

Pre-Budget Submission to the House of Commons Standing Committee on Finance

Re-thinking where, why and how we build

*submitted on August 3, 2017
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Executive Summary

The Canadian Society of Landscape Architects (CSLA) is pleased to submit this brief as part of the 2018 federal pre-budget consultations.

The CSLA was founded in 1934 and is the voice of more than 2,000 landscape architects across Canada. As the voice of the profession in Canada, the CSLA is an advocate for its members on issues such as urban design, urban renewal, sustainable communities, climate change, and cultural heritage.

In keeping with the theme set by the Standing Committee, this brief focuses on two recommendations related to increasing Canadians' productivity and well-being in their communities.

In order to build a strong, competitive, and productive economy, this brief emphasizes the important role that landscape architects have in supporting a climate ready economy. Our common future depends on building an economy that is resilient — an economy that is functional because it works to mitigate and adapt to climate change. If Canada does not purposefully work toward climate-change readiness, our businesses, our jobs, our economy and productivity; will falter.

“Landscape architecture and its allied disciplines seek real solutions to real problems, from master planning to detail design.”

Nancy Pollock-Ellwand, in *Landscapes|Paysages* magazine Vol 16, no 4

Recommendation #1

The CSLA recommends that the federal government further invest in applied research that would recognize and amplify the leadership of landscape architecture in building inter-

disciplinary partnerships in green infrastructure projects geared to creating sustainable, resilient, productive economies and smart communities ready to face the challenge of climate change.

Rationale

Landscape architects create sustainable societies. Landscape architects work across disciplines, and are skilled in the planning and design of sustainable societies and environments.

Sustainable societies ensure that the decisions made to meet today's needs do not compromise the capacity of future generations. In a sustainable and prosperous society, people rely on a healthy environment for:

- the provision of food and resources
- safe drinking water
- clean air
- shelter for all citizens.

Healthy environments increasingly rely on humans for the protection, conservation and wise use of resources to ensure their continued viability, especially under increasingly trying conditions.

Recommendation #2

The CSLA recommends that all federal government projects adhere to the *Canadian Landscape Standard*. Adhering to the standard will bolster the economy, ensure climate change resilience, and help create sustainable communities. Adhering to the standards in federal infrastructure projects, as well as in the creation of smart cities, will further advantage productivity and a climate ready economy.

The federal government may also want to consider applying the Canadian Landscape Standard to the national building code, allowing landscape architects to plan for change.

Rationale

The CLS is a national recognized convention. Standard sets guidelines and makes recommendations for all major aspects of the landscape industry. It is intended that the Canadian Landscape Standard will set guidelines for landscape construction projects across Canada. It is intended for use by anyone who specifies landscape work, including landscape architects, landscape designers, municipal parks, planning departments, procurement departments, and allied organizations. It is intended for landscape contractors to support them in the bid process. Furthermore, it supports industry related educational and training programs.

Landscape architecture and a productive economy

Landscape architecture is the design profession most concerned with the planning, design, management and stewardship of land and water. Landscape architects are at work in parks, protected areas and cultural landscapes, urban planning and design, transportation, green infrastructure and more. The scope of work is vast and affects every aspect of our community. In essence, landscape architects help to create healthy, functional, adaptable and productive communities.

The specialized skills and expertise of landscape architects are required for many restoration projects—for example of contaminated land, destroyed forests, damaged historical sites, etc. Landscape architects are also involved in the redesign and strengthening of underused urban areas, or development projects related to public spaces, and residential and commercial buildings. Landscape architects create resilient natural systems, help to mitigate climate change, and work to create healthy, resilient, functional and productive communities.

The work of landscape architects touches many aspects of the Canadian economy and productivity. Nationally, the estimated GDP contribution from landscape architecture in 2014 was over \$1Billion, and has typically grown by over 10% annually. Economic activity in the landscape architecture industry has a multiplier effect nationally of 2.1, meaning that every dollar input into Landscape Architecture generates \$2.10 of economic activity. Every \$1Million dollars in Landscape Architecture project expenditures creates 12.83 jobs nationally. As of June 2015, there were 851 Landscape Architectural firms in Canada. All are categorized as small businesses with fewer than 100 employees.

How can landscape architects make a difference?

In May of 2017 as the Prime Minister toured the extensive, flooded areas of the Outaouais, he reflected and was quoted in the media as saying:

“...we will have to think how we build our cities, how we plan infrastructure and this will certainly be part of the reflection that we will be part of...” *

(*Alan Freeman - ipolitics <http://ipolitics.ca/2017/05/12/>)

The CSLA agrees with this statement and welcomes the opportunity to offer the expertise of its members to help support this reflection.

The CSLA believes that the profession is uniquely positioned to provide leadership in planning for the stresses of a changing climate and its impact on our economy, our productivity, and our communities.

Through its Task Force on Adaptation to Climate Change, established in 2014, the CSLA is providing leadership and supporting policy for members undertaking projects that proactively anticipate the alterations needed to meet future needs.

The CSLA encourages its members to integrate options so as to:

- minimize risks associated with extreme events and environmental changes
- reduce the potential for adverse effects to human health and safety
- sustain species, habitats, and ecosystems

- protect cultural landscapes
- enhance resilience in natural systems and human communities

In keeping with these principles the CSLA works to initiate collaborative action amongst the related planning and design professions of Canada in order to:

- disseminate the latest science on environmental change
- develop and disseminate information on best practices
- integrate climate change into planning and design education
- advocate with government for needed changes to design policy, regulations and standards

Landscape architects can counteract the effects of climate change through smart design: by practicing evidence-based landscape architecture, by setting climate goals appropriate to the scale of the project and to the season in which the landscape will be most used.

There are many, many stories across Canada of landscape design projects that indeed make a difference to our communities and to our economies.

Examples of resilience — Living with water, wind, and storms

Some of the examples of outstanding work are both historic and current. These include the Red River Floodway in Winnipeg, a massive channel created in the 1960s to divert and control flood waters around the city of Winnipeg. Used dozens of times since its completion in 1968, the Floodway has prevented over \$100 billion (CAD) in cumulative flood damage.

Landscape architects are also helping Canadian municipalities rebuild waterfronts in the face of what are becoming increasingly regular gale force winds and hurricanes.

One example is the work that landscape architects are doing in Charlottetown, PEI. In October 2012, Hurricane Sandy made landfall in New Jersey, leaving a swath of destruction. The storm's impact was felt across the entire eastern seaboard.

The need for an updated waterfront master plan had been percolating for some time in Charlottetown. Up until Sandy's arrival the city had been discussing climate change resilience plans as an option. But Sandy changed everything. Much like floods and fires, the need to plan for climate change became a harsh, tangible reality. When Sandy hit, in many areas the most basic urban services—food, transportation and telecommunications—were completely shut down for the better part of a week; some continued to be impacted over a year later.

After Sandy, the tone of planning in Charlottetown changed and the need to consider the increased frequency and intensity of coastal flooding events due to climate change became a critical public issue in the planning process.

* Excerpt adapted from: "*Choppy Waters*"— Landscapes|Paysages Magazine

Landscape architects by working with other specialists can also reduce the threat of fires by applying resilient designs and enhancing natural defenses.

In essence, strategies implemented by landscape architects can help create resilient designs that anticipate less than ideal environmental conditions that can wreak havoc on communities and economies.

In conclusion

“Whatever is the solution, we know for sure the North American city will need a dramatic retrofit.”

Patrick Condon, 2010. Seven rules for sustainable communities, p1

The CSLA believes that the importance of landscape architecture’s contribution to the economy will only continue to grow as society becomes increasingly aware of best practices to mitigate and adapt to climate change. But we also know that in order to meet the challenge there is need for support to help ensure that our communities have the science and the materials to take on the challenges of a low-carbon future.

Whether mitigating climate change, or creating landscapes that work to build healthy, productive communities, or encouraging ground-breaking projects through designs that promote new urbanism and environmentally friendly habits, landscape architects are on the forefront of visioning and re-visioning our urban and rural communities and their economies.

The productivity of our society, the competitiveness of our businesses, and the health of our communities are all intertwined and demand that we move quickly to address our common future.

What we can do to help grow our economy:

- lead interdisciplinary teams on adaptation
- promote resilience and sustainability in environments, systems and structures
- employ greener approaches to stormwater management through low impact development, infiltration systems, treated disposal
- value urban tree canopies and urban natural areas as carbon sequestering/sheltering assets
- assist with needed changes to environmental assessment and regulatory instruments
- integrate planning and design for climate change into existing university programs, and provide continuing training and tools for practitioners

The two recommendations noted in the executive summary are made to support the profession of landscape architecture in developing policies, practices and models that can be beacons for low-carbon communities and a green, sustainable economy.

The profession needs support in further researching and re-visioning the low-carbon future that will be upon us by mid-century

The CSLA firmly believes that with the support of the federal government, the profession of Landscape Architecture will be empowered to maximize its contributions to a Canadian

economy that is resilient, productive, and internationally recognized for its examples of climate readiness.