Conceptual Master Plan for the Future Urban Area

Interim Report and Preliminary Community Structure Plan

Development Services Committee
October 3, 2016
Purpose of Report:

1) To provide an update on work completed to date on the Future Urban Area Conceptual Master Plan

2) To release the report and hold a Public Open House to obtain public input on a Preliminary Community Structure Plan
Future Urban Area - Background

- Located north of Major Mackenzie Drive, east of Woodbine Avenue
- New neighbourhood lands (brown) – 675 ha (1,700 ac)
- New employment lands (teal) – 300 ha (750 ac)
- Greenway System (green) – protected natural heritage system
- FUA to accommodate:
  - 40,000 population (12,000-13,000 units)
  - 16,000-19,000 jobs
Future Urban Area - Planning Process

**CMP studies:** each 3-phases (to align with subwatershed study):
- **Phase 1** - background, characterization, model development
- **Phase 2** - impact assessment (impact of land use concepts)
- **Phase 3** - development of recommendations/implementation strategy

Currently mid-way through Phase 2.

*Conceptual Master Plan will satisfy Master Plans component of Municipal Class Environmental Assessment (EA) process*
Consultation

Residents and Businesses

First Nations and Métis

Utilities

TRCA, MNRF, York Region School Boards

Non-Government Organizations

Landowners
Healthy Communities
Preliminary Community Structure Plan

Dan Leeming, The Planning Partnership
Marisa Creatore, PhD, St. Michael’s Hospital
Vision

“New neighbourhood and employment lands in the north Markham Future Urban Area will be designed as healthy, compact and complete communities.

These communities will reflect the City’s leadership in sustainable development with resilience and innovation being cornerstones of community design.”
The Built Environment and Health: The role of Urban design in public health

Marisa Creatore, PhD

Centre for Research on Inner City Health, Li Ka Shing Knowledge Institute, St. Michael’s Hospital;
Dalla Lana School of Public Health, University of Toronto
The Public Health Problem

- Only 15% of adults get the recommended amount of physical activity (to stay healthy)

- Only 9% of Canadian kids aged 5 to 17 get the recommended amount of activity they need each day

- In Canada 60% of adults are overweight or obese (Statistics Canada, 2012).
Obesity Trends Among Canadian and U.S. Adults, 1985

Mokdad AH. Unpublished Data.
Obesity Trends
Among Canadian and U.S. Adults, 1990

Mokdad AH. Unpublished Data.
Obesity Trends Among Canadian and U.S. Adults, 1994

Obesity Trends Among Canadian and U.S. Adults, 1998

Obesity Trends Among Canadian and U.S. Adults, 2000

Obesity Trends Among Canadian and U.S. Adults, 2004/05

Provinces (measured) CCHS, 2004  Territories (self-report) CCHS, 2002
Obesity increases the risk for:

- Heart disease
- Stroke
- High blood pressure
- Diabetes
- Cancers (endometrial, breast, colon)
- Mental health conditions
- Disability
- Liver & gallbladder disease
- Asthma, sleep apnea & other respiratory problems
- Arthritis and osteoarthritis
- Infertility and reproductive complications
What are the human/societal costs?

- Obesity has roughly the same association with chronic health conditions as 20 years of aging.
- Health care costs for overweight and obese individuals are 37% higher than for people of normal weight. 

\(^1\)
An economic tsunami
the cost of diabetes in Canada

December 2009

Cost of Diabetes in Canada: 2000 to 2020

Source: Canadian Diabetes Cost Model
How did we get here?
The world we sit in

As a society we spend more time sitting than we perhaps ever have, a fact revealed by a comparison of labour-market trends in 1970 and 2000.
More time spent in cars → higher rates of obesity

The built environment as a potential target for intervention
Built Environment shown to be associated with:

- Physical activity
- Healthy food choices/Diet
- Safety & Crime
- Social cohesion
- Air Quality
- Obesity
- Child obesity
- Chronic Disease
- Mental health
- Healthy aging
Research Has identified Built Environment elements associated with active living:

**Density**
- (residential, non-residential)

**Service Proximity**
- (to a variety of services, to transit, to employment)

**Land Use Mix**
- (mixed land use, mixed building use, mixed housing types)

**Street Connectivity**
- (intersection density or block size)

**Road Network & Sidewalk Characteristics**
- (complete streets, traffic calming, traffic speed & pedestrian-priority, footpaths, sidewalks & buffer strips, cycle-friendly design, lighting)

**Aesthetics & Human Scale**
- (setbacks & streetwalls, height to width ratio, tree placement/characteristics)
Not just about individual characteristics, but about how we put them together

- Research shows that density, mixed use and micro-design elements in combination are most likely to result in higher levels of physical activity
Does area walkability predict physical activity levels, body weight and the development of diabetes?
<table>
<thead>
<tr>
<th>Characteristic (%)</th>
<th>Q5:Q1 ratio</th>
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<tbody>
<tr>
<td>Walk or bicycle to work</td>
<td>3.09</td>
</tr>
<tr>
<td>Public transit to work</td>
<td>1.72</td>
</tr>
<tr>
<td>Drive to work</td>
<td>0.57</td>
</tr>
<tr>
<td>Obesity*</td>
<td>0.75</td>
</tr>
</tbody>
</table>

*CCHS population, age 30-64 yrs; p < .001 for all

Transportation behaviours and obesity rates by walkability quintile
Original Investigation

Association of Neighborhood Walkability With Change in Overweight, Obesity, and Diabetes

Marla I. Creatore, PhD; Richard H. Glazier, MD; Rahim Moineeddin, PhD; Ghazal S. Fazli, MPH; Ashley Johns, MSc; Peter Gozdyra, MA; Flora I. Matheson, PhD; Vered Kaufman-Shriqui, PhD; Laura C. Rosella, PhD; Doug G. Manuel, MD, PhD; Gillian L. Booth, MD

Q1 shows an increase by 13% in overweight
Q5 shows a decrease by 6% in overweight
Overall found approximately a 30% decrease in diabetes in most walkable neighbourhoods.
Relevant at all Ages

• Obesity-prevention effect of BE seems strongest in young/middle-aged adults

• The benefits of physical activity for older adults are wide ranging and include the following:
  • preserving muscle and bone mass
  • reducing rates of functional decline (both physical and cognitive)
  • improving glucose control & cardiovascular health
  • Improving balance and stability (Sattelmair, Pertman, & Forman, 2009).
BE and Aging population

- Older adults (60+) are the fastest growing, yet least active, segment of the population with <3% meeting PA recommendations (Troiano et al., 2008)

- One aspect of successful aging is aging in place (Yen & Anderson, 2012) – which requires supportive built environment.
Non-Health Benefits of Walkable Communities

Social benefits include:

• Community connection

• Safety - reduction of traffic related injuries to pedestrians

Non-Health Benefits of Walkable Communities

• Increased Store rents.
• Increased Property value – each point increase in WalkScore, increase home values by $700 - $3,000 \(^1\)
• Business and the local economy – the slower we travel the more we spend \(^2\)
• Space for people is valued more than car parking making the street more attractive for people to spend time and therefore money.
What do walkable, ‘activity-friendly’ communities look like?
Why Think about it Now?

• Traditional suburban communities are less walkable – opportunity to be progressive and head off health problems before they start

• Region of Peel have implemented the HIA to give as much weight to health as to environment, sustainability, etc
Peel Region Healthy Development Evaluation Tool

AIM:
• Tool to rate development submissions
• To encourage future development to proceed in a form more conducive to healthy living with a focus on physical activity
Peel Region Healthy Development Evaluation Tool

Policy Impacts:

Amendments to Regional and Municipal Official Plans requiring health impact indicators and assessments as well as encouraging public awareness

Amendments to engineering standards to increase walkability and active transportation, and proposed changes to provincial policy statements

Integration of health background studies at the earliest stage of planning as part of a complete development application
THANK YOU
Preliminary Community Structure Plan
Principles/Parameters

- Protecting and enhancing the natural environment
- Building compact, complete communities
- Maintaining a vibrant and competitive economy
- Increasing travel options
- Adopting ‘green’ infrastructure and development standards
Key Directions document will also address ‘green’ practices at the community, infrastructure, and building levels, such as:

- Managing use of potable water
- Conserving energy and use of green energy
- Sustainable stormwater management practices
- Community energy systems
- Waste diversion and reduction
- Enhanced interior air quality
- Improving public health through design of buildings and sites
- Planning infrastructure systems to increase resilience, affordability and adaptability.
Next Steps

• Public Open House to be held (early November) – public input to be considered in remaining phases of studies

• Second part of Phase 2 impact assessment to be completed, followed by development of implementation recommendations

• At end of Phase 3, a draft Conceptual Master Plan consisting of a Preferred Community Structure and Key Directions for the development of statutory secondary plans will be presented to Council for endorsement.
Recommendation:

• The report be released for public input, including Public Open House; and

• This report be forwarded to the Province to support Council’s request that planning in the Future Urban Area continue on the basis of the current York Region Official Plan 2010 (at 70 residents and jobs per hectare) notwithstanding proposed amendments to the Growth Plan which may result in higher Designated Greenfield Area density requirements.
Discussion