data as baseline inputs.
- Include modelling that resets the baseline assumptions to reflect project-driven growth and cumulative effects.
- Identification of full financial impacts (capital, operating, service expansion), with clear cost attribution and funding mechanisms.

## **METEOROLOGICAL ENVIRONMENT (5.1)**

Northumberland County emphasizes that climate change considerations must be integrated into the assessment of baseline conditions and project design. The County is already experiencing the effects of a changing climate, including increased frequency and intensity of extreme weather events, which have implications for infrastructure resilience, emergency management, and long-term operations.

The County has advanced both a Corporate Greenhouse Gas Emissions Reduction Plan and a Climate Adaptation and Resiliency Plan to guide coordinated local action. The assessment should therefore consider how projected climate conditions - including extreme heat, precipitation, flooding, and severe weather - may affect the safety, reliability, and long-term operation of the proposed facility, as well as associated infrastructure systems.

## **FISH AND FISH HABITAT (5.11)**

Within the many biophysical environment conditions and species at risk the assessment should consider the potential effects of thermal discharges on aquatic ecosystems and fish, including their role in the local tourism economy.

This would include:

- Assessment of impacts on water temperature, fish communities, and aquatic habitat.
- Consideration of potential effects on recreational fisheries and associated tourism activity.

## **HEALTH, SOCIAL AND ECONOMIC CONDITIONS (6)**

---

Section 6 covers a holistic approach to the requirements for health, social, and economic conditions but requires expansion to reflect population, service, and governance realities at the County scale. While identifying the seven lower-tier municipalities within its boundary, there is no reference to Northumberland County. This omission does not reflect the two-tier municipal structure within which the project is situated.

As the upper-tier municipality, Northumberland County is responsible for regional infrastructure, service delivery, emergency services, housing systems, and growth management that will experience direct and cumulative impacts over the full lifecycle of the project. The absence of the County as a governance structure risks limiting the geographic scope of the assessment and overlooking regional and cross-boundary effects. The County submits that the proponent should be

specifically required to work with the County as part of its minimum requirements for fulfilling the requirements of section 6, as is the case with all of the local municipal governments.

The Assessment should reflect:

- Recognition of Northumberland County as the upper-tier municipality and a required regional partner in the assessment process.
- Assessment scope and study areas that reflect the full tiered governance structure and regional service responsibilities, supporting a clearly defined Regional Study Area (RSA).
- Engagement protocols that include the County in data sharing, technical review, and ongoing coordination (see additional submission comments for the draft Public Participation Plan).

### **GENERAL BASELINE CONDITIONS (6.1.1)**

Northumberland County is a largely rural and rural-adjacent region with a mix of small urban centres, agricultural lands, forests, and shoreline communities. The County's Official Plan anticipates population growth to approximately 122,000 residents by 2051 (an increase of 34.5%), with corresponding increases in demand for infrastructure, services, housing (both supply and affordability) and workforce support systems. The County also has a significantly older population profile, with approximately 29.1% of residents aged 65 and over compared to 16.7% across Ontario, reflecting both an ageing-in-place trend and the County's role as a retirement destination within a rural and small urban community.

Northumberland County is already experiencing pressures related to housing, workforce capacity, infrastructure, and service delivery that are not project generated. A project of this scale would introduce additional population and service demands, requiring updated baseline studies, scenario-based modelling, and cumulative effects analysis.

### **GENERAL EFFECTS ASSESSMENT (6.1.2)**

The County acknowledges the range of effects to be considered but is particularly concerned with the effects of a large, highly mobile construction workforce and future operational workforce on regional systems, including housing availability and affordability, rental markets, and community infrastructure. Temporary workforce influxes can create short-term but significant pressure on housing supply, particularly in regions with limited rental stock. Northumberland County currently experiences a low supply of purpose built rental housing, reduced tenant mobility, and rising waitlists for community and affordable housing. The County anticipates that Northumberland's exposure could mirror the experience of Bruce County, where large construction projects contributed to the displacement of seniors, local workers, and low-income households.

It is important that these pressures be assessed in the context of existing regional and municipal land-use and growth management plans across Northumberland County. Workforce-related housing pressures are already affecting the County's manufacturing and employment sectors, with implications for labour retention and economic stability.

The cumulative health assessment should reflect construction and operational workforce timing and duration, impacts on regional housing availability and affordability, and pressures with County-level land use, infrastructure, and growth frameworks.

### **EFFECT OF SOCIAL DETERMINANTS OF HEALTH (6.2.2.1)**

The County supports the recognition of municipal capacity constraints and reference to capacity funding. Local municipalities - including the County - are already managing significant strain on infrastructure and services, including ageing assets, affordable housing, demand for childcare spaces, and social services supports. Infrastructure and services are largely funded by residents through property taxation. Delivery of additional services required to respond to project-related impacts would place further pressure on the property tax base, affecting not only household affordability but also the viability of commercial, industrial, and agricultural properties.

The assessment must consider how the proposed project may affect key social determinants of health across both the Local Study Area (LSA) and RSAs, including housing stability, access to services, cost of living and economic security. Project-related construction and operational activities may intensify pressure on housing markets, service access, and costs, particularly where transient workforce demand is back filling or displacing limited local supply.

The assessment should also consider potential effects on food systems, including local production and distribution, perceptions of safety, and implications for the region's agricultural economy and rural identity.

### **SOCIAL CONDITIONS (6.3)**

The assessment of social conditions must consider service and infrastructure capacity across Northumberland County, within a regional, two-tier municipal framework. As a rural and agricultural region, community well-being is closely tied to land, water, and local service systems that are operating with limited ability for increased capacity.

The assessment must determine whether existing infrastructure, emergency services, housing systems, and social supports can absorb project-related pressures while maintaining acceptable service levels over the full life of the project. A municipal capacity review must consider financial, operational, and staffing requirements, including the ability to respond to sustained or cumulative impacts.

The County believes coordinated planning and sustained collaboration amongst municipal, provincial, and federal governments are required to ensure infrastructure and services are identified, funded, and delivered proactively, with appropriate cost-sharing arrangement to keep pace with project timelines.

### **BASELINE FOR SOCIAL CONDITIONS (6.3.1)**

Northumberland County identifies solid waste management as a constrained municipal service with limited remaining landfill capacity. Our last remaining landfill has a projected capacity to meet our current needs until the year 2034, based on current waste disposal rates. Our existing waste management infrastructure (Community Recycling Centres and last remaining active Landfill) is not designed to accommodate significant increases in construction, industrial, or population-driven waste volumes.

A project of this scale will generate substantial construction and operational waste and place additional pressure on curbside collection, recycling systems, and waste facilities through workforce influx and population growth. Without clear controls, project-related waste may be

directed to County owned and operated waste management systems, accelerating landfill capacity depletion and increasing operational and capital pressures.

The Impact Statement should:

- Quantify construction, operational, and induced waste generation;
- Assess municipal system capacity and service impacts;
- Identify measures to avoid reliance on municipal landfill and recycling systems; and
- Define mitigation measures, cost responsibility, and funding mechanisms.”

## **ECONOMIC CONDITIONS (6.4)**

Economic development, workforce readiness, and housing are deeply interconnected systems in Northumberland County and are fundamental to the County’s mandated responsibilities. The County provides county-wide planning, housing and homelessness services, economic development, land use planning, and regional workforce coordination across seven lower-tier municipalities. The County is responsible for allocating population and employment forecasts, coordinating growth management, aligning housing and employment land supply, planning infrastructure and services, and delivering social services across a largely rural geography with several small and mid-sized urban centres.

A project of this scale, duration, and labour intensity has the potential to significantly affect Northumberland’s housing system, labour market, service capacity, and long-term growth projections.

A county-level assessment is essential to informed decision-making and to understanding cumulative effects, inter-municipal effects, and land use planning impacts that extend well beyond the immediate project footprint.

The County is already under significant pressure and is highly sensitive to workforce-driven in-and-out migration. Housing supply is limited, labour pools are tight, and service systems are operating with limited ability for expansion. The project presents a credible risk to housing market volatility, displacement of the local workforce, and potential boom and bust impacts.

Without proactive, coordinated planning and mitigation, temporary population surges may result in long-lasting affordability pressures, disrupt the local workforce, and place unplanned fiscal and operational burdens on municipal and county systems.

- **Housing Conditions**

- Housing supply is constrained across the county, particularly for:
  - purpose-built rentals
  - affordable rental housing
  - attainable ownership housing, and
  - supportive and special-needs housing.
- Vacancy rates and affordability pressures are already challenging for:
  - moderate-income households
  - seniors, and
  - essential and service workers.
- Construction activity is limited by labour shortages and servicing constraints and infrastructure capacity.

- **Labour Force & Workforce Readiness**

Northumberland County's labour market faces many challenges complicated by housing availability. Large, well-paid, mobile construction workforces can divert labour away from essential services and local employers unless explicitly assessed and managed.

- The county has an ageing workforce and historically lower levels of working-age in-migration.
- Key sectors – including skilled trades, construction, healthcare, transportation, emergency services, and municipal operations - currently face recruitment and retention difficulties.
- Training capacity for specialized and regulated occupations, including those relevant to nuclear construction and operations, requires long lead time and coordinated investment.
- Labour markets function at a regional scale, extending beyond municipal boundaries into the neighbouring Region and the Greater Toronto Area, increasing the likelihood of labour substitution and service impacts.

- **Economic Development & Community Development Services**

Northumberland County supports business retention and expansion, investment attraction, and employment land planning; however:

- The County has limited control over labour supply and housing delivery.
- Fiscal and staffing capacity to respond reactively to cumulative growth pressures is limited.

Without early intervention, economic benefits may be lost to outside the county if local businesses and workers are not positioned to participate fully.

This environmental scan supports this submission and includes:

- *Northumberland County Official Plan*: Establishes county-wide settlement pattern, growth management, and employment land framework.
- *Long Term Growth Forecast and Urban Lands Needs Analysis*: Provides county-wide population, housing, and employment projections and land needs analysis to 2051, forming the quantitative growth baseline against which project related cumulative impacts should be assessed.

Northumberland County will need to initiate a re-examination of long-term growth assumptions and related planning work considering the NNWP, recognizing that a project of this scale will significantly affect population, housing, workforce, and infrastructure demand beyond existing forecasts.

- *Oak Ridges Moraine Conservation Plan (ORMCP)*: A Provincial land use policy that protects the ecological and hydrological integrity of the Oak Ridges Moraine. Although the NNWP site is approximately 15 km south of the Oak Ridges Moraine boundary (north Port Hope), proposed haulage routes to Highway 401 may rely on County roads that travel through the Moraine and connect into other jurisdictions, including Peterborough County and Durham Region.

Accordingly, the ORMCP policies are relevant to the project, and should demonstrate consistency with the Impact Statement, including measures to avoid or minimize adverse effects on Moraine features and functions (e.g., through haul route selection, construction controls, spill prevention/response, and contingency planning).

- *Northumberland Housing and Homelessness Plan and Northumberland County Affordable Housing Strategy*: Identifies existing and projected housing affordability gaps, priority populations, and system capacity constraints.
- *Workforce Development Board, Local Labour Market Planning Report*: Provides evidence-based analysis of regional labour market conditions, workforce supply and demand, skills shortages, and training gaps.

The draft Integrated Guidelines address economic, housing, and workforce matters primarily through Section 6. However, the analysis is framed largely at a local or project-adjacent scale, with limited direction to assess impacts across an upper-tier municipal system such as Northumberland County. This limits consideration of inter-municipal spillover effects, including displacement of housing demand and service pressures across the county.

Northumberland County is likely to experience housing and workforce pressures earlier than the immediate Wesleyville area. Northumberland lacks deep rental stock, intensification capacity, and servicing readiness to scale supply. Without early action, the County will become the shock absorber and likely to experience:

- Rapid absorption of existing rental stock.
- Conversion of ownership housing to rentals.
- Sustained upward pressure on rents and home prices.

The absence of details points to gaps:

- Labour market modelling to assess labour substitution, crowd-out, and essential services impacts.
- Assessment of cumulative effects, including interaction with other approved or planned growth (e.g. Campbellford Health Campus expansion).
- Insufficient direction for a comprehensive transportation impact study and emergency evacuation analysis at a county scale.
- No clear definition or consistent use of “local” versus “regional.”
- Limited consideration of land use compatibility, agricultural impacts, and minimum separation distances near Wesleyville.

From a Northumberland County perspective, these gaps present tangible risks:

- Further deterioration of housing affordability and availability.
- Labour diversion from healthcare, emergency services, construction, and municipal operations.
- Unanticipated fiscal pressures on County and municipal systems.
- Economic leakage reducing local benefits.
- Cumulative impacts exceeding service and housing thresholds without early identification or mitigation.

***The draft ITISG should identify Northumberland County as a required municipal partner and strengthen the language (Section 6, page 57) from “the proponent should work with” to “the proponent must work with” the County and local municipalities, reflecting the County’s statutory responsibilities.***

The County requests the Impact Statement Guidelines:

- Explicitly require assessment of upper-tier (county) level, not solely host community.
- Include quantified, scenario-based analysis of housing demand, workforce needs, and population change by project phase.
- Explicitly assess impacts on essential services and training system capacity.
- Align mitigation measures with County growth management, housing, service delivery, and emergency preparedness frameworks.
- Identify Northumberland County as a required municipal partner.

A strong, county-level assessment will enable Northumberland County and its municipalities to proactively plan, protect housing affordability and workforce stability, manage growth pressures, maximize long-term economic benefits, and maintain community resilience throughout the project lifecycle.

Use of a County and local municipality lens to:

- Strengthen government relationships to achieve workable solutions.
- Anticipate where, when, and how pressures will occur across the Northumberland.
- Guide future housing, population, and employment growth.
- Protect housing affordability and workforce stability.
- Proactively plan for infrastructure and services.
- Maximize long-term economic benefits while maintaining resilience.
- Develop, attract, and retain high-quality talent.

### **EFFECTS ON SERVICES AND INFRASTRUCTURE (6.3.2.2)**

Northumberland County owns and manages regional road infrastructure with a replacement value exceeding \$936M, serving approximately 90,000 residents across seven lower-tier municipalities. The County's arterial road network functions as the primary transportation network system, supporting the movement of goods, services and residents across the region.

The County is currently experiencing a funding shortfall of \$9.8M annually to maintain road infrastructure at acceptable levels. The gap reflects ageing infrastructure, inflationary pressures, increasing service expectations, and population growth. Under current funding levels, asset condition is projected to decline, with only 54% of the 498 km arterial network currently rated as adequate.

Existing network constraints already operate below desired performance levels. The County's Transportation Master Plan identified several corridors operating at reduced levels of service (LOS C-D), including key routes connected to the Wesleyville site.

The County has also identified goods movement corridors and Emergency Detour Routes (EDRs) along the Highway 401 corridor are critical to regional mobility but susceptible to congestion, particularly during highway closures or peak demands.

Safety is also a concern, with several high-collision intersections along corridors likely to be used by project-related traffic. These conditions confirm limited excess network capacity.

A project of this scale will introduce significant additional traffic volumes during construction and operations, increasing wear, exacerbating congestion, and placing further strain on an already

constrained system. Without appropriate assessment, mitigation, and funding, these pressures will accelerate asset deterioration and reduce network safety and functionality.

The current ITISG identifies transportation and emergency services considerations; however, further clarity is required to ensure a comprehensive regional assessment.

IAAC should require:

- A detailed Transportation Impact Study (TIS) examining the full regional network.
- Analysis of construction and operational traffic impacts, including routing, volumes, timing, and safety effects.
- Emergency access and evacuation route analysis, including scenarios where Highway 401 is unavailable.
- Assessment of impacts to bridges, culverts, and stormwater systems, and wellhead protection areas.
- Evaluation of high-risk intersections with recommendations for safety improvements.
- Integration of findings to inform an update to the County's Transportation Master Plan.
- Identification of required infrastructure improvements, associated costs, and clear funding mechanisms to ensure the County is not responsible for project-related impacts

A project of this nature will place additional strain on regional infrastructure and services through population growth, traffic increases, and accelerated asset deterioration. Without comprehensive studies and proactive funding strategies, existing financial pressures will be amplified.

A comprehensive, regionally focused assessment is required to ensure that the transportation network can continue to support safe and efficient movement. Other critical services - including emergency response, housing access, and workforce mobility - are dependent on a reliable transportation system.

### **EFFECTS ON SERVICES AND INFRASTRUCTURE (6.3.2.2 CONTINUED)**

Paramedic Services are delivered at the upper-tier level, serving all lower-tier municipalities within Northumberland County. Northumberland Paramedics provide emergency and life-saving response across approximately 1,900 square kilometres, with a predominantly rural settlement pattern.

Paramedic services are a front-line life-safety function and play a critical role across all phases of a nuclear project, including construction, operations and emergency scenarios.

The NNWP introduces significant demand pressures and risks that would affect paramedic response capacity and emergency management coordination across the entire county.

Northumberland Paramedic services are already operating under increasing demand and capacity constraints.

- Approximately 29,000 calls annually, with steady increases.
- Hospital offload delays, reducing ambulance availability.
- Frequent cross-boundary responses.
- Rural geography with long travel times and limited redundancy.

- An ageing population, increasing call complexity.
- Staffing and fiscal constraints limiting scalability.

These conditions reduce system resilience and the ability to absorb sudden demand increases.

From the County's perspective, the draft framework presents several key gaps:

- No modelling of increased demand on paramedic, hospital, or emergency social services.
- No clarity on funding responsibility for service expansion.
- No demonstration of County-level capacity to meet CNSC requirements.
- No requirement for a County-wide nuclear emergency response framework.

Without explicit assessment and resourcing, there is a risk that emergency response plans are operationally unsustainable.

If unaddressed, the County faces risks:

- Deterioration of response times.
- Downloading of nuclear responsibilities without funding.
- Inability to meet provincial and CNSC expectations.
- Increased risk to responder safety and public safety.
- Reactive, unplanned system expansion.

IAAC and the CNSC must require:

- Paramedic and Emergency Services Capacity Assessment: Quantitative assessment of capacity, staffing, fleet, and projected demand.
- Demand and Surge Modelling: Modeling of system impacts from construction, operations, and emergencies.
- County-wide Nuclear Emergency Response Planning: Development of an integrated County-wide framework.
- Funding and Service Expansion Commitment: Clear responsibility for funding and sustaining capacity.

CNSC Readiness and Compliance requires a robust assessment to enable:

- Clear identification of capacity limits.
- A funded, county-wide emergency framework.
- Protection of response times.
- Alignment of responsibilities with resources.
- Proactive, readiness rather than reactive system strain.

Bruce County and Durham Region, with decades of nuclear experience, demonstrate that nuclear operations require sustained, specialized emergency medical services over the full project lifecycle. Their experience shows that paramedic services must be scaled, trained, and funded at a system level, with continuous investment in readiness, coordination, and surge capacity.

Northumberland County, with its rural geography, has limited surge capacity. This constrained baseline underscores the importance of early, county-wide assessment and resourcing of paramedic services in advance of project approvals, rather than adding capacity reactively after impacts begin to occur.

## **EMERGENCY MANAGEMENT (9.2)**

Northumberland County is the upper-tier municipality responsible for regional emergency management coordination, including emergency planning, emergency information, evacuation coordination, Emergency Operations Centre (EOC) operations, and inter-municipal and inter-agency coordination. These functions are directly relevant to the proposed project, given the potential for large-scale, low-probability/high-consequence incidents requiring coordinated regional response. The project has implications for population safety, responder capacity, evacuation logistics, health system surge, and long-term recovery across both local and regional scales.

Northumberland County supports seven lower-tier municipalities, seasonal population fluctuations, and a transportation network that relies on Highway 401 as a primary evacuation corridor, creating known congestion and clearance-time constraints. Emergency services across the county (paramedic and emergency social services) are already operating under capacity pressures related to workforce availability, volunteer reliance, training demands, and concurrent emergencies such as extreme weather and public health events.

The County and municipal EOCs operate with defined staffing and technological limits and are not currently resourced for sustained, multiweek emergency response or recovery scenarios associated with a nuclear incident. While existing emergency plans align with provincial frameworks, implementation capacity – particularly in training, equipment, and public education – remains constrained.

The draft ITISG requires descriptions of emergency management and response plans, including accident scenarios, coordination mechanisms, and response measures. The County's comments are informed by operational experience and a review of relevant frameworks, including the Northumberland County Emergency Management Program and Plan, lower-tier municipal emergency response plans, the Provincial Nuclear Emergency Response Plan (PNERP), and Emergency Management Ontario's BEM and IMS frameworks.

Key gaps identified:

- No explicit requirement to assess upper-tier municipal or regional emergency management capacity, despite reliance on County-level coordination.
- No requirement for quantitative evacuation modelling, clearance-time analysis, or health system surge modelling that incorporates seasonal and projected population conditions.
- Absence of cumulative demand analysis considering concurrent emergencies or multi-unit accident scenarios.

- Roles, responsibilities and commitments across the proponent, Province, upper-tier, and lower-tier municipal governments are not operationally defined.
- Funding, resourcing, and long-term maintenance of emergency preparedness measures are not clearly specified.

From the County's perspective, these gaps create material risks, including:

- Emergency plans that are compliant in principle but not operationally feasible at a regional scale.
- Insufficient evacuation capacity, responder fatigue, and agency coordination challenges and public confusion during an incident.
- Cost pressures on municipalities for training, equipment, exercises, and recovery activities without secured funding.
- Reduced confidence in the sustainability of emergency preparedness and recovery over project lifecycle.

IAAC and CNSC should require:

- A regional emergency management capacity assessment, including EOC operations, staffing, training, and inter-municipal coordination.
- Quantitative evacuation and clearance time modelling for local and regional study areas, incorporating seasonal population variability, workforce influx, transportation constraints, and concurrent emergencies.
- A health and social services surge analysis, including paramedic services, emergency social services, and recovery systems.
- Clear definition of roles, responsibilities, and funding commitments for all phases of emergency management, including preparedness, alerting, response, exercises, public education, and recovery.
- Assessment of cumulative and long-term readiness, including multi-unit scenarios and sustained operational readiness across the full project lifecycle.

A strong assessment would deliver regionally executable emergency response and evacuation plans, a quantified understanding of system capacity limits and required investments, and identified staffing, infrastructure, and training enhancements supported by appropriate funding. This would support both responder preparedness and public confidence in the safety and resilience of the region.

### **CANADA'S ENVIRONMENTAL OBLIGATIONS AND CLIMATE CHANGE COMMITMENTS (10.1)**

Northumberland County's climate action planning, including its Corporate Greenhouse Gas Emissions Reduction Plan and Climate Adaptation and Resiliency Plan, reflects a commitment to coordinated action on mitigation and adaptation that should be considered within the broader context of Canada's climate objectives.

## CLOSING COMMENTS

---

Northumberland County thanks IAAC, the CNSC, and the proponent for the work undertaken to advance the impact assessment process and welcomes the opportunity to contribute to its development.

The County's comments are offered in a spirit of collaboration and with the objective of strengthening the ITISG to ensure that the assessment fully reflects the scale, complexity, and regional nature of the proposed project. As an upper-tier municipality, the County plays a central role in the planning, delivery, and long-term sustainability of infrastructure and services that will be directly affected by the project.

Ensuring that regional systems are appropriately assessed - and that required infrastructure, services, and capacity are identified, funded, and delivered in alignment with project timelines – is not merely preferable; it is essential to a credible and defensible assessment.

The County is committed to collaborating with IAAC, Indigenous communities, the proponent, local municipalities, and other partners as the project advances through the impact assessment and licensing phases.

Northumberland County remains committed to working constructively on behalf of its residents and communities to support a rigorous, transparent, and regionally grounded assessment process that protects community well-being and supports informed federal decision-making.

## SUPPORTING REFERENCES

The following plans, frameworks, and legislative references have informed Northumberland County's submission. Copies of County documents are available upon request.

### Northumberland County

- *The County's Transportation Master Plan (2016)*
- *Asset Management Plan (AMP)*
- *Northumberland County Emergency Management Program & Plan*
- *Municipal Emergency Response Plans (Lower Tier)*
- *Northumberland County Communications Master Plan 2023 -2033*
- *Northumberland County Official Plan*
- *Long Term Growth Forecast and Urban Lands Needs Analysis*
- *Northumberland County Housing and Homelessness Plan*
- *Northumberland County Affordable Housing Strategy*
- *Northumberland Paramedics – Service Commitment*
- *Climate Adaptation and Resiliency Plan*
- *Corporate Greenhouse Gas Emissions Reduction Plan*
- *Oak Ridges Moraine Conservation Plan (ORMCP)*

### Legislative and Regulatory Framework

- Impact Assessment Act, S.C. 2019, c. 28, s. 1 - Sections 6(1)(h), 11, 27, 51, and 75(1)

- Impact Assessment Agency of Canada, Practitioner’s Guide to Federal Impact Assessment in Canada
- Provincial Nuclear Emergency Response Plan (PNERP)
- Ministry of Emergency Preparedness and Response - Emergency Management Ontario – BEM and IMS Framework
- Ministry of Health – Emergency Health Services Division (MOH – EHSD) - Response Time Performance Plan (RTPP)

#### **Industry and Best Practice Frameworks**

- *Workforce Development Board, Local Labour Market Planning Report*
- *Canadian Association of Nuclear Host Communities – CANHC IAAC Submission, February 2026: Reference # 447 New Nuclear at Wesleyville*
- *International Association for Public Participation (IAP2) - IAP2 Spectrum of Public Participation*
- *UK Government Communication Service - OASIS Evaluation Framework*