

Bring Back the Maples

Trees for Woolwich Roadside Planting Project

**Why the Region of Waterloo should help to fund the Largest Roadside Tree Planting Program in Ontario since 1890!
Bring Back the Maples!**

The plan to reforest rural roadsides with 22,000 trees is well under way - 8000 trees planted and counting.

Project Details and benefits are on page 2 but here is a summary:

This program has big benefits to regional climate adaptation initiatives.

- It is very visible, giving people the awareness of action and progress at the regional level. It shows what a partnership can accomplish.
- In these tight economic times, it is extremely cost effective. With all the volunteer time involved, we have the planted cost down to \$15/tree. Big impact, low cost. Additionally, we have attracted funding from private and corporate donors to further reduce the cost to the region. The total budget is approximately \$347,000 and to date we have raised \$180,000 of corporate and private money. If the Region pitches in \$100,000 over 2 years it will amount to \$4.55 per tree.
- The Township of Woolwich has been very supportive both in terms of staff time to manage communications and funding for the past 2 years.
- This project is eminently scalable. REEP is working to create a region wide version of this project through 2 Billion Trees, and Mapleton and Wilmot Townships are interested in getting started.

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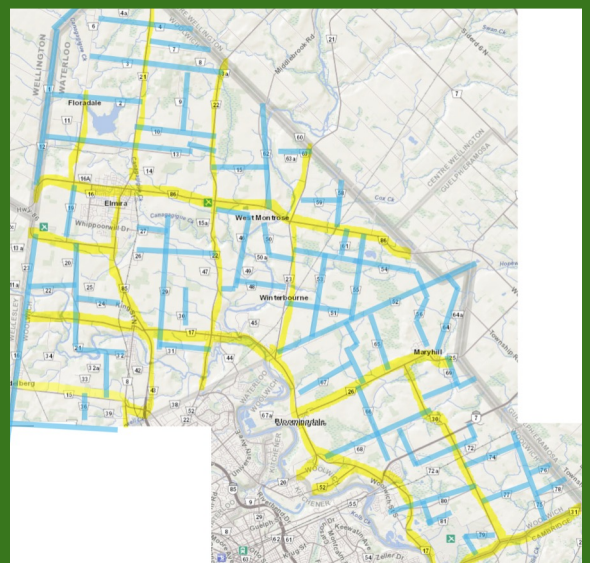
Trees for Woolwich Roadside Tree Planting Project

- Planting trees is the most cost effective way to capture carbon to offset climate change
- Roadsides are the most available planting areas.
- Most large trees historically on our country roads were planted 140 years ago: many are now gone, leaving roadsides bare.
- Trees for Woolwich plans to plant 22,000 trees along viable areas of our 335 km of rural roads both township and regional.
- Trees will be planted over 3 years from 2022-2025. To date over 8,000 trees have already been planted
- Project management and installation, tree watering, and initial pruning will be performed by Trees for Woolwich in partnership with Earthscape's equipment and their trained youth worker crew.
- Funding requirements average \$110,000/year, provided by corporate donors, private citizens and the Township of Woolwich. .
- Project technical support will be provided by Woolwich Township Infrastructure Services, Region of Waterloo Forestry, and Grand River Conservation Area.
- The entire program can be approved by two authorities only – the Township of Woolwich (Township) and Regional Municipality of Waterloo (Region of Waterloo).
- To test logistics, plans for installation and maintenance, a trial planting will install 200-300 trees along Floradale Road, Kramp Road, and Lerch Road in 2022.
- First year survival rate was 80%
- The majority of trees will be Sugar Maple, Red Maple, Bur Oak, Walnut and Crab apple.

Roads in Woolwich Township (October 2016)

Regional – 120 km approx. ignoring built up areas

Township – 215 km approx. ignoring built up areas



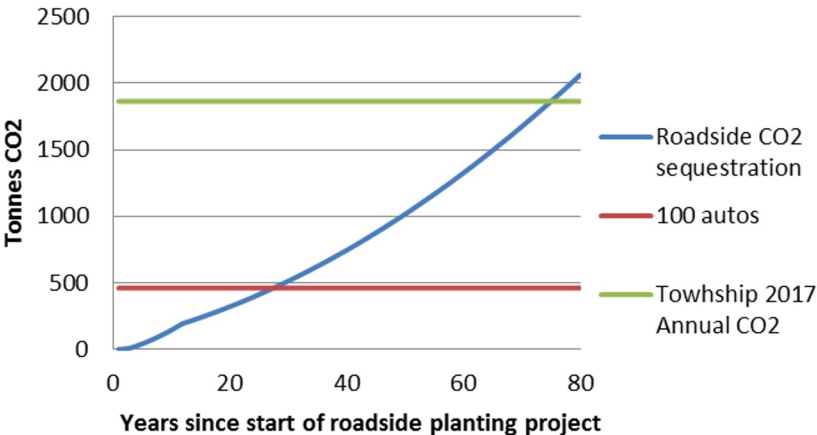
- Trees will be planted as plugs , with shelters & a supporting stake to protect from winter snow damage, weeds, & animal predation.
- This planting method means trees need less maintenance and have a higher survival rate.

| Description | Per Tree |
|--|----------------------|
| Tree | \$ 3.75 |
| Tree Tube 3' and wraps | \$ 3.05 |
| Stake | \$ 1.07 |
| Install and water labour @\$35/hr | \$ 5.76 |
| Shipping | \$ 1.10 |
| Contingency (8%) | \$ 1.04 |
| Total cost per tree | \$ 15.77 |
| 2024 cost for 8000 trees | \$ 126,160.00 |
| 3 year program cost for 22000 trees | \$ 346,940.00 |

Benefits

- Demonstrates that a community effort can make a significant environmental difference
- Carbon capture from these open growth broad canopy trees over the next 80 years is 68,000 tonnes of carbon dioxide. This is the equivalent of taking 170 cars off the road each year for 80 years. (See chart below.)
- Stormwater in the amount of 680,000 cubic meters will be diverted from runoff into soil absorption as trees act as water reservoirs and reduce erosion over the next 80 years.
- Increased canopy provides cooling and slows windspped to reduce drying of crops.
- Airborne pollution will reduce as the roadside trees absorb 283,000 kg of airborne pollutants over 80 years, such as ozone, carbon monoxide, nitrogen dioxide and sulfur dioxide and intercept micron level particulate matter such as smoke, dust and ash, as well as lowering temperatures.
- Mature roadside trees will form a wide network of vegetation connecting our scattered forest areas. Roadside vegetation are important wildlife habitats for birds, insects, reptiles, and mammals that support migration and permit outbreeding with broader animal populations.
- Reduced traffic speed, as shown by research on tree-lined rural roads.
- Highly visible "park" will be enjoyed by residents daily, boosting the aesthetic and cultural impact.

Annual CO2 Budgets



In partnership with...

