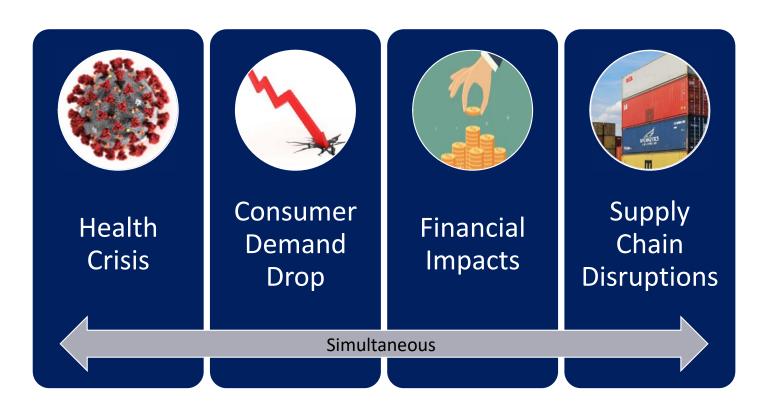


#### THE CENTER FOR AUTOMOTIVE RESEARCH (CAR)

Automotive industry contract research and service organization (non-profit ) with more than 30 years experience forecasting industry trends, advising on public policy, and sponsoring multi-stakeholder communication forums.



# Coronavirus (COVID-19) Impact on U.S. Production

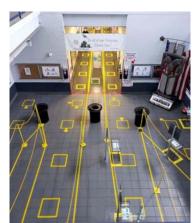




#### Nearly All Automakers & Suppliers Have Detailed "Restart Playbooks"

- Redesigning worker flow & jobs for social distancing
- Implementing health checks
- Use of PPE
- Increased cleaning
- Plans for how to handle illness
- Planning for higher levels of absenteeism



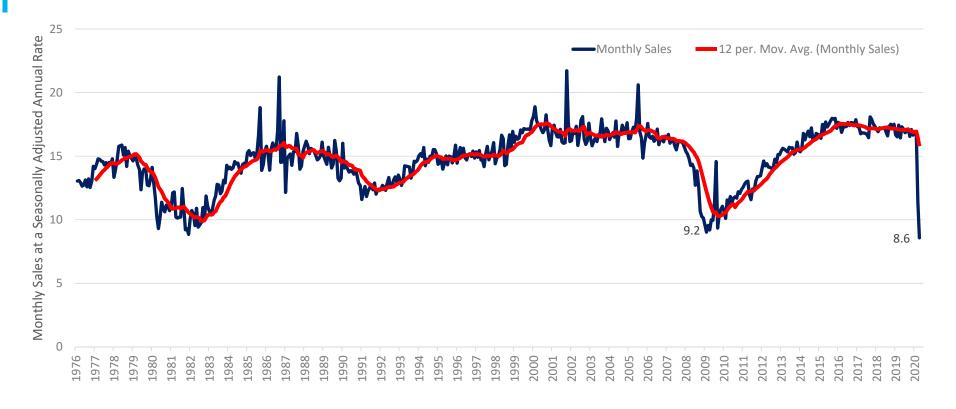




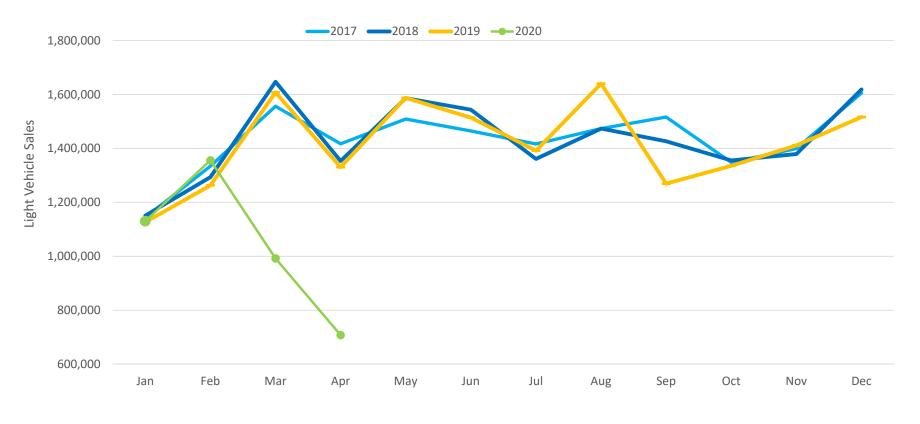


#### U.S. Light Vehicle Monthly Sales (SAAR)

1976 - April 2020



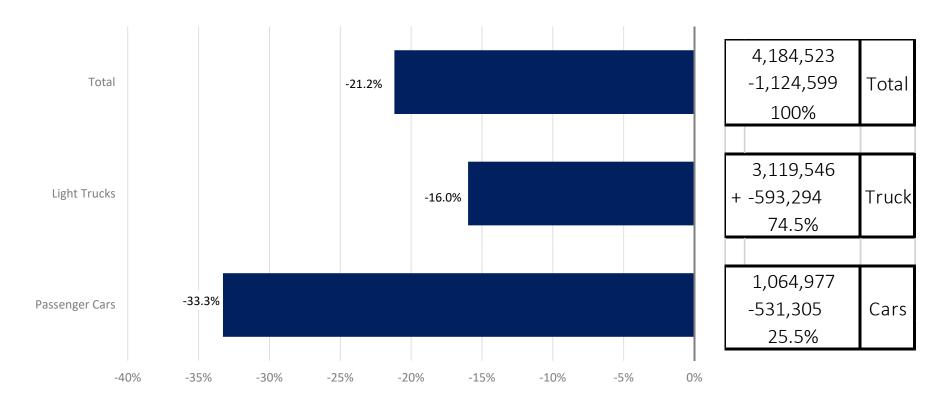
# U.S. Light Vehicle Monthly Sales January 2017 – April 2020



CENTER FOR AUTOMOTIVE RESEARCH

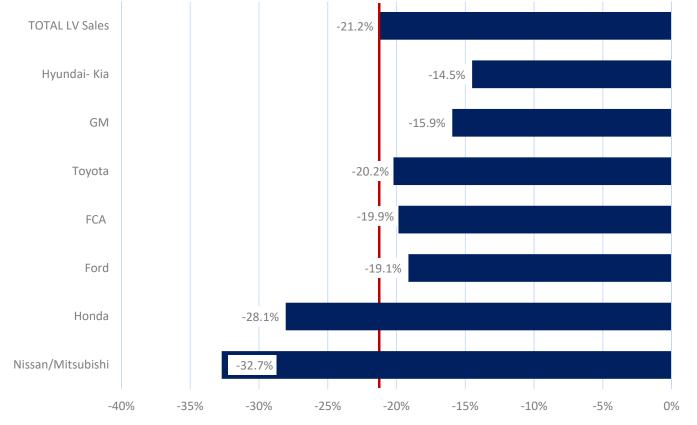
#### U.S. Light Vehicle Sales

Percent Change (YTD) Through April: 2020 vs. 2019



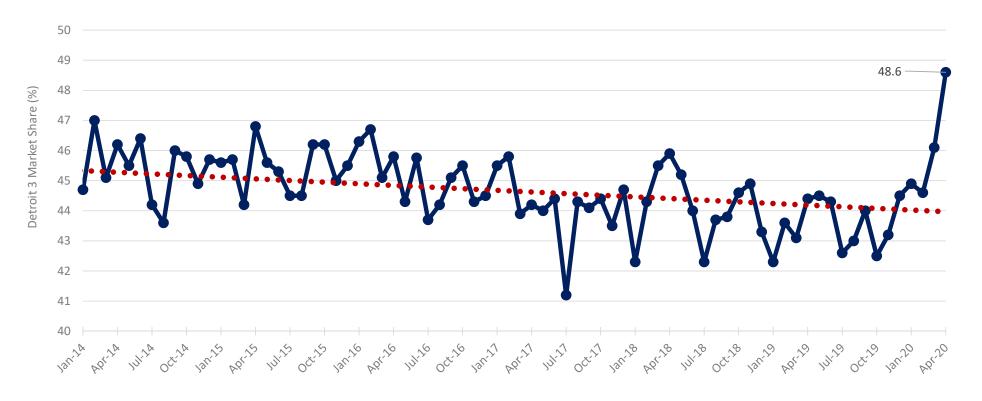
#### Percent Change in Sales of Light Vehicles Per OEM:

YTD Through April: 2020 vs. 2019



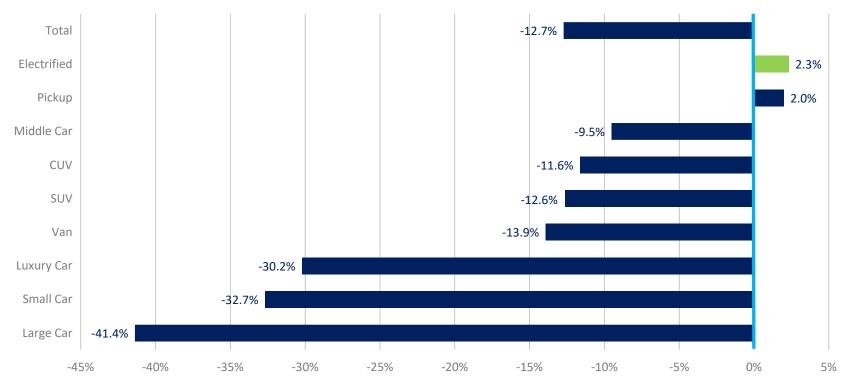
4,184,523			
-1,124,599	TOTAL LV Sales		
100%			
339,254			
-57,539	Hyundai- Kia		
8.1%			
753,152			
-142,861	GM		
18.0%			
580,441			
-147,139	Toyota		
13.9%			
534,683			
-132,515	FCA		
12.8%			
615,506			
-145,628	Ford		
14.7%			
356,536			
-139,026	Honda		
8.5%			
343,556			
-167,023	Nissan/Mitsubishi		
8.2%			

## Detroit 3 Monthly U.S. Market Share Rose to 48.6% in April January 2014 – April 2020



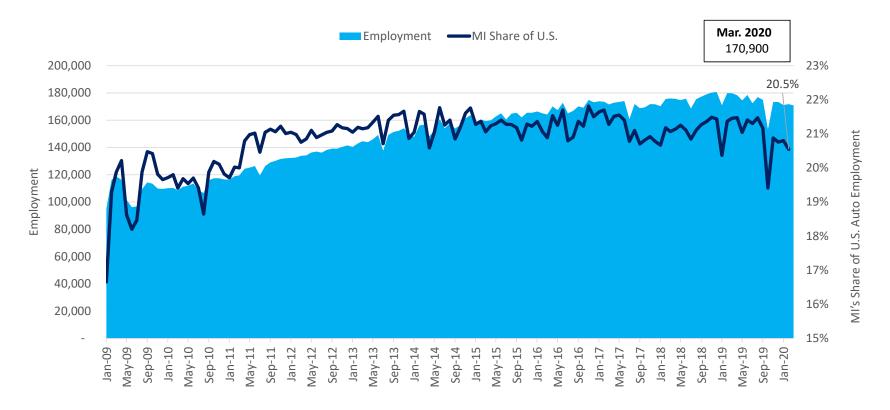
## Segment Breakdown: U.S. Light Vehicles Sales Percent Change

2020 YTD vs. 2019 YTD Through March



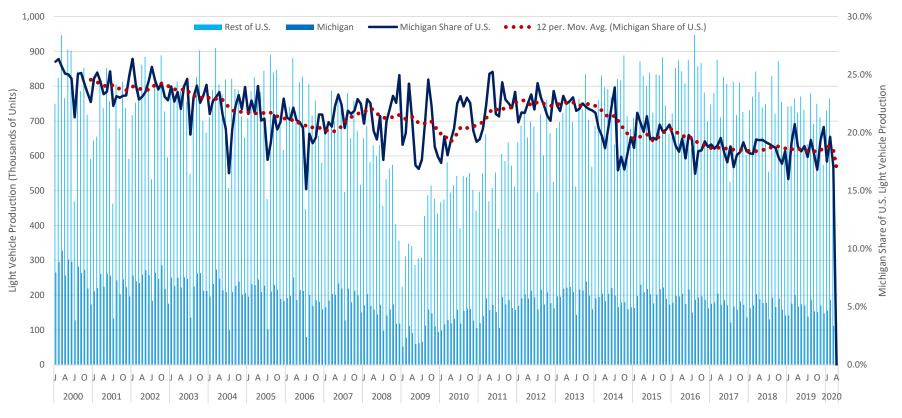
Note: Electrified Segment consists of BEVs, HEVs and PHEVs; all other segments are sales exclusive of Hybrid models

#### MI Motor Vehicle & Parts Manufacturing Employment, 2009 - Q1 2020



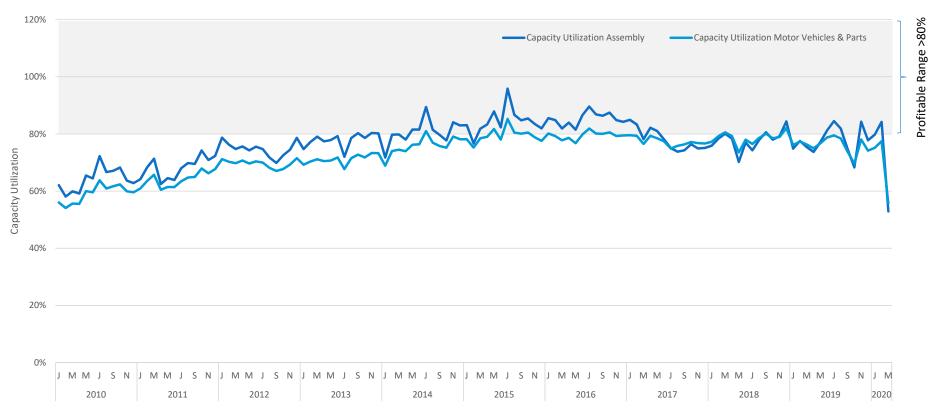
13

## Michigan is the top state for U.S. light vehicle production (18.5%), but share has been trending downward since 2012



#### U.S. Automotive & Parts Capacity Utilization Fell Sharply

Assembly & Parts Capacity Utilization, 2010-March 2020

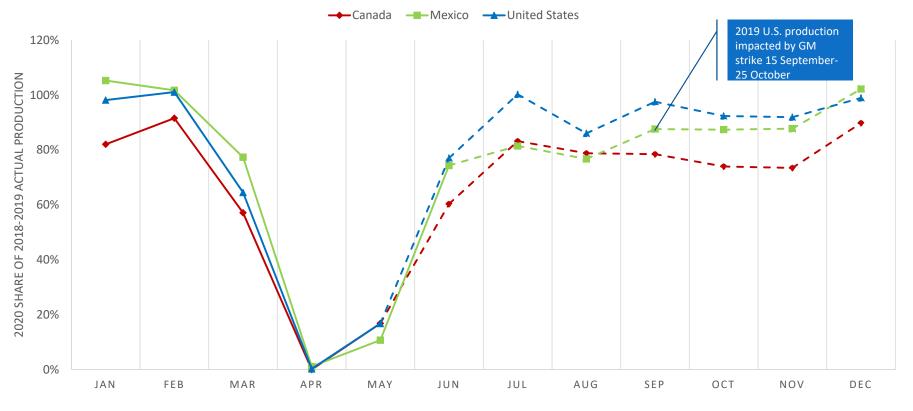


## Production Ramp-Up Summary

	2020 Projected / 2018-2019 Average Production	2020 Units Lost Production vis-à- vis 2018-2019 Average Production
North America—All Automakers	75%	-4.1M
North America—D3 Automakers	73%	-2.3M
U.S.—All Automakers	77%	-2.5M
U.S.—D3 Automakers	76%	-1.3M
Michigan—D3 Automakers	76%	-485K

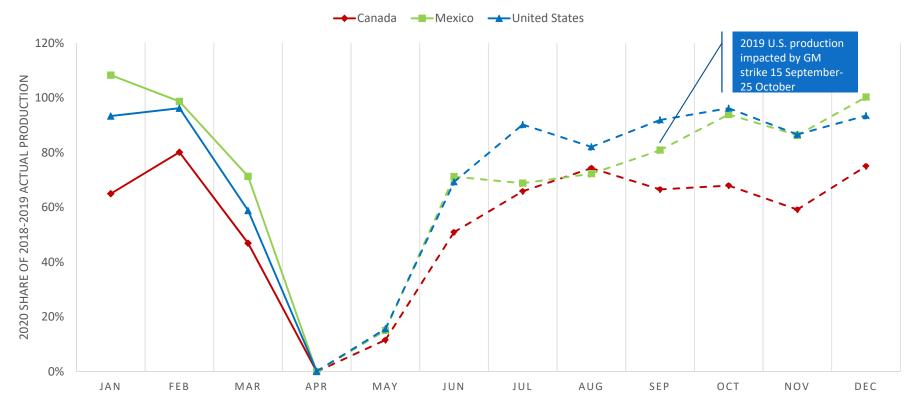
#### North American Production Ramp-Up

#### 2020 Forecast as a Share of 2018-2019 Actual



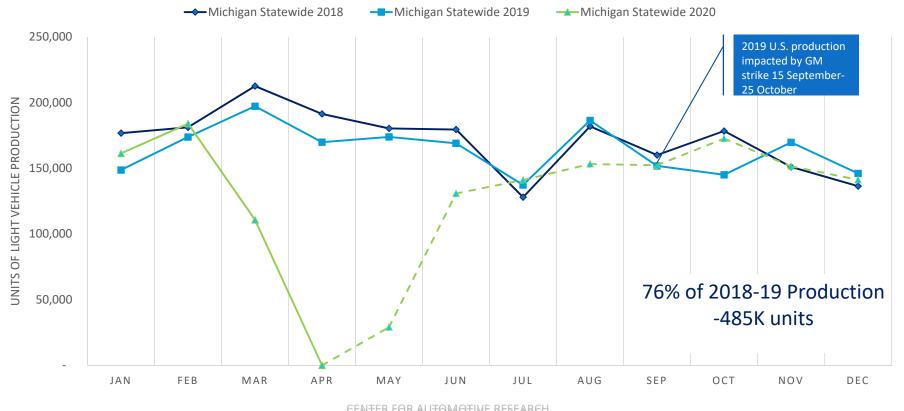
#### North American Detroit 3 Production Ramp-Up

#### 2020 Forecast as a Share of 2018-2019 Actual



#### Michigan Production Ramp-Up: Statewide

#### 2020 Forecast as a Share of 2018-2019 Actual





#### Auto Industry Current Financial Situation

- Limited sales and earnings visibility, when "stay-at-home" and "essential business" government mandates enacted on state-by-state basis
  - Earnings guidance withdrawn by nearly all publicly traded auto companies
  - Companies rushed to boost liquidity, i.e., cash on hand
- 1Q: 20 earnings results
  - Focus by investors on liquidity and cash burn
  - 'Earnings' largely not as bad as initially feared
- Some 'bright spots' for automakers and suppliers
  - Light vehicle sales held up better, pre-"stay-at-home" mandates
  - Product mix, i.e., light trucks
  - Restructuring and cost-containment efforts

#### Liquidity Situation – Automakers & Auto Suppliers

#### Automakers:

- Detroit 3 drastic measures to boost liquidity, e.g., drawing down credit lines and issuing debt
- Japanese Automakers unprecedented actions for cash preservation, e.g., salaried employee furloughs
- Detroit 3 @ ~ 12 months liquidity buffer\*; < 6 months for Japanese (except Subaru @ 10 months)

#### Auto Suppliers:

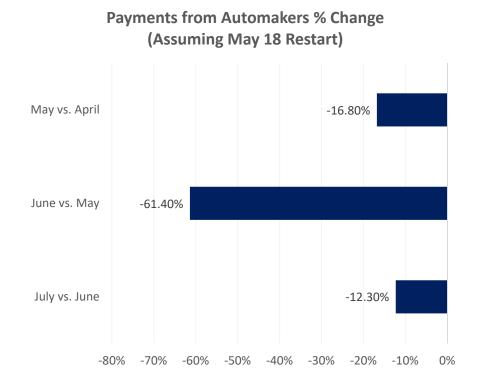
- Financially better-positioned by and large coming into COVID-19 pandemic vis-àvis automakers
- Most publicly traded suppliers @ > 6 months liquidity buffer\*
- The full impact of idled production not experienced in 1Q due to 40-60 day' payment terms

### What's Next?

- 2Q: 20 Outlook
  - A moving target
  - Much worse impact to be felt by auto suppliers
- Restart outlook (so far)
  - Japanese automakers this week
  - Detroit 3 next week

#### Outlook: Auto Suppliers Cash Flow Issues

- Payments from Automakers at 45day Payment Terms, FY2020
- Full impact of 'Zero Revenue' not yet experienced for supply base
  - Cash flow squeeze expected during June-July
  - Implications for suppliers not yet fully understood, but include financial distress, insolvency, & consolidation



#### Liquidity crisis could turn into an insolvency crisis...



Fed Chair Warns the Economy May Need More as Congress Hesitates

Jerome H. Powell pointed to potentially dire consequences if a lasting economic downturn is not averted with forceful policies.

Solution of the Province of

 $\underline{\text{https://www.nytimes.com/2020/05/13/business/economy/fed-chair-powell-economy-virus-support.html} \\$ 

"The passage of time can turn liquidity problems into solvency problems... additional fiscal support could be costly, but worth it if it helps avoid long-term economic damage."

Fed Chair Jerome H. Powell13 May 2020

### Financial Summary / Outlook

- Focus shifting from liquidity / cash burn (1Q) to production restart and supply-chain risk (2Q)
- Financial distress likely during 2Q; Tier 2- and 3 particularly at risk
- 'W-shaped' recovery a major concern...
- Restructuring & consolidation to return



#### Michigan is the Top State for Automotive Trade

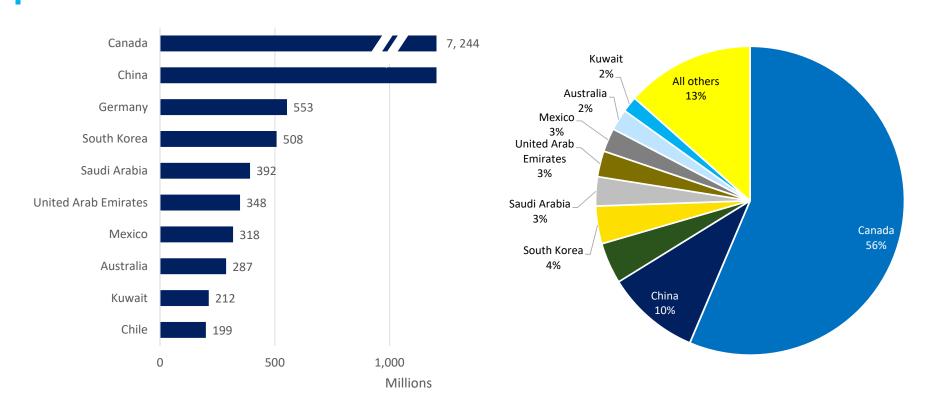
Top 10 Automotive Exporting States: 2015 to 2019



\*NAICS 3361-3

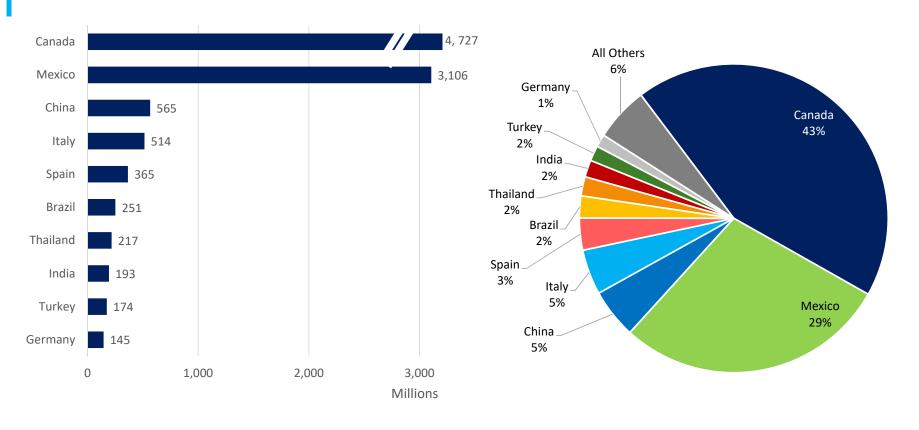
#### Top Ten Destinations of MI Vehicle Exports (3361)

#### In Dollar Terms (USD), 2019



#### Top Ten Destinations of MI Vehicle Parts Exports (3363)

In Dollar Terms (USD), 2019



# Many Michigan-built vehicles rely heavily on Mexican parts & components content

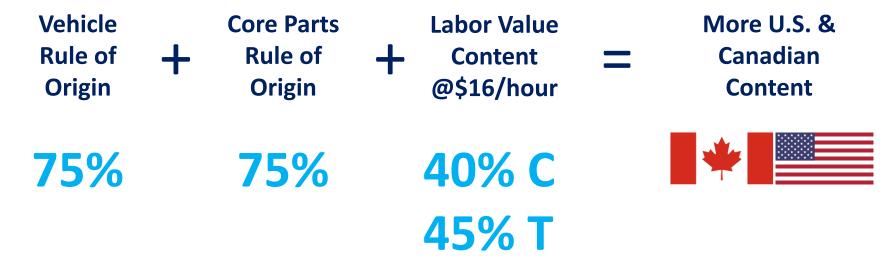
2020 American Automobile Labeling Act (AALA) Report Content

			2020 AALA Parts Content Share		hare
Automaker	Assembly Plant	Model	US/CAN	MEX	Other
<b>General Motors</b>	Flint Truck	Sierra HD	41%	46%	13%
<b>General Motors</b>	Flint Truck	Silverado HD	41%	46%	13%
Ford	Michigan Assembly	Ranger	50%	31%	19%
FCA	Sterling Heights	1500	57%	28%	15%
FCA	Warren Truck	1500	59%	27%	14%
FCA	Jefferson North	Grand Cherokee	61%	27%	12%
FCA	Jefferson North	Durango	60%	26%	14%
Ford	Flat Rock	Continental	60%	24%	16%
<b>General Motors</b>	Lansing Delta Township	Enclave	54%	22%	24%
<b>General Motors</b>	Lansing Delta Township	Traverse	54%	22%	24%
<b>General Motors</b>	Orion	Sonic	49%	21%	30%
Ford	Flat Rock	Mustang	51%	20%	29%
<b>General Motors</b>	Lansing Grand River	Camaro	59%	19%	22%
<b>General Motors</b>	Lansing Grand River	CT4	59%	19%	22%
<b>General Motors</b>	Lansing Grand River	CT5	59%	19%	22%
Ford	Dearborn Truck	F-150	56%	16%	28%
Ford	Dearborn Truck	F-150 SuperCrew	56%	16%	28%
<b>General Motors</b>	Orion	Bolt EV	18%	0%	82%

### USMCA Enters Into Force 1 July 2020

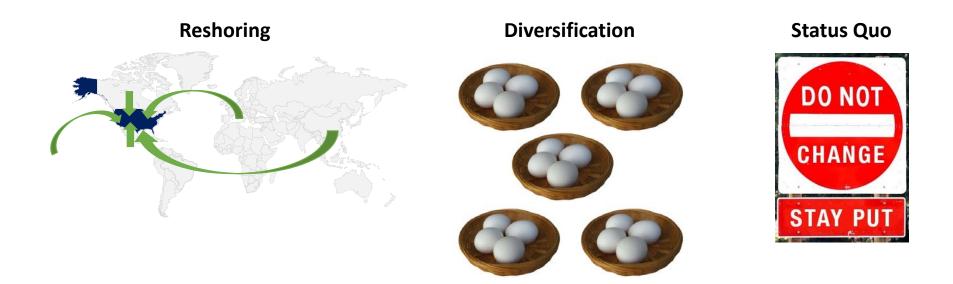
NAFTA has a single threshold: 62.5 percent originating content	USMCA has five thresholds, each applying to a different set of parts or finished vehicles, ranging from 65 to 75 percent originating content		
NAFTA was explicitly designed to prevent roll-ups	USMCA rules explicitly allow, even encourage roll-ups		
NAFTA incorporates a tracing list as one of the measures against roll-up	USMCA abolishes the tracing list but requires more items to be originating		
NAFTA has no requirements for steel and aluminum sourcing	USMCA introduces a requirement for North American steel and aluminum purchases		
NAFTA does not have any labor value requirements	USMCA requires a minimum of 40 (45) percent of the value of manufacturing labor incorporated in a car (truck) to have been paid a wage rate above \$16 per hour. Up to 10 points of the requirement can be earned via R&D or IT salaries.		
NAFTA does not address trade measures other than conditions for tariff-free access to each country's market	Provisions within the USMCA and its side letters provide limited protection for Canada and Mexico from a potential §232 tariff placed on imported vehicles and vehicle parts  The USMCA provides limited protection for Mexico in the event that the U.S. raises its MFN tariff rates applied to vehicles and vehicle parts		

## Core Parts Rule + Labor Value Content Rule Combine to Incentivize U.S. & Canadian Production



(engine, transmission, body, chassis, axle, suspension, steering, advanced batteries) Cars=25% from materials & manufacturing Trucks=30% from materials & manufacturing

### Three Options to Mitigate Supply Chain Disruption



### Changes in Automotive Manufacturing

**Automation** 



"Plump" Lean



Consolidation



