



# Embracing Indigenous Cultures to Address Infrastructure Needs

Inclusivity advances widespread positive impact.

The main objective of infrastructure is to support existing communities and growing populations with essential facilities, structures and services. Globally, projected investment falls far short of the amount needed to provide adequate infrastructure by 2040.<sup>1</sup> The range is wide—covering buildings, roads and services, such as healthcare, education, energy, transport and water. Around the globe, the pandemic has given visibility to unmet needs, highlighting fault lines in the basic services and systems that all people depend on, and calling attention to underserved communities.

Timely opportunity exists to nurture new approaches to infrastructure development as society increasingly places value on diversity and inclusivity, recognizing the potential positive impact on individual wellbeing, innovation and whole communities. In the following Q&A, we spoke with Douglas Yahn, Indigenous Relations Lead, WSP in Canada, to explore how perspectives from Indigenous peoples can enhance infrastructure projects and the communities they support.



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*“Planning and design approaches that include the contributions of Indigenous cultures to national and regional identity allow for the creation of projects that speak to us all.”*



Douglas Yahn, Indigenous Relations Lead

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## ***How can communities learn from Indigenous peoples to inform the planning and design of the built environment?***

**Douglas Yahn:** Today, all communities are trying to understand how to develop resilience and sustainability across social, environmental and economic systems. It is only once we begin to delve deeper into the issue of resilience that we think about the importance of social components, such as inclusivity in the narrative, and informing projects with insight from Indigenous peoples—and, indeed, contemplate the value of collaboration with Indigenous communities in the planning and design of infrastructure.

Indigenous peoples can inform this process with their distinctive histories and perspectives. The culture of Indigenous peoples—each unique in their own country and region and often struggling against the historic impacts of social conditions created by hierarchy—can bring different perspectives on the connection to factors that challenge sustainability. Culture, as defined by world view, language, definition of space as well as personal and shared group

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<sup>1</sup> [Global Infrastructure Hub](#)

experience, can be brought forward to advance current understanding of resilience. Including Indigenous knowledge in projects can lead to a shift in, and enhancement of, current practices that are applied to strengthen resilience.



WSP and Architecture49 worked with Fort Albany First Nation and contributed to the design of the Peetabeck Academy School in Fort Albany, Ontario, Canada. Fort Albany First Nation is a remote community, accessible by winter road (on ice, compacted snow and frozen tundra) or by plane. In June of 2016, a group of WSP engineers and environmental specialists visited Fort Albany First Nation to learn more about the community's aviation, environmental, buildings and infrastructure needs. (pre-COVID-19)

### ***Can you expand upon the nature of resilience in the context of Indigenous peoples?***

**Douglas Yahn:** Resilience, in the sense that it refers to the ability to recover after being stressed, is not a static response but, in fact, a dynamic one. For human beings, the process of recovery is likely to cause lasting incremental change. In societies where their histories are punctuated by adversity and stress, adaptation is the inevitable response to these incremental changes. How one navigates through change is governed by many variables, including socio-cultural ones. Gaining an understanding of how Indigenous communities respond in this context, given their unique histories and physical and socio-cultural environments, can widen perspectives and reshape prevailing approaches to infrastructure projects; planners and

designers can consider those insights as they seek to strengthen resilience and, from that position, sustainability.



Students in a classroom of the Peetabeck Academy School in Fort Albany, Ontario, Canada (pre-COVID-19)

### ***How can applying cultural understanding of Indigenous peoples help create better places for everyone?***

**Douglas Yahn:** In every undertaking, there is a formative period when we ask ourselves two questions: What is the best approach to a problem? How do we arrive at a preferred solution? What we—planners, designers and all other project stakeholders—must further ask is, How does everyone in the community derive value from the solution? This last question will prompt industry to challenge established approaches and encourage inclusive engagement to foster innovative solutions within our social, environmental and economic systems.

### ***What are the main drivers of inclusive engagement?***

**Douglas Yahn:** The ideas that we are discussing are only available to us by engaging Indigenous peoples directly, to inform not only Indigenous-led or co-led projects but also those projects that would otherwise be based on a

single-culture-centric perspective. This last scenario would involve strong Indigenous community involvement; and all of the scenarios would benefit from appropriate use of Indigenous design and interpretations underpinned by the cultural framework of resilience and sustainability that comes from the unique histories and perspectives of Indigenous peoples.

We can all share the Earth to the mutual benefit of every inhabitant when we think and act from a position of respect, both respect of land and respect of people. It is important to understand that the sustainability standards adopted by governments and industries and applied to the traditional land of Indigenous peoples were regularly not established with their participation in the process. Enhanced communication and engagement are the means to begin to integrate their knowledge into design.

As previously mentioned, each Indigenous community is unique. Outreach and relationship building is about open and honest communication. Starting those conversations with Indigenous peoples is best done before there is a potential project on the horizon. This approach forms a collaborative foundation for project development. The dialogue that develops will guide future conversations about how to work together over time in a meaningful way. Planning and design approaches that include the contributions of Indigenous cultures to national and regional identity allow for the creation of projects that speak to us all.

## Contact

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