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APPI PLANNING

Alberta Professional Planners Institute

Journal

Conference Edition

- + Car Trek: The Next Generation
- + Edmonton's Downtown Changing for Good
- + APPI 2015 Planning Awards

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Articles for future publication will always be welcomed.

Potential subject areas include:

- Sustainability initiatives
- Member accomplishments
- Member research
- Community development projects
- Urban design
- Student experiences
- Innovative ideas
- Planning successes
- Any other topic of value to the planning community

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SOURCE: City of Edmonton



SOURCE: Pogo CarShare



SOURCE: John Steil



SOURCE: Semra Kalkan



Message from the President

GREETINGS!

I'd like to start with a big thank you to all those involved with the 2015 APPI Great Cities and Great Regions-Prairie Urban Transformations Conference held in Edmonton. The conference was a phenomenal success with over 230 registered delegates attending. My deepest appreciation goes out to all those involved in the preparation and delivery of the conference. I am confident you will see throughout this journal edition evidence of the types of innovation and commitment to planning that our presenters proudly showcased.

I'd also like to take a moment to address one of the items I brought up during my speech at the conference, and that was the issue of compensation and gender inequality in our profession. As promised, our consultant did a "deeper dive" into the topic to really examine compensation by gender. The summary of findings stated the following: "After examining compensation by gender within industry experience, respondent age, job title, professional status, employer type, number of employees managed, and hours worked per week, we conclude that **the gap in compensation is based on gender and not any other demographic measure.**" I'd like to assure the membership that a strategic effort will be made to communicate these findings with as many members, managers and human resources staff as possible so that in 2017, when the survey is conducted again, we will see evidence of progress towards greater equality.

The past few months have been transformative both provincially and nationally as our profession continues to grow and evolve. At our recent President's meeting on November 19th the Provincial and Territorial Institute and Associations (PTIAs) were briefed by Hazel Christy, the President of the Canadian Institute of Planners (CIP), on the success their board had had over the previous

weekend charting a new course forward for the profession nationally. I would encourage everyone to stay on top of the issues by visiting CIP's website. Once again as a reminder, the bylaw created by CIP will need to be voted on by the CIP membership in the spring of 2016. This bylaw will establish the framework and process for the subsequent election of a new Board at the 2016 AGM.

Provincially, we are continuing to work on our transition from an operational governance model into a strategic management model. At our last Council on November 21st Terms of Reference for each of the new Strategic Committees of Council were adopted. Our committees are made up of members from Council who will review committee specific responsibilities and help bring recommendations to Council. In the future members and non-APPI members with specific expertise in areas such as auditing and governance may be called upon to participate in formulating recommendations for Council.

Lastly, this will be our last APPI journal. APPI, MPPI and SPPI have now all confirmed their commitment to moving forward with a Tri-PTIA Planning Journal for 2016. Calls for a volunteer Editor in Chief, and volunteers to serve on the Editorial Board have been issued to the membership of all PTIAs. We are tremendously appreciative of the hard work that goes into each issue. Our team of volunteers deserves recognition for their dedication. We are looking forward to partnering with our fellow PTIAs to reach a larger audience with the important work planners do.

Please do not hesitate to contact me if you have any questions, suggestions or thoughts. I can be reached at mistysklar@hotmail.com.

Misty Sklar, RPP, MCIP
APPI President

Message from the Journal Committee

They say that all good things must come to an end. It was with a mix of sadness, and anticipation that the committee prepared this 17th and last issue of the *Journal*. Sadness because everyone on the committee has found the work to be engaging and rewarding. Anticipation because we are excited that the next publication will be including Planners and stories from Manitoba and Saskatchewan. Before moving on though, a little reflection seems in order.

The launch of the *Journal* in March 2009 expanded the opportunities previously provided by the *Planning Digest* for volunteers and contributors. The quality of the new publication reflected, as then President Brian Kropf described in his opening message, a profession in a period of growth, with a rising profile, and opportunities for growth and leadership. Members were encouraged to contribute articles to raise awareness, stimulate the imagination, and 'push the envelope'. Having received the highest rating of all of the services provided by APPI in the latest membership survey, it is wonderful to see that the *Journal* has attained the goals set out for it almost seven years ago.

The premiere Issue of the *Journal* appeared as the *AACIP Planning Journal* launched under the helm of Editor Riley Weldon. A committed group of Edmonton based planners guided the next four issues. Chaired by Janelle Wyman this group set the submission criteria and production standards that have allowed the committee to maintain a consistently high quality product, and developed a regionally diverse group of committee members. By issue #5 the committee included representatives from every region represented by APPI. Ann Peters has chaired the committee since issue #9 came out.

The *Journal* has provided a vehicle available to all members for continuing professional learning across the vast geography of Alberta, the Northwest Territories, and Nunavut for the past seven years. The results speak volumes. With a new mandate and scope for our official publication the door is now open wider than ever for the professional collective.

BY THE NUMBERS

18

APPI MEMBERS PARTICIPATED AS MEMBERS OF THE JOURNAL COMMITTEE

25

BUSINESSES & ORGANIZATIONS ADVERTISED IN THE JOURNAL

128

ARTICLES PUBLISHED

+1,190

VOLUNTEER HOURS

18,700

COPIES PRINTED

VOLUNTEERS OVER THE YEARS

Amber Nicol

Ann Peters

Christy Fong

Heather Chisholm

Imai Welsh

Jagdev Shahi

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Tasha Elliott

Yolanda Lew



Message from the Conference Committee



Peter Ohm, RPP, MCIP



Nancy MacDonald, RPP, MCIP

We were honoured to co-chair a successful, and sold-out, 2015 APPI conference in Edmonton this past September. The conference theme was “Great Cities, Great Regions: Prairie-Urban Transformations,” and our host community, Edmonton, was an excellent place to showcase a city-in-transformation. We would like to extend a huge thank-you to the many conference volunteers, generous sponsors, gracious participants, engaged delegates and the committed APPI office and Council for making this possible.

The conference provided an excellent occasion to come together to reflect on the collaboration and commitment required as we work together to plan, build, and maintain great cities and great regions. At the heart of our practice we understand that our cities, towns and regions are places for people - for all of us - where we live, how we get around it and how we grow. The diversity of the work we do, both in terms of the similarities and contrasts across APPI’s large geography and across our different areas of practice, provided unique opportunities for mutual learning and ongoing engagement within our profession.

There is something special about our community-building efforts in Alberta, Nunavut and the Northwest Territories. Our work is fueled by a sense that we can achieve great things if we work together. It is fueled by an understanding that attention to the small temporary things, as well as the big permanent things, defines who we are and how we live. Through our design decisions and our community conversations, we can help build cities and regions that deliver choice, diversity, resiliency, sustainability, and innovation. Our work as professional planners calls on us to raise the bar not only in how we work for our communities to build better physical places, but also how we work in partnership to do so. Together, we can co-design places in ways that are more adaptive to future changes and challenges, and in ways that build diversity and resilience into our cities and regions.

Working together depends upon innovative and new approaches developed with the enthusiasm and commitment of a wide spectrum of folks.

It means seeking to hear the loud and the quiet voices alike—and thinking about how the prosperity of our communities can be advanced as well as how social equity issues and environmental stewardship can be addressed. This truly is a community effort, and we were able to enjoy many examples of projects and initiatives advanced by our membership at the APPI conference in September. Our illustrious keynote speakers educated, entertained, and provoked us to think differently about our work. The many breakout sessions sparked lots of interesting discussion. The various tours and social events helped us all see Edmonton and our peers in new ways. Finally, the award-winning projects and project teams inspired us to continually strive to improve our work and do better for our communities and as professionals.

It was a privilege to serve as your 2015 conference co-chairs. We look forward to handing the torch to the upcoming conference chairs and connecting with you next year in beautiful Jasper.

Your 2015 Conference Co-Chairs

Peter Ohm, RPP, MCIP

Nancy MacDonald, RPP, MCIP

Car Trek: The Next Generation

Cars have long dominated both planning theory and practice, and have left a legacy of car-oriented cities in their wake. While recent shifts in city planning have gone some way to rebalancing modal splits in our cities, there are still a number of challenges that restrain this transformation. Emerging technologies are helping to break through these limits and create a new model for how we accommodate cars in our cities.

The first Model T's built in Canada began rolling off the line in 1914 in pursuit of Henry Ford's dream of providing "a car for the great multitude." Canada's initial reaction to the car was mixed. While Vancouver opened the first commercial gas station in 1907, Prince Edward Island banned cars completely in 1908. Yet very rapidly the car shifted to the mode of choice. By 1920, Canada was the world's second largest producer of cars.¹

The popularization of the private car in Canada coincided with another monumental shift: urbanization. In 1910, with a mere 13,000 registered cars across the entire country, only 40% of Canadians lived in urban centres with populations greater than 5,000. For comparison in the same year, England had 100,000 registered cars, and a 70% urbanized population.² By the time Canada reached the same level of urbanization as 1910

England, it was 1961 and over 4.3 million cars were registered in Canada.³

The rise of the car and the rise of the city were inextricably linked, and the need to accommodate automobiles was the founding tenet of conventional city building wisdom. Nowhere was this more apparent than New York City, headed by Robert Moses who declared that "cities are for traffic." Throughout his 60-year tenure, Moses shaped the city to serve the car through massive public works including bridges, highways and parking garages. He also actively thwarted efforts to improve public transportation, for example purposefully building parkway overpasses that were too low for buses to pass underneath. While perhaps its most extreme manifestation, Moses' "cars first" philosophy pervaded cities across North America.

SOURCE: iStockphoto

Increasing social awareness of climate change has led to millennials consciously choosing to drive less.

The persistence of the car-centred approach is particularly perplexing as at no time was it demonstrated to be effective. Far from reducing congestion, it was demonstrated time and time again that building more car infrastructure seemed to only make traffic worse. For far too many decades, the phenomenon of induced demand was quietly ignored as many cities continued to try to build their way out of congestion. It is only in recent decades that we have started to see a shift away from a monolithic car narrative to one where a multitude of modes can be accommodated in our urban centres.

Demographic and social shifts have been fundamental in supporting this change. Starting in the 1990s, popular TV shows began showcasing urban lifestyles. From *Friends* to *Seinfeld*, our cultural icons came without cars and provided an urban ideal for a younger generation to aspire to. Smart phones and iPads have also filled a social status function that used to be met by cars. In a survey completed by ZipCar, over a third of respondents aged 18 to 34 reported that giving up their phone would have the greatest negative impact on their life, a level double and even triple the rate of other age groups, all of which reported losing their car as the greatest impact.

Car shares offer a bridge between public and private transportation options.

SOURCE: Pogo CarShare



Findings have also shown that increasing social awareness of climate change has led to millennials consciously choosing to drive less.

These factors have added up to a noticeable decline in young people choosing to get drivers licenses. In Alberta, since 2009 alone, there has been a roughly 5% decrease in the number of people getting drivers licenses in age groups from 20 to 54.⁴ Studies from the Metro Vancouver region show a similar pattern, and one that is strongly correlated with how urbanized a city is. The greater land use density, mix, and availability of public transportation, the lower the licensing rates.⁵

This observation speaks strongly to the role that we as planners play in shaping our cities. With the rise of joint transportation and land use planning, and the realization of transit-oriented development, we are creating increased opportunities for people to choose their mode of travel, rather than being compelled to rely on a single option as a result of how our city is constructed. There are countless examples showing that the built form can have a significant influence on modal use, regardless of context or social norms. Edmonton's Oliver neighbourhood is an excellent demonstration of this fact. Despite being located in a city known for its car-oriented character, nearly equal numbers of people use active modes of transportation in Oliver than make use of private vehicles.⁶

As encouraging as the Oliver example is, it also tells an important story, that even in Alberta's densest neighbourhood, 40% of people are still dependent on their cars. This speaks to the lasting legacy of the automobile—no matter how progressive our current planning policies and practices are, we still have cities that were built around the private vehicle. There are significant incentives to continue to drive, including a city that is scaled for driving and fixed costs for car ownership: once the car is bought and insurance paid, there is little disincentive to drive as often as possible.

New technologies and services are challenging the dominance of the car and breaking down these barriers. These technologies use smartphones and cellular networks to allow individuals to share vehicles, call and pay for rides from their phones, find the quickest multi-modal transportation route, and in the near future, have a car drive itself. Four disruptive innovations stand out:

1. Carsharing (Pogo, Car2Go, Zipcar)

Carsharing allows multiple people to use a pool of vehicles. Users find and reserve cars using their smartphone and payment is handled automatically. Benefits include vehicle access and drop-off across a city, access to different vehicle types based on use need, and having all maintenance and cleaning handled.

Carsharing changes vehicle usage in two big ways. First, people can access a vehicle without having to own one. North American cities can be very challenging if a person does not have access to a vehicle at least some of the time, and this forces many people to own a car they only use occasionally. The expansion of carsharing will allow many households to reduce the number of cars they own, or allow them to choose not owning a car at all. Second, carsharing changes the cost of using a vehicle from a largely fixed cost to completely variable one. The less one drives, the more money is saved. Households who choose carsharing over private vehicles have a natural incentive to drive less. It is estimated that one carshare vehicle replaces 15 private cars, and many developers are replacing large parkades with small carshare lots, in anticipation of reduced parking demand.

2. Ride sourcing (Uber, Lyft)

Ride sourcing allows people to call and pay for rides from their smartphones. Ride Sourcing makes calling a ride very simple, reduces “missed pick-up” anxiety, and automates payments. Ride sourcing provides an attractive alternative to a private car through increased flexibility and no parking requirement. Like carsharing, ride sourcing facilitates multi-modal transit by providing an efficient, direct route transit option on-demand.

3. Routing Apps (Transit App, Google Maps)

Routing Apps show different transportation options, including walking, biking, public transit, carsharing and ride sourcing, comparing travel time and price. These apps make multi-modal and alternative transportation easier by providing optimized routes, easy instructions, and real-time public transit information.

4. Driverless Cars

Driverless cars are expected to be on our roads within the next five to 20 years. Driverless cars will likely operate in a similar way to ride sourcing



services and act as another option in a multi-modal system. They will allow very high utilization of a single vehicle and create a large decrease in parking requirements.

These four innovations will not replace car transportation, but they do change the way cars are used. In many ways, these technologies can be seen as a bridge to alternative transportation, allowing people to use non-vehicle options as their primary transportation modes, but provide vehicle options when required to by our current city layouts. In doing so, they make not owning a vehicle feasible for many. The use of variable rather than fixed pricing encourages reduced vehicle usage. Perhaps most important, they will dramatically reduce parking requirements associated with development. This will promote natural densification and walkability, and change the layout of our cities.

The full impact of these innovations remains to be seen, but it is clear that new vehicle technologies will be major drivers of change in the shape of our cities, and how we get around them. ■

Anne Stevenson is a city planner and proud Edmontonian. She has worked in a variety of Canadian and international contexts, and is happy to bring this experience home through her current work at the City of Edmonton.

Kieran Ryan is an Edmonton based entrepreneur and business owner. A graduate of the University of Alberta, he co-founded Pogo CarShare in 2014, one of Alberta's first home-grown carshare programs.


About the Authors

Routing Apps help people choose the most efficient mode by providing real time information on walking, biking, transit, driving, car share and ride share services.

SOURCE: Pogo CarShare

FOOTNOTES

- 1 Canadian Science and Technology Museum (2015). In Search of the Canadian Car history timeline. Retrieved from <http://www.canadiancar.technomuses.ca>
- 2 Bairoch, Paul and Goertz, Gary (1986). Factors of Urbanization in the Nineteenth Century Developed Countries: A Descriptive and Economic Analysis, *Urban Studies* (23), 285-305.
- 3 Statistics Canada (2014). Roads and Road Transport (Series T142-194). Retrieved from <http://www.statcan.gc.ca/pub/11-516-x/section/4147444-eng.htm#3>
- 4 Alberta Transportation Office of Traffic Safety (2015). Alberta Operator Statistics: All Drivers By Age Group and Sex As of March 31, 2015.
- 5 Chan, Kenneth (May 8, 2014). Major Decline in number of young licensed drivers in Metro Vancouver: statistics. Retrieved from <http://www.vancitybuzz.com/2014/05/major-decline-number-young-licensed-drivers-metro-vancouver-statistics/>
- 6 City of Edmonton (2014). Municipal Census results (Oliver). Retrieved from http://www.edmonton.ca/city_government/facts_figures/municipal-census-results.aspx



Planning without Lawyers, or Trees:

An Experiment in Radically Simplifying Zoning in the Arctic

New road construction in Kugluktuk
SOURCE: Jesse Ajayi

During decentralization, the small hamlet of Kugluktuk, perched as it is on the edge of the Arctic Ocean at the extreme west of Nunavut, became the headquarters for planning and lands. This was in accordance with the territory's policy to bring jobs and vitality to the communities which make up three quarters of the population living outside of the capital. It is from there that I oversaw community planning for all 24 hamlets as well as the City of Iqaluit.

This summer I was out on a hike with an elder—an old Inuk woman with a cane who I could barely keep up with—as we were tracing old caribou calving routes. At the end of the hike we crossed a road still being constructed and leveled, and even though the road cut into lands she had hiked and picked berries along and watched caribou from for decades, she had no idea a subdivision had been planned there or that this area was identified as the next phase for development. She turned to me, perhaps not quite realizing which branch of the government I worked in, and said that no matter how much she and others resisted new development, “there’s nothing we can do.”

I wish I could say that this occurred two years ago, before I started my campaign to make planning policy in Nunavut more accessible. I wish I had a great

“after” story, where hikes through new subdivisions ended with members of the public celebrating the cultural sensitivity on display, the community-aware design, the conversations they had about the alternatives and the value of the site they ultimately agreed to and supported. We are not quite there yet.

Instead I want to discuss one ongoing project through which planners in Nunavut are trying to move in that direction.

UPDATING THE KUGLUKTUK COMMUNITY PLAN AND ZONING BYLAW

When the Community Plan and Zoning Bylaw for Kugluktuk needed to be updated, the planning staff at the headquarters took it as an opportunity to re-think how our planning tools could match the planning context.

And the planning context is just what you find in many of Nunavut's small communities: the implementation of our zoning bylaws is spotty, the comprehension of their content is low, and they face very few legal challenges. Hamlet councils do their best with the resources available, using their memory of what the bylaw requires when a copy isn't on hand, or their gut when it comes to approvals. Or, sometimes development proceeds without any regulatory check.

Kugluktuk is also a community where one or two development permits are issued per year, and the purpose of land use designations is not widely understood. So how does this community connect with the planning policies which govern its growth?

Well, to start with, no one could understand the policies. One example: the community has no paved roads and yet the zoning bylaw calls for 6.1' by 3' parking spaces for persons with disabilities per X persons employed in Y adjacent buildings varying according to Z mm of rainfall that year (to paraphrase). You can imagine, in a place with no lines painted on the ground—which is both gravel and covered in ice most of the year—and with no designated parking lots, how it would be difficult to equate the requirements of this policy to the actual parking needs of public and commercial buildings in the community.

So, in response, we stripped all that out and required that a sign be put up reserving areas near the front of buildings for people with disabilities. We re-wrote the bylaws in plain language and removed whatever couldn't be rephrased in a way which could be understood and applied by the people who would be implementing the policy. We also turned the document into a booklet, added pictures of the community, white space, visual cues, samples, etc. We spelled out the process of getting a development permit in terms of roles of individuals, spelled out the difference between permitted and conditionally permitted—things which seem obvious to planners but are actually in many cases assumed. Even in the case of this permitted vs. conditionally permitted issue—something so basic and fundamental to the way Council deals with development proposals—there was actually no definition provided in the Planning Act, and no zoning bylaw in any community in Nunavut had actually outlined the difference. So the Kugluktuk plan was the first to spell out all of these details, to



focus on process, and to make the text accessible to the people who are meant to implement it.

This was an experiment in matching policy to its audience, and also in accepting some legal ambiguity and risk. We accept this trade-off as we shift policy away from technical specificity and towards practicality and accessibility. In doing so we hope to leave the community more aware of the way it grows, with residents better equipped to engage the process. ■

Jesse Ajayi worked for four years as a community planner for the Government of Nunavut, and has recently moved to Alberta where he is the Director of Planning and Development for Athabasca County.

Top: The author assisting residents in mapping
Bottom: New road construction in Kugluktuk
SOURCE: Jesse Ajayi

About the Author

Multifunctional Landscapes:

Building a Transformative Open Space Network in the City of Edmonton

Edmonton Downtown and River Valley
SOURCE: City of Edmonton

“We have not even scratched the surface of the impact parks could have on the revitalization of communities.”—Fred Kent and Kathy Madden, Great Parks/Great Cities (Seattle, 1998).

A moose crossing. A six-hectare constructed wetland/stormwater management facility set to be created from the asphalt of the runway of Edmonton’s former municipal airport. Gallagher Park at the height of folk fest. The bioswales that flank Hazeldean Greenway. The magnificent network of the North Saskatchewan River Valley and its tributary ravines. The haphazard, heartfelt beauty of community gardens. And that little seating area surrounded by pretty plantings near the Bonjour Bakery on 99 Street.

What do these places have in common? They are all wonderfully, eclectically, sometimes surprisingly, part of Edmonton’s open space network¹—the publicly-accessible open land and water that is set aside for recreation, conservation and community building.

This year, the City of Edmonton is embarking on the creation of a new Open Space Master Plan. Through this project, we seek to develop a long-term vision and strategy for the creation of landscapes that enrich, inspire and sustain us. The goal is to create connected networks of open

space that layer and integrate functions at the site, neighbourhood and city scales.

We ask a lot of our open space: It provides opportunity for recreation and learning; it offers wildlife habitat and critical ecosystem services; it serves as amenity space, event space, and space for urban agriculture; it manages our stormwater and cools our urban core; it provides places for community to celebrate history and culture, to grow and to thrive; and perhaps most importantly, it gives us space—space to retreat, to regenerate, to be soothed and healed, space to simply be.

An evolution in open space planning has taken place in Edmonton over the last 20 years, from an approach of protecting individual open spaces as opportunity arose and limited means were available to understanding the value of creating connected networks of open space. We are now facing a new challenge: the Edmonton Metro region is set to welcome an additional one million inhabitants by 2050, and we expect to see significant shifts in the age and demographic structure of our neighbourhoods. How can we design multifunctional open space sites that meet the diverse and changing needs of our changing population? And how can we do this in a way that simultaneously increases the ecological services our urban landscapes support?

CONNECTED NETWORKS OF OPEN SPACE—MULTIFUNCTIONALITY AT THE SYSTEM LEVEL

The extent to which the potential of each open space is realized depends in large part on its connection to other spaces—within a neighbourhood, between neighbourhoods, across the city and beyond—and its place within a larger network.

Some open spaces are, by their nature, fixed on the landscape. For example, while opportunities for naturalization and restoration are often available, a core natural area in its native form is where it is and cannot be moved. But schools are, to an extent, movable on the landscape; so are stormwater management facilities. Notwithstanding obvious

Alignment of urban systems for the creation of a connected open space system.
SOURCE: City of Edmonton



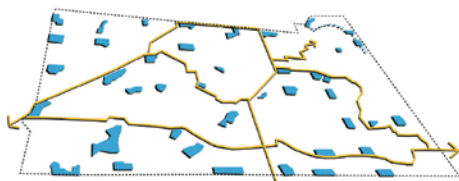
Recreation Network
Parks and School Sites



Ecological Network
Natural Areas: Wetlands and Tree Stands



Comprehensive and Connected Open Space System



Stormwater Management Network
Constructed Wetlands and Bioswales



Multiple Functions, Multiple Opportunities: Multifunctional Open Space Sites
 SOURCE: City of Edmonton



and practical constraints, there is some flexibility in where these elements are situated. The same goes for pocket parks, restored greenways, and many other types of open space.

Aligning all of these elements requires considering many urban systems together and—in the words of Landscape Architect Michael Van Valkenburgh—facilitating “dynamic integration” between natural and urban systems.² How can our transportation, drainage, recreation and ecological networks be laid out in a way that maximizes opportunity—for example, situating a park adjacent to a constructed wetland to create a unique open space for nearby residents, manage stormwater, and extend the area of wildlife habitat? As individual open spaces their primary functions remain the same—but the reach of each is extended through connectivity.

Creating well-connected open space networks also depends on thoughtful design, especially in places where the open space network intersects transportation or other networks in a way that might not be beneficial. These “touch points” reveal their own challenges—and hold their own potential.

Recognizing the impact at the intersection of Edmonton’s ecological and transportation systems, the City of Edmonton initiated the creation of a set of Wildlife Passage Engineering Design Guidelines in 2007. This educational publication was developed by a multidisciplinary team and provided all partners with easily understood and accessible information on wildlife passage design. At a time when wildlife collisions were on the rise in Alberta (Alberta Transportation, 170% between 1991 and 2008), Edmonton’s data reveals a 51% reduction in wildlife collisions since 2007.

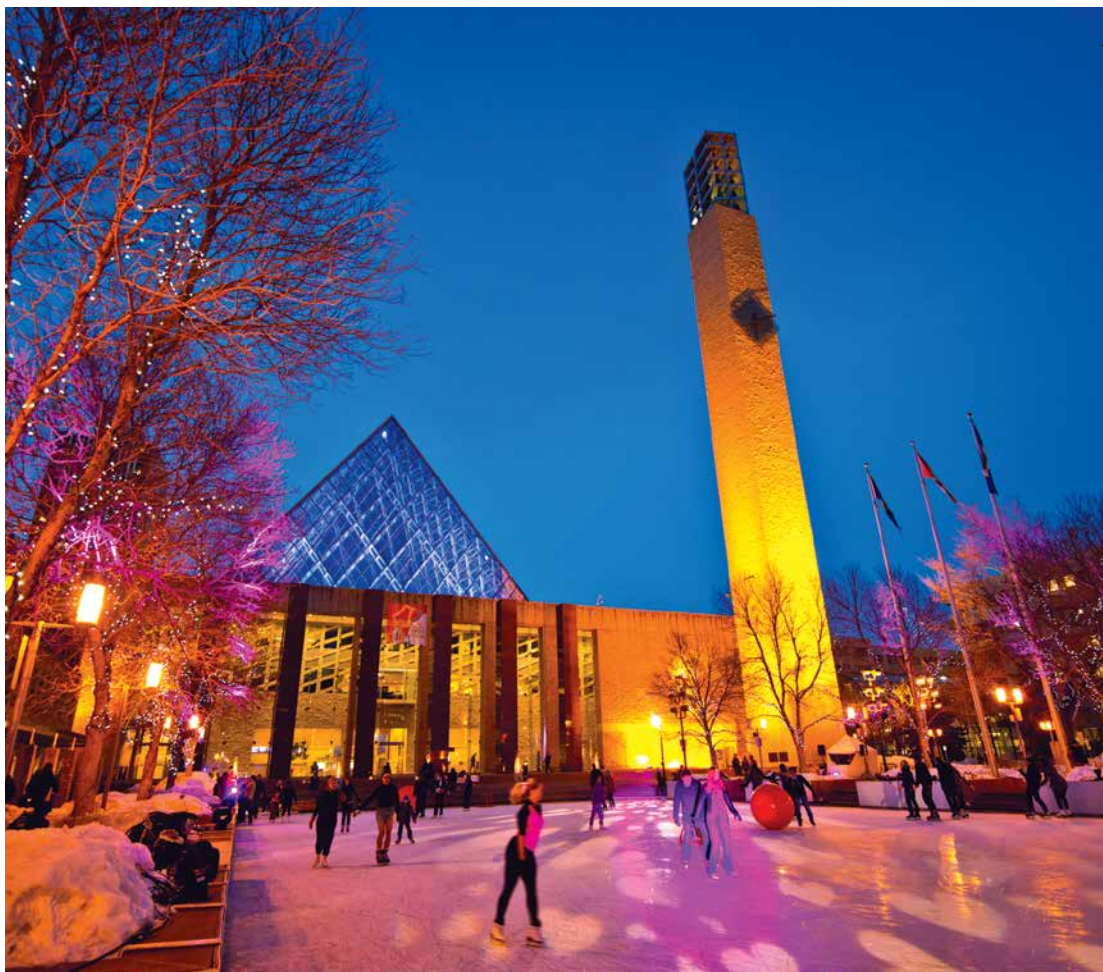
In considering our urban systems comprehensively, strategically aligning diverse open space elements, and identifying and bridging gaps in the system, we begin to realize benefits well beyond those realized through the protection of individual sites. However, while connectivity gets us a step closer to a vibrant, sustainable open space network, we can realize even greater benefits when we start to look at aligning and layering urban functions and services at the site level.

TRUE INTEGRATION: MULTIFUNCTIONALITY AT THE SITE LEVEL

Each open space has its own distinct character, and is often managed first for a specific function. However, each also holds a great deal of potential in its ability to provide a multitude of functions simultaneously—stormwater management, wildlife habitat, interpretive opportunities, recreation—and to flexibly accommodate new functions as user demands shift and other needs arise. The image on the next page shows a hypothetical open space that supports a wide range of functions, both in winter and in summer.

Clearly multifunctionality is not about realizing this diversity of uses in every open space across a city—but rather about understanding the needs and demands, opportunities and constraints in a given area, and working out how best to accommodate the functions that are required. How can sites be planned, designed and programmed in ways that meet a community’s needs, and also protect and support vital urban and ecosystem services?

An open space in the Edmonton neighbourhood Lendrum Place provides an example of context-appropriate multifunctionality realized. The park is nestled between two schools and a community league, and located at the lowest point of a depressed area in the neighbourhood that collects surface drainage from a contributing area of approximately 148 hectares. Following an extreme storm event in July 2004 which resulted in the flooding of more than 80 homes in the area, the schools’ playing fields were redesigned to double as a dry pond which now receives and contains flood waters during infrequent, large rainfall events. The park now contains a ball diamond, a running track, a tobogganing hill, a naturalized wet meadow, an outdoor classroom with native aspen parkland landscaping, trails and seating. Designed to meet the community’s needs for recreation, education and access to nearby nature, provide wildlife habitat, and accommodate a pressing need for more integrated stormwater management, this site is a great example of what a carefully planned multifunctional open space can provide.



City Hall Skating
SOURCE: City of Edmonton

FOOTNOTES

- 1 This network includes natural areas, all types of park, from pocket parks to City-wide parks, corridors and linkages—greenways, trails, bioswales, utility corridors, wildlife passages, other green infrastructure—street trees, constructed wetlands, community gardens—and countless other spaces that do not fall neatly into any of these categories.
- 2 American Society of Landscape Architects. Interview by Jared Green (n.d.). Interview with Michael Van Valkenburgh, FASLA. Retrieved from <http://www.asla.org/ContentDetail.aspx?id=29648>
- 3 Project for Public Spaces website: <http://www.pps.org/about>

DESIGNING FOR FLEXIBILITY... AND MAKING PLACE

Multifunctional site design also means designing for flexibility. What functions have we *not* anticipated, and how can we accommodate “organic” use of open space? How can we accommodate changing demographics, and changing demands on a given open space? Something as simple as movable furniture or flexible play structures might achieve this. In taking care not to *overplan*, we often leave the door open to new and unexpected uses of open space. We trust that the users of the space are the true experts.

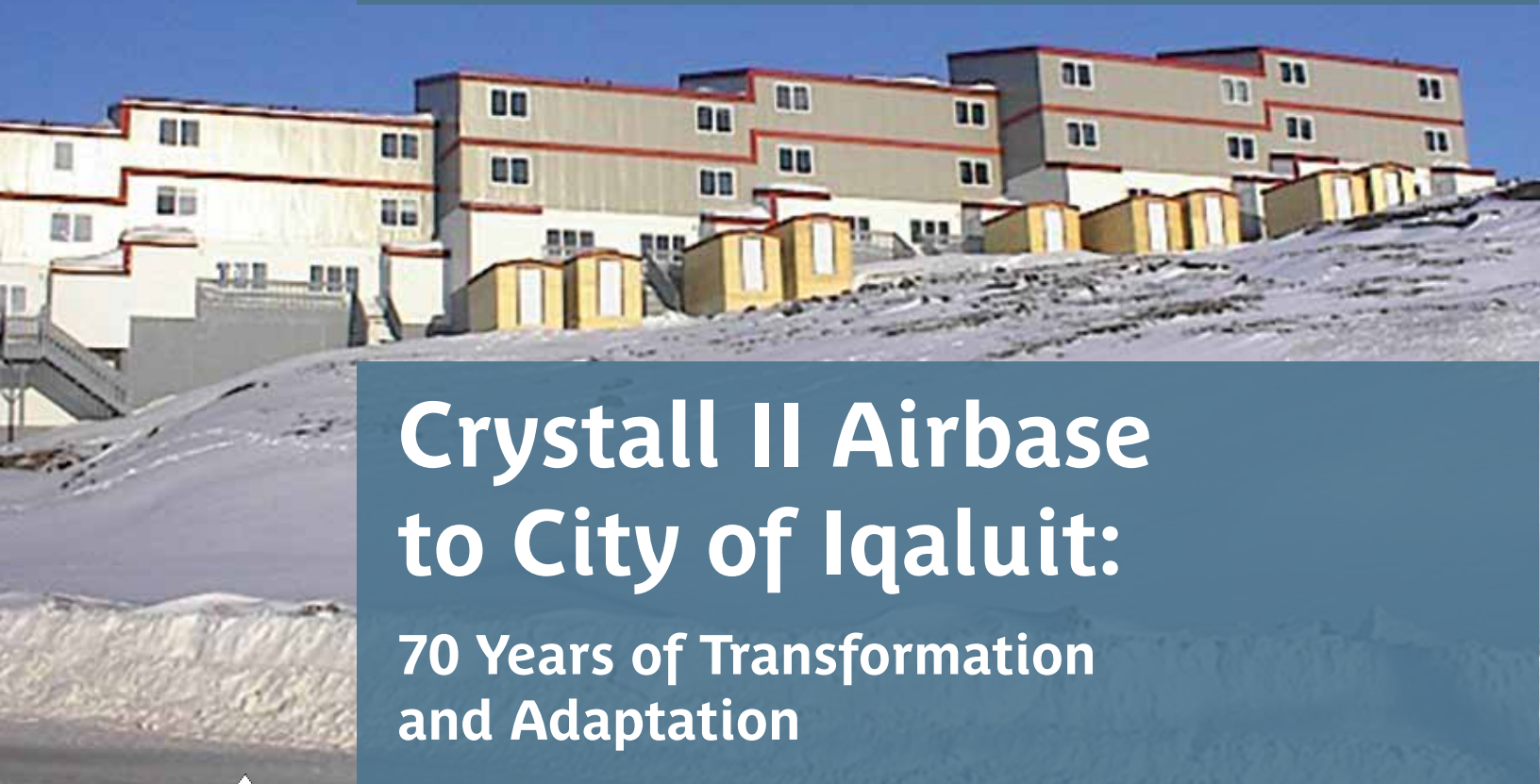
For this reason, we must engage communities directly in transforming public spaces. They are the people who can help us find the *right* mix of functions for a given space, and to help us to create “vital places that highlight local assets, spur rejuvenation and serve common needs.”³ As

planners, this is our real opportunity: to help to create and recreate the spaces that connect, inspire and sustain us—as individuals, as communities and as a city. ■

Angela Hobson is a Principal Ecological Planner with the City of Edmonton, where she has worked for the last 10 years with a focus on ecological policy development, strategic planning and community engagement. She has an undergraduate degree in Environmental Studies and a Master’s in Planning with a specialization in ecological planning.

Heloisa Ceccato Mendes is a Principal Planner with the City of Edmonton (Parks + Bio Diversity Section, Urban Planning and Environment Branch, Sustainable Development Department), where she is currently working on the Edmonton’s Open Space Master Plan as Project Lead. Heloisa has 12 years of international experience as a Planner, having worked for the public and private sectors in Brazil, US and Canada.

About the Authors



Crystall II Airbase to City of Iqaluit:

70 Years of Transformation and Adaptation

The "lego land" multi-family residential development reflects a literal naming often used by the community.

SOURCE: *Kenneth Johnson*

The City of Iqaluit is among a unique group of Canadian communities that originated entirely from a military presence, and not from a commercial venture or trading post, or from a government administrative centre. From its origin as an airbase to serve the ferrying of aircraft from North America to Europe, Crystall II, then Frobisher Bay (1964), and finally Iqaluit (1987), has experienced 70 years of transformation and adaptation.

The modern history of the region originated almost 450 years ago with the exploration of Martin Frobisher, and his apparent discovery of gold in 1576. The site of this early arctic mining misadventure is only 190 kilometers to the south east. No significant exploration of the region advanced until C.F. Hall explored the region in the 1860's, as part of the search for Sir John Franklin's lost expedition; he created the first rudimentary map of the area.

Another 80 years passed before the interest in the region once again emerged with the Second World War and the Battle of the Atlantic, through which the Allied Forces suffered terrible losses from Nazi Germany's submarine fleet. A new mobilization plan for supplies, and aircraft in particular, was developed and became known as the Crimson Route. This route made use of the

point of land at the south end of Baffin Island, which was on the great circle route to Europe, and accommodated the leap frogging of fighter aircraft.

During late July 1941, a United States Army Air Forces team investigated the Frobisher Bay region for a potential airfield. Ultimately, a level meadow beside the community was selected as an airfield site. The base amenities consisted of the base accommodation, a hospital, and a sealift area, in addition to two runways. The construction was difficult, particularly since the military personnel had no experience constructing in permafrost soils. This venture was a "secret" project back in 1943.

The Battle of the Atlantic turnaround in 1943 meant that the Crimson Route through the base became obsolete because the location was not particularly strategic. The airfield activity was reduced to weather, communications, and logistics

duties and the base was inactivated in 1950, functioning as a weather station only.

In nearby Ward Inlet, 10 kilometers south of the community, the Hudson's Bay Company (HBC) had an outpost. In a strictly commercial venture, the HBC outpost moved in 1949 from Ward Inlet to the neighbouring river valley of Niaqunngut, officially called Apex, to take advantage of the commercial prospects at the airfield. The HBC could not relocate to the base itself because of its military status, so they settled on being five kilometers away.

The advantages of having high latitude airfields were realized soon after the end of WWII and the start of the Cold War with the possibility of an over the top attack from the Soviet Union. The US military reactivated the base in 1951 and Crystall II became known as Frobisher Bay Air Base. A bilateral agreement signed between the Canadian and US governments led to the construction of the Distant Early Warning (DEW) Line. The airbase became a staging point for the construction of the DEW Line with materials sealifted to the airbase and then transported by air to DEW Line sites in the region. A DEW Line site at the base itself opened in 1957, and subsequently closed in 1961, ending the surveillance activity. In 1957, the community had a population of 1,200 with 489 being Inuit.

A new direction for the community came with John Diefenbaker's 1958 election campaign, where he announced his "Northern Vision." This was a strategy to extend Canadian nationhood to the Arctic and develop its natural resources for the benefit of all Canadians. The Department of Northern Affairs and National Development implemented the "National Development Policy" and announced the "Road to Resources program."

In March 1958, a speech by the Chief of the Industrial Arctic Division of the Department of Northern Affairs and National Development was made regarding the redevelopment of Frobisher Bay (Iqaluit). "It will be the most revolutionary community in the country, perhaps on the continent. Today, architects and engineers are talking in terms of a new community shaped roughly like a snowflake. In the centre of the snowflake would be the stores, the newspaper and radio, the hotel and restaurants, the banks, the movie and cocktail lounge, and other small enterprises that go to make up a modern community of more than 4,000 people. In the outer

"It will be the most revolutionary community in the country, perhaps on the continent."

areas might be the accommodation unit reaching into the sky."

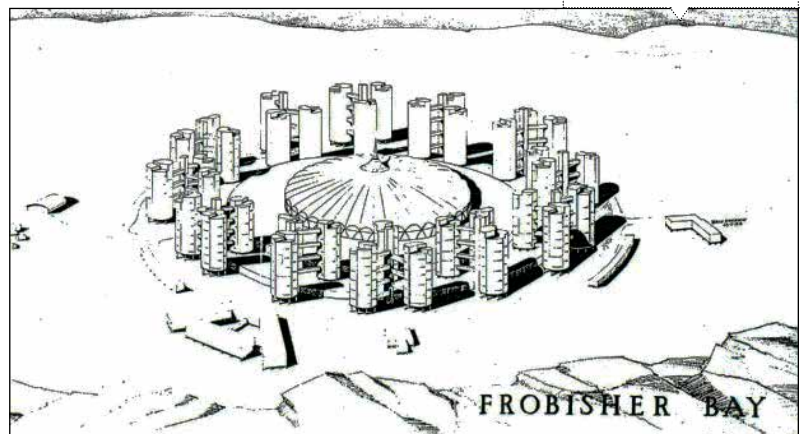
This futuristic plan for a domed city surrounded by residential towers had a price tag at the time of \$120 million, which would be at least one billion dollars today. In fact, residential towers around a central covered dome, was a totally impractical design for an arctic community, particularly given the extreme construction challenges of building on permafrost.

Following the shelving of the futuristic concept, a more modest "new town two" plan was developed; this concept was still based upon a sheltered environment from the harsh arctic temperatures. The grand vision came and went when Diefenbaker lost power in 1962. Further community planning was completed by Mossad Safdi in the years that followed, and these concepts were more realistic in the reflection of the climate and terrain of the community.

In 1963, the remaining military forces left, creating a Canadian government center for the eastern arctic. This was the action which ultimately transformed a military base into a community, with a legacy of the "bedroom community" of Apex, which was accessed by a road in 1955. During this period the overlying governance for the community changed from Ottawa to Yellowknife, when Yellowknife became the territorial capital in 1967. This changed the previous north-south working relationship to an east-west working relationship. Frobisher Bay reported to Yellowknife, which

A concept for a domed city was formulated in 1960, with an estimate cost of \$120 million at the time.

SOURCE: *Popular Mechanics Magazine*, May, 1959





The piped water and sewer system utilizes insulated plastic pipe and steel manholes.

SOURCE: Kenneth Johnson

created an ongoing tension until the Nunavut Territory was created in 1999.

Within the community itself, a central area called Astro Hill became the community focus in the late sixties, and a satellite residential area was connected with a sheltered corridor to the “White Row” housing. The limited residential neighborhoods included the “Lower Base” and Iqaluit with “k” instead of a “q”. The community’s infrastructure included a water supply originating from a lake above the community, and a sewage collection system that discharged into the inlet. Only the Astro Hill neighbourhood had piped services, with the remainder of the community on trucked services.

In the mid-1980s, planning occurred for a new expansion area. It included a major residential development designed by H.K. Kang, which would be substantially served with a piped system that employed a buried system of insulated plastic pipe and steel manholes. The ultimate naming of the new development was quite literal, and the neighbourhood name of New Expansion Area has stuck. The New Expansion Area began to build out in the 1990s to create the first large unique neighbourhood.

In the approach to the creation of the Nunavut Territory in 1999, the Town of Iqaluit had to fight for the right to be the territorial capital, competing against the regional centres of Rankin Inlet and Cambridge. Iqaluit won out, which created

a phenomenal boom in the community, with a growth estimate to 5,000 people, ultimately becoming 6,600 people. The housing in the New Expansion Area took on a modern look reflecting the maturation from a regional center to a territorial capital. Considerable multifamily residential housing was also developed, and once again Iqaluit remained quite literal with one multi-family development nicknamed “lego land”.

The economy of Iqaluit remains entirely government based, and the capital infrastructure plans for the community total almost \$500 million, which includes a \$300 million airport expansion that is currently underway. Iqaluit is uniquely a “big city” with features of the community, such as 200 cars per kilometer of road, which is a value competing with Singapore.

As much as Iqaluit is a big city in the context of the Nunavut Territory, the community remains an arctic community at heart on the edge of a frontier. How many capital cities can boast about the occasional polar bear walking through town? ■

Kenneth Johnson is a senior planner, engineer, and occasional historian, with Stantec in Edmonton. He has almost 30 years of experience in planning and engineering in the far north, and he has lived and worked in all three northern territories. His first excursion to Iqaluit was in 1988, and he has witnessed first-hand the “capitalization” of the community over the past two decades.

About the Author



The New Expansion Area was planned in the mid 1980s and has created the first large unique neighborhood.

SOURCE: Kenneth Johnson



Agriculture—More than just the Land!

My grandfather and great uncle moved from Lancaster, Wisconsin to the Northwest Territories in 1903. They homesteaded—each got their own quarter sections. Times have changed since then. We need a broader view of “agriculture” such as: the growing, raising, managing and/or sale of livestock, crops, food, horticulture, and agri-food related value added enterprises including education, motivated either by profit or lifestyle. Agriculture is an economic activity, it provides an alternative lifestyle choice, it helps establish community character, and it contributes a set of environmental goods and services. But probably the most important for us is food: *No farmers, no food!*

Agriculture has gone through dramatic changes, and continues to change. The world’s increasing population continues to demand protein rich diets. With urbanization, there will be less land for agriculture production. The Central Intelligence Agency identified that eventually only six countries will be net exporters of food, of which Canada will be one. There is volatility in supply, some of which comes from variable and extreme weather patterns, all in a context of climate change. Think about the impact of Bovine Spongiform Encephalopathy (BSE) on agriculture in Alberta; consider things like political turmoil or

trade negotiations. The implication is there is still great opportunity for Canadian agriculture in the global marketplace.

Many people still view agriculture through the long-outdated model when a family could thrive on just a quarter section with a mix of grain and animals. Restructuring and consolidation of the agriculture sector has been going on for a long time. To run a successful agriculture operation you require a unique set of management systems, skills, quality control protocols, equipment, and capital. Farmers do not control prices; they have to control costs to be competitive.

Farms are getting larger
SOURCE: John Steil

No. 104495

DOMINION LANDS.

INTERIM HOMESTEAD RECEIPT.

No. 31238

Agency, _____ 1900

AUG 25 1903
REG. OFFICE
WEGONIA, ALTA. N.W.

I certify that I have received from John Steil
Launceston Wis.
the sum of 2.00 Dollars, being the office fee for Homestead Entry for 2.00
Quarter of Section 12 Township 38 Range 22
West of 1st Meridian, and that the said John Steil
is, in consequence of such entry and payment, vested with the rights conferred in such
cases by the provisions of "The Dominion Lands Act," respecting Homestead Rights.

Local Agent.

NOTE.—This Entry is granted under and subject to the provisions of the Dominion Lands Act and its amendments, governing Homestead Entry for Dominion Lands.

Homestead Certificate
SOURCE: John Steil

Agricultural land, on its own, in sheer economic terms cannot compete with residential and industrial uses.

This has led to the need for specialization—to be competitive, for example, you need to spread the cost of all that equipment over a larger land base. In Alberta, there are now about 3,000 farmers that farm over 3,500 acres, some farming 10,000 acres, some farming up to 50,000 acres across several counties and even interprovincial. Equipment is bigger, enabling larger passes of fields, but then you have to move this machinery to the next 5,000 acres, so safety of operations is a big issue for farmers. There are major advances in technology like precision farming using GPS. Farmers are using drones for measuring crop performance, varying fertilizer to just where it is needed. These approaches are necessary to keep competitive in a global market place. It is driven by economics but enabled by technology. But, with increased fragmentation, more people living in agricultural

areas leads to more conflict. A related issue is the changing character of our rural areas—fewer people farming and living on the land.

We are witnessing an increasing interest in local food and specialized foods. But cost competitiveness is still a huge factor—people still want cheap food they get at the big supermarket (price still trumps the source) and the supermarket requires guaranteed supply all year long. Most food, including fresh produce, continues to be supplied by companies that are national and international in scale. So it remains unclear how far the local food movement can go.

Another related trend is the move towards advanced quality control systems and traceability. A farm food safety system might be a requirement for products to be received at processing plants. Agri-tourism is also seen as a growing trend: growing interest in local food, new experiences, and parents wanting children to understand from where their food comes.

An agrarian viewpoint held that the farmer and farmland provided inherent social benefit, but this came with a view that farmers should be able to do what they want with their land. Economic pragmatism follows the notion of highest and best use. Divergent viewpoints are summarized by the farmer who says 'protect my land till I want to retire.' There is competition for land. For the most part, Alberta communities took root on the best land to serve the surrounding farmers. As settlements grew, they continued to spill over onto the best agricultural land. Agricultural land, on its own, in sheer economic terms cannot compete with residential and industrial uses, particularly as settlements expand and their 'urban shadow' extends farther. However, there are good examples where agriculture land is being preserved: Landcaster County, the BC Agricultural Land Reserve, and the 2005 Ontario Greenbelt. One key piece in the Strathcona agricultural master plan was the concept of 'conversion of prime and unique farmland only as a last resort.' This recognizes the multiple goals that municipalities have including trying to maintain agriculture as an integral and permanent part of the community.

Alberta's Provincial Land Use Policies had good intent, but no teeth. They encouraged municipalities to identify areas where agriculture should be the prime use, limit fragmentation, direct non-agricultural uses to areas where they would

not constrain agriculture, and minimize conflicts between intensive agricultural operations and other users. This led to weak municipal policies that used words like “where practical” and “when possible”. I worked on an agricultural report for Strathcona County in 2003, but nothing was done. There was no political will.

In Edmonton, the first metropolitan plan in 1958 was based on research into agriculture. It looked to keep agriculture as an integral part of the region. Fragmentation was to be stopped. Unfortunately, the plan was relatively ineffective. In preparing the Land Use Plan in 2009, the Edmonton Capital Region Board did not address the issue of agricultural land preservation—they passed the issue back to the Province. In 2014, the Province passed the topic of agricultural land preservation back saying they were “expecting” the Capital Region Board (CRB) to deal with the issue. Strathcona County lost 14 percent of its farmland since the 2003 study. In 2015, Strathcona County adopted a new plan. Some things had changed—mostly political will. Ultimately, the counties are all part of the CRB and as the Growth Plan gets updated, there is hope for a regional approach.

Agriculture is changing and we have to address the change to make sure it stays integral. This is where we stress the theme of “it’s more than just the land”. An updated Growth Plan needs to address the land, but it needs a comprehensive approach, addressing topics like governance, infrastructure, communication, and economic development. But if you do not have the agricultural land, you do not have to worry about most of these other things. Land use policy is still one of the key pillars and the two big land use issues are conversion and fragmentation; but there are others, like avoiding conflicts, allowing urban agriculture, and addressing value added agricultural uses.

Parkland County’s land use bylaw allows four parcels to be subdivided out of a quarter section. Is this consistent with the need for larger farm operations and trying to reduce conflicts? Landowners have expectations. The transfer of development credits concept, with sending and receiving areas, is based on logical spatial planning with some consideration of the equity question. There are lots of examples of transfer of development credits in the USA. The Alberta Land Stewardship Act now provides the mechanisms to do it in Alberta.



There are other tools to consider in a multi-pronged approach. We use environmental impact assessments; why not agricultural impact assessments? Municipalities can tailor strategies to a particular economic development focus. One example we talked about in Strathcona County was about using waste heat from the Heartland Industrial to develop a greenhouse industry. Of course, agriculture needs roads and they need weed control on municipal ditches. Other infrastructure might be part of the equation: farmer’s markets, staging areas for trail rides, or indoor equine centers.

Governance is an important consideration. We hear from the agricultural community that people do not understand agriculture and do not care about it. So, education, communication, and advocacy should be part of an overall approach.

Agricultural plans need an implementation strategy and success and failure needs to be measured. Agriculture will change and our plan needs to be dynamic. And, comprehensive! ■

Agriculture is a global marketplace
SOURCE: John Steil

John Steil, FCIP, RPP is a Principal in Stantec’s Vancouver office. He is a former President of both CIP and APPI, and is currently Chair of the CIP College of Fellows. He is also a painter, poet, printmaker, and plays defence at Saturday morning hockey. He is co-author of *Public Art in Vancouver: Angels among Lions*.

About the Author



The Quarters Downtown/
Armature
SOURCE: Semra Kalkan

Edmonton's Downtown is Changing for Good

Edmonton is a city undergoing a major transformation, and 30 delegates at the 2015 APPI Conference in September got a look at the impact it is having on Downtown. With construction on over a million square feet of land in Downtown, Edmonton's core is seeing unprecedented growth. However, getting to this point of Downtown revitalization was no easy task.

First the City needed to reverse the slow decline. Between 1971 and 1996, Downtown's residential population fell 10%, even as the City grew by 40%. Revitalization started with small steps. A concert hall was built. Housing incentives brought more people living Downtown. A major college built their campus in an area that had been stagnant for decades.

This was followed up with revitalization of 104 Street. Zoning was introduced to preserve and create the warehouse district feel. Pedestrian-friendly street infrastructure, and a focus on building stores, shops and restaurants, have created a vibrant atmosphere that now attracts many people to the area.

Momentum was slowly building, and more people were living and visiting Downtown. Unfortunately, over half of the land in the core was still vacant or underdeveloped, often serving as surface parking lots. However, vacant land also equalled opportunity.

In 2010, the City adopted the Capital City Downtown Plan (recipient of the APPI Award of Merit), which recommended using catalyst projects to stimulate development and to create a sustainable, well-designed, accessible and vibrant community.

To fund this work, the City pursued using the Government of Alberta's financing tool called Community Revitalization Levy (CRL) for the Downtown area. Approved in 2013, the Downtown CRL allows the City to borrow funds to build infrastructure that attracts development, then use the tax lift from the economic growth to pay off the original infrastructure investments. A CRL remains in place for up to 20 years.

The first catalyst project started in 2013 with the construction of Rogers Place and already the promise of millions of event-goers coming Downtown is attracting investment.



Rogers Place
SOURCE: Semra Kalkan



Ice District
SOURCE: Semra Kalkan



Kelly-Ramsey Building
SOURCE: Semra Kalkan

ROGERS PLACE

Scheduled to open in September 2016, Rogers Place will be a world class entertainment venue and home to the Edmonton Oilers. This 18,500 seat facility will feature state-of-the-art technology, and bring an estimated 3 million people Downtown each year.

ICE DISTRICT

Rogers Place is the centrepiece of the privately developed Ice District. Featuring a public plaza, two new office towers, one of which will be the tallest west of Toronto, condos, a hotel and more, this \$2.5 billion development is transforming 25 acres of land, giving the area energy and feeling unlike anything the City has seen before.

KELLY-RAMSEY BUILDING

When the historic Kelly and Ramsey Buildings were severely damaged in a fire, Edmontonians mourned the loss of these historic buildings and the street-level activity they contained. Now, the site is being redeveloped into a 25-storey office building featuring the historic facades. With the assistance of a \$1.7 million grant from the City of

Edmonton, the facades were disassembled and catalogued brick-by-brick, before being cleaned up and restored to their original location.

ALEX DECOTEAU PARK

There is a shortage of park space Downtown, particularly in the Urban Warehouse area where the City envisions an eclectic residential area. Starting in 2016, construction will begin on a new park featuring an off-leash dog area, community garden and places to relax. This will completely transform the 0.35 hectare site, which has been a parking lot since 1962.

THE QUARTERS DOWNTOWN/ARMATURE

East of Downtown is an area called the Quarters, which was the original site for Downtown in Edmonton's early days. The area had become dominated by surface parking lots and had gained a reputation for crime and disorder. Financed with its own CRL, the Quarters began its revitalization with critical drainage infrastructure, and creation of "the Armature" which is a high-quality, pedestrian focused street featuring low impact development. Other work includes



Royal Alberta Museum
SOURCE: Semra Kalkan



The Armature
SOURCE: City of Edmonton



Jasper Avenue New Vision
SOURCE: Semra Kalkan

* Leadership in Energy and Environmental Design is an international green building certification program

Fox One Tower
SOURCE: Semra Kalkan



partnering in affordable housing projects, and a community centre featuring community spaces, child care facilities, and the YMCA Family Resource Centre.

ROYAL ALBERTA MUSEUM

At 36,000 square meters, this will be the largest museum in Western Canada, featuring double the exhibition space of the current location, equipped with modern museum technology capable of hosting a wider range of feature exhibits. The project is targeting LEED* Gold and is scheduled to open to the public late 2017.

JASPER AVENUE NEW VISION

The City is re-establishing Jasper Avenue as the main street of Edmonton by dramatically improving the urban design. Wider sidewalks, fewer vehicle lanes, and a focus on high-quality furnishings, art and plantings will make it a place all Edmontonians can be proud of. One section is completed, and the rest will be done in phases over the next decade.

OTHER PROJECTS UNDERWAY AND IN PLANNING:

Residential:

1,100 residential units are under construction in Downtown and the Quarters, and well over 3,000 more are in planning. Underway now are:

Ultima, Fox Towers, Mayfair North, Symphony, and Edgewater Towers.

Education:

The City projects that there will be 50,000 students Downtown by 2020, fuelled by two college expansions: Norquest College Singhmar Centre for Learning, MacEwan University Center for Arts and Culture.

Infrastructure:

The City of Edmonton's Valley Line Light Rail Transit line, mechanized river valley access, \$46 million in drainage improvements.

In all, it is a pivotal time for Edmonton's Downtown. The core is already reaping the benefits of the work that has been done, but there is much more change to come as people fill the arena, retail, schools, condo towers and office towers currently under construction. If you have not been to Downtown Edmonton in a while, it is time to see this transformation for yourself. ■

Tom Beck RPP, MCIP is a Planner with the City of Edmonton's Urban Renewal Section. He contributes to the implementation of the Capital City Downtown Area Redevelopment Plan and the Capital City Downtown Community Revitalization Levy Plan.

About the Authors

2015 APPI Planning Awards

Each year the Alberta Professional Planners Institute recognizes exemplary planning within the planning profession. Awards acknowledge meritorious plans and projects, undertaken in whole or in part by members of the Institute, that significantly contribute to the livability of communities in Alberta, the Northwest Territories and Nunavut. The awards were presented at the APPI Annual Conference. Recipients received a Certificate of Planning Excellence or a Certificate of Planning Merit. As well, the award winning plans and projects will be featured on the APPI website, Planning Journal and in a media release. Awards for Planning Excellence and Merit were announced at the APPI 2015 Conference on September 17th.

Award of Planning Merit

Comprehensive and Policy Plan Category

Building In. Let's Talk: Evolving Infill and Edmonton's Infill Roadmap
The City of Edmonton

All cities change over time. This is certainly true for Edmonton, which is growing rapidly. Growth means planning to accommodate the thousands of new residents drawn here each year. To do this, the City strategy is to grow up, in and out—with growing “in” meaning infill or new homes in older communities. Our Municipal Development Plan sets an annual target of 25% of net new housing units in our mature and established neighbourhoods, and Edmonton's 180 mature communities are poised for change.

The Evolving Infill project and the resulting Edmonton's Infill Roadmap were a strategic response to this opportunity that allowed neighbourhoods, developers and the City to work together to identify and implement actions supporting better residential infill in older communities. The project was unusual in that we

Left to right: Misty Sklar, Peter Ohm, Yvonne Pronovost, Kalen Anderson, Lisa Larson, Jeff Chase, Tim Brockelsby
SOURCE: Semra Kalkan



The Infill Action Collaborative members had rich, nuanced conversations about infill in Edmonton.

SOURCE: City of Edmonton



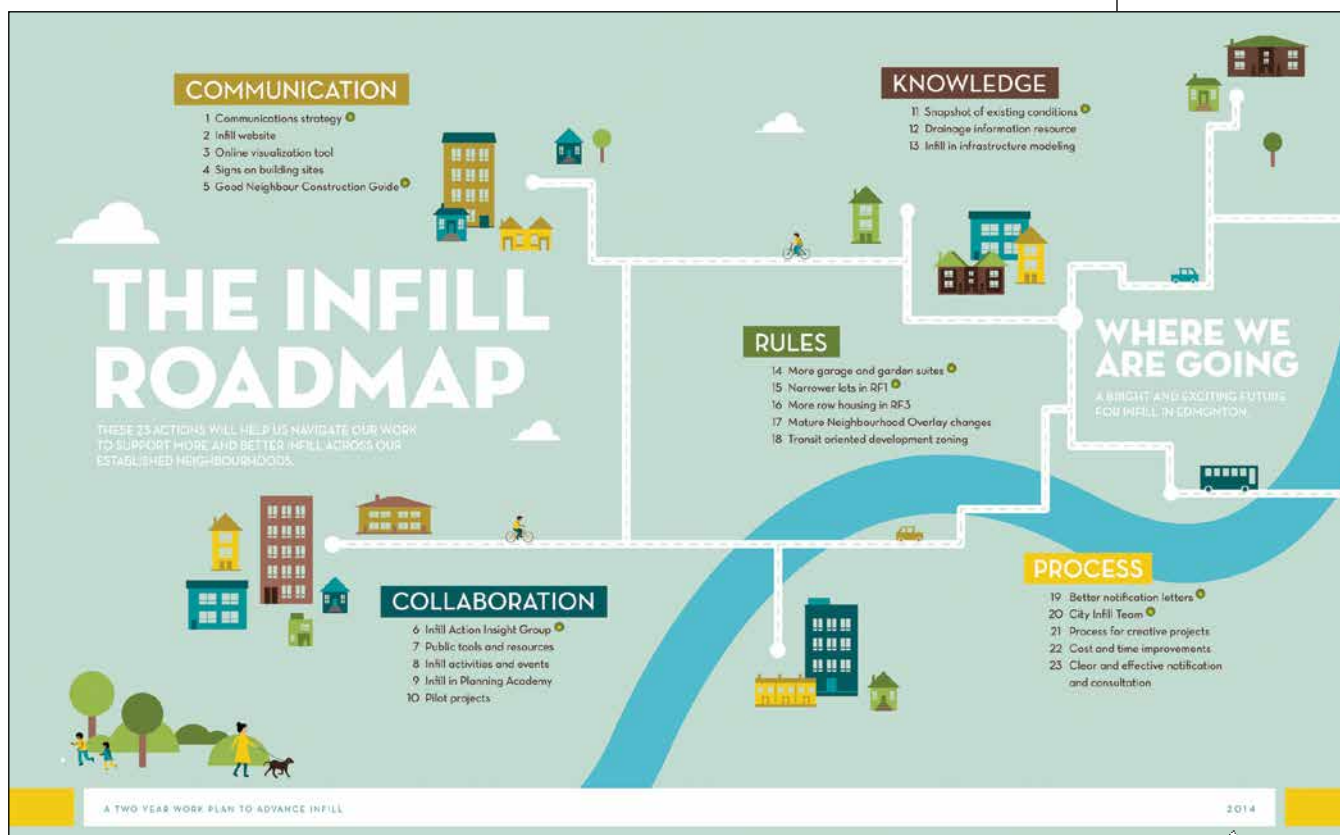
All sorts of stories came out of the Evolving Infill process. These stories informed the actions in the Roadmap.

SOURCE: City of Edmonton



invited the public to help the City create a work plan. It was process-based and story-focused. We started from a place of genuine inquiry, without a specific end goal or action in mind. That meant that the actions to support infill flowed naturally from what we heard.

Evolving Infill used a three step process undertaken between November 2013 and August 2014. Step One involved a city-wide conversation about infill. Participants shared their infill stories – and we heard a lot! Some stories were good, some were not so positive, but all of them helped illuminate problem points with infill. More than that, stories helped build relationships and trust between infill stakeholders. The stories were then used in Step Two by the Infill Action Collaborative. The Collaborative was a group of 30 people who worked together to provide recommendations to the City on what we might be able to do together to support more and better infill. In Step Three, we shared the draft Edmonton's Infill Roadmap with the public to make sure we were on the right track and to identify priority actions.



Edmonton's Infill Roadmap was presented to the Executive Committee of City Council for information in August 2014. It contains 23 actions (including 8 priority actions) that the City and its partners can do together over the next two years. There are 23 actions because we know that infill is complex, and that there is not one single thing we can do, but rather it is a combination of many things. We also know that the Roadmap is a starting point—this is not everything we could do, but it is what needs to be done first in order to get us to where we want to go.

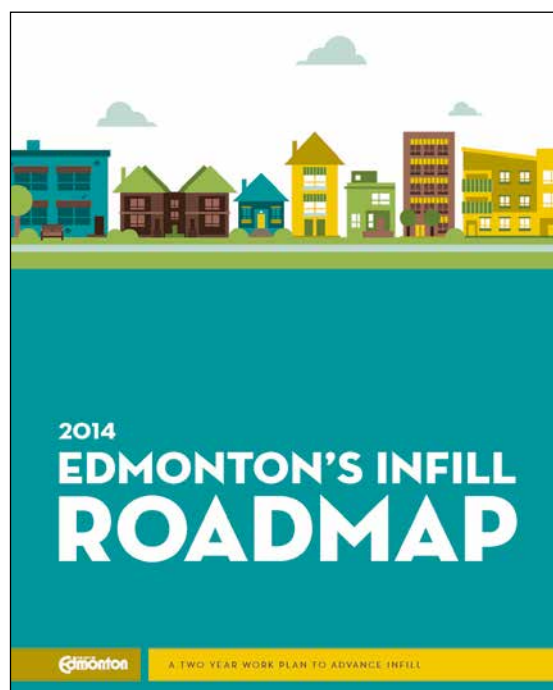
Eleven of the actions in the Roadmap have been completed and implemented as of August 2015, including seven of the eight priority actions. Another eight are in progress, and we are on track to begin the remaining four by August 2016. Implementation has been a team effort, and could not have been accomplished by just one Department, nor by the City alone.

Edmonton is continuously changing, in both its physical make-up and the dreams and aspirations of its residents. This project helped us bring both

of these together into one shared conversation that resulted in concrete actions to foster positive change for Edmonton in the best way possible.

The Edmonton Infill Roadmap is a two year workplan to get us where we want to go.

SOURCE: City of Edmonton



The Edmonton Infill Roadmap contains 23 actions to support more and better infill in our mature and established neighbourhoods over the next two years.

SOURCE: City of Edmonton

Award of Planning Merit

Special Study Category

*Contamination, Creativity and Community Revitalization:
The Story of the Community Revitalization Levy in Cochrane Alberta
Town of Cochrane and Urban Systems*

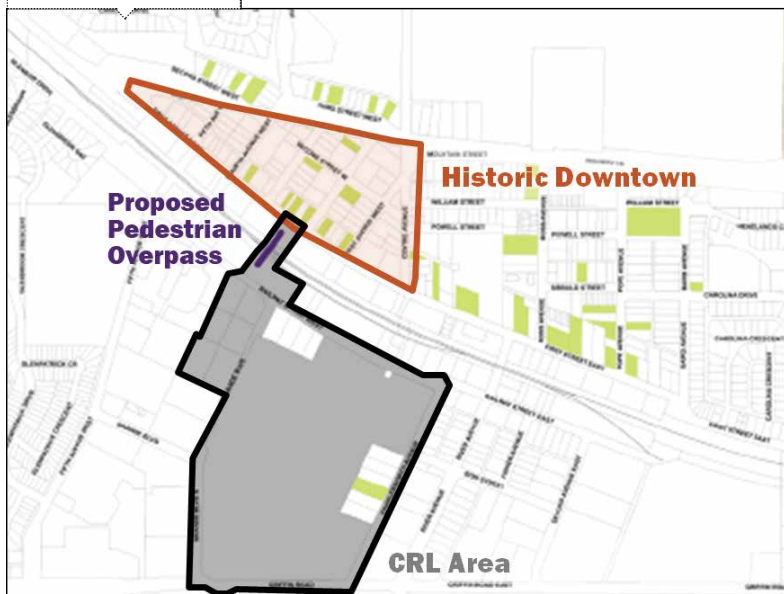
Left to right: Misty Sklar,
Mike Caldwell, Stephen Utz,
Tim Brocklesby
SOURCE: Semra Kalkan



Map of downtown Cochrane identifying the boundary of the expansion area, the contaminated sites, the historic downtown area, Centre Avenue, the area identified for large-format retail, and the CRL area.

SOURCE: Town of Cochrane

"Sometimes, you have to use every tool in the toolbox in order to create the community that you want."
— Julian deCocq, Chief Administrative Officer, Town of Cochrane



The Town of Cochrane, located in a picturesque valley thirty minutes west of Calgary, was home to 17,580 residents in 2012. At that time, Cochrane had just over 25 hectares of its downtown expansion area that lay largely fallow, highlighted by a 17 hectare contaminated industrial site. This industrial site had been used between 1963 and 1988 for treating wood with creosote, a chemical designed to prevent rotting. Regrettably, this activity contaminated the soil and created an extensive underground plume of dioxins and furans.

Abandoned since 1988, the contaminated industrial site received its first breath of new life when Cochrane received a Building Canada grant in 2009 to extend Centre Avenue, the main north-south road, from the alignment in the Historic Downtown through the middle of the contaminated site. With this impetus, large-format

retail in the expansion area became financially viable. Concerned that the introduction of such retail could take away from the viability and charm of the Historic Downtown, Cochrane sought an opportunity to develop infrastructure that would connect the historic downtown with new retail planned on the contaminated site in the downtown expansion area—both physically and psychologically, in the minds of local residents and visitors (see table below).

A Community Revitalization Levy (CRL) is a unique, one-time opportunity provided by the Government of Alberta that allows a municipality to freeze the assessment values of lands within a defined boundary, and redirect the incremental value of increased assessment over the next 20 years towards projects that will spur further redevelopment within that boundary, creating a virtual cycle of urban development.

Infrastructure Projects	Commencement Date	Expenditure
Public Space Improvements (<i>Urban Design, Plaza Spaces and Roadway Standards</i>)	2013–2014	\$3,000,000
Canadian Pacific Railway Above-Grade Pedestrian Crossing	Dependent on CRL Cash Flow (2016–2022)	\$4,000,000
Contribution to Arts Centre	Dependent on CRL Cash Flow (2016–2022)	\$3,000,000
Shared Parking Facility	Dependent on CRL Cash Flow (2016–2022)	\$3,000,000

However, like many municipalities in the Calgary Region, Cochrane found itself challenged with growth pressures creating demands for both hard infrastructure (i.e. water, sanitary) and soft infrastructure (i.e. policing, recreation), on a budget hindered by a limited non-residential tax base (18% of revenue in 2012). Creative solutions would be necessary to develop the projects deemed necessary to connect and improve the contaminated sites with the *Historic Downtown* without having to delay or delete projects such as the RCMP Station and Pool/Curling Club from *Cochrane's Ten-Year Financial Strategy*. Accordingly, Cochrane turned to a little-used section of the *Municipal Government Act* regarding community revitalization levies to finance this infrastructure.

The *Community Revitalization Levy Area Plan* adopted by Cochrane included the contaminated industrial site as well as some adjacent parcels affected by the underground plume. Though the boundary could have been extended to include other parcels with redevelopment potential, revenues generated by a Community Revitalization Levy are required to go to infrastructure within the defined boundary only, and cannot be used as part of the general revenue stream. Accordingly, the amount of land that needs to be included must be balanced against the need to finance infrastructure in the revitalization area.

For Cochrane, the fact that the 25 hectares had a combined assessed value of just \$6.5 million in 2012 provided an ideal opportunity to see



SOURCE: Town of Cochrane

Centre Avenue improvements
SOURCE: Town of Cochrane



incremental increases. With Development Permits for several projects pending in 2012, the assessed value was expected to increase dramatically. Over time, the estimates for assessed value on full redevelopment of the lands ranged between \$90 million and \$113 million. This in turn led to an estimated range of \$19.1–\$24.8 million in taxes, of which \$5.3–\$6.9 million would stand as baseline general revenue. The remaining \$13.8–\$17.9 million would be generated by the community revitalization levy (see figure below).

As of May 1, 2015, approximately 80% of the forecasted development (over 33,000m² of retail) had been occupied, constructed, or received approval. Approximately \$1.1 million had been generated in revitalization levy revenue, far exceeding the \$600,000–\$900,000 range anticipated for this point in the implementation schedule. At-grade pedestrian crossings have been developed in advance of future above-grade connections, and the public space enhancements identified for Centre Avenue and connecting crossroads of Bow Street

and Quarry Street completed.

The acceleration of development within the plan area means that 2018 is now anticipated to be the first year of maximum assessment and maximum cash flow generation, instead of 2022. The advancement of the timeframe gives the Town of Cochrane flexibility to:

1. retain the CRL for the full 20-year horizon and provide additional funds to the projects; or
2. rescind the CRL once all of the infrastructure projects have been developed and paid for by the CRL regulation in order to fund other projects identified in the *Ten Year Financial Plan* earlier.

The results of Cochrane's experience with the community revitalization levy legislation show that this financing tool can be tremendously successful when significantly undervalued properties are on the cusp of being redeveloped. This reduces borrowing requirements for the municipality and shortens the window for achieving revenue, creating a win-win situation for everyone.

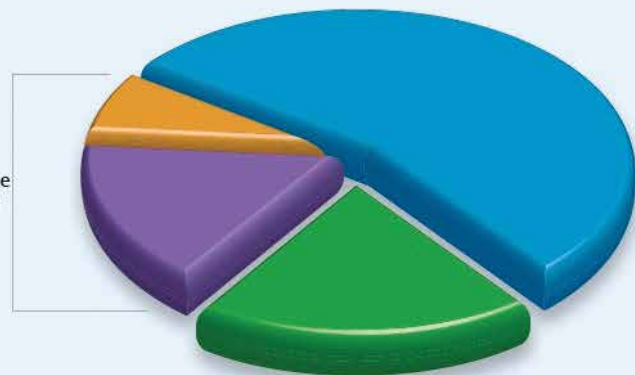
SOURCE: Town of Cochrane

Increased Assessment Scenarios

- Municipal Revenue (Baseline)
\$3.4M to \$4.4M
- Provincial Education (Baseline)
\$1.9M to \$2.5M
- CRL Revenue (Provincial)
\$4.7M to \$6.1M
- CRL Revenue (Municipal)
\$9.1M to \$11.8M

Total Revenue \$19.1M to \$24.8M

Baseline Revenue
\$5.3M to \$6.9M





Kilini Creek, Parkland County
SOURCE: Parkland County

Award of Planning Merit

Comprehensive and Policy Plan Category

Parkland County Environmental Conservation Master Plan and Policy Updates
Parkland County and O2 Planning + Design

Left to right: Misty Sklar,
Deanne Cambridge, Duncan
Martin, Tim Brockelsby
SOURCE: Semra Kalkan

Parkland County is located in the Alberta Capital Region just west of the City of Edmonton. The County is home to a wide range of natural areas and is rich in biodiversity. With heavy development pressures in all areas, resource extraction, and an expanding industrial area, the County initiated the Environmental Conservation Master Plan (ECMP) project to take stock of its environmental assets as a first step in prioritizing landscape-wide planning initiatives.

The ECMP was completed in three interrelated phases: 1) inventorying and mapping the County's Environmentally Significant Areas (ESAs), 2) developing draft environmental policies for the County's Community Sustainability and Development Plan, and 3) preparing a comprehensive set of policies, procedures, and



County-wide mapping to support environmental conservation and management.

Environmentally Significant Areas (ESAs) have been defined in Alberta as places vital to the long-term maintenance of biological diversity, soil, water, or other natural processes at multiple scales. In Parkland County, identifying and mapping ESAs was a critical step in informing wise land use planning and science based decision-making. The Phase One inventory of ESAs provided a solid and defensible framework for the policy development that occurred in Phases Two and Three of the project.

This study acknowledges that landscapes embody a gradient of environmental values, with ESAs as critical nodes—or indispensable patterns in the landscape. The study was based on the premise that if certain indispensable patterns are conserved, the majority of ecological functions in that landscape will remain intact.

From this perspective, the ESA study informed the development of policy tools to conserve interconnected ecological processes and resources across the County's landscape. The Phase One inventory and analysis also resulted in mapping all ESAs in the County, which helped identify priority areas for conservation and management. The project findings also informed the creation of draft environmental policies for the County's Community Sustainability Development Plan and the

preparation of new County-wide environmental policies and procedures

The process for identifying ESAs in Parkland County consisted of obtaining, formatting, and integrating a wide variety of county-wide spatial data sets within a consistent mapping framework. Extensive data analysis, field reconnaissance, and public consultation were instrumental in refining a total of 61 ESAs for the County.

Multiple public open houses and stakeholder workshops were held in locations across the County, while an online mapping tool collected public feedback on identified ESAs. Stakeholders also played an important role in ensuring that the ECMP reflects the diverse values of Parkland County.

The ECMP contributes to the profession by positioning a comprehensive ESA study as a framework for landscape-scale planning and informed policy development. The project facilitated the conservation and restoration of critical ecological networks through the development of sound policy and detailed mapping tools. The ECMP will guide the update of the County's Community Sustainability and Development Plan and effectively direct future updates to County-wide environmental policies and procedures through informed, scientific and defensible analysis of landscape patterns and environmental processes.

North Saskatchewan River,
Parkland County
SOURCE: *Parkland County*



Award of Planning Merit

Special Study Category

City of Lacombe's Heritage Management Program

The City of Lacombe, Lacombe & District Historical Society,
and Donald Luxton & Associates

The City of Lacombe Heritage Management Plan was adopted in June 2013 and was developed as a framework for heritage planning. The Plan establishes the processes and guidelines for designating Municipal Historic Resources and sets goals and priorities for ensuring the success of heritage preservation in the City.

Together, the Plan and programming allow Lacombe to determine its own heritage goals and to help encourage the preservation of heritage structures. Since its adoption, programming and key elements of the Plan have been woven through other municipal plans and programs, helping to ensure that the goals of the Plan are implemented through a variety of methods.

The Plan was designed to establish efficient and streamlined processes that could be undertaken by any member of the Planning and Development Department. A straightforward framework and accompanying application templates were established to enable the assessment of potential historic sites, and the designation of municipal historic resources and alteration of designated buildings.



Volunteer Blacksmiths,
Jennifer Kirshner and
Henrietta Verwey at the
Lacombe Blacksmith Shop
SOURCE: Tilde Ehman



Left to right: Misty Sklar,
Jennifer Kirchner, Lyla Peter,
Tim Brockelsby
SOURCE: Semra Kalkan



Main Street, Lacombe
SOURCE: City of Lacombe

A unique feature that has come from the Heritage Program was the creation of an innovative assessment process for applications to demolish historic structures (50+ years of age). A Historic District Overlay was adopted within the Land Use Bylaw that requires the Heritage Resources Committee to assess applications for the demolition of historic structures by conducting background research, a site visit, and full documentation of the structure. Ultimately the Committee makes a recommendation on the potential demolition to the Municipal Planning Commission. There is a further requirement for the applicant to advertise the building for salvage; promoting sustainable practices, which link to the

Municipal Sustainability Plan, while ensuring that unique architectural items and historic building materials can be reclaimed and reused.

Since the Plan was adopted by Council, administration and the Committee have been working to implement the Plan. Some of the successful outcomes to date include:

- The establishment of a Historic District Area Overlay, providing guidelines for the salvaging of building materials, detailed assessment and documentation of demolition applications and encouragement of appropriate infill development.
- The establishment of a Heritage Resources Fund to provide grant monies to Municipal



St Andrews United Church,
Lacombe's First Municipal
Historic Resource
SOURCE: *City of Lacombe*

Historic Resource owners for approved projects.

- Development of the Lacombe Heritage Facebook Page which provides ongoing information on local heritage events, archival photos, and showcases Lacombe architecture.
- Designation of St. Andrew's United Church and the Lacombe Blacksmith Shop as Lacombe's first and second Municipal Historic Resources, along with a corresponding Plaque Program.
- Establishment of the Doors Open program which is in its 3rd year.
- Influenced the design elements used for street furniture and infrastructure projects

in the downtown including heritage style street furniture at transit stops and parklets, use of the iconic Lacombe red brick colour in sidewalk improvements and providing architectural guidelines for infill projects in the downtown to complement the existing historic streetscape.

- The Heritage Management Plan has also influenced the development of several City documents including: The Municipal Sustainability Plan, the Council's Strategic Plan for 2014-2017, the Municipal Development Plan, and updates to the Land Use Bylaw through design overlays. ■



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