BITS + BYTES

DID YOU KNOW…

The Alliance is currently updating its establishing agreement to clarify its strategic direction and add the cities of Edmonton and Calgary as Board members?

PARLIAMENT WELCOMES AB SMART CITY MESSAGES

On February 16, 2017, two Alliance officials addressed the House of Commons' Standing Committee on Transport, Infrastructure, and Communities, offering perspective on Smart City challenges and opportunities. Three key recommendations were provided, relating to:

1. Amendments to Canada's digital strategy to reference borderless connectivity, digital economy requirements, and various Smart City components;
2. Incentivization of regional Smart City strategies & multi-sector participation;
3. Long-term dedicated funding to support infrastructure, research, and test beds

The presentation was very well received, and the Alliance continues to be approached to offer perspective to local, provincial, and national audiences.

For more information, see a summary at Committee Presentation Highlights

ALLIANCE CO-HOSTS PANEL ON SMART CITY INVESTMENT

On March 23, 2017, during the 2017 Economic Developers of Alberta Conference, the Alliance is co-hosting a panel session on "Investor Ready Smart Communities". Speakers include municipal, provincial, and private sector leaders, focused on approaches to leveraging Smart City approaches for economic development; roles and supports required; and their personal experiences to date.

For more information, visit the Alliance events page at smartcityalliance.ca.

EDMONTON TO LAUNCH MORE SMART PARKING SYSTEMS

The City of Edmonton is researching technology that provides information on available parking stalls in "real time."

The City would install sensors on parking stalls in city-managed parking lots that would relay information to an app and an online map. Digital signs on each level of a parkade would also show the number of available stalls. As the project moves forward, City officials will try to assess infrastructure and service costs, and ensure that its investments are planned in an effective manner. More information to be released when available.

HAVE YOUR TEAM, PROJECT, NEWS, OR EVENT PROFILED!

The Alliance encourages all members (public and private) to **send us stories and pictures** on your Smart City efforts, projects, research, products / services, etc. These solution and member spotlights are showcased in "Bits and Bytes".

It's easy, and your contributions will be featured (free of charge) each month to stimulate awareness and collaboration!

BROADBAND IMPORTANCE REINFORCED AND NEW TOOLKIT LAUNCHED

Community broadband internet needs are on the lips of almost every local leader in recent years. Recently, several Alberta communities have launched or completed local reviews of broadband needs and approaches, calls to action have been made by several organizations, leaders within the Government of Alberta have shared their desire to improve community connectivity and the value of the Alberta SuperNet, and communities have come together to collaborate on shared messages and approaches.

In addition, researchers at the University of Alberta have produced a new resource named "Understanding Community Broadband: The Alberta Broadband Toolkit". This important resource supports communities to learn more and develop broadband solutions. For example, the Toolkit recommends some best practices in this area, such as "dig once" policies, transition planning, regional collaboration, and more. The Alliance supports this as a good resource for members.

For a copy of the Alberta Broadband Toolkit, visit the Alliance research page at smartcityalliance.ca/research.

ST. ALBERT COLLABORATES TO LAUNCH SENSOR NETWORK AND PLATFORM PILOT

The City of St. Albert has launched a municipal initiative to test the use of several municipal sensor networks, support research related to these networks, and test various IOT / sensor management platforms. Within its acclaimed Smart City Master Plan, the City had expressed its interest in establishing an array of sensors to monitor infrastructure and other things.

In one of the recently launched pilots, Alliance members Zedi and NAIT are working to test the application of a LoRa (low power, long range) network, remote weather sensors, and the Zedi IOT platform. In another pilot, Alliance members Cisco and IBM are preparing to test movement and noise sensors, other network designs, and the IBM IOT platform. In a third pilot, the City also plans to work with Alliance member SensorUp to test citizen weather sensors, home network usage, and the SensorUp IOT platform. Additional pilots may be explored in the coming months as well.

For more on St. Albert's Sensor Network and Platform Pilots, or its Smart City Master Plan, visit stalbert.ca/smartcity or contact smartcity@stalbert.ca.

PROVINCE OF ALBERTA ANNOUNCES NEW SOLAR ENERGY PROGRAM

As part of the reinvestment of the Alberta carbon levy, the Alberta government has announced a $36-million rebate program for new solar PV installations on residential, multi-residential and commercial buildings, which will be officially launched in a couple of months. The goal of the program is to encourage solar development in the province and to achieve 10,000 new rooftop solar installations by 2020 – creating jobs, cutting costs, and reducing greenhouse gas emissions.

Through the Residential and Commercial Solar Program, homeowners, businesses and non-profit organizations will be able to receive a partial grant for grid connected solar PV systems. The government is currently working to identify and hire a third party organization to implement and deliver the program.

Across Alberta, several other municipal, provincial, and federal programs also exist to support solar installations. Some include solar incentive programs in the Town of Banff, City of Medicine Hat, Starland County, and City of Edmonton.

For more information on the Province's pending incentives, watch for program updates through Energy Efficiency Alberta.

SMART CITIES COURSES HOSTED WITHIN IVY LEAGUE

Smart Cities courses are growing in popularity, and some Ivy League schools have good offerings. For example, Harvard University will host "Future Cities" on Sept 21-22, 2017, and MIT will host "Beyond Smart Cities" on July 24-26, 2017.

These courses are intended to provide attendees with a good perspective on the many opportunities, required inputs, and technical considerations relative to Smart City / sustainable community developments. Alliance member Cisco also boasts one of the instructors, renowned Smart City thought leader Rick Huijbregts.

For more information, see the MIT and Harvard course pages.

ALBERTA TECHNOLOGY MARKET POISED FOR SUCCESS
By David Howe

Though a rather nebulous term, the 'high-tech' sector has kept strong in Alberta despite a slow economy. Two fields driving this strong industry in Alberta are video game development and artificial intelligence.

One of the most exciting emerging technologies in the province comes in the advancement of artificial intelligence (AI). AI has widespread practical applications that are certain to revolutionize the global economy and change human life on a large scale, from self-driving cars to machine learning. The Financial Post has acclaimed Alberta as a world leader in AI, thanks in large part to the research being done by Richard Sutton at the University of Alberta in Edmonton. Sutton is the pre-eminent authority on reinforcement learning - a type of AI that learns by trial and error, making it attractive for ad and article placement, or schedule and resources management.

As a result of Sutton's research, and the forecast that global demand for AI will reach USD 45 Trillion by 2025, businesses are moving quickly to catch the wave. RBC is funding a new AI research lab in downtown Edmonton, and new startups are already starting to appear under the banner of the Alberta Machine Intelligence Institute, chaired by Sutton. Further, the intake of multi-national corporations into the Capital Region presents opportunities across many industries to share in this success.

The video game business has had roots in our province for some time, with industry giant Bioware headquartered in Edmonton. Although the comparatively inexpensive labour offered by South Asian counterparts has effected the labour force's lower end, shifting some of the game development out of the region, creative components still largely take place here and the number of workers employed in the industry has grown to around 20,000 according to ATB.

With video games rapidly gaining steam as the preferred form of entertainment for younger generations, video games and their development present a host of economic opportunities for our province- and the opportunity to get in at a relatively early stage in the industry (the first video game ever, a precursor of Pong, is not yet 60 years old). Video gaming seems poised to hit an entirely new level with the rapid increase in virtual/augmented reality technology, and could see an entirely new wave of developers and producers to accompany this exciting new technology.

Capitalizing on a poor office renting environment, Alberta looks poised to target large software companies seeking to diversify their American offices and put boots on the ground closer to these local industries.

SOLUTION SPOTLIGHT – SHOUT MY PROBLEM

Every municipality has problems. Every business does too. Lots of them. Slips and falls on work sites. Mosquito control. Graffiti. Snow removal. Waste management. Fuel efficiency. You name it. There are a gazillion problems looking for solutions. But because you don't actually know what the solution might be, your employees spend crazy amounts of time and money researching the web, going to conferences and reaching out to whomever they can think of. Essentially, you're searching for a needle in a haystack and the answer may not even be a needle.

There's a new service about to launch that intends to solve the problem of solving problems. It's called Shout My Problem. With ShoutMyProblem.com, you can anonymously shout your problems to the world, then just walk away and have potential solutions land in your e-mail.

If you have a business problem, you briefly describe it. It's important that you describe your problem, not the presumed solution. When you effectively communicate the problem, you may receive unexpected solutions. Since Shout My Problem is all about research (not procurement), you're going to want to be open minded about the responses. The proposed solutions come from companies that may have an existing product or service that can solve your problem.

Think of Shout My Problem as a matchmaker. Before posting, they review the submitted problems and verify the identity of the organizations submitting them. Then they share these problems with potential product and service providers while protecting the anonymity of the organizations who submitted the problems. Companies who wish to pitch potential solutions can respond to opportunities. The service has human curators who review the pitches to ensure they are on-point and not malicious (i.e.: pornographic, etc.). Then they forward the pitch to the organization that posted the problem.

Shout My Problem is in a beta phase right now while they work out the kinks. They are inviting problems, but not yet taking pitches. As they are now building a community of users, you are invited to submit your business problems at shoutmyproblem.com. Right now they prefer business problems that don't have tight deadlines because they want to gather an inventory of problems before turning on the pitching functionality. This could take a few months.

Why participate now? There may eventually be a membership or per-transaction fee for organizations to shout their problems. Shout My Problem intends to grandfather free posting of problems to early adopter organizations who participate in the beta. If you're looking for a problem to pitch on, you can sign up for their email list and they will let you know when you can start pitching. You can sign up for the mailing list at shoutmyproblem.com.

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