Gross Domestic Product (GDP) estimates

This document explains how Economic Development & Culture (EDC) staff estimated GDP for the city of Toronto, the rest of the Toronto Census Metropolitan Area (CMA) and the rest of Ontario for about 200 industries.

These GDP estimates are based on employment-shares by industry of Ontario GDP, using [GDP data (at basic prices, in chained 2007 dollars) from Statistics Canada](#).

Employment data by industry (annual 2016 totals), for the city of Toronto, the rest of the Toronto CMA and the rest of Ontario) are from a special run of Labour Force Survey (LFS) data. 2011 National Household Survey (NHS) were used to adjust the LFS data for in and out commuting by detailed industry in the Toronto CMA. Both of these datasets are available at: www.toronto.ca/ecdevdata. Since detailed place of work employment data were not readily available for Ontario, we assumed no net commuting in or out of Ontario.

LFS data were adjusted for suppressed data by reverse-engineered data points where possible to determine the suppressed numbers (any LFS cell corresponding to less than 1,500 persons).

We also adjusted for net commuting into the city of Toronto and the Toronto CMA by detailed industry, using the 2011 NHS data. The net in commuting into the Toronto CMA is about 6.0% (148,740) of total employment. We adjusted the LFS employment data for the CMA by the percentage of net in commuting by detailed industry.

The net in commuting into Ontario is about 0.5% (37,465) of total employment, and public administration accounts for about one-third of the total net in commuting. At this time, we only have net in commuting into Ontario at the two-digit NAICS industry level (less than 20 industries); therefore, we did not adjust for net commuting into Ontario by detailed industry.

LFS employment data for the city of Toronto are collected by place of residence and according to 2011 NHS data, 82.5% of city residents that are employed work in the city of Toronto, and 67.1% of jobs in the city of Toronto are filled by city of Toronto residents.

To obtain jobs in the city, we used the city's share of Toronto CMA employment in 2011 by detailed industry. We first calculated the city's percentage share of Toronto CMA employment using employment by place of work data from the 2011 NHS, with adjustments for people who worked at home and with no usual place of work. We then multiplied this ratio by the LFS Toronto CMA employed residents by detailed industry.

Estimated jobs in the city of Toronto by industry was calculated as follows:

$$\textbf{\textit{Estimated jobs in city}}$$
$$= \frac{(estimated\ jobs\ in\ ctiy\ from\ 2011\ NHS\ by\ POW)}{(estimated\ jobs\ in\ CMA\ from\ 2011\ NHS\ by\ POW)}\ X\ (LFS\ CMA\ employment\ adjusted\ for\ net\ commuting)$$

To estimate GDP by industry for the CMA, we allocated the provincial GDP to the CMA corresponding to the CMA's adjusted employment share of provincial employment by industry.

In the case of imputed rent for owner occupied dwellings, we allocated the provincial GDP from imputed rented based on the CMA's percentage share of provincial total value of owned housing, using data from 2011 NHS.

GDP estimates by industry for the city are determined by the city's employment share of the CMA. GDP from imputed rent was calculated in the same way as above.