

## Industry gaps addressed during CCPPP panel

(Michael Fenn provides advice on infrastructure delivery based on his [Sept. 2017 report](#) for RCCAO).

by Angela Gismondi Nov 22, 2017

The diversity gap, the challenge of training job-ready graduates and the need for more innovation in the infrastructure industry were three main topics discussed by panellists during the We Can Do Better: Staying on Top session at the Canadian Council for Public-Private Partnerships conference in Toronto recently.

Panellist Adriana Chang, a part time masters student at the University of Toronto and a construction contract administrator for Diamond Schmitt Architects, said as part of the research for her graduate thesis she undertook 28 interviews with women in senior leadership roles to find out the common challenges they experienced to get to the top.

"My time in the field has really reinforced how disproportionate the male to female ratio is, especially onsite," said Chang, adding the jobsite is not the most welcoming place for women and visible minorities. "Discrimination and racism is still an issue. It's very discouraging but I try not to let it bother me because I love what I do."

Another common challenge is confidence, as women are under a lot of pressure not to be wrong, Chang noted. One of her suggestions to boost confidence was for leaders to recognize the accomplishments of females in their companies.

Chang recalled being "elated" when her boss sent her an email recently, acknowledging her role.

"I'm still elated when I think about that email because it means all the hard work, all the long nights, all the sacrifices that I have made have not gone unnoticed," she said.

Maternity leave can be another obstacle for women in leadership roles, she said.

"There are some examples of Scandinavian countries where they have mandated paternity leave. Not only is it beneficial for the child or the parent but it also removes part of the hiring bias because you have to expect that whether you are male or female you might go on maternity or paternity leave," Chang explained.

She asked leaders in the audience to help advance the cause, adding women often have a lot of excellent leadership qualities such as organizational, multi-tasking and problem-solving skills.

"Over the last 10 to 15 years there have been more women entering the industry but the trouble is promoting and retaining them, so I implore you to offer those positions to women that you know who have the same qualifications," said Chang. "There are women who are as passionate about infrastructure and construction as I am and I hope that one day I can be sitting alongside you to make those multi-billion dollar decisions."

Matti Siemiatycki, an associate professor of planning and geography at the University of Toronto, who has been doing research on diversity in infrastructure and working with Chang, said having a diverse workforce is not only the morally correct thing to do, it is also advantageous for the industry.

"If men are the predominant group in this industry then we're only playing with half the workforce. That can be problematic in terms of getting the best and brightest who will then deliver the project as well as possible," said Siemiatycki.

"One interesting stat is that a woman is more likely to be the president or prime minister of her country than she is to be the minister of infrastructure.

"There is something about infrastructure, an explicit or implicit bias, that is leading it to be male dominated."

Tom Murad, head of the Siemens Engineering and Technology Academy, took a different approach to diversity, focusing instead on the next generation of talent.

He said there are two main factors why it's challenging for managers to hire new engineering graduates from Canadian universities, male or female.

"Employers are demanding specialized knowledge and skills before they will hire an engineer to avoid the cost and time required for on-the-job training and universities are graduating engineers with insufficient job-related skills to successfully compete for the available engineering jobs," Murad explained.

He added many engineers are graduating but not finding jobs at home so they decide to pursue a masters or a PhD or go to work elsewhere.

"I'm sad for the generation that is getting into this, investing their lives and their money and their parents money to get into the system and the only avenue for them is to go and do post graduate studies because our education system pushed them towards that...because they don't have the sufficient skills to go to market," said Murad.

"We believe that integrated learning is the best way for our students."

**Michael Fenn**, a senior advisor for Strategy Corp., said in addition to the diversity and employment gap, there is also an innovation gap, which is having a major impact on the industry.

"A wise infrastructure investment serves us for generations. Poor infrastructure investments will burden us for decades," said Fenn.

"The way to avoid that, we have to recognize that without good planning, good project selection, a more practical environmental assessment process, well-structured P3s, and without the competitive P3 marketplace and a focus on the future needs particularly of megatrends, projects are going to continue to be delayed, money is going to continue to be wasted and ultimately the public support for this kind of initiative is going to melt away. The evidence says after three decades in the business that P3s are good insurance."