Call for Proposals for Research Grants - 2024-25

The Alberta Land Institute (ALI) announces a Call for Proposals for its research grants competition. The deadline for receipt of applications is **JANUARY 30, 2025**.

We expect that successful applicants will be notified by **FEBRUARY 28, 2025.**

About Alberta Land Institute

The Alberta Land Institute is an independent research institute based at the University of Alberta. We are committed to research that supports and enhances land use policy in the province of Alberta and beyond. Sound policy development should be informed by a thorough consideration of costs and benefits – economic, social and environmental. ALI's work focuses on the changing landscape and the ways that planning and policy design can ensure the long-term sustainability of Alberta's agricultural sector, its water and its natural areas.

Applicants are invited to apply to the following grant streams:

ALI is interested in research that relates to and informs the public policy process.

1) One-Year Research Grant

One-year projects funded to a maximum of \$50,000

Project funding is dependent on the potential policy implications and the proposed approach

2) Micro Research Grant

Up to a 6-month project – funded to a maximum of \$10,000

Knowledge synthesis or analysis of existing or proposed legislation or policy

Research Areas

ALI is currently focusing on four research areas: 1) Wildfire Management, 2) Implications for Renewable Energy Development for Alberta, 3) Land Use Planning and the Alberta Nature Strategy, and 4) Housing and Residential Development.

Selection Process

Applications will be pre-screened by ALI staff and assessed by the ALI Director and external reviewers. Upon the recommendations of the reviewers, the Director will make the final decision on the awards.

All prospective applicants are invited to contact ALI's Director, Sandeep Agrawal at <u>albertalandinstitute@ualberta.ca</u> to discuss the suitability and scope of the proposal prior to formal submission.

Requirements

Applicants must submit ALI's completed application form. Please review the guidelines carefully before completing the application form. Along with this, applicants must submit a Tri-Agencies personal data form for themselves and for each co-investigator. <u>Applicants must submit one PDF file containing all required information and documentation on or before the deadline to: albertalandinstitute@ualberta.ca</u>.

One-year Research Grant (\$50,000)

- Within two months of project completion, a Final Report describing the research methodology, findings, and conclusions, as well as (and in a substantive manner) the policy issue that the research addresses and the implications of the report for policy and/or practice. The Research Director may set out other reporting requirements.
- A short (2–4 pages), non-technical summary of the Final Report to be submitted to ALI, and which ALI may use to publicize the research.

Subsequent applications will only be considered if satisfactory final or interim progress reports of all previous and existing ALI grants have been fulfilled prior to the new application.

Micro Research Grant (up to \$10,000)

- Awards for the knowledge synthesis or analysis of existing or proposed legislation or policy.
- A final 5–6-page report to be submitted to ALI within a month of completion.
- Participation and follow-up engagement in knowledge mobilization/communication initiatives including ALI webinars and outreach initiatives.

Any published work that is derivative of the research supported by the grant must acknowledge the financial support received from the Institute. ALI must be provided with a copy of any publications.

Contact

All inquiries may be addressed to <u>albertalandinstitute@ualberta.ca.</u> Please clearly indicate the nature of your email in the subject line.

RESEARCH AREAS – Winter 2024-25

The Alberta Land Institute is accepting for consideration research proposals in the following four research areas:

1. WILDFIRE MANAGEMENT

Background

The frequency, severity and intensity of wildfires in Alberta have markedly increased in recent years. This escalation is attributed to rising temperatures, extended fire seasons with a higher incidence of warmer days during the fire season, prolonged dry periods, and heightened fire weather conditions. The recent fires have grown to unprecedented scales, significantly impacting communities on social, economic and environmental levels. Consequently, evacuations have been necessary, substantial damage to properties and infrastructure damage has occurred, and air quality has been adversely affected. These highlight that prioritizing research and implementing policies and regulations are vital to protecting Alberta's lands, communities, wildlife, and ecosystems. Leveraging advanced technologies, such as remote sensing, advanced modelling techniques and artificial intelligence-powered systems can effectively contribute to detecting, monitoring and mitigating wildfire impacts while preparing for and managing uncertain future fire events.

Research Questions

- 1. What communities are particularly vulnerable to wildfires, and how might wildfires influence the well-being of these communities?
- 2. What are the long-term economic, social and environmental consequences of repeated wildfires in the province?
- 3. How do ecosystems recover from wildfires and what is the impact of repeated wildfires on forest regeneration and land degradation? Understanding these processes can guide future conservation and restoration efforts.
- 4. How can advanced predictive models, remote sensing and artificial intelligence be integrated in early detection and rapid response systems for wildfires?
- 5. How can we effectively integrate Indigenous knowledge and practices relating to fire management into existing strategies?

2. IMPLICATIONS OF RENEWABLE ENERGY DEVELOPMENT FOR ALBERTA

Background

Renewable energy generation is expected to approximately triple in the period 2022 – 2030. In Canada the wind, solar, and energy storage sectors grew by 11.2% in 2023 alone. The land that is needed to accomplish this growth may come at the expense of other land uses and the interests that they encompass. In some cases, conflict may arise with agricultural uses; in others with landscapes having high environmental values. Such concerns led the Alberta government to first place a seven-month moratorium on new renewable energy projects, followed by new restrictive policies on renewable energy development. The Alberta Land Institute seeks to support research on the conflicts and compatibilities between renewable energy development and other land uses, particularly high-value agriculture and environmental uses (or non-uses).

Research questions:

- 1. What agricultural practices are compatible with wind or solar energy installations?
- 2. What forms of renewable energy development, if any, is compatible with the conservation in areas of high biodiversity value?
- 3. What policy tools (including economic incentives) are available to reconcile renewable energy development with agricultural and environmental land uses?

3. LAND USE PLANNING AND THE ALBERTA NATURE STRATEGY

Background

The Government of Alberta has held consultation toward the development of a made-in-Alberta nature strategy (https://www.alberta.ca/nature-strategy-engagement). While the nature of the strategy is not yet known, one subject of consultations has been the role of land use planning in nature conservation. Alberta has employed regional land use planning intermittently for several decades, the most recent version being based in the Alberta Land Stewardship Act (ALSA)of 2019. The ALSA planning process, however, has not been fully developed. The Alberta Land Institute seeks to support research that investigates expected complementarities and conflicts between land use planning (both actual and potential) and nature conservation, with a view to optimizing the effectiveness of both processes.

Research questions

- 1. What land-use planning approaches and tools optimize nature conservation?
- 2. How can conservation planning accommodate competing interests?
- 3. What are best practices in conflict resolution in land use planning?



4. HOUSING AND RESIDENTIAL DEVELOPMENT

Background

Canada's affordable housing crisis has reached a critical juncture, with a significant gap between housing supply and demand. Recent estimates suggest that the country is short by as many as 4 million homes, underscoring the severity of the issue. In response, federal and provincial governments have introduced a series of initiatives aimed at addressing this shortfall and increasing the housing supply.

Key measures include mandating municipalities to revise policies and regulations that hinder development, providing targeted funding through programs such as the Housing Accelerator Fund, and offering low-cost financing schemes to encourage developers and builders to undertake new projects. These steps aim to remove bottlenecks in the housing development process and stimulate construction activity.

However, several structural challenges continue to impede progress. Municipalities face long-term financial burdens associated with new residential developments, including the cost of maintaining infrastructure and services. Additionally, high development charges and regulatory processes imposed by local governments can discourage builders, while the scarcity of developable land—particularly in large urban centres—further exacerbates the problem. Addressing these barriers will require coordinated efforts across all levels of government and private-sector collaboration to create sustainable and inclusive housing solutions.

Research Questions:

- 1. It is understood that in major cities, residential developments often do not cover their own costs. Is this also the case in rural and smaller urban municipalities throughout Alberta? Which types of land use generate revenue and which ones incur expenses for small urban or rural municipalities?
- 2. Are Edmonton and Calgary prepared to implement the Housing Accelerator Program federal initiative to enhance housing availability? What would they need to move forward with this program? The Zoning Bylaw offers more opportunity for development in mature neighborhoods than ever before. Has the availability of more housing led to greater market affordability in those areas? What material impact has been observed in the market since the introduction of the new bylaw in January 2024? What impact will proactively upzoning land in priority growth areas within an infill context have on the market?
- 3. What is the correlation between housing prices and the introduction of new development charges? How does Edmonton compare to other jurisdictions? What trade-offs to individual affordability will this have as costs escalate?
- 4. What are the cumulative impacts of policy and changing infrastructure standards on housing affordability and attainability in the Edmonton region?
- 5. What potential impact does artificially constraining local land supply through policy in Edmonton might have on regional growth dynamics, price escalations and urban connectivity within the metro area?