

A Profile of the Automotive Manufacturing Industry in Canada, 2012-2016

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1. Introduction

Over the past five years, Canada's automotive industry has been marked by modest growth and relative stability. Annual vehicle production averaged just below 2.4 million units over the past five years and vehicle assembly and parts manufacturing employment have increased steadily. The federal government and the governments of Ontario and Québec have implemented and refined several public policy tools designed to support investments in both traditional automotive manufacturing and in emerging vehicle technologies. The resolution of collective bargaining between Unifor and FCA, Ford, and GM in the Fall of 2016 helped secure further investments and certainty regarding those firms' Canadian production footprint. Recent large-scale investments in vehicle software development facilities by GM, Ford, and BlackBerry QNX and Ford's decision to produce their GT 'supercar' at a Multimatic plant near Toronto due to the latter firm's expertise in lightweight materials are evidence of the competitive advantages offered by the highly-skilled and innovative Canadian workforce.

This report follows earlier APRC industry profiles and publications that compiled and analyzed industry statistics such as production, employment, trade, and contributions to GDP (Holmes, 2015; Sweeney, 2013; 2014; and Mordue, 2017; Yates, 2015). Such analysis is central to the APRC's ongoing research mandate. More specifically, the report focuses on recent trends in vehicle production, employment by Original Equipment Manufacturers (OEMs), employment by independent automotive parts, components, and value-added services firms, and the composition and geography of the industry in southern Ontario.

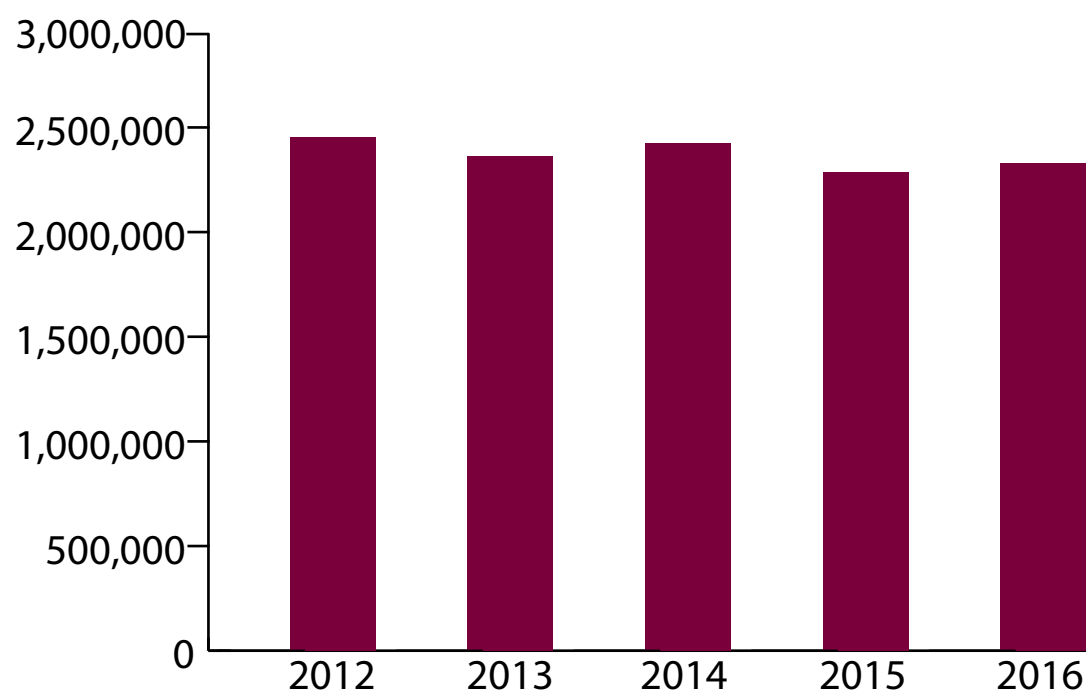
2. Vehicle Production

OEMs built nearly 2.3 million vehicles in Canada in 2016. Average annual vehicle production in Canada was slightly below 2.4 million between 2012 and 2016 (Figure 1). Although vehicle production fell below 2.3 million in 2015, this was primarily the result of retooling at FCA's Windsor, Ontario assembly plant, which took place over several months (as is normal) following the renewal of the plant's production mandate.

Vehicle production increased in three of five OEMs between 2012 and 2016 and at four of five OEMs between 2015 and 2016 (Figure 2). Toyota currently builds the most vehicles in Canada, followed by FCA and GM. However, GM's Canadian vehicle production is expected to decline following the closure of the Consolidated assembly plant in Oshawa and the end of GMC Terrain production in Ingersoll in 2017.

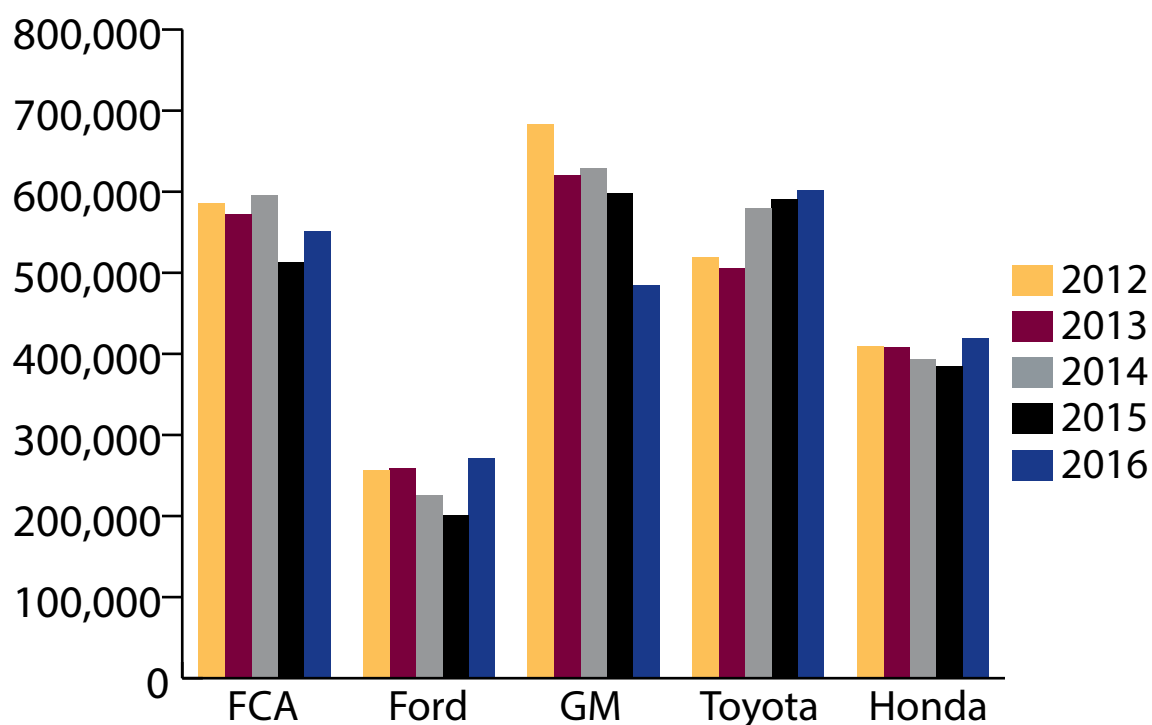
Approximately two-thirds of all vehicles produced in Canada are light trucks or SUVs. These include small- and medium-sized SUVs such as the Toyota RAV4, Ford Edge, Honda CR-V, and Chevrolet Equinox, luxury SUVs such as the Lincoln MKX and Lexus RX350, and minivans, namely the Dodge Grand Caravan and the Chrysler Pacifica. Light truck production as a total of all vehicle production increased from 58 percent in 2012 to 67 percent in 2016 (Figure 3). This proportion is likely to increase in the near future as Toyota replaces the Corolla with the RAV4 at their assembly plant in Cambridge and as GM begins to assemble pickup trucks at their assembly plant in Oshawa.

Figure 1 – Annual Vehicle Production (Units) in Canada, 2012-2016



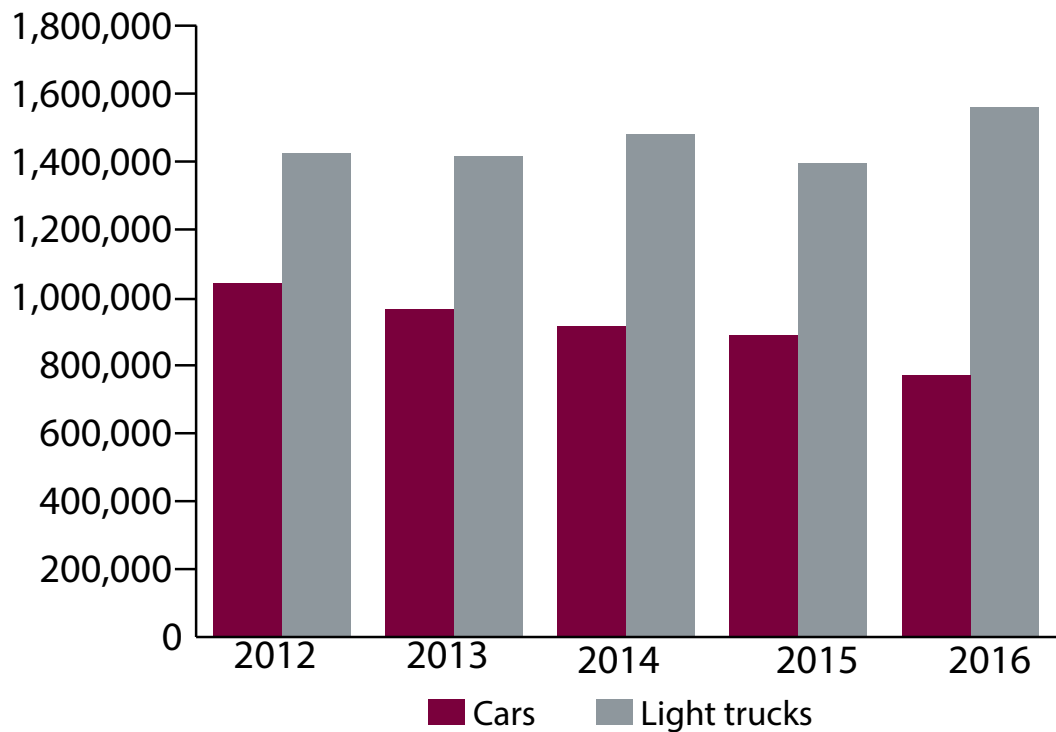
Source: Author's Calculations, Automotive News Canada, 2017; OICA, 2017

Figure 2 – Canadian Vehicle Production by OEM, 2012-2016



Source: Author's Calculations, Automotive News Canada, 2017; OICA, 2017

Figure 3 – Passenger Car and Light Truck Production (Units) in Canada, 2012-2016



Source: Author's Calculations, Automotive News Canada, 2017; OICA, 2017

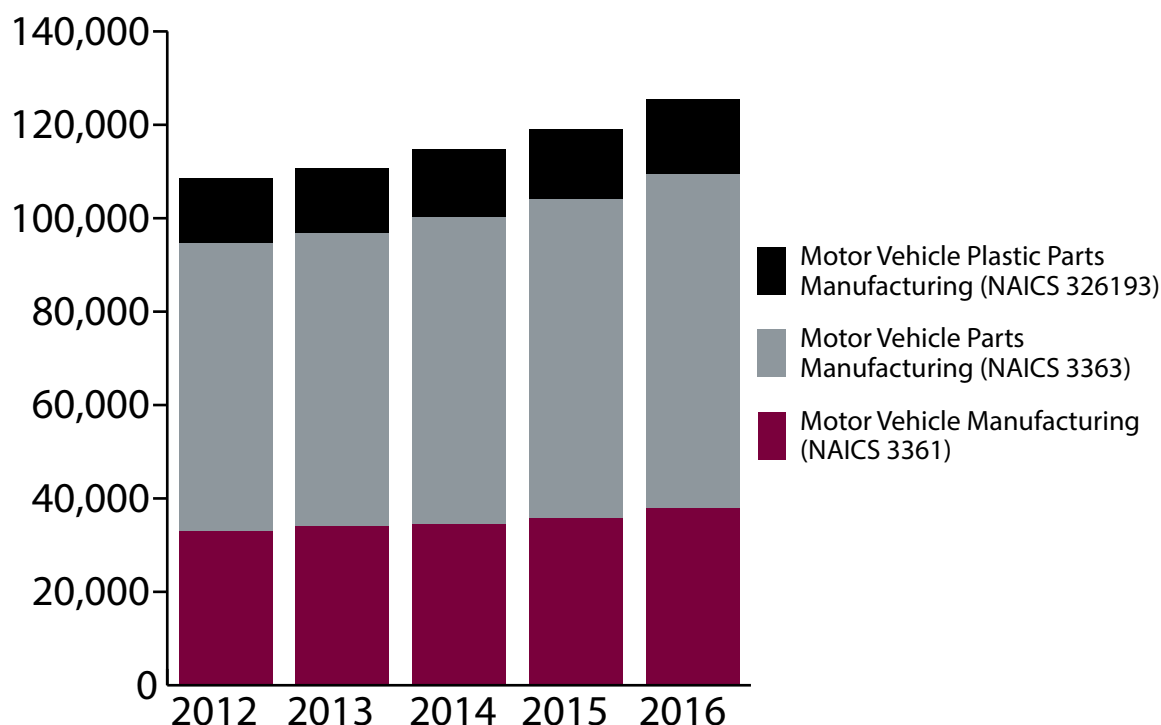
3. Employment

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Employment in most segments of automotive manufacturing increased in every year between 2012 and 2016. Based on Statistics Canada data, the automotive manufacturing industry employed 125,395 people in 2016 (Figure 4). This represents an increase of 16,913 jobs when compared to 2012. These data suggest that approximately 30 per cent of the automotive manufacturing workforce is employed in vehicle assembly and 70 per cent is employed in automotive parts manufacturing.

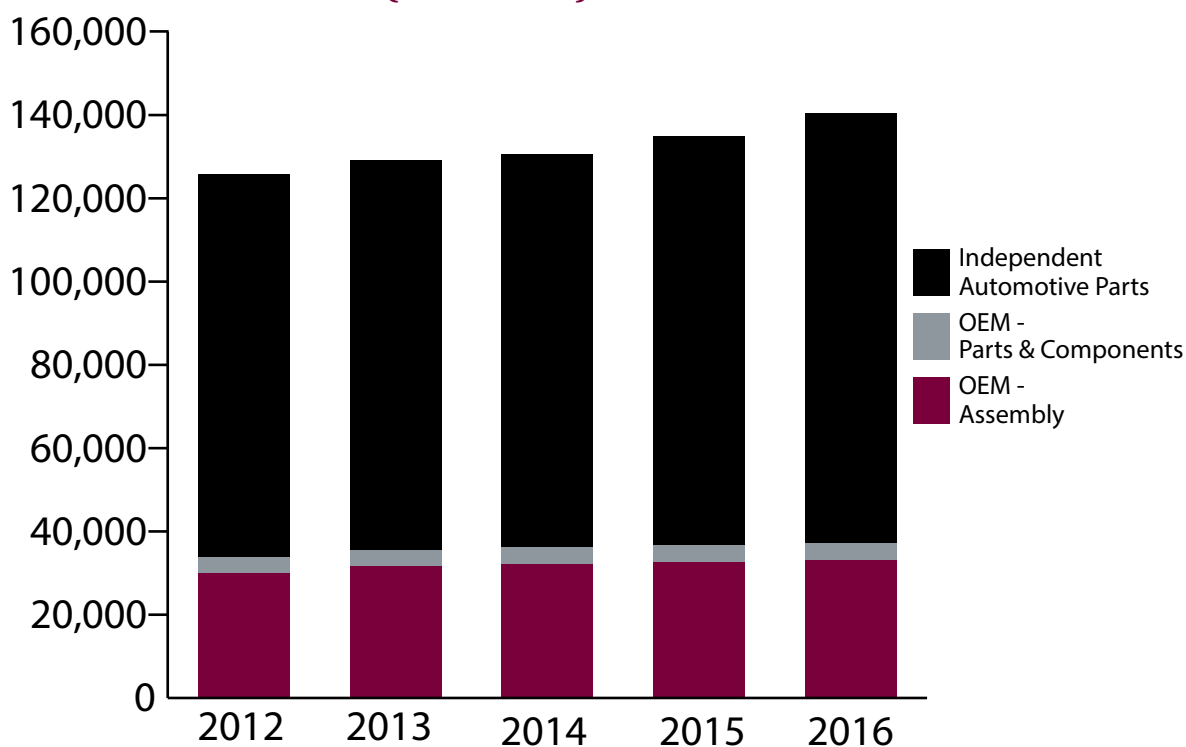
Data collected by the APRC suggests that automotive manufacturing employment in Canada is higher than Statistics Canada's data indicates. This is because many establishments that produce automotive parts and components are not categorized by Statistics Canada as motor vehicle parts manufacturers or as motor vehicle plastic parts manufacturers. For example, many known automotive parts suppliers are categorized as manufacturers of rubber products, foundries, or glass. APRC research has identified over 200 automotive parts manufacturing establishments that are categorized as something other than motor vehicle parts manufacturing or motor vehicle plastic parts manufacturing. This allows us to develop a more accurate profile of automotive industry employment in Canada. APRC data shows that the automotive industry directly employed 140,404 people in 2016 and on average 16,845 more people between 2012 and 2016 than Statistics Canada data, and that total employment increased by 14,704 between 2012 and 2016 (Figure 5).

Figure 4 – Automotive Manufacturing Employment in Canada, 2012-2016 (Statistics Canada data)



Sources: Author's Calculations of data from Statistics Canada, 2017 (CANSIM Table 281-0024);
Statistics Canada, 2013 (CANSIM table 301-0006)¹

Figure 5 – Automotive Manufacturing Employment in Canada, 2012-2016 (APRC data)



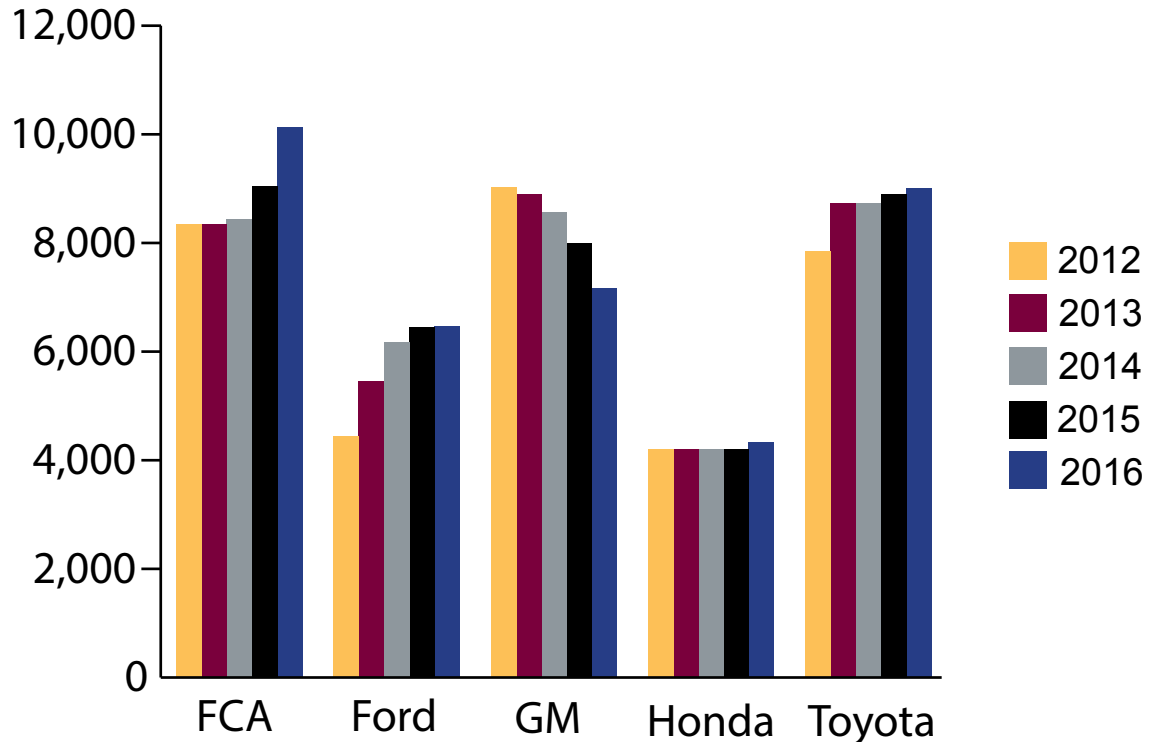
Source: Author's Calculations, APRC Database

¹ Note: Motor Vehicle Manufacturing (NAICS 3361) includes only employment in Ontario - the exclusive location of OEM car and light duty truck assembly plants in Canada. Heavy duty truck and bus manufacturing facilities exist elsewhere in Canada, but are not the subject of our research.

Five OEMs employed 37,127 people in their manufacturing operations in 2016. Two assembly plants – Ford Oakville and Toyota Cambridge - employ more than 5,000 people. Another – FCA Windsor, Canada’s largest manufacturing workplace – employs more than 6,000. These facilities are among the six largest manufacturing and resource extraction workplaces (by number of reported employees) in Canada (ArcelorMittal Dofasco’s Hamilton plant and Syncrude and Suncor’s Fort McMurray facilities are the other three). This illustrates the economic importance of the industry.

Manufacturing employment at four of five OEMs (FCA, Ford, Honda, and Toyota) increased between 2012 and 2016 (Figure 6). During this time total employment at both Toyota and FCA’s Canadian operations surpassed employment at GM’s Canadian operations. This marked the first time in decades that GM was not Canada’s largest automotive OEM employer.

Figure 6 – OEM Manufacturing Employment by Company, 2012-2016



Source: Author's Calculations, APRC Database

4. Restructuring in the Automotive Parts Manufacturing Industry

The independent automotive parts manufacturing industry is comprised of well-known Canadian- and foreign-owned firms with global footprints and a diverse group of Canadian- and foreign-owned SMEs. In 2015, Canadian-owned firms account for over half of all employment in this sector (Table 1). Japanese-owned firms accounted for over 18 percent of independent automotive parts employment, and US-owned firms accounted for 13 percent. The proportion of the independent automotive parts manufacturing workforce employed by US-owned firms – which was high as 30 percent as recently as 2007 – decreased considerably over the past decade (for more detail see Sweeney and Mordue, 2017). The proportion of the independent automotive parts workforce employed by Chinese-owned firms has also increased over the past five years (Keenan, 2016; Macaluso, 2017). This has come as the result of the acquisition of the Canadian assets of Stackpole, Westcast, Meridian, Henniges, and Johnson Controls by Chinese-owned firms.

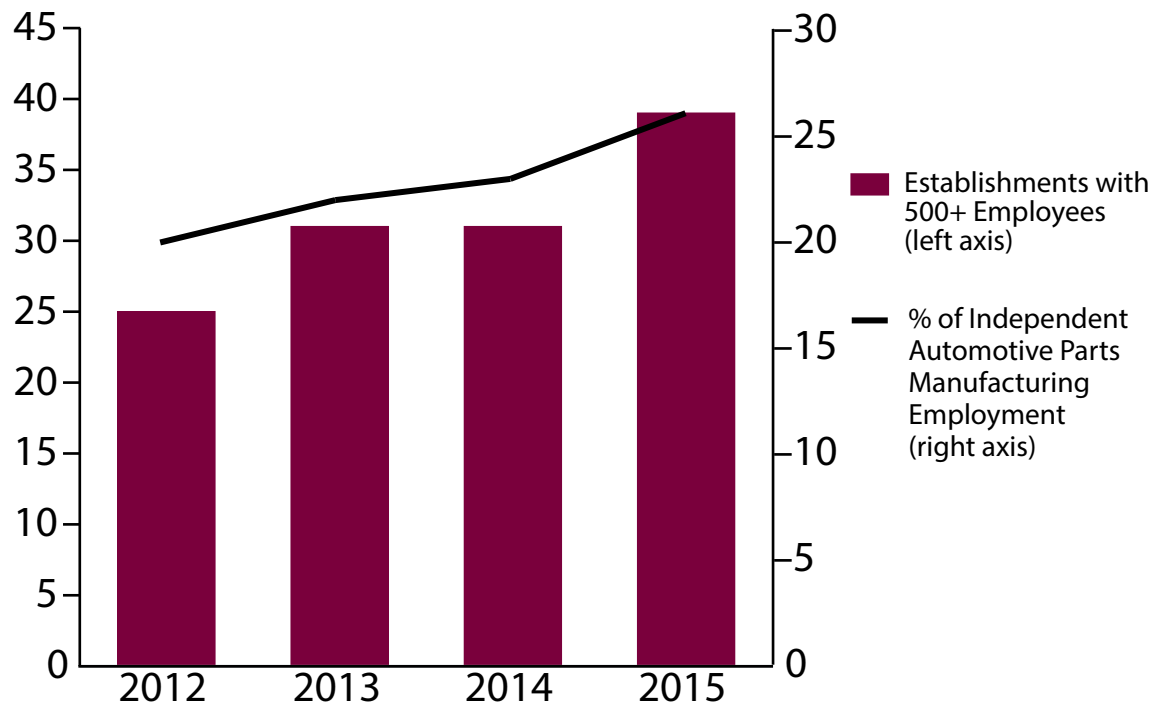
Table 1– Independent Automotive Parts Employment by Nationality of Ownership, 2015

Nationality	Proportion	Employees
Canada	53%	51,923
Japan	18%	17,634
US	13%	13,020
German	5%	5,066
Other	11%	10,769
Total	100%	98,412

Over 60 percent of Canada’s independent automotive parts manufacturing workforce are employed by firms listed as ‘Top 100’ suppliers by Automotive News (Automotive News, 2016). Four Canadian-owned Top 100 suppliers (Magna, Linamar, Martinrea, and Multimatic) accounted for approximately one third of all independent automotive parts employment. Foreign-owned Top 100 suppliers account for just over 30 percent, and foreign-owned SMEs account for just over 10 percent. Canadian-owned SMEs account for just under 25 percent of independent automotive parts manufacturing employment.

There has been a simultaneous increase in the number of independent automotive parts manufacturing establishments that employ 500 or more people (Figure 7). Most of these establishments are owned by Top 100 firms. In 2012, there were 25 automotive parts manufacturing establishments that employed over 500 people. Together, they employed approximately twenty percent of the workforce. By 2015, there were 39 establishments that employed 500 or more people, accounting for over 26 percent of the workforce.

Figure 7 – Automotive Parts Establishments with 500+ Employees, 2012-2015



Source: Author's Calculations, APRC Database

Canada's automotive industry has become increasingly concentrated within southern Ontario during the first decade of the 21st century.² This trend continued over the past five years. Figures 8, 9 and 10 illustrate the geography of OEM production facilities and employment in OEMs and primary independent automotive parts manufacturing establishments in 2006, 2011, and 2016, respectively.³ Between 2006 and 2011 the number of OEM production facilities decreased in all but one census division (Oxford) and the number of persons employed in the automotive industry decreased in all but two (Oxford and Wellington). Between 2011 and 2016, however, employment increased in most (but not all) census divisions where a substantial number of people are employed in automotive manufacturing. The most significant increases occurred in Essex, Oxford, Halton, and Wellington. The most significant decrease occurred in Durham. Moreover, figures 8, 9, and 10 illustrate a shift away from regions in northern Ontario and east of Toronto, and an increasing concentration of production and employment in two distinct regions: Windsor-Essex and the 401 corridor between London (Middlesex) and York. These regions are home to both vehicle assembly plants and to diverse networks of automotive parts manufacturers and value-added service suppliers.

² The vast majority of Canada's automotive manufacturing industry is located in southern Ontario. In addition, there are approximately 4,000 people employed in OEM automotive parts manufacturing in Québec, and several hundred in British Columbia and Nova Scotia. Automotive industry employment in Québec decreased substantially between 2001 and 2011, and has stabilized since.

³ We define a 'primary' automotive parts manufacturing establishment as one whose primary purpose is to manufacture products for the OEM automotive supply chain. In contrast, a 'diversified' supplier manufactures some products for the OEM automotive supply chain as well as other industries (e.g. aerospace, construction machinery). For a more detailed overview of this methodology see Sweeney and Mordue (2017: S2-S5).

Figure 8 – OEM and Primary Supplier Employment in Ontario, 2006

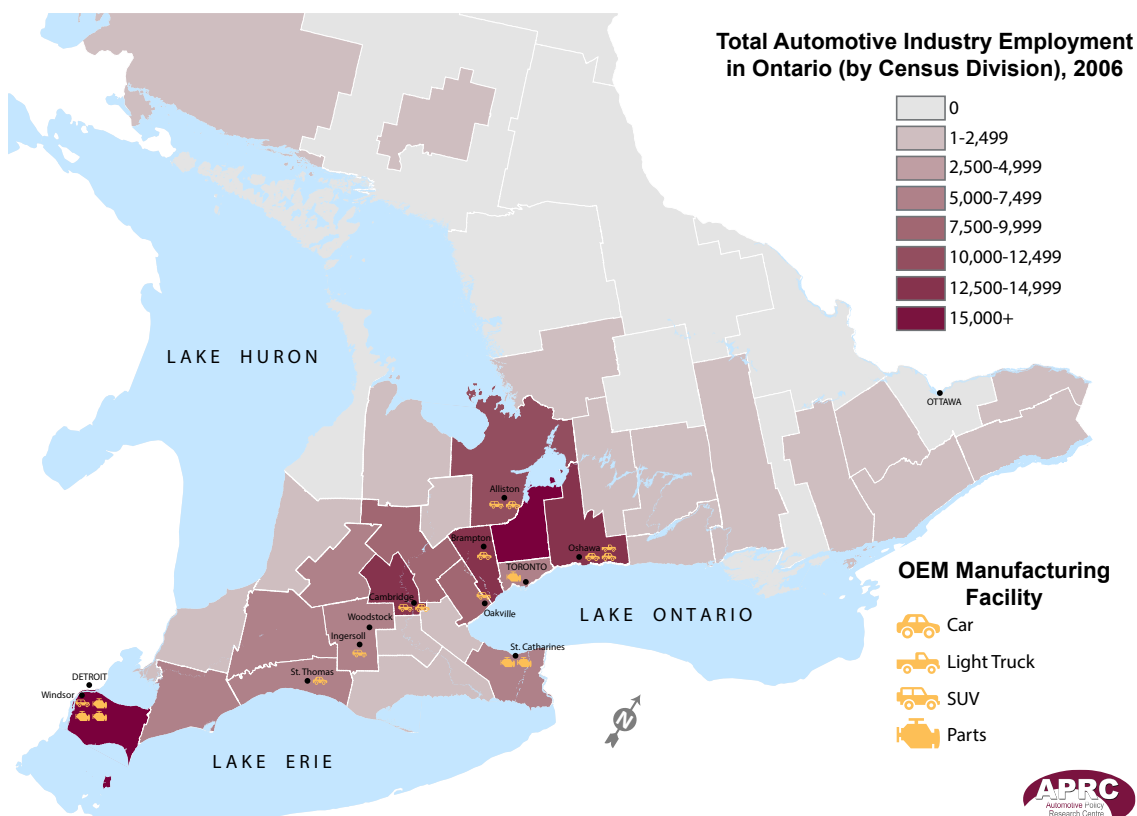


Figure 9 – OEM and Primary Supplier Employment in Ontario, 2011

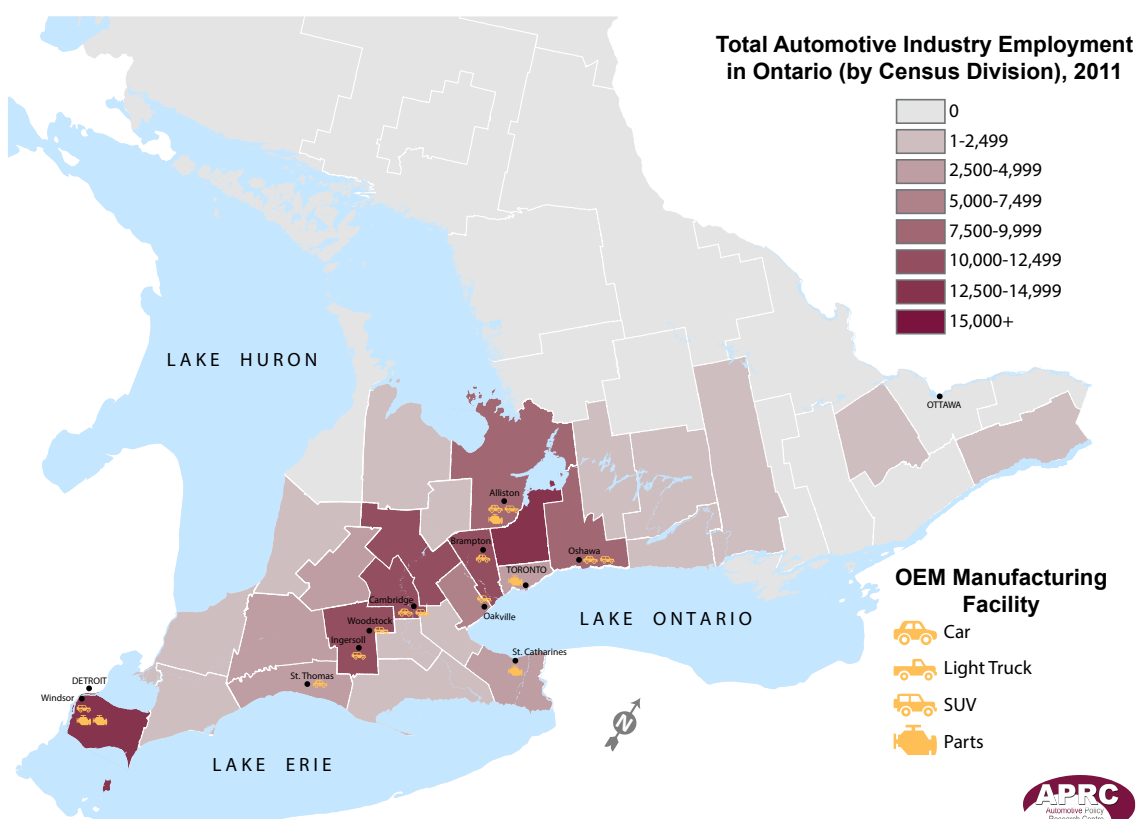
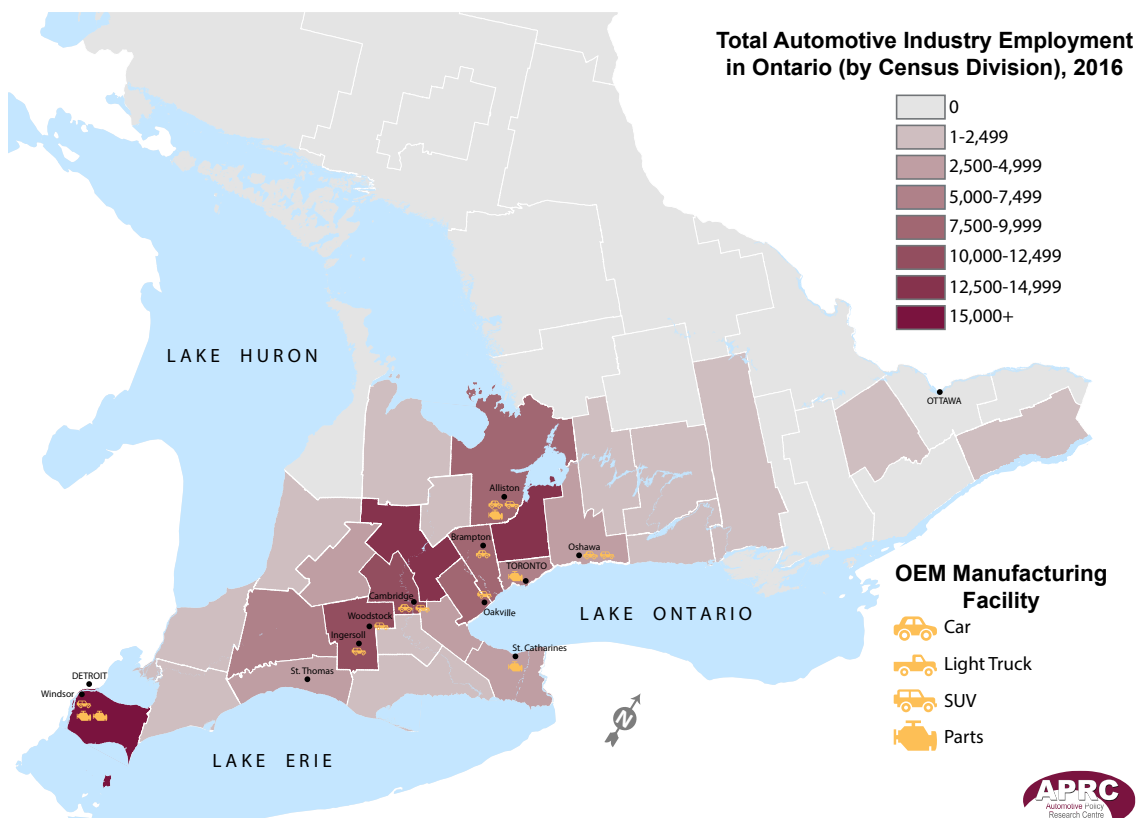


Figure 10 – OEM and Primary Supplier Employment in Ontario, 2016



5. Summary

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The data presented in this report points to several trends.

- The period between 2012 and 2016 has been one of relative stability in Canada's automotive industry, despite a small decrease in vehicle production.
- Employment in both the vehicle assembly and automotive parts manufacturing industries increased in every year between 2012 and 2016.
- The simultaneous increase in employment and (slight) decrease in vehicle production is due partly to a shift away from the production of passenger cars and towards light trucks, which require more person-hours to assemble, and to a shift towards higher value-added vehicles generally. It is also due to the in-sourcing of work by some OEMs (Flavelle, 2014), and to increased demand for Canadian-made automotive parts in the US.
- Between 2012 and 2016, employment at FCA and Toyota surpassed employment at GM, and employment in Japanese-owned independent automotive parts manufacturing firms surpassed employment in US-owned independent automotive parts manufacturing firms.
- Automotive industry production and employment has become increasingly geographically concentrated. The epicenter of the industry shifted westward and most production now takes place in Windsor-Essex and in the 401 corridor between London and the GTA. At the same time, automotive industry production and employment diminished in regions peripheral to the supply chain.
- Canada's automotive industry became increasingly concentrated in large manufacturing establishments, most of which are owned by 'Top 100' suppliers with global footprints.

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