# Proposed 2050 Climate Change Sister Cities Initiative – DRAFT (Mar. 15, 2016)

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**Concept:** As climate change progresses, communities across the world will be severely tested in their ability to maintain a high quality of life for their residents. It is expected that climate change will significantly impact almost all aspects of municipal affairs, including urban forestry, natural heritage systems, stormwater management, utility supplies (clean water and electricity), poverty, homelessness, emergency preparedness and public health and safety.

With the collapse of initiatives such as the Kyoto Protocol, efforts to prevent climate change at the international level have largely failed, and we now find ourselves entering an era focused on adaptation, much of which must occur at the local level.

In order to assist municipalities such as London prepare for our changing climate, we propose a "Climate Change Sister Cities" initiative. Through this initiative, a municipality would designate a working group to identify a more southerly city of comparable size which currently experiences (approximately) the climate anticipated by the municipality in 2050. The former municipality (e.g. London) could then approach the latter with a proposal to become a "Climate Change Sister City" to London.

Whereas traditionally, "Sister City" initiatives seek to promote trade and cross-cultural understanding between cities, "Climate Change Sister Cities" would serve as a means of knowledge exchange on issues related to climate change adaptation at the municipal level. Developing such a relationship would give London's civil service better access to expertise, ideas, and data resources from a municipality already facing our "issues of tomorrow" today.

For example, our "Sister City" could provide recommendations on the use of trees native to their state for use in roadways, and help identify possible suppliers of seed for species we anticipate moving into our region. On the Public Health front, staff from our southern counterpart could help identify diseases likely to spread into our area, and provide resources to help reach out to the London public about them.

Unlike the traditional two-way "Sister City" model where partnership between the two cities identified is reciprocal, a climate change "Sister City" would, by necessity, encompass a one-way relationship (as a community south of us would benefit little from learning how we in London might deal with colder weather, though ideas regarding climate change mitigation may still be usefully shared). As a consequence, each city would ideally identify a counterpart community to its north and its south, with an appropriate climate, such that it may become both a recipient *and* a provider of valuable climate change adaptation information. In London's case, and in the spirit of "paying it forward", the city would also identify a community "25 years north", to which London's civil service could act as an information resource.

This initiative could also help contribute to the City's future Climate Change Action Plan (proposed in the draft London Plan - see Sec. 48(6) on p. 21), as resources and contacts by those affected by "tomorrow's climate today" would help advance its development.

Finally, publicly pursuing a "Sister City" partnership based on our changing climate will also demonstrate to the public that not only does the City recognizes climate change as a reality, but also that London is taking concrete action to plan for it. This will help to increase public awareness of climate change as a major issue facing all cities, which will hopefully in turn help generate public support for future initiatives.

To our knowledge, there are no such "Climate Change Sister Cities" yet in the world, which would also make London into a world leader in municipal planning to adapt to climate change.

#### **Objectives:**

- To partner with organizations which are known to conduct research related to climate change (potentially including Western University, Environment Canada, and the Middlesex London Health Unit) to identify the appropriate climate projections and weather data for use both in Canadian and American contexts (given the likelihood that a community currently experiencing our expected 2050 climate is south of the border).
- To use projection data to identify an American municipality currently experiencing (approximately) the climate London should expect for 2050, and another community to our north that will in 2050 be experiencing the type of climate London has to day.

(It is possible that a few potential "candidate communities" may need to be identified in each case, as not all possibilities may wish to pursue a new "Sister City" partnership at this time). It is hoped that a researcher from Western University will undertake this task: possibly as the primary research topic for a student pursuing a post-graduate degree.

- 3) To make recommendations to council concerning potential sister municipalities and to identify any resources (budget, staff time) that may be required. The working group may also make recommendations on external sources of funding which the City could apply for to help develop such a program.
- 4) If so further directed by Council, the working group, led by a City staff person, could then approach the candidate "Sister Cities" about the possible partnership.

If the partnership is successful and if so further directed by Council, the working group would also approach Sister Cities International (www.sister-cities.org) with the idea of using London's methodology to create a global network of "Climate Change Sister Cities".

# **Proposed Timeline:**

Climate change is already credited with triggering several major crises, such as the recent flooding events in New York and Calgary, and the 2014 wildfire in the Northwest Territories. The rate at which impacts are felt is expected to accelerate rapidly over the coming decades.

Meanwhile, for urban forestry purposes, it is important that the City begin planting species tolerant to our future climate as soon as possible if we are to have mature trees by 2050. As such, TFAC would recommend that this initiative be pursued as soon as is practical for the City.

## **Proposed Partner Organizations & Working Group Participants:**

- City of London staff (appropriate departments TBD) and/or interested councillors
- Western University
- Middlesex London Health Unit
- Environment Canada
- Advisory Committee representatives (TFAC, EEPAC, ACE; others as willing)

# **Deliverables:**

Some of the more specific outcomes we would witness arising from such a partnership would include:

- A clear methodology (which could be applied by other communities as well)
- Identification of tree species native to the Sister City which are best suited for use as boulevard trees
- Identification of tree species which would provide the greatest habitat and food value to migrating wildlife
- Development of a list of suggested suppliers for seed and potted stock from the identified sister city's region
- Partnership with a local nursery to grow stock from Sister City seed (less likely to carry new plant diseases or pests than directly acquiring stock from further south)
- Sharing of public health educational materials related to diseases likely to move northwards as the climate warms, such as Lyme disease and West Nile virus
- Sharing of urban forestry educational materials related to new pests, such as Asian longhorn beetle
- Determine what species not yet invasive in London are likely to become invasive in the future (if already present in the Sister City community)

- Identification of any food species which may have future potential for cultivation in London (as part of ongoing food security efforts)
- Production of training materials
- Data resources

If successfully implemented, the "short-term" outcome of this program would ideally be two workshops held with senior management in each of London's Climate Change Sister Cities: one where London staff would visit our southern counterpart to learn about their operations as they relate to climate, and one where London would host guests from our northern counterpart to learn about ours.

Longer term outcomes could include London raising awareness of the initiative through forums such as the Canadian Urban Forest Conference. If a global network is ultimately formed (for example, through Sister Cities International), communities may ultimately pair themselves based not just on projected climate, but also on specific projected impacts and how to adapt to them. As an example, the severe (and likely unstoppable) flooding of places such as Miami and the Maldives may lead these cities to form partnerships to share experience and knowledge.

## **Resource Requirements:**

Since this initiative centres around the exchange of ideas and information, the anticipated costs to the City of London are fairly minimal. If, in the long run, the City has a dedicated employee working on climate change adaptation, this person could serve as the key contact person for the initiative. It is anticipated that, beyond the initial set-up phase, this initiative will serve primarily as a resource to support information requests (i.e., through e-mail), keeping costs to a minimum (and, indeed, generating cost savings for the City, should the Sister City provide educational materials and the like for public use on issues such as Asian longhorn beetle or Lyme disease).