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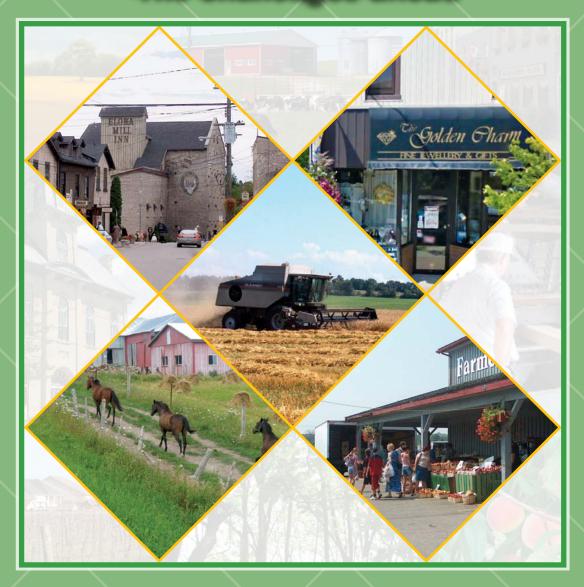
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# ANNING **Journal**

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#### **Rural Ontario**

### The evolving face of rural planning



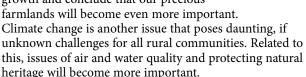
By Wayne J. Caldwell

It wasn't much fun cleaning up the planning library, but then again it was only the second week of her summer position with the County Planning Department. Increasingly though, she found herself fascinated by the dusty reports from the late '60s and early '70s. Judging by the tattered pages these were obviously well used. There were reports on the Niagara Escarpment, something called the Foodland Guidelines, there was a small tattered document called the Agricultural Code of Practice and something that looked really important, Design for Development: The Toronto Centered Region. Given her farm background, there was also one that called out to her entitled Countryside Planning. As she scanned the report released by the Ministry of Housing in 1976 she couldn't help but compare the contents to her own evolving thoughts about rural planning. She noted in the preamble that the report was "an attempt to develop a more rational approach for the planning of rural areas."

As she read sections from this report she was thinking about her previous semester in planning school—discussions about the Provincial Policy Statement, Places to Grow, the Greenbelt Plan (and there is that word 'countryside' again) and the upcoming reviews of several of these documents along with the Niagara Escarpment and the Oak Ridges Moraine plans. She thought about her visit with provincial staff and thought, yes, there has been much effort put into the more rational planning of rural areas. At the same time as she reflected on the changes over the last 40 years she couldn't help but say out loud "I wonder how planning for rural areas will evolve and change over the next 40 years throughout my own career?"

n many ways this question is at the core for those of us who study and work in rural communities. The future is a collage of things from evolving politics and demographics to international markets and societal

values. As we think about the future of rural planning we have the benefit of looking backwards and as planners to project some of these trends into the future. We can look to the country's aging population and forecast with some certainty that this spells trouble for the future of many rural communities. We can project with some certainty that immigration will be critical to their future as well as the provision of an acceptable level of services. We can also look to regional and global population growth and conclude that our precious



While these changes present problems, what is more challenging is to prepare for the unforeseen. We are challenged to think about that unexpected critical event that can occur and change all of our forecasts and projections. While climate change is likely to be one of these events, there are others of an economic, environmental or social nature that will catch us off guard. Examples from the past include business cycle impacts (the high interest rates of the 1980s) and the introduction of invasive species and pests (the emerald ash borer) and even the renewed interest in local food (growth of farmers markets, new local food act). Beyond climate change, other future events might include the changing role of technology and automation in agriculture and elsewhere. Indeed, we may currently be in the midst of a major transition connected to the process of "fracking" and what it appears to be doing to international energy markets, along with



Wayne Caldwell

uncertainties associated with reported environmental contamination.

So, as we think about the evolving nature of rural planning we need to think about these critical events and reflect on where we have been. We can identify the important and growing role of the provincial government in developing policy and creating a coordinated framework that leads to expressions of provincial policy and provincial plans. This fundamentally impacts municipalities and the way that planning occurs locally and regionally. At the local and regional level, we have also seen much growth in the profession and its influence. Virtually every rural municipality in Ontario now has an official plan and zoning by-law. While there are occasional debatable divisive issues, planning is generally accepted not only as a necessity, but as something that can enhance the quality of life, save money and build desirable futures.

The series of articles that comprise this special issue are not intended to limit discussion concerning the evolving nature of rural planning. It is much broader than the discussion presented here or within the selected articles. Clearly there are other topics that could have been selected ranging from resources management to social

planning in rural communities. There is also a host of topics core to the practice of a municipal planner that could have been selected - from severance policy to the treatment of rural lands within various provincial plans.

Thanks to the contributing authors, we have a number of excellent articles that capture different initiatives and perspectives from across the province and beyond. John Turvey and Arthur Churchyard provide a current perspective on planning for agriculture in Ontario. This connects nicely to the article by Sara Epp and Christopher Fullerton on mitigating land use conflict

in the rural countryside. It is noted that there are commonalities and themes between these two articles and the insight provided by Tom Daniels in his article Rural Planning in the U.S.: Lessons for Ontario. Rural and small-town development is discussed by Kara Van Myall in her reflections on fostering community design leadership in rural Ontario. Paul Kraehling, Erica Arnett, Karen Loney and I build on OPPI's interest in healthy communities by looking at it from a rural context. This is complemented by Emily Hill's article about linking health and the built environment in rural settings. Stephanie Simard and Dennis Kar add to this discussion by looking at Coordinated Rural Transportation.

• • •

As we look to the future, there are certain directions that we might anticipate or consider for rural planning. While the following perspectives could easily morph into a lengthy paper, they are offered here as a reflection of where we may be headed.

Rural Planning as a planning specialization—While there is much similarity in planning for rural and urban areas and many essential linkages, there are also important differences reflecting the issues, geography, economy, skills, people and perspectives that need to be respected and accounted for within the planning system. Planners need to develop the skill set to effectively manage this complexity. Core to this will be the rural planners' ability to serve as strategist helping to provide key direction.

Planning broadly defined—As a practice, planning will need to

continue to be broadly defined in the rural context. While individual subject expertise is important and at times critical, rural communities are challenged by a broad set of issues. This breadth speaks to the profession's skill set as problem solvers including an ability to think out of the box and to tackle diverse needs. It also speaks to the planner's role as change managers in the ways that they can help communities consider and adopt new practices.

Planners as educators—Related to the need to broadly define planning, rural planners of the future will need to adopt an educator's mind set, helping communities understand the challenges to be faced in the 21st century. Building a community's capacity for change will continue to be a core competency. Planners will need to be skilled facilitators, recognizing that while there is a role for regulation there is also a role for voluntary action and activity. This educational role also coincides with an important role in helping to develop and implement innovative policy and action.

Planning and Development—Within Ontario we have a province of growth and a province of decline or stability. In the last census, despite massive growth in communities close to the

GTA there were a number of rural communities that lost population. While the term "development" does not necessarily mean physical development, it does speak to the importance of community and economic development as an opportunity to build capacity and respond to the challenges faced by many rural residents.

Sustainability continues to be a valid term—While it is easy to get caught up in defining the term, as a concept it seeks to blend key aspects of a community's social, economic and environmental future, thereby

providing a useful goal for future rural and community development.

Connections between rural and urban—While there are distinct issues that are rural or urban in nature, in the future, we will need to increasingly plan for the inter-relationships and inter-dependencies that exist between rural and urban communities. All residents are part of a bigger whole where, for example, rural provide many products and services to urban while urban populations drive many businesses and much of the agriculture, tourism and recreational components of rural economies.

In conclusion, there is one thing that I am confident in saying in response to the question posed at the start of this article: the potential role and need for planners in rural communities has never been greater. The diversity of tasks is endless. The planner's skill set will be constantly challenged and s/he will need to find new and innovative ways to do the job. As a profession, planners have the skill set and influence to make a difference: changing lives and improving life.

Wayne Caldwell, MCIP, RPP, is a professor in rural planning and director of the School of Environmental Design and Rural Development at the University of Guelph. He worked for many years with the County of Huron Planning Department and is a former OPPI President. He is a passionate advocate for the future of rural communities. His research can be viewed at www.waynecaldwell.ca.

Trends, critical events and scenarios

#### **Ontario Planning Framework**

### **Protecting agriculture**

By John Turvey and Arthur Churchyard

he need for long-term protection of agricultural land and the practice of planning for agriculture has long been of public interest in Ontario.

#### **Public policy context**

As early as the 1960s, researchers were taking an interest in the loss of specialty croplands to urbanization in the Niagara Peninsula (Niagara Escarpment Study, 1968). In 1978, the province adopted the *Foodland Guidelines* to assist all levels of

government in planning for agriculture within the land use planning system in Ontario. The guidelines were intended to outline a framework for meeting agricultural land needs and to ensure that an adequate land base for agriculture was maintained into the future.

The Foodland Guidelines were later replaced by the Comprehensive Set of Policy Statements and subsequently the Provincial Policy Statement under Ontario's Planning Act. Many of the



John Turvey

provisions articulated in the *Foodland Guidelines* are still reflected in the 2014 *PPS*, including: identifying prime agricultural areas, relying primarily on the Canada Land Inventory Soil Capability mapping; giving the highest priority for protection to specialty crop areas; limiting non-agricultural uses in prime agricultural areas; and limiting agricultural land fragmentation and lot creation outside settlement areas.

In Ontario and many other jurisdictions, there has been a renewed and growing interest in planning for agriculture, in part because of the spotlight on food as an important consideration in land use planning and burgeoning public interest in local food. For example, in 2007 the American Planning Association adopted its "Policy Guide on Community and Regional Food Planning" (APA, 2007). In 2011, the Ontario Professional Planners Institute endorsed its Call to Action linking healthy communities and planning for food systems (OPPI, 2011).

Since then, the Ontario legislature has passed the *Local Food Act* (2013) and the Premier has challenged the agri-food sector to double its growth rate and create an additional 120,000 jobs by 2020 (Premier's Agri-Food Summit, 2013). This highlights the crucial economic role of the agri-food sector, contributing approximately \$34-billion annually to GDP and supporting 767,000 jobs across Ontario.

As planners, we play an important role in the long-term protection of the agricultural land base, promoting the sustainability of agri-food businesses and minimizing land use conflicts.

Ontario has continued to refine its planning approach to the protection of farmland, especially in the Greater Golden Horseshoe. In 2005, the province approved the *Greenbelt Plan* 



which protects almost two-million acres of agricultural and environmentally sensitive lands, including specialty crop areas of the Holland Marsh and the Niagara Peninsula. This was complemented in 2006 by the approval of the *Growth Plan for the Greater Golden Horseshoe*, which identifies where and how urban growth will occur across the GGH region and, through effective growth management measures, reduces development pressure on farmland.

The 2014 *PPS* clarifies and strengthens a number of key agricultural planning concepts. New policies recognize the importance of local food, the promotion of agri-food and agri-



Arthur Churchyard

product businesses, and the protection of agricultural resources as factors in long-term economic prosperity (2014 PPS section 1.7.1.h). The long-term protection of agricultural resources is strengthened by the requirement to designate prime agricultural areas and specialty crop areas in official plans (section 2.4.2) and revisions to policies related to urban expansions and nonagricultural uses on prime agricultural lands (sections 2.3.5 and 2.3.6),

including mitigating impacts on surrounding agricultural operations and lands.

The 2014 *PPS* also provides more flexibility and opportunity for economic activities on farms, including those in prime agricultural areas. The definition of agriculture-related uses has been revised to provide additional flexibility by not limiting the scale of such operations and allowing them to service the broader farming area (section 6.0). A new term, "on-farm diversified uses" (e.g., home industries, home occupations, agri-tourism and value-added agricultural products) is intended to clarify the range and scope of on-farm permitted uses (sections 2.3.3 and 6.0).

In February 2015, the Ontario Ministry of Agriculture, Food and Rural Affairs posted "<u>Draft Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas</u>" (OMAFRA, 2015). These guidelines are intended to help municipalities, other decision-makers and farmers interpret the range of uses permitted by the 2014 *PPS* in prime agricultural areas.

OMAFRA is also undertaking a review of the "Minimum Distance Separation Formulae and Implementation Guidelines" (EBR, 2015). The objective of the MDS Formulae and Guidelines is to prevent land use conflicts and minimize nuisance complaints from uses that are sensitive to odours from livestock facilities.

The Ministry of Municipal Affairs and Housing has also released two draft discussion documents highlighting policies of the 2014 *PPS* that affect land use planning in rural and northern Ontario. These documents contain concepts and examples that illustrate *PPS* implementation in prime agricultural areas, rural lands and other parts of Ontario's rural landscape.

#### Farmland continues to be lost

Despite all of these initiatives, we continue to lose farmland in Ontario. Between 1976 and 2011, the Census of Agriculture indicates that the total area of farmland in Ontario declined by more than 18 per cent (approximately 1,135,000-million hectares).

Between 2006 and 2011, the Census of Agriculture indicates that the total area of farmland in Ontario declined by approximately 260,000 hectares. While census data can tell us that we are losing farmland, it cannot readily tell us why the land is no longer being farmed. It may be the case that in parts of Ontario where there is limited population growth and development pressure, farmland has typically been retired from production rather than lost to non-agricultural uses. However, in areas such as the GGH, it is likely that the 340,000 hectares of farmland lost since 1976 largely represents conversion to non-agricultural land uses including urban development. Since 2006 alone, the Census of Agriculture indicates that 65,000 hectares of farmland—an area larger than the City of Toronto—were lost in the GGH.

Approximately four-million hectares of prime agricultural lands (i.e., Canada Land Inventory Class 1 to 3 soils) remain available for agricultural production in Ontario. Another two-million hectares of prime agricultural land have already been consumed by roads, infrastructure, urban development and other non-agricultural land uses, or is covered by natural heritage features such as woodlots.

Climate change may pose some opportunities for agriculture by allowing for increased productivity and diversity of crop species and varieties in some parts of Ontario. However, it also poses significant challenges such as increased heat stress on livestock, increased pest volumes, northward migration of pest species, and impacts from extreme weather events (e.g., increased erosion). Climate change may make the productivity of other global food regions less predictable (e.g., drought in California). These factors could increase demand for agricultural land and production in Ontario.

For Ontario's agriculture and food sector to thrive, and ultimately meet the Premier's challenge, it will be crucial to maintain Ontario's farmland as an essential resource for current and future generations. Our favourable climate and water resources make our farmland even more valuable.

#### Moving forward

Planning in Ontario needs to address the on-going trend towards farm consolidation (e.g., farm operations acquiring additional land, expanding size and scope, etc.). At the same time, it is also important to recognize the diverse needs of the Ontario agriculture sector, which produces more than 200 commodities.

Thinking systematically about agriculture and food systems and coordinating land use, health promotion and economic development efforts will be important for continued agricultural prosperity. An awareness of how the food chain connects from farm to fork is needed, particularly as Ontario's food processing sector continues to adjust to global markets. As of 2013, over 65 per cent of the food inputs purchased by food processors in Ontario were produced on Ontario farms (AOFP, 2013).

It is often the role of planners to bring together stakeholders, particularly underrepresented voices. Farmers represent less than 2 per cent of Ontario's population. Also, it is often the

planner who is required to think comprehensively about public interests and work across jurisdictional boundaries. As the profile of planning for agriculture and food systems grows, the challenge for planners is to consider and explore opportunities to enhance our existing policy frameworks, consider integrated strategies and innovative tools to support agriculture in the long term, and work through partnerships.

In 2015, the province launched a coordinated review of four provincial plans that play a critical role in protecting farmland in the GGH: the *Greenbelt Plan* (2005), *Niagara Escarpment Plan* (2005), *Oak Ridges Moraine Conservation Plan* (2002) and *Places to Grow: Growth Plan for the Greater Golden Horseshoe* (2006). The plan reviews, in conjunction with the 2014 *PPS*, provide an opportunity to consider our approach to farmland protection while continuing to balance other provincial interests and planning principles where there are overlapping issues.

John Turvey, MCIP, RPP, is a policy analyst with the Environmental and Land Use Policy Unit of the Ontario Ministry of Agriculture, Food and Rural Affairs. Arthur Churchyard is the rural planner for Central-Eastern Ontario with the Ontario Ministry of Agriculture, Food and Rural Affairs and a Candidate member of OPPI.

#### **Bibliography**

- Niagara Escarpment Study Fruit Belt Report. Niagara Escarpment Study Group, Regional Development Branch, Department of Treasury and Economics. (1968)
- Foodland Guidelines. Ontario Ministry of Agriculture and Food. (1978)
  American Planning Association (APA). "Policy Guide on Community and
  Regional Food Planning". Retrieved 24/02/2015 at <a href="www.planning.org/nationalcenters/health/food.htm">www.planning.org/nationalcenters/health/food.htm</a> (2007)
- Ontario Professional Planners Institute (OPPI). "Planning for Food Systems in Ontario: A Call to Action". Retrieved 24/02/2015 at <a href="https://www.ontarioplanners.ca/PDF/Healthy-Communities/2011/a-call-to-action-from-oppi-june-24-2011.aspx">www.ontarioplanners.ca/PDF/Healthy-Communities/2011/a-call-to-action-from-oppi-june-24-2011.aspx</a> (2011)
- Ontario Ministry of Agriculture, Food and Rural Affairs. "Statistics Census of Agriculture". Retrieved 24/02/2015 at <a href="https://www.omafra.gov.on.ca/english/stats/census/index.html">www.omafra.gov.on.ca/english/stats/census/index.html</a> (2011)
- Ontario Ministry of Agriculture, Food and Rural Affairs. "AgMaps Agricultural Information Atlas". Retrieved 24/02/2015 at <a href="https://www.giscoeapp.lrc.gov.on.ca/web/OMAFRA/EMB/AIA/Viewer/viewer.html">www.giscoeapp.lrc.gov.on.ca/web/OMAFRA/EMB/AIA/Viewer/viewer.html</a> (2011)
- Premier's Agri-food Summit. "The Premier's Agri-Food Challenge: Building on Success". Retrieved 24/02/2015 at <a href="www.omafra.gov.on.ca/english/about/challenge\_paper.htm">www.omafra.gov.on.ca/english/about/challenge\_paper.htm</a> (October 7, 2013)
- Statistics Canada. "Growing more local food opportunities". Retrieved 24/02/2015 at <a href="news.ontario.ca/omafra/en/2013/09/growing-more-local-food-opportunities.html">news.ontario.ca/omafra/en/2013/09/growing-more-local-food-opportunities.html</a>. (2011)
- Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). "Draft Guidelines for Permitted Uses in Prime Agricultural Areas". Retrieved 24/02/2015 at <a href="https://www.omafra.gov.on.ca/english/landuse/permitted
- Environmental Bill of Rights Registry (EBR). "Draft Minimum Distance Separation Formulae and Implementation Guidelines". Retrieved 24/02/2015 at <a href="https://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTI0NDQy&statusId=MTg3Mzg0&language=en">https://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTI0NDQy&statusId=MTg3Mzg0&language=en</a> (2015)
- Alliance of Ontario Food Processors (AOFP). "Ontario's Food and Beverage Processing Industry Strategy". Retrieved 24/02/2015 at <a href="https://www.aofp.ca/pub/docs/Ontarios Food and Beverage Processing Industry Strategy The New Engine of Ontarios Economy.pdf">https://www.aofp.ca/pub/docs/Ontarios Food and Beverage Processing Industry Strategy The New Engine of Ontarios Economy.pdf</a> (2013)

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## Mitigating land use conflict

By Sara Epp and Christopher Fullerton

he complexity of land use planning in Ontario is heightened in rural communities where traditional land uses and new development often result in conflict. This conflict is especially evident in agricultural communities or communities with high amenity value (Kelsey and Vasertein, 2000; Sullivan et al., 2004; Gosnell and Abrams, 2011). Often, such communities are attractive to exurban migrants seeking the rural idyll and bucolic landscapes, which are often perceived to offer an improved quality of life (Kendra and Hull, 2005; Yarwood, 2005; Beesley, 2010). As residential development intensifies in close proximity to agricultural land, conflicts arise between these seemingly incompatible land uses. While planning policies have sought to protect agricultural land (Ali, 2008; Pond, 2009), the intensification of residential development adjacent to active farmland poses a significant challenge for planners, policymakers, farmers and residents.

This article presents the results of a case study conducted in Niagara-on-the-Lake to build understanding of how residential development impacts rural agricultural communities.

Located on the shore of Lake Ontario, Niagaraon-the-Lake is characterized by its tender fruit orchards and vineyards. The *Greenbelt Act* (2005) protects the majority of land within the town, permitting only agricultural land uses. Agriculture is a significant industry, valued at over \$157,000,000 and representing 9 per cent of all gross farm receipts within the Greater Golden Horseshoe (Planscape, 2014).

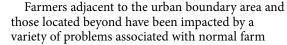
#### **Conflicting perspectives**

Niagara-on-the-Lake is a highly desirable community that has attracted a growing number of exurban migrants seeking its high amenity value. With a well-defined urban area boundary that limits the expansion of urban development, large-scale residential subdivisions have often been constructed in close proximity to active agricultural land. While the vineyards and orchards of Niagara-on-the-Lake do offer a beautiful landscape, new residents are often unprepared for the reality of agricultural activities and are in opposition to the associated sights, scents and sounds. As a result, conflicts have emerged between residents and farmers, challenging the farm industry, local planners and provincial agencies.

The use of spray fertilizers and pesticides is a significant concern for adjacent residents. Given the close proximity of large-scale residential developments and agricultural land uses, farm activities are highly visible. Furthermore, the limited separation distance between these land uses generates concerns

regarding spray drift and its potential impacts on health and safety. In a survey, residents identified potential threats to their children's well-being and the impacts of these chemicals on their health as key concerns.

Residential development has significantly impacted the Niagara-on-the-Lake farming community. Given the influx of new migrants and significant intensification of residential neighbourhoods, farm operations occur in close proximity to new large-scale residential developments. While this is particularly true on the rural-urban fringe, conflicts are not limited to this area. A survey of the farm community noted that conflicts between residents and farmers occur throughout the town, as non-farm residents move into the rural countryside. Scattered residential development, most often on former retirement lots intended for the farm community, have resulted in the development of rural estates for non-farm, exurban migrants seeking the amenity value of the agricultural landscape (Gayler, 2010). As a consequence, the conflicts originally bounded by the urban area have permeated the rural countryside.



practices, such as noise-generating farm equipment and the use of spray pesticides and fertilizers. While much of the rural residential development is a result of planning decisions made decades ago, the impacts of those decisions are only now being realized. With many retirement lots still undeveloped, the influx of non-farm residents outside of the urban boundary is expected to continue.





**Christopher Fullerton** 

#### **Conflict resolution**

Conflict resolution in Niagara-on-the-Lake is ongoing. Farmers have taken a proactive stance to reduce the potential impacts of their farming practices. For example, farmers often spray pesticides early in the morning or later in the evening, when residents are least impacted. Also, many farmers have engaged neighbouring residents in an effort to encourage communication and education regarding farm activities. However, while such measures may reduce the potential for conflict they increase the complexity of normal farm activities, largely to the benefit of non-farm residents.

Land use planning plays a significant role in mitigating the potential conflicts between adjacent land uses. Given the limited availability of developable land within Niagara-on-the-Lake, conflicts are likely to continue as residential development intensifies and the separation between the countryside and

urban land uses diminish. While the town has established minimum separation distances, the separation of agricultural and residential land uses is insufficient and cannot properly address the conflicts. While, potential opportunities exist to require landscape buffers for new residential developments, such as hedgerows, to absorb some spray drift, dust and noises, the importance of education cannot be overstressed.

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#### Sources

- Ali, A. (2008). Greenbelts to contain urban growth in Ontario, Canada: Promises and prospects. *Planning, Practice & Research*, 23 (4), 533-548.
- Beesley, K. B. (Ed.). (2010). The rural-urban fringe in Canada: Conflict and controversy. Brandon, Canada: Rural Development Institute, Brandon University.
- Coles, P. (2004, November 6). Noise from new winery has tired residents complaining of lack of sleep. *The Niagara Advance*, 2.
- Coles, P. (2005, March 26). Residents hope for decision on wind machines used in vineyards. *The Niagara Advance*, 17.
- Gasporotto, L. (2012). *Locational Map of Niagara-on-the-Lake*. Brock University, Geography Department.

- Gayler, H. (2010a). Agricultural land preservation and the contested countryside in Niagara, Canada. In K. Beesley (Eds.), *The Rural-Urban Fringe in Canada: Conflict & Controversy* (pp. 312-326). Brandon, MB: Brandon University, 312-326.
- Gosnell, H., & Abrams, J. (2011). Amenity migration: Diverse conceptualizations of drivers, socioeconomic dimensions, and emerging challenges. *GeoJournal*, 76 (4), 303-322.
- Grey Forest Homes. (2015). *Shaw's Lane*. Retrieved March 2015 from: <a href="http://greyforesthomes.ca/?page\_id=75">http://greyforesthomes.ca/?page\_id=75</a>.
- Kelsey, T.W. and Vasertein, G. (2000). Farming and non-farming neighbours: Conflict, coexistence, and communication. *Journal of Soil and Water Conservation*. 55 (4): 462-466.
- Kendra, A., & Hull, R. (2005). Motivations and behaviors of new forest owners in Virginia. *Forest Science*, 51 (2), 142-154.
- Mountain View Homes. (2015). *Pallek Estates, Virgil*. Retrieved March 2015 from: <a href="http://properties.mountainview.com/homes/new-homesites/pallek/pallek\_estates">http://properties.mountainview.com/homes/new-homesites/pallek/pallek\_estates</a>
- Paradis, A. (2004, November 13). Tired, cranky reader hopes for windmill alternative. *The Niagara Advance*. 4.
- Planscape. (2014). Golden Horseshoe Food and Farming Alliance. Retrieved March 2015 from: <a href="http://niagararegion.ca/living/ap/raeis download.aspx#2010">http://niagararegion.ca/living/ap/raeis download.aspx#2010</a>
- Pond, D. (2009). Ontario's Greenbelt: Growth management, farmland protection, and regime change in Southern Ontario. *Canadian Public Policy*, 35 (4), 413-432.
- Sullivan, W., Anderson, O., & Lovell, S. (2004). Agricultural buffers at the rural-urban fringe: An examination of approval by farmers, residents, and academics in the Midwestern United States. *Landscape and Urban Planning*, 69 (2-3), 299-313.
- Yarwood, R. (2005). Beyond the rural idyll. Geography, 90 (1), 19-31.



Location of a residential development adjacent to an active vineyard in Niagara-on-the-Lake

#### Rural Planning in the U.S.

### **Lessons for Ontario**

By Tom Daniels

he United States and Canada share common rural planning goals, but have differing legal foundations that influence the ways planners try to achieve those goals. Both countries have important farming, forestry and mining industries; and the strength of these industries is crucial to the well-being of

many rural communities. Environmental quality is also important, not just for rural residents, but also because many rural areas depend on a quality environment to attract urban recreationists and tourists. Clean air and water are essential parts of a rural recreation experience and an appealing built environment is a major tourist draw. Finally, rural dwellers want access to services that maintain a good quality of life, such as health care, education and transportation networks. With these goals in mind, one can find successes and shortcomings in American rural planning that have lessons for rural planning in Ontario.

There are two distinct rural areas: the close-in rural areas; and remote rural areas. The close-in rural areas are influenced by their proximity to urban areas. In the United States, these close-in rural areas are often referred to as non-metropolitan counties that are adjacent to metropolitan counties or non-metro adjacent counties. Another distinction is a micropolitan statistical area, which may include one or more remote rural counties or non-metro adjacent counties (U.S. Bureau of the Census, 2014, U.S. Office of Management and Budget, 2013). A micropolitan statistical area has a core urban area of at least 10,000 people, but less than 50,000; there were 536 micropolitan statistical areas comprising 641 counties as of 2013 (U.S. Office of Management and Budget, 2013). Micropolitan areas have the bulk of rural population and economic activity. There are 1,335 rural counties that are clearly remote, outside of micropolitan areas (ibid).

#### **Agriculture**

The U.S. federal government has long equated "rural" with "agriculture." While this definition made sense in 1900 when about one-third of all Americans lived on farms, today less than two per cent of the nation's population is directly engaged in farming and rural areas are far more diverse (Lapping et al., 1989, USDA, 2014). Even so, farm programs still dominate federal rural policy, and have major impacts on rural land uses.

Farmers and ranchers own most of the privately-held land in America, more than 900-million acres (USDA, 2014). Agriculture is largely concentrated in the Midwest Corn Belt, Great Plains, and Central Valley of California. Congress has favored agriculture not only through direct payments to farmers for growing certain crops, but also through the aggressive promotion of ethanol from corn. It has mandated that the U.S. obtain



Tom Daniels

36-billion gallons of ethanol (including 15-billion gallons from corn) by the year 2025 (ibid.). In 2011, for instance, nearly 40 per cent of the U.S. corn crop went for the production of ethanol (Daniels, 2014a).

From 2005 to 2011, more than 200 ethanol plants sprung up in a total of 29 states. The price of corn climbed to over \$8 a bushel, well

above its historic range of \$2-\$2.50 a bushel. Corn growers were soon rolling in money. From 2007 to 2012, the value of U.S. farm output surged by nearly \$100-billion to \$394-billion, an increase of about one-third in just five years (USDA, 2014a). With such handsome returns to farming, land use planning and growth management were hardly mentioned. Today, the price of corn is back below \$4 a bushel. Canada has had a policy that 5 per cent of gasoline must contain ethanol; but a significant portion of the corn for ethanol has been imported from the United States (Pratt, 2013). Ethanol is less energy dense than gasoline; moreover, the amount of energy needed to produce a gallon of ethanol is about equal to the energy

value of a gallon of ethanol (Daniels, 2014a). And burning ethanol contributes to greenhouse gas emissions.

Lesson 1: Avoid growing corn for ethanol

Climate change poses long-term threats to global food supplies, and Canada and the United States are well-positioned to export large volumes of food and animal feed to the rest of the world. Planning for the protection of valuable farmland makes good economic sense in the long run both for local food consumption and for food exports. In addition, farmland protection is an important growth management strategy in metro and micropolitan areas to promote more compact development and minimize costly sprawling development.

Lesson 2: Planning for farmland retention is a good long-term strategy in the face of climate change

The leading U.S. counties in farmland protection use five interrelated planning techniques: a comprehensive plan that states goals and objectives for maintaining land in farm use; agricultural zoning, usually allowing no more than one house per 20 acres; urban growth

boundaries to limit the extension of sewer and water lines into the countryside; preferential property taxation of farmland to avoid taxing farmers off their land; and the purchase or transfer of development rights from willing farmland owners (Daniels, 2010).

Canada has only recently begun to explore the use of purchase of development rights. In part, this is because legally the Crown still enjoys certain rights over land. Yet, some private landowners have sold



Preserved farms in Lancaster County, Pennsylvania

development rights (also known as conservation easements) to private, non-profit land trusts, such as the Ontario Farmland Trust (Ontario Farmland Trust, 2014a).

An important advantage of the sale of development rights is that it preserves farmland by limiting its use to farming and open space through a deed of easement, which is recorded with the owner's property deed and "runs with the land," so that if the land is sold or passed on to heirs, the restrictions in the deed of easement still apply. By contrast, land use regulations can be rather easily changed and are subject to political whims.

An important lesson from the U.S. comes from the State of Oregon's attempt to keep sprawl out of rural areas through regulation—urban growth boundaries and strict rural zoning. Voters in Oregon voted three times to relax rural zoning (in 2000, 2004 and 2007), in part because of a perception that rural landowners were not able to develop their land the way that urban dwellers could. In the early 2000s, Greater Portland also expanded its metropolitan service district to encompass another 24,000 acres of "urbanizable" land (Daniels, 2014b). This additional urban land exceeded the recommended 18,000 acres over a 45 year period in greater Portland's 2040 plan (ibid.).

The lesson from Oregon is that regulation alone will not satisfy rural landowners. The State of Maryland recognized this fact when it adopted the Rural Legacy Program to purchase development rights from willing landowners as part of the Maryland Smart Growth program of 1997. The Rural Legacy program supplements the state's farmland preservation program; the two programs together have preserved nearly 400,000 acres of farmland (Daniels, 2014b). The purchase of development rights also helps with farm viability by providing an injection of cash.

In Ontario, the *Greenbelt Plan* and Growth Plan are strong policy documents but implementation continues to have some challenges. In particular, the building industry needs incentives to develop more high-density housing in existing urban areas and keep development from spilling onto farmlands (see Ontario Land Trust 2014b).

Lesson 3: Hold the line on growth boundaries to maintain the integrity of greenbelts and provide financial incentives for farmland owners to keep their land in farm use

#### **Energy**

Changes in oil and natural gas extraction technology since the mid-2000s have led to a surge in U.S. energy production. Many old oil fields have been given a new lease on life and North Dakota has emerged as a new major oil producer. Natural gas "plays" in the Marcellus Shale of Pennsylvania and eastern Ohio, the Bakken Formation in North Dakota and the Eagle Ford region of Texas, among others have provided a revitalization of regional rural economies. Horizontal drilling and hydro-fracturing ("fracking") have enabled energy companies to squeeze tight oil and loosen pockets of natural gas from deep within the earth. The upshot of this new rural energy wealth is less political pressure for land use planning and growth management, even though the boomtown phenomenon, long associated with energy development, is causing social dislocations and strains on public services.

In Canada, Quebec, Nova Scotia, and Newfoundland have enacted moratoriums on shale gas exploration involving hydraulic fracturing (National Collaborating Centre for Environmental Health, 2014). Ontario does have some natural gas deposits. But it is worth noting that Ontario's neighbor, the State of New York, banned hydrofracturing in 2014 because of environmental quality and health concerns (Gerken, 2014).

Lesson 4: Energy development can bring important economic activity to rural areas, but environmental impacts need to be closely monitored, especially if hydro-fracturing is allowed

#### From regulation to incentives

An obvious trend in U.S. rural areas is the shift away from land use regulation to land use incentives for landowners. The state-level command and control approach to land use regulation occurred in only a handful of states and has largely given way to local control and in most rural communities land use regulations are not highly restrictive.

The overall message for rural communities is that traditional planning has meant planning for development, but rural communities now also need to plan for land preservation to retain key economic and environmental assets.

The Federal Farm and Ranchland Protection Act of 1996 has provided more than \$1.2-billion in matching funds to state and local governments and land trusts (Daniels, 2014a). Today, there are an estimated five-million acres of preserved agricultural land in the United States (Daniels, 2014b).

Tom Daniels is a professor in the Department of City and Regional Planning at the University of Pennsylvania. He is the author of The Environmental Planning Handbook (APA, 2014) and co-author of The Small Town Planning Handbook (APA, 2007).

#### References

Daniels, Tom. 2014a. *The Environmental Planning Handbook* (2<sup>nd</sup> ed.). Chicago: American Planning Association.

Daniels, Tom. 2014b. How Lancaster County, PA Preserved 100,000 of Farmland. Paper presented at The National Workshop on Large Landscape Conservation. Washington, D.C., October 23, 2014.

Daniels, Thomas L. 2010. "The Use of Green Belts to Control Sprawl in the United States," *Journal of Planning Practice and Research*, 25: 2, 255 - 271.

Gerken, James. "New York State to Ban Fracking," The Huffington Post, December 18, 2014.

http://www.huffingtonpost.com/2014/12/17/cuomo-fracking-new-york-state\_n\_6341292.html, Accessed December 20, 2014.

Lapping, Mark B., Thomas L. Daniels, and John W. Keller. 1989. Rural Planning and Development in the United States. New York: The Guilford Press.

National Collaborating Centre for Environmental Health. 2014. Overview of Shale Gas and Hydraulic Fracturing in Canada. <a href="http://www.ncceh.ca/sites/default/files/Overview shale gas hydraulic fracturing Canada Nov 2014.pdf">http://www.ncceh.ca/sites/default/files/Overview shale gas hydraulic fracturing Canada Nov 2014.pdf</a>. Retrieved, December 1, 2014.

Ontario Farmland Trust. 2014a. Home. <a href="http://ontariofarmlandtrust.ca/">http://ontariofarmlandtrust.ca/</a>. Retrieved, December 1, 2014.

Ontario Farmland Trust. 2014b. Farmland News, Spring/Summer 2014. <a href="http://ontariofarmlandtrust.ca/wp-content/uploads/2014/06/OFTNewsletterS2014.pdf">http://ontariofarmlandtrust.ca/wp-content/uploads/2014/06/OFTNewsletterS2014.pdf</a>. Retrieved, December 1, 2014.

Pratt, Sean. "U.S. Corn Making Much of Canadian Ethanol," The Western Producer, May 17, 2013.

http://www.producer.com/2013/05/u-s-corn-making-much-of-canadas-ethanol/, Retrieved, November 28, 2014.

U.S. Bureau of the Census. 2014. Metropolitan and Micropolitan Statistical Areas Main. <a href="http://www.census.gov/population/metro/">http://www.census.gov/population/metro/</a>. Retrieved, November 30, 2014.

U.S. Department of Agriculture. 2014. 2012 Census of Agriculture Volume 1, Chapter 1: U.S. National Level Data. Washington, D.C.: USDA.

U.S. Office of Management and Budget. 2013. OMB Bulletin 13-01. February 28, 2013. <a href="http://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b-13-01.pdf">http://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b-13-01.pdf</a>. Retrieved, November 30, 2014.

### Fostering leadership

By Kara Van Myall

ften the notion of community design is associated with urban design and urban areas. However, community design at its basic level is about how built form can play a role in shaping

the social and environmental well-

being of our communities. Small communities often can't afford to employ a planner to manage land use applications, let alone find the human and capital resources to proactively influence the design of their communities. As a result, design innovation and the ability to challenge the status quo is missing.

While recognizing that community design has the potential to impact the economic well-being of rural communities, too often we repeat the mistakes of the past with outdated and ineffective zoning

regulations, suburban design standards, insufficient public spaces, limited active transportation networks and minimal protection of natural systems. The intent of this article is to

open the discussion on how rural communities can be more engaged in community design.

First, it is important to foster collaboration among stakeholders. Getting people excited about the potential for their community is the fun part. Educating them on what other communities are doing and talking to them about scale and timelines helps stakeholders envision a future where thoughtful community design is inherent in every decision.

One of the most effective methods we have found to help the community define its future is a **Community** Design Toolkit, which incorporate five steps: organize, energize, strategize, visualize and capitalize. The result is a reference document to guide how the stakeholders want to see the community transform. It must be user friendly, easy to interpret and illustrative of what the future can look like.

As we all know, getting Organized with all the partners around the table is often the most cumbersome and challenging step. However, it is essential to involve those that are vested in

the success of the community itself. To help the community mobilize, we have developed a Community Checklist which outlines what is needed. This Checklist is revisited every year through an Annual Report Card, as a reminder of who needs to be around the table and what relationships need to be fostered. This tool has proven highly successful at coordinating partners and streamlining the agenda.

ENERGIZING the community is a powerful experience and forms the backbone of the Community Design Toolkit process. Using a

destination development focus helps to get communities to think about themselves in a new light—as a destination to visit, live in, or open a business in. The key is to develop a

community brand that is translated into every decision point. Through a series of daylong Brand Camps, each community develops a unique community identity it wants to pursue. There are four simple rules to ensure the process doesn't just become an exercise in logo development: Your brand has to be unique. No one else can own it; it has to be authentic to your community; it has to be based on an experience; and it can't be something your target market can do closer to home. The result is a cohesive community vision.

STRATEGIZE priorities through an action plan that highlights short-to-longterm projects and coordinates them based on cost and complexity. Successfully completing a series of projects, albeit small in scale, energizes stakeholders and focuses them on the tasks ahead.



Kara Van Myall







Clockwise from upper left: Ripley Streetscape with inclusion of Movable Street Trees; Southampton trial bump out public notification; community participants at the Southampton brand camp

VISUALIZING the future of community design in our small towns is essential to keeping people on track and developing buy-in across the entire community.

Long range planning and commitment to a clear path forward are the kevs to Capitalizing many of these community design projects. By helping people envision how they want their town to function as well as what they want it to look like, we are starting to see the community transition. Projects that are now brought forward are more aware of community design principles.

In Southampton a working group prioritized walkability and worked with the municipality and a consultant to investigate options to make the main street more conducive to pedestrians. The result was a low cost temporary test of reduced curb widths utilizing paint and bollards on the main street. This increased pedestrian visibility and walkability across a large right-of-way.

In rural communities the keepers of the community design vision have to be the community itself. Smaller municipalities simply don't have the resources to drive the agenda on their own.

A working group in Wiarton, has been successful in moving the farmer's market into the downtown core and redeveloping the downtown parkette. Currently it is collaborating with the municipality to reconfigure the streetscape to be more pedestrian friendly.

The local committees established through this process are flourishing in Bruce County and influencing the private projects and public budgets that have the potential to transform their communities.

The Community Design Toolkits referenced in this article can be viewed at www.sprucethebruce. com. The toolkits are always evolving. What started off as a community design

initiative is now evolving to incorporate economic development and marketing and promotion strategies. Watch for updates in 2015. Spruce the Bruce is a regional

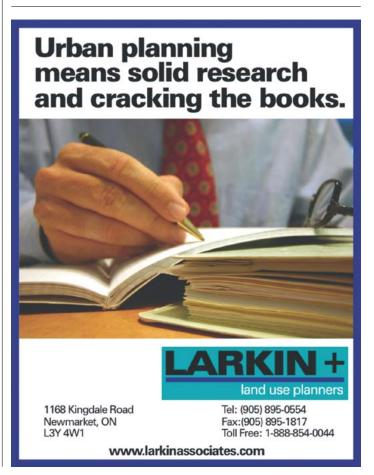
revitalization program run by the County of Bruce.

Kara Van Myall, MCIP, RPP, is the manager of corporate policy with the County of Bruce and a member of the OPPI Community Design Working Group. She welcomes the opportunity to discuss challenges and successes of community design in rural environments.

In Ripley the community rallied to create movable handcrafted tree containers to line its streets. Incorporating street trees into a road reconstruction project was presented as an insurmountable obstacle. so they got creative.



Wiarton Downtown Parkette after farmers market relocation



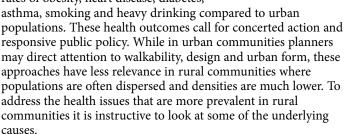
### Municipal strategies

By Wayne Caldwell, Paul Kraehling, Erica Arnett and Karen Loney

ural communities are home to approximately one in five Ontario residents. These residents experience a unique environment and a unique lived experience that contributes to specific and often negative health outcomes. While there are many positives associated

with living in rural communities (amenity value, lifestyle and employment, among others) there are also many differences compared to urban centres negatively impacting life, livelihoods and lifestyles. These differences range from reduced economic opportunity, to reduced amenities and services, to a heavy reliance on the automobile for transportation. Planning and the planning process, however provides an opportunity to respond to many of these issues. In response the rural planning program at the University of Guelph in partnership with health and planning professionals developed Healthy Rural Communities: A Guide for Rural Municipalities (2015). This paper provides an overview of the report and tool kit.

There are a number of health concerns that afflict many rural residents. Statistically rural residents have higher rates of obesity, heart disease, diabetes,



The Public Health Agency of Canada (2013) has identified 12 key determinants of health (see Figure 1). While these factors potentially impact all Canadians, there are key differences that point to the particular challenges rural residents and communities face. Notably, incomes, education and employment opportunities are more limited in rural areas than in urban centres. Working conditions, safety and job security also impact rural residents and can impact health. There is more limited access to health services and populations tend to be older. There are also important differences in the built environment. The rural physical environment, for example, dictates the need for an automobile for daily tasks and if not available or affordable families and individuals tend to suffer. Combined these trends result in counter intuitive outcomes—rural residents tend to have less access to fresh food and they tend to receive less exercise than their urban counterparts.



Wayne Caldwell



Erica Arnett



Given these determinants of health and corresponding health outcomes, what are the opportunities for targeted planning strategies and how must these strategies necessarily differ from more urbanbased approaches? This fundamental question led to the initiative to develop Healthy Rural Communities: A Guide for Rural

Municipalities. The research included the following key objectives:

- Identify existing effective land use planning policies and models of practice for healthy rural built environments.
- Recognize the benefits of a coordinated approach to rural planning and development that uses a range of regulatory and non-regulatory tools.
- Identify innovative land use planning policies and initiatives that can contribute to healthy communities and healthy populations.

The methods used in the development of this report included the creation of an extensive <u>literature review</u>, a survey of municipal and health unit employees from across Ontario, the identification of innovative practices, and the use of key informant interviews with input from a broad based coalition of planners and health unit staff. Public Health



Paul Kraehling

**Karen Loney** 

Ontario funded the development of this tool kit with more than a third of Ontario's public health units participating on the advisory committee. The report was developed with reference to the excellent work on healthy communities completed by OPPI and the Ministry of Municipal Affairs and Housing including *Planning by Design: A Healthy Communities Handbook*.

The Healthy Rural Communities report helps to establish a response to some of the challenges that directly or indirectly impact the health of residents of rural Ontario. Planning processes can help to engage residents, leading to strategies that can influence the built environment and the local economy. These range from community design to local economic development strategies to create employment and enhance



quality of life. The tool kit brings a rural lens to issues that are often viewed from an urban perspective. This tool kit offers a number of planning and development strategies that can help rural municipalities create a healthier community and in turn a healthier population.

Figure 2 identifies 13 actions that are profiled within the report. There are also a number of case studies offered in support of these actions, which fall into several broad categories. Some fall under the umbrella of land use and environmental planning (such as design, nature, water quality and air quality); others speak to economic challenges and opportunities that rural communities sometimes face (such as tourism, agriculture, local food); and still others reflect a more functional planning approach (such as planning for special age groups, climate change, and safe and affordable housing). Each are discussed under three headings: why is the action important; what are key points from the research (literature review and case studies); and recommendations for rural municipalities.

The report also recognizes that many rural municipalities lack staff and financial resources and struggle with how to develop a basic approach to address these issues. It identifies 10 process actions that can help to organize a municipal response. While these will be relevant for both rural and urban municipalities they are likely to resonate more strongly with small resource-strapped municipalities. be relevant for both rural and urban

Public health officials have a specific interest in healthy communities. In part, this is driven by new built environment requirements released in the 2008

Ontario Public Health Standards and the 2013 Ontario Public Health Sector Strategic Plan. In particular, there is a specific interest in fostering healthy communities through improvements to active transportation, air quality, access to affordable healthy food, injury prevention, climate change, safe and affordable housing, economic development and the greening of communities.

Planners share many of the same goals using somewhat different tools. Planners seek to improve quality of life for residents through innovation in land-use planning policies, which can lead to improvements to the rural built environment. The 2014 Provincial Policy Statement is one key document that guides planners in terms of policies in rural communities. By using



Fig. 1: Key Determinates of Health, (PHAC, 2013)



Fig. 2: Healthy Rural Communities: A Focus on Thirteen Actions

Planning Act tools and non-regulatory initiatives in partnership with community members and health promoters, rural planners have the ability to contribute to the development of healthy communities. Healthy Rural Communities: A Guide for Rural Municipalities (2015) invites rural planners to broaden their mandate in rural communities by bringing an important focus to rural development including economic, social and environmental considerations.

Wayne Caldwell, MCIP, RPP, is a professor in Rural Planning and Director of the School of Environmental Design and Rural Development at the University of Guelph. A former *President of OPPI, he is a passionate* advocate for the future of rural communities.. Paul Kraehling, MCIP, RPP, is a Phd Rural Studies student at the University of Guelph, School of Environmental Design and Rural Development. His research interest is the use of 'green infrastructure' in building rural community sustainability. Erica Arnett has been a Health Promoter at Elgin St Thomas Public Health for 10 years and before that was at the Huron County Health Unit. Since 2006, the focus of her work has been on health and the built environment. Karen

Loney is a health educator at the Chatham-Kent Public Health Unit. She holds a Master of Leaders in Business and Non-profit and enjoys connecting people together to mobilize change.

Readers are encouraged to visit the project website or contact Wayne Caldwell.

#### Footnote

<sup>1</sup> Public Health Agency of Canada - PHAC (2013) What Makes Canadians Healthy or Unhealthy? Retrieved from: <a href="http://www.phac-aspc.gc.ca/ph-sp/">http://www.phac-aspc.gc.ca/ph-sp/</a> determinants/determinants-eng.php





### **Considering the rural context**

By Emily Hill

t is well documented that a community's built environment can significantly influence the physical and mental health of its residents. A recent report sought to increase knowledge of the relationship between health and the built environment in rural contexts, while providing a local application to Middlesex County.

This article highlights findings of that report—<u>Linking Health</u> and the Built Environment in Rural Settings: Evidence and Recommendations for Planning Healthy Communities in

Middlesex County. The report was initiated by the Healthy Communities Partnership Middlesex-London and written by the Human Environments Analysis Laboratory at Western University in collaboration with the Middlesex-London Health Unit.

For governments to continue meeting the health and safety needs of their citizens, community design, investments in infrastructure and commitment to policies that promote healthy communities are essential. The report provides evidence and



Emily Hill

recommendations showing how rural environments can be designed and retrofitted to promote healthier behaviours, increase safety and improve health. An evidence-based approach was used incorporating a review of academic literature, a scan of relevant policy documents and interviews with key informants. The recommendations throughout the report suggest how the rural built environment can be designed and retrofitted to promote healthier behaviours, increase safety and improve population health. They are focused around four priority topics: active living, road safety, food systems and healthy eating and social capital and mental well-being.

Active living—The goal is to increase opportunities for active living within the built and natural environments for all residents, especially for older adults, children and those living in low-income households. This can be achieved through both active transportation (e.g., walking, cycling) and physical recreational activities (e.g., sports, play). This helps in meeting residents' daily recommended levels of physical activity that can either maintain or improve individual health. Among the 21 recommendations is one to provide amenities and built form that will best support active transportation in all new residential, commercial, and industrial developments, including sidewalks on both sides of the street, bike lanes, and a well-connected trail network.

Road Safety—The goal is to provide a safe transportation system to decrease the number of injuries and deaths among all road users, including pedestrians, cyclists, motorists and their passengers. Measures such as increasing residential density, improving road design (e.g., complete streets) and separating pedestrians and cyclists from vehicular traffic can be used to improve overall safety. Twelve recommendations are proposed, including collaboration among municipalities and the county to provide a continuity of cycling infrastructure (both on and

off-road routes/trails) including bike lanes, trails and paved shoulders.

Food Systems and Healthy Eating—The goal is to increase residents' intake of healthy foods by increasing the accessibility, affordability and sustainability of the local food system, which includes food production, processing, distribution and consumption. There is strong evidence that the consumption of nutritious food contributes significantly to a healthy lifestyle and gaining access to foods which contribute to good health is important for nurturing and maintaining healthy dietary habits. Accessibility to grocery stores, community gardens, and farmers' markets all improve access to and affordability of healthy foods and levels of food security. Among the 15 recommendations proposed is one to facilitate the formation of farmers' markets, especially in settlement areas without a local grocery store.

Social Capital & Mental Well-being—Social capital reflects the degree to which citizens are involved in their community, trust one another and interact on a daily basis. Mental wellbeing is defined as a state where people realize their potential, can cope with the normal stresses of life, work productively



Food systems and healthy eating, just one of four priority topics

and fruitfully, and are able to make a contribution to the community. The goal is to increase social interaction, enhance social capital and promote mental wellbeing through well-designed built environments. The literature identifies five key factors of the rural built environment that

are linked to social capital and mental well-being: population density, availability and accessibility of social, recreational and greenspace destinations, diverse housing, land-use mix and safety. Of the seven recommendations one is to ensure a diversity of housing choice, including a mixture of dwelling types, affordable and mixed-income options, non-traditional arrangements and universal design features to support more complete communities and foster aging in place.

Emily Hill, RN, BScN, MA, is a public health nurse, with the Healthy Communities & Injury Prevention team of the Middlesex-London Health Unit. The report, Linking Health & the Built Environment in Rural Settings: Evidence and Recommendations for Planning Healthy Communities in Middlesex County, was prepared by Dr. Jason Gilliland, Dr. Andrew F. Clark, Lucie Richard, Dr. Richard Sadler and Emily Hill, in collaboration with the Middlesex-London Health Unit in 2013. This article includes excerpts from the report.

## **Coordinated transportation framework**



By Stephanie Simard and Dennis Kar, contributing editor

ack of public and community transportation is a significant issue facing many rural and remote communities in Ontario. In rural communities, the issue is less about congestion reduction and attracting automobile drivers to more sustainable modes and more about providing mobility to residents who do not have access to a car or are unable to drive a car (primarily due to age or affordability).

For a number of seniors, lack of mobility limits opportunities to access health care and essential services that allow them to continue to

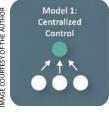
age at home. This can result in lengthy hospital stays or premature moves to nursing homes. Issues such as rural youth unemployment and access to education/skills training is a particular problem and if rural areas are to sustain a high quality labour force, lower income segments of the population need to be mobile and able to get to jobs or training in adjacent communities despite having lower levels of car ownership. Many employers have had difficulty attracting a quality labour force without transportation options available to



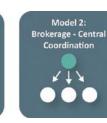
employees. This can limit economic development opportunities for rural communities.

While the need for improved transportation services is evident, the planning and delivery of public and community transportation in rural areas faces a number of challenges:

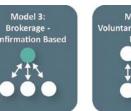
- The low density and dispersed nature of population, employment and services makes it difficult to provide effective transportation that meets all needs within the community at reasonable costs
- The longdistance nature of nature of trips (often travel is to adjacent urban centres to access services) makes the per trip cost

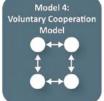


of rural transportation expensive











Coordination models to consider

A lower tax base makes available funds for transportation services scarce, particularly when competing with other municipal priorities and established provincial programs.

This has resulted in a lack of public and community transportation service in many rural communities. Where transportation services are in place, the availability, frequency and geographic area where service is provided is limited due to high costs and limited revenue opportunities (due to low ridership). For rural residents without access to private automobiles, the lack of public transportation is a significant barrier and an impediment to remaining active members of the community.

#### Traditional approach to rural mobility

A number of municipalities, agencies, private sector companies and other organizations in rural communities have responded to fill the rural mobility gap. Some municipalities have invested in small public transit systems that operate within the community and connect to nearby urbanized towns and villages. Non-profit community care or social service agencies have established a network of vehicles and volunteer drivers to provide transportation



population group or trip type (e.g., medical trips). Many nursing homes and retirement homes have also purchased small buses to provide transportation for residents, although these vehicles often sit unused throughout much of the day. The result is a disconnected network of transportation providers, each operating under its own mandate or eligibility criteria, leaving mobility gaps that go unfilled.

that is typically focused on a targeted

#### Filling the gap

To address these challenges, a number of rural communities have established a coordinated transportation framework: "a process in which two or more organizations interact to jointly accomplish their transportation objectives." The shared responsibility improves resource management and helps to achieve greater cost-effectiveness in service delivery. This results in savings which can be used to

> enhance the number of trips provided and/or the quality of transportation for all clients serviced by the coordinated framework. In an effort

to share knowledge of effective coordinated transportation models and emerging innovation in rural transportation, the Rural Ontario Institute, the Ontario Healthy Communities Coalition and Dillon Consulting Limited collaborated to develop a resource guide called "Towards Coordinated Rural Transportation." The document provides a resource tool for organizations in rural communities to come together and develop or enhance an existing coordinated transportation framework.

#### Coordination models to consider

There are various coordination frameworks in place that allow communities to improve mobility. The Resource Guide outlines four models commonly found in rural communities. Each model provides a different degree of coordination; from a more centralized framework to a more autonomous framework. The degree of coordination varies and is dependent on a number of factors. The highest level of coordination is not necessarily the most appropriate and should not be set as a target simply because it sits on top of the hierarchy. Each community must decide the level of coordination that will best fit its needs and make the most effective use of existing transportation resources.

Centralized Control—This model provides the highest level of coordination where two or more partners enter into an agreement to have one organization take full responsibility for transportation services within the community. In this case, all transportation operations are combined, the fleet is pooled and everything is managed by the lead organization.

Deseronto Transit provides a good example of this model. Deseronto Transit is a regional transit service that links Napanee, Belleville, Picton/Bloomfield, Tyendinaga Territory, Tyendinaga Township and Deseronto (lead organization). Deseronto owns the fleet and provides the service. A steering committee representing the town, county, community care and social service agencies guides service provision along the two transit routes within Hastings County and to the City of Belleville.

Brokerage—This models offers a common framework that allows individual agencies to retain some autonomy. In this case, individual organizations retain ownership and operation of their vehicles. However, customers looking for transportation service do so through a single point of contact (lead organization). This point of contact plans and schedules transportation services and determines the best available service to meet the needs of the client and improve the efficiency of the overall network. The trip is delivered by one of the individual transportation providers that form part of the partnership.



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Toll Free: 1 (855) 771-7266 www.gagnonlawurbanplanners.com EasyRide provides a good example of a Brokerage Model. EasyRide consists of five community care agencies in Huron and Perth County that have entered into a formal partnership to provide coordinated demand-responsive transportation services. In this model, one agency books and schedules all trips on behalf of the five member agencies, which have retained control of their own vehicles and drivers. This allows the transportation coordinator to schedule trips in the most effective manner, meeting the needs of the customer, irrespective of the agency to which the customer is registered. Resources are more effectively allocated, allowing for greater shared rides and the ability to accommodate additional trip requests using the same resources. The result has been a 120 per cent increase in the number of coordinated trips since 2010.

There are several examples of transportation networks in Ontario's rural communities that show the breath of solutions that can be implemented through coordination. Many of these can be found in a compendium document entitled "Accelerating Rural Transportation Solutions: Ten Community Case Studies from Ontario" by the Rural Ontario Institute and the Ontario Healthy Communities Coalition.

#### **Coordinating transportation services**

The process of coordinating transportation services is challenging and will require commitment from a group of organizations that share a common interest in enhancing transportation services within their community. Coordination between two or more municipal and/or non-profit transportation providers is the most common arrangement, but successful models have also involved funding agencies, health service providers, school boards, major employers and referral agencies. Identifying partners that share a common vision and can contribute to the coordination framework is the first step to implement or improve upon an existing coordination model.

The resource guide breaks down the process of coordination into a series of six steps:

- 1. Identify two or more organizations that share a common goal that coordination will help achieve
- 2. Inventory existing transportation services and key stakeholders
- 3. Identify service demands and gaps / implementation issues and opportunities
- 4. Assess different coordination models
- 5. Identify the building blocks of the preferred coordination model
- 6. Select a preferred coordination model.

Providing mobility in rural communities is a challenge and is difficult to accomplish by municipalities and agencies working in isolation of each other. Resources are scare and funding opportunities are limited, yet the demand for transportation continues to grow leaving mobility gaps that impact the quality of life in rural communities. A coordinated transportation model is one of several management or problem solving tools that can be used to improve transportation services in rural areas.

<u>Stephanie Simard</u>, M.A.Sc., MCIP, RPP, is a transportation planner at Dillon Consulting Limited. <u>Dennis Kar</u>, MUP, MCIP, RPP, is an associate at Dillon Consulting Limited and the contributing transportation editor for the Ontario Planning Journal. He can be reached at <u>dkar@dillon.ca</u>. Stephanie and Dennis were the lead authors of the <u>Towards Coordinated Rural Transportation Resource Guide</u>.

#### Footnote

<sup>1</sup> TCRP Report 101 – Toolkit for Rural Community Coordinated Transportation Services, pg. 4

### The Humbertown Master Plan

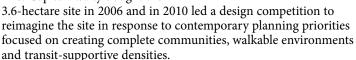
By Cyndi Rottenberg-Walker, Leigh McGrath, Christine Fang-Denissov

n built-out cities like Toronto, finding suitable locations for infill and intensification can be challenging. One distinctive part of the city's more suburban landscapes that still offer significant opportunities for intensification are suburban strip malls. Through a rigorous design competition and city

approvals process, a new master plan for the Humbertown Shopping

Centre in Etobicoke will guide its evolution from a single-purpose commercial plaza surrounded by surface parking into a fully integrated mixed-use community.

When it was built in 1956, the Humbertown Shopping Centre in the Toronto suburb of Etobicoke was a state-of-the-art community retail amenity offering a unique outdoor mall experience in the Humber Valley Village community. First Capital Realty bought the



The winning concept, prepared by Urban Strategies Inc. and LGA Architectural Partners, proposed breaking up the large site with a street and block pattern that is animated by integrated residential and commercial uses organized around a generous new public realm framework. At the heart of the master plan is the Village Square, a central public gathering space for community events. The site is anchored to the west by Lambeth Community Green, a new neighbourhood parkette and on the east by Humber Court, a vibrant dual-storey shopping mews. The Humberline, an elevated pedestrian route, traverses the site, connecting each of the open spaces to the larger community. Considerable attention was given to the five mixed-use buildings that range in height from two to 12 storeys. The development blocks were carefully integrated into the surrounding mature neighbourhood characterized by single-family dwellings, apartment buildings and a robust tree canopy. Using significant setbacks from the streets, stepbacks and terracing of the building forms, traffic calming measures and generous landscaping, the master plan makes clear efforts to

> complement the neighbourhood in numerous ways.

Achieving the vision for coordinated design and planning competition, First Capital Realty Partners, Kirkor Architects, Scott Torrance Landscape Architect

Humbertown required a effort involving many parties. Following the initial design formed a multidisciplinary team including Tridel, Urban Strategies, LGA Architectural

Inc., BA Group and Tate Economics. Since 2011, the team has been working with city staff and the local community through one of the most extensive community participation processes ever undertaken in Toronto to refine and modify the Humbertown proposal to balance the interests of all groups

As with any complex project that brings significant change, the proposal was met with strong concern from the local community, spearheaded by the local neighbourhood association, the Humber Valley Village Residents Association. The association was wellorganized and professional, repeatedly expressing its objectives and concerns, and hiring its own team of consultants to offer alternative proposals. Public meetings related to the project drew thousands of local residents and considerable media attention. While the public process was often acrimonious, the First Capital Realty team was committed to working with the city and the









Leigh McGrath **Christine Fang-Denissov** 



Looking north east, showing open spaces along the east-west access



The Village Square is the heart and centrepiece of Humbertown





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community to achieve mutually agreeable outcomes. After six comprehensive revisions to the proposal, in 2013 a final master plan was agreed to through mediation at the Ontario Municipal Board and unanimously supported by the residents' association.

The story of the Humbertown Shopping Centre redevelopment in Toronto is one that will, and should, repeat itself many times, as well-located older community retail plazas reach the end of their useful lifespan and become an excellent focus for intensified mixed-use developments that better correspond to contemporary urban life styles. While the approval process for Humbertown could potentially have been eased by a policy regime that more explicitly supported intensification on these kinds of local commercial sites similar to the avenues policies in the Toronto official plan for instance—there will likely never be a typical process. Each intensification site will be unique, with its own set of special circumstances, important issues and considerations. It is the role of the planners and advocates involved in these processes—within the community, the city and in the private sector—to recognize these circumstances and chart a course appropriate to the context.

The ultimate success of the Humbertown process can be attributed to the ongoing commitment from all parties to participate fully in meetings and mediation, to be open to negotiation and to maintain a level of flexibility in determining what was ultimately appropriate in this unique context.

Cyndi Rottenberg-Walker, MCIP, RPP, is a partner at Urban Strategies whose work ranges from campus and community master plans through to development approvals and comprehensive policy studies. Leigh McGrath, MCIP, RPP, is a senior associate and planner at Urban Strategies whose work involves complex municipal planning approvals, urbanizing and creating transit supportive densities in former suburban landscapes and measuring environmental performance of growing cities. Christine Fang-Denissov, MCIP, RPP, is an associate urban designer and planner at Urban Strategies, with a multidisciplinary background in architecture, urban design, and transportation planning.

The Humbertown Master Plan is a 2014 Excellence in Planning winner in the *Urban/Community Design category.* 



In Print

### The Virtual Self: How Our Digital Lives are **Altering the World Around Us**

Author: Nora Young Publisher: McClelland & Stewart Ltd. 219 pages

Reviewed by David Aston, contributing editor

o you self-track? If you track how you used the hours in your day, budgeted your money, used a pedometer, then you self-track. More and more of us are keeping track of the statistics of our lives, leading lives that are more numerically documented. We are doing this as technology continues to develop so rapidly that we can find a program or an app that makes it fun, focused and interesting to track our lives.

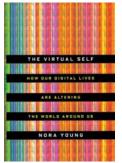
But what does access to all of this information mean to us, or do for us as people and communities? How can we utilize the information and link it together in a way that assists us with planning our communities and managing change, rather



Dave Aston

than creating a world ever more concerned with privacy and control of personal information? These are some of the questions that are explored throughout Nora Young's book, The Virtual Self, in which she presents current information in a rapidly changing landscape of technology.

Author Nora Young is the host and creator of a show about technology and culture (Spark) that airs nationally on CBC. She started monitoring the daily habits of her life to understand the growing phenomenon of tracking and to understand more about herself through the process. What she found was that tracking expressed her life in a digital and numerical way that she came to think of as her "data map."



A value of self tracking or selfmonitoring to individuals and to the planning profession is the opportunity to consolidate, integrate and examine information collected and create patterns or data maps. Location-specific information can inform decisions on where people go, why they go there, how long they stay, services they use, the experience they had and all of the linkages in between. Selftracking and the digital mapping of the information, if collected and managed correctly—a debate unto itself—may provide powerful information to planners and decision makers. However, it comes with a caution: we need to be careful not to misinterpret or overstate what digital information is telling us and become too reliant on the data.

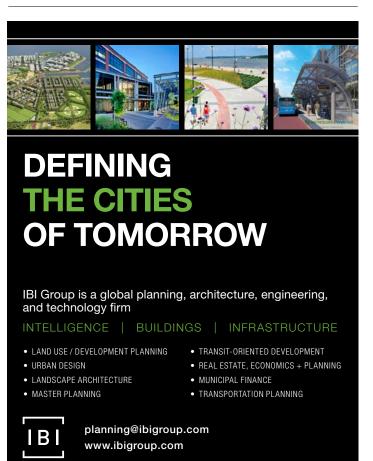
Young suggests that if we wrestle with the issues of privacy,

information control and data management now, we can harness the virtual information we all produce in the world around us to "make our real world, our bricks and mortar neighbourhoods, better."

As a planning community, we have successfully adapted and engaged in the realm of social media as a form of public engagement. Our next challenge and opportunity may be to understand how to gather, sort, analyze and meaningfully apply information collected everyday.

Nora Young was a keynote speaker at the 2014 OPPI symposium.

David Aston, MCIP, RPP, is a partner with MHBC Planning, Urban Design and Landscape Architecture in the Kitchener office. His practice includes policy development and land use planning for both public and private sectors throughout Ontario. If you are interested in completing a book review and adding to your professional credit, please contact David at daston@mhbcplan.com.



### **Departments**

PRESIDENT'S MESSAGE

### Enhanced Professional Regulation

By Paul J. Stagl

PPI <u>Council</u> continues moving forward on enhanced <u>professional regulation</u>. We have had some very successful member engagements and events in 2014 that built on consultations and input over the past few years. We expect 2015 to be very active with District events, Journal articles, e-updates

and other opportunities to dialogue about professional regulation. Council is aware there are still some members who have not yet become engaged, thus communication remains a priority.

As we move forward, we will also be speaking more about some of the legislative details that might be available for us to consider. The recent Saskatchewan RPP legislation is a model that keeps coming up as an example of contemporary legislation, but with some additional enhanced title



protection. In Ontario, the recent Human Resources professional legislation, among others, is being considered the legislative template with which we will likely be working.

Discussions with the province continue with an expectation that 2015 will provide an opportunity to focus on which of the legislative options best works for all involved. Stay tuned for further updates.

#### CONTINUOUS PROFESSIONAL LEARNING

### **Finetuning**

By Brian Brophey

PPI members' first year of formally documenting Continuous Professional Learning units has been a resounding success. Over 90 per cent of members met their CPL requirements in 2014, the first year it was mandatory.

While the CPL Program Guide, particularly the tables on pages 6 and 8, address most situations about claiming learning units, questions about three scenarios keep cropping up. Here is the short answer:

- Time spent on volunteer committees, boards, etc. is capped at 5.0 Independent & Self-directed learning units per year. This is because such committees are not intended to provide substantive planning knowledge and skills to committee members.
- Activities that are part of your job—reading a project file or related document(s)—do not qualify as a CPL activity. However, attending a lunch'n'learn session organized by your employer does qualify for Organized & Structured learning units.
- Attending a full-day workshop is unlikely to comprise a solid eight hour stretch. The learning units claimed should reflect the pattern of the day. If the full-day session is a guided tour, field study or mobile workshop then travel time is assumed and only 4.0 learning units may be claimed.





CPL enforcement will change slightly in the coming year. Members who fail to meet the 2015 CPL requirement by March 1, 2016 must pay the assessed penalty fee and backlog enough CPL learning units to meet the 2015 CPL requirement by June 30, 2016. Members who do not meet both of these conditions may not renew their 2017 memberships. Also, later this year the Professional Standards & Registration Committee will begin random audits of members' CPL claims.

Brian Brophey is OPPI's Registrar and Director, Member Relations.

#### **PROVINCIAL NEWS**

### Regional resilience in the GGH

By Leah Birnbaum, contributing editor, and Zack Taylor

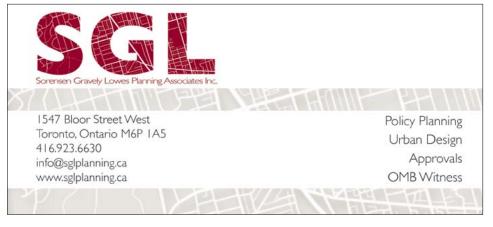
esilience may be planning's new catchphrase. Over the past decade, organizations from the United Nations and the World Bank to the Rockefeller Foundation and the Brookings Institute have focused their attention on the resilience of cities. The term can also be found in the province's newly launched coordinated land use planning review. One of the six goals around which the review is organized is "addressing climate change and building resilient

communities." In that context, resilience is primarily about guiding land use in order to increase the region's capacity to respond to and recover from extreme weather events. While the ability to bounce back from natural disasters is a wellrecognized aspect of urban resilience, resilience thinking has also been applied to other stresses and threats faced by cities: economic recessions, demographic change, infrastructure failure and armed conflict.

To explore the Greater Golden Horseshoe's resilience to potential future challenges, the University of Toronto's Program in Planning recently partnered with the Urban Land Institute to form the Project on Regional Resilience. With funding from the Ministry of Municipal Affairs and Housing, four thematic workshops were held with professionals and experts to discuss the region's assets, potential future threats and risks and the need for policy interventions. Invited participants represented a broad range of expertise, including land use planning, land development, social services, geriatric care, economic development, housing markets, demographic forecasting, public finance, architecture and urban design and infrastructure planning. The workshop results are being synthesized into a discussion paper that is anticipated to spark a broader public discussion, which will inform the province's coordinated plan review.

A resilient region is one that is prepared for both sudden shocks, such as extreme weather events and economic recessions, and slow shifts that may take place over decades, such as climate change, the greying of society and the depletion of fossil fuels. The need to build a more resilient region is at once obvious—for example, social service delivery must respond to an ageing population—and bewildering. How can we plan for future needs with short political cycles, constrained public finances and unknown risks? Drawing







on their own expertise, experience and research, the 28 participants in the Project on Regional Resilience tackled these questions and more.

Several general messages resounded. Participants recognized that the Greater Toronto Area's rapid growth over the past 75 years is due to a powerful combination of assets. These include its inland geographical location in proximity to markets, a diverse manufacturing and services economy, a large and diverse labour pool, effective planning and governance systems, abundant fresh water, and protected natural assets. At the same time, participants voiced concerns about the future. Echoing recent reports by the

United Way, the Metcalf Foundation, the Toronto Region Board of Trade and others, participants identified numerous threats and risks. These included rising social inequality and poverty, especially among recent immigrants, the hard infrastructure deficit, lagging innovation and productivity, chronic under-investment in social infrastructure, and the ability of our built environment to adapt to a future in which households are smaller and older and energy is much more expensive.



Leah Birnbaum

The conversation then turned to how to foster resilience—how to anticipate threats and mitigate risks. Here is some of what we heard.

First, policy frameworks and plans must be flexible if they are to adapt to changing circumstances and implementation must embrace a habit of continuous learning. For example, several participants in the economic-themed workshop argued that employment land protections are too blunt an instrument and are insufficiently connected to economic development objectives at the regional scale. In an interesting parallel, some in the social-themed workshop argued that land for social and community facilities should be protected so that facilities can adapt as neighbourhoods change. One participant illustrated this through a scenario where a public building was transformed over 50 years from a school to an adult daycare to a long-term care home and back to a school. However, grant-funded social service organizations are often squeezed out by rising rents when neighbourhoods intensify. The present debate over the use of school buildings as community hubs illustrates the same dilemma.

Second, decision makers must be attuned to complexity and the potential for unintended consequences. For example, the participants in our fiscal- and environment-themed workshops called for more complete user-pay models for infrastructure of all

kinds, from water pipes to roads, to promote more efficient public investment and more compact urban form. The social-themed workshop, however, highlighted the negative impact of regressive taxation on vulnerable communities. Directing public finances to achieve efficiency and environmental objectives cannot ignore potential social impacts. Policymakers must not only recognize complexity but, in the words of one participant, aspire to "do no harm."

Third, almost all participants shared the assumption that Ontario operates, and will continue to operate, in an environment of scarce public resources. As labour market participation rates



Zack Taylor

decline with an ageing society, so too will tax revenues. There was broad consensus that the provincial government should go much further in tying infrastructure spending to performance. In particular, up-zoning of centres and corridors should be a precondition of investment in transportation infrastructure. Municipalities should adopt a business case approach to assessing infrastructure and urban development projects to maximize future revenues. A key challenge is to harness private and pension fund capital to achieve

public ends through public-private partnerships that are carefully structured to maximize public benefit and minimize public risk. Most participants agreed that our leaders have not been honest with the public about a basic fact: infrastructure and services cost money and at some point we will have tolerate higher taxes and levels of borrowing to pay for them.

Improving resilience is a useful principle for policymaking and planning in urban regions. It challenges us to think about long-term trends in terms of the risks they pose, and to see how economic, social, environmental, and fiscal dimensions of urban development are linked. The promise of the *Places to Grow Act* and the *Growth Plan for the Greater Golden Horseshoe* is that it would link physical planning to social and economic objectives. Considering the region's resilience during the coordinated plan review provides an opportunity to take those links to the next level.

Leah Birnbaum, MCIP, RPP, is a freelance urban planning consultant in Toronto. Leah is the OPJ provincial news contributing editor. She is coordinating the Project on Regional Resilience. Zack Taylor, PhD, MCIP, RPP, is an assistant professor at the University of Toronto, Scarborough and the lead researcher in the Project on Regional Resilience.





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### Dialogue on impact and opportunities

By Melanie Hare

en years into the provincial growth management framework in the Greater Golden Horseshoe, there is a remarkable opportunity to reflect and heartily debate the implications—successes and impacts—of the four plans and their policies—Growth Plan for the Greater Golden Horseshoe, Niagara Escarpment Plan, Oak Ridges Moraine Conservation Plan, Greenbelt Plan.

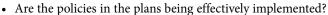
There seems to be little doubt that the GGH is growing in a more compact manner (44 per cent of new growth outside Toronto is within the built boundary) thus reducing outward growth significantly. No more are we debating whether managing growth is necessary or a good idea. The city-region structure put in place by the Mobility Hubs, Urban Growth Centres, transportation corridors and protected landscape of the Greenbelt has been endorsed and adopted by all 21 municipalities. However, a number of important questions are being posed in terms of whether we are achieving the intent of the plans and what the implication of these policies is on the

ground. While some are based on specific perspectives and interests, the review process is a key time to have a healthy debate about their merit while identifying opportunities for strengthening the four plans.

Over the past year, likely in anticipation of the plan review process, position papers, opinion pieces and outreach efforts have been undertaken by key stakeholders such as Building, Industry and Land Development Association (BILD), the Frontier Centre of Public Policy, the Fraser Institute, the Neptis Foundation and Pembina Institute. More specifically, the

following questions and positions are being posed about the impacts of the Growth Plan and Greenbelt Plan, in particular:

- Have the plans reduced housing affordability and choice across the
- Is there enough land available to accommodate the forecast population and employment growth?
- Is smart growth contributing to congestion levels and impeding economic productivity?



The following synopsis outlines a sampling of key arguments being posed in relation to these questions. Hopefully, the synopsis can inspire robust debate, through OPJ



Melanie Hare







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or other forums, using our profession's knowledge of on-the-ground, evidence-based information and experience to inform the discussions. Some positions are clearly pointing to the ineffectiveness or negative consequences of the plans. Rather than dismiss these ideas we need to discuss them through the review process to debunk any myths, and more importantly, to consider how best to advance and strengthen these provincial plans and related planning initiatives.

#### Housing affordability and choices

*The Argument:* Constrained land supply, outdated land-use planning policies and increasing government fees and charges have exponentially increased the cost of land, thus making housing unaffordable for buyers.

The Opinions: BILD points to a report by the Frontier Centre of Public Policy, which argues that Ontario's smart growth policies have contributed to "urban containment" and the resultant shortage of land and escalating costs of housing has driven up demand for condominiums, thereby creating a shortage in the supply of low-rise housing. Although BILD points out that its members have "respectfully adhered to" intensification policies, they feel that condo living isn't for everyone and consumers should have options available to make the best choices for their families. This argument is further linked to a reduction in the standard of living and increase in levels of poverty.<sup>2</sup>

The Pembina Institute counters this argument by pointing to the multiple factors affecting home prices, in particular low mortgage rates and the demand for urban living, which have contributed most to housing price increases. In its mind, the perceived land scarcity and costs of development do not contribute significantly to housing costs.<sup>3</sup>

The Neptis Foundation dismisses claims by the development industry over the scarcity of land driving up housing costs, noting that the 107,100 hectares remaining for development will accommodate populations up to 2031 at average densities comparable to today's standards.<sup>4</sup>

#### Sufficient land to grow

*The Argument*: The urban growth boundary has created an artificial containment of growth that may lead to a shortage of land to meet projected growth.

The Opinions: The Frontier Centre argues that there is no need for containment because unconstrained growth does not waste land. Urbanized areas represent less than 5 per cent of the nation's agricultural belt. In other words, we have lots of land so this is not a problem.<sup>5</sup>

As noted above, Neptis dismisses claims that the scarcity of land is driving up housing costs, noting the 107,100 hectares remaining for development will accommodate populations up to 2031 at average densities comparable to today's standards.<sup>6</sup>

Further, analysis conducted by Pembina concludes there is an adequate supply of land in the GTA for approved and future residential developments. Based on municipal projections, 81 per cent of the land available for development will still be unused in 2031.<sup>7</sup>

Given more compact development patterns, this land will go further to accommodate growth than in the past. Toronto chief planner Jennifer Keesmaat and Pembina point out that between 1991 and 2001 growth of 1-million people resulted in a 26 per cent increase in the urban footprint, but from

2001-2011 more compact development has meant another 1-million people have been accommodated with only a 10 per cent increase to the urban footprint.<sup>8</sup>

#### Congestion and economic productivity

*The Argument:* By limiting outward growth and with insufficient investment in transit to provide reasonable choice, planned growth will increase congestion and reduce economic productivity.

The Opinions: The Frontier Centre argues that urban containment increases congestion and thus reduces economic productivity. While walking/cycling/transit is appropriate for many, these modes cannot compete with the speed and reach of automobile transportation. The centre suggests that the mobility and income-earning potential of low-income households is improved by automobile access. Strategies to improve automobile traffic movement are the only means of reducing congestion and commute times.<sup>9</sup>

Studies of the cost of congestion identify a price tag of up to \$6-billion today and if not addressed, may mount as high as \$15-billion by 2030. Clearly such costs can significantly impede economic productivity. However a solution of more roadway capacity to serve a more dispersed growth pattern is at odds with the experience of many GGH suburban communities, which simply cannot build enough road capacity. Instead municipalities such as Brampton, Markham and Mississauga are successfully implementing a range of transportation alternatives such as higher order transit networks like VIVA, Züm and MiWAY. These transit lines have sparked reurbanization along corridors such as Queen Street in Brampton, Highway 7 in Markham and Dundas Street West in Mississauga. In Brampton, the forecast ridership on Züm was surpassed from opening day and continues to grow.

#### **Effective implementation**

*The Argument*: While the plans have been instrumental in changing the way we grow, they have not been as effective as they could be.

The Opinions: Although Neptis is supportive of smart growth, it is critical that governments are failing to implement the Growth Plan and are permitting too much low-density, leapfrog development.

Neptis argues that the Growth Plan has been underperforming thus far, in that most municipalities have only adopted minimum targets—with the exception of Peel Region and Waterloo Region, which plan to exceed them, and the City of Toronto where all development is considered to be intensification—and many have been permitted even lower targets. In other words, most municipalities and the province itself are treating the minimum targets as maximum requirements.

By comparing the land totals with the growth forecasts, Neptis concludes that the Inner Ring (The Greater Toronto Area plus Hamilton) will be adding more than three times the number of people and almost four times as many jobs as the Outer Ring (the rest of the Greater Golden Horseshoe). Yet Outer Ring municipalities are adding nearly as much land to the built-up area as are Inner Ring municipalities, to accommodate much less growth. Thus, the Growth Plan will allow the supply of low-density housing to continue to grow, but it will be "leapfrog" development.<sup>11</sup>

The Frontier Centre calls for increased investment and

policy direction on infrastructure improvements to increase affordability and mobility. This will have the effect of increasing discretionary spending and improving economic productivity. It further suggest that the plans would be more effective if housing affordability and economic development were identified as the priorities of urban planning, placing built form and transportation as secondary objectives. 12

#### Conclusion

These are merely a sampling of the issues, study findings and dueling positions being expressed in the public domain today. Agricultural viability, the impact of community design on human health and the relationship of the plans to climate change objectives are also areas being discussed in relationship to the plans. With the formal start of the province's review process, let's capture this critical moment to delve into some of these issues, ask hard questions and heartily debate the evidence before us. In doing so, we can only better the performance of the plans from the last 10 years and help to define areas to strengthen the plans for the next 10 years.

Melanie Hare, MCIP, RPP, a partner at Urban Strategies Inc, has been actively involved in growth management strategies at the provincial, regional and local levels in Ontario and is currently leading the Growth Plan Update for Alberta's Capital Region around Edmonton.

#### Footnotes

- https://www.fcpp.org/sites/default/files/toronto-housing.pdf
- http://www.bildblogs.ca/ontario-land-supply/
- http://www.pembina.org/reports/priced-out.pdf
- http://www.neptis.org/sites/default/files/growth\_plan\_2013/ theneptisgrowthplanreport\_final.pdf
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- http://www.pembina.org/reports/priced-out.pdf
- http://www.thestar.com/opinion/commentary/2015/03/17/ greenbelt-makes-gta-more-not-less-livable.html#
- https://www.fcpp.org/sites/default/files/toronto-housing.pdf
- <sup>10</sup> HDR December 2008. Costs of Road Congestion in the Greater Toronto and Hamilton Area)
- 11 http://www.neptis.org/sites/default/files/growth\_plan\_2013/ theneptisgrowthplanreport final.pdf
- 12 https://www.fcpp.org/sites/default/files/toronto-housing.pdf

#### SOCIAL MEDIA AND CONTEMPORARY TECHNOLOGY

# Creativity and **Technology**

By Robert Voigt, contributing editor

learview Township, a rural community of almost 15,000 residents north of Toronto and about 40 minutes west of Barrie, has adopted a particularly creative and comprehensive approach to using

technology. This has increased the planning department's capacity to complete plans, streamlined

work flow and improved meaningful citizen engagement. Much of this technological evolution has occurred over the better part of a decade, led by planning director Michael Wynia, MCIP, RPP.

The Clearview planning department has found new ways of addressing problems and uncertainty through changes and advancements relating to communication, work flow, computer software and hardware, open data and



Robert Voigt

mapping. The outcomes have been positive. Some examples of its creativity in adopting technology are illustrated below.

Approximately five years ago the planning department decided to build its own interactive mapping tool at less than one hundredth the cost that was initially projected for the concept. Staff went directly to software developers to see what it would take to enhance a significantly less expensive mapping technology with specifically designed code for their project's purpose. The result was a custom interactive mapping tool for \$1,000.

A second example came about when the planning department took the initiative to respond to the citizens' desire for improved communications with the township. The result was websites and blogs dedicated to specific projects, planning studies and educational materials. As well, the workflow of staff was adapted to embrace the concept of open data, making all planning information available online to the

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public. Smaller changes included use of the Wordpress blogging platform as a hybrid publishing medium and data base for planning files because it offers flexibility, data management and an exceptionally low cost of less than \$400 per year and streamlining of the file digitization and web upload process, by providing each planning staff with a scanner at his or her desk.

The third example relates to the creation of a GIS database/ map that was developed with a survey interface designed for computer tablets to complete a community-wide tree inventory. The information was gathered and input in the field by staff and volunteers. While this may not seem like such a leap forward in technology, the unfortunate reality is that there are still far too many municipalities where these kinds of tools are not an option.

What makes this project even more special is that it is now being adapted for another unique study. This time the same tools that allowed for geo-location, photographic documentation, and note taking throughout the community, are being adapted for a heritage cemetery study.

The planning policies and projects currently underway in Clearview are in many respects as contemporary and advanced as any community within the province, regardless of size and urbanization. Efforts focused on healthy community design, innovative mixed-use and infill developments, place-based design, active transportation, and creating an all-ages friendly community are all actively being pursued. How technology can facilitate or advance these work programs is continually explored.

What's next for Clearview? The planning department is considering the development of a digital 3D-model to to examine the urban design characteristics of new developments in a more sophisticated and effective way than is now possible. This is a similar model to that used in <a href="Portsmouth">Portsmouth</a>, New Hampshire to assess context sensitive designs in the community's heritage district as part of its development review process and as a community information tool.

The Clearview planning department is always seeking to enhance its work through consistent exploration of technological tools. I believe that any community can have similar successes if it can foster the necessary curiosity, courage and creativity to integrate technology into their planning programs.



Robert Voigt, MCIP, RPP, is a planner, artist and writer, specializing in healthy community design, active transportation and citizen engagement. He is senior project manager for Cambium Inc., chair of OPPI's Planning Issues Strategy Group, member of PPS' Placemaking Leadership Council and writer for Urban Times and CivicBlogger. Twitter@robvoigt Google +robertvoigt.

#### **ENVIRONMENT**

Air Emissions Assessments

### **D-series guidelines**

By Nicole Shantz and Franco DiGiovanni

ir quality impacts caused by certain land uses on adjacent sensitive receptors have been at the root of many land use incompatibilities for centuries. In the mid-1990s, the Ontario Ministry of the Environment developed the D-series guidelines for land use planning and proposed changes to land uses that may involve environmental impact considerations. Since 1994, *Provincial Policy Statements* under the *Planning Act* have provided direction on land use compatibility issues relating to sensitive uses, facilities (or industrial, commercial and institutional development) and adverse effects. Most municipal official plans reflect the *PPS* compatibility policies and refer to MOE guidelines including the D-series guidelines. In April 2014 a new *PPS* was

This D-series guidelines is meant to prevent or minimize adverse effects (as defined in the *Environmental Protection Act, R.S.O.1990, c.E.19*) on sensitive land uses due to incompatibilities between, for example, new industrial or residential developments and currently existing developments. They are applicable to environmental discharges such as noise, vibration, odours and air emissions, such as dust.

As originally developed, the D-series were meant to guide assessments that were to be submitted to the MOE for review. However, starting in 1995, the responsibility for administering land use compatibility assessments was given to municipalities.

The purpose of this article is to highlight the difficulties that have often been observed with air quality assessments conducted for land use



Nicole Shantz



Franco DiGiovanni

compatibility studies in Ontario. Some of the difficulties are a result of the downloading of responsibility without appropriate modification in the land use compatibility assessment procedures. This may lead to potentially incomplete air assessments. The acceptance of incomplete air quality assessments (e.g., for industrial land uses) risks the health and well-being of the surrounding community. A better approach

may be to use assessment methods similar to those used in many environmental assessments, which provide a more complete assessment and thus a better picture of the air quality in terms of risks to human health.

It is worth noting that the D-series guidelines have been under review for some time; it is our hope that this paper provides useful input to that review process.

#### **D-series guidelines**

The D-series guidelines provide two-way assessment procedures. They provide procedures to assess both the likelihood of adverse environmental impacts due to proposed facilities on existing sensitive land uses, and the likelihood of adverse environmental impacts from existing facilities on proposed sensitive land uses. The definition of facilities in the guidelines is fairly wide-ranging and assessment methods vary by facility-type. However, to highlight some issues with air quality assessments we focus on industrial-type facilities in this article.

The D-6 guideline (for industrial facility land uses), places all industrial facilities into three classes: class I facilities having the least potential for impacts and class III facilities the most. Defined for each class of facility is a minimum separation distance, within which adverse effects may be anticipated, and a potential area of influence, within which environmental impact/influence is expected to be negligible. However, the classification of facilities is subjective, as industries could have characteristics resembling more than one class and the decision

as to how to classify these industries may not be clear. When a facility is to be located within the separation distance specified for its class type, a study would normally be required to justify its compatibility.

#### Specification of an appropriate air quality study

The D-6 guideline does not provide clear study specifications but implies that the study procedures are to be the same as those used in a MOE emissions permit application. *Ontario Regulation 346/90 (O.Reg.346)* is cited, since that was the regulation governing the general environmental emission (air and noise) permit applications when the D-6 guideline was written. This regulation has since been superseded by *O.Reg.419* (2005), but the D-series guidelines have not been updated to reflect this change.

Permits issued currently under *O.Reg.419* are referred to as environmental compliance approvals. They require the impact of all air emissions from the subject industrial source to be assessed at the property line and beyond, and summarized in an Emission Summary and Dispersion Modelling report. If those air emissions are found to be compliant with the MOE air standards, then the MOE may issue an ECA permit and thus deem the application acceptable. An ESDM report has often been assumed to meet the study requirements of the D-6 guideline.

However, it is important to understand that the air assessment required for an ESDM report is limited in scope to aspects of interest to the MOE. There are both procedural and



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LONDON OFFICE 318 Wellington Road London, ON, N6C 4P4 (519) 474-7137 TORONTO OFFICE 20 Maud Street, Suite 305 Toronto, ON, M5V 2M5 (416) 622-6064 technical problems with using an ESDM-type study for land use compatibility assessments that must test for adverse effects. Procedural issues include:

- O.Reg.419 and its guidance governs the provision of information to the MOE and does not govern the provision of information by a re-zoning applicant to a municipality. It is thus questionable whether O.Reg.419 and its guides have any legal applicability for studies conducted for land use compatibility.
- MOE has introduced an additional approval system (2011) where certain activities can be registered with the Environmental Activity and Sector Registry. This includes activities such as comfort heating and emergency generators and has replaced the requirement for a site-specific air assessment (as in an ECA). However, since Environmental Activity and Sector Registries are specified under a different set of regulations (O.Reg.245/11), it is not clear that a registration would qualify as an appropriate air study method under D-6. More guidance is required in this matter now that there are more regulations in place.

#### Technical issues with ESDM-type reports

There are a number of aspects of air quality that are not accounted for or are not required when conducting studies to apply for an ECA in Ontario, and are therefore, often not assessed for land use studies. Such omissions cause ESDM-type reports to provide an incomplete picture of air quality to the municipality responsible for the land use compatibility assessments that must test for adverse effects.

*No accounting for cumulative air quality levels in the* surrounding community

As pollutants from the proposed facility disperse through the air, they will add to pre-existing levels of pollutants emitted from other sources. For example, dust will be emitted by many other facilities, from public roads, as well as from other sources in the area forming background levels of pollutants.

O.Reg.419, however, only requires that a facility assess its own air emissions at the property line and beyond. The MOE guides and O.Reg.419 do not indicate methods or requirements for a facility to account for cumulative air quality levels (i.e., addition of new industry emissions to the pre-existing, background levels of contaminants).

There is little public information on how the MOE checks for cumulative air concentration levels using ECA applications. The MOE factsheet Framework for Managing Risk (March 6, 2014) infers that MOE performs additional assessments, outside of the O.Reg.419 analysis, to fully characterize community-level cumulative exposures for air quality. However, a Municipal D-series air assessment is not submitted to a central body (such as the MOE) that could perform these additional calculations. With D-series assessments managed by municipalities, there may be independent peer review; however, the peer reviewer may not conduct the additional analysis required nor call for such additional analysis if s/he is not sufficiently knowledgeable.

Technically, such an omission in a D-series assessment can lead to a significant underestimation of airborne contaminant levels: accounting for cumulative levels may signify that air

quality criteria was exceeded whereas examination of the industry-only emissions may show that it did not exceed. It is possible cumulative levels may indicate a potential adverse health effect on sensitive receptors in the surrounding community that may be missed if only industry-specific emissions were examined.

No accounting of adverse effect from emissions from motor vehicles

The Environmental Protection Act of Ontario exempts motor vehicles from requiring an ECA. Thus, they are generally not accounted for under a study triggered by D-series even though vehicle emissions may cause an adverse effect (e.g., diesel truck emissions).

Assessment and speciation of fugitive dusts

There is significant confusion and misunderstanding regarding the air assessment of fugitive dust emitted from roadways and storage piles in ESDM reports. This has led to air studies ignoring elements of fugitive dust emissions such as particulate matter in the smaller size fractions (PM<sub>2,5</sub>) or crystalline silica, common components of fugitive dust emissions that have their own unique human-health impacts. Thus potential health risks for the surrounding community may be missed. If ESDM reports are used as air studies for land use assessments under D-series, misunderstandings of how to assess fugitive dust emissions may lead to underestimated air quality impacts. In EAs, PM<sub>2.5</sub> would be considered, for example, and this would then represent a more complete air quality study.

#### Potential data gaps

D-series are meant to be guidance only and are not a regulation or a strict requirement in land use assessments. Thus, D-series may not be applied in all situations, potentially leaving a significant data gap in a land use compatibility assessment. Most official plans refer to provincial guidelines on land use compatibility, if not D-series directly. However, policies can be ignored in a review of an individual facility and this may not be discovered unless there is an objection or appeal. Moreover the Ontario Municipal Board may override a policy requirement for a particular study.

#### Potential underestimation of areas of influence

The potential influence areas and minimum separation distances provided by the D-6 guideline has been identified by the ministry "through case studies and past experience." Unfortunately no information is provided as to the basis of these "experiences" that determined the setback distances. Are these distances still valid today and can they be proven with current studies? It may be possible that these D-series setback distances are underestimated and should be revised to reflect updated science for land use compatibility assessments. The Province of Alberta, for example, requires that surrounding facilities and public roads within a minimum 5-km study area are considered during an air impact assessment, compared to the 1-km potential influence area around Class III facilities that is used in the Ontario D-series documents (Alberta Environment document Air Quality Model Guideline, 2009).

#### Summary

An overall issue with the D-Series guidelines is that it is not at all clear what is considered an acceptable air assessment for the various classes of facilities that form a particular land use. The D-series guidelines, and the presumed use of O.Reg.419 as a method of air assessment, was originally intended to be guidance for a proponent submitting the information to the MOE. It was not intended to govern the provision of land use compatibility information from a re-zoning proponent to municipalities.

Using O.Reg.419 in isolation, as part of a D-Series land use compatibility assessment, is no longer appropriate now that the MOE has downloaded the administration of land use compatibility assessments from the province to municipalities. We hope that the MOE will update the D-series guidelines to rectify the issues discussed in this article and that land use assessments should resemble EA-type reports and not ESDMtype reports.

Nicole Shantz, PhD and Franco DiGiovanni, PhD, TSRP(Ont.), would like to thank OPJ environment contributing editor Steven Rowe for helpful critique of this paper; the views and opinions furnished here, however, are solely theirs. Nicole Shantz is an air quality scientist and modeller at Airzone One Ltd., an air quality consulting firm in Mississauga. Franco DiGiovanni is a senior air quality modeller and head of the Modelling and Permitting Group at Airzone One Ltd.

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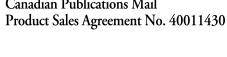
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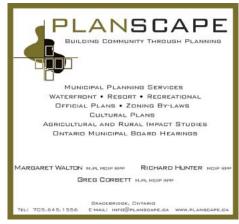


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