

COVID-19: J.D. Power Auto Industry Impact Report

April 8, 2020

Webinar Dial-in: (562) 247-8422

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<https://register.gotowebinar.com/register/4653144609487918348>

Agenda

1. Retail Sales Impact Through April 5

2. Sales Outlook

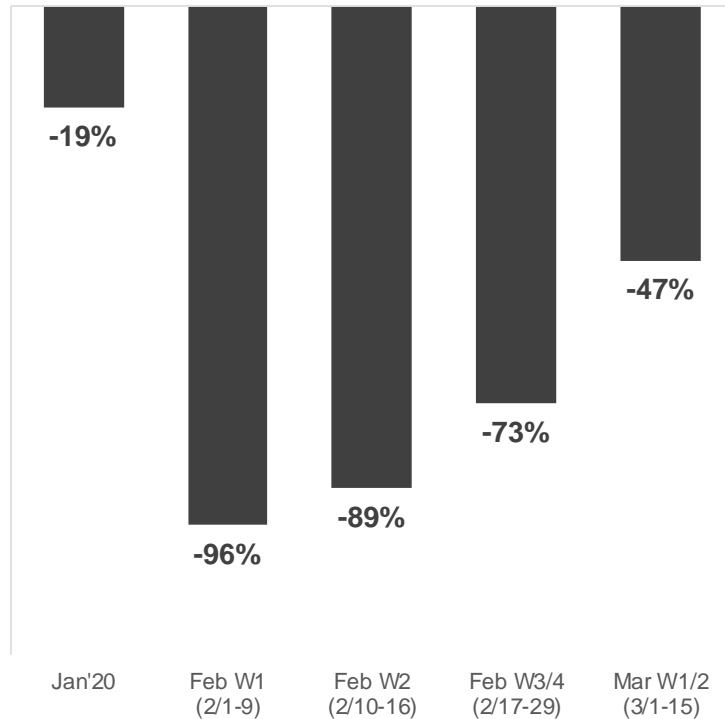
3. Path to Restarting Manufacturing

4. Q&A

1. Retail Sales Impact Through April 5

IMPACT: China Sales Results

China: Year-over-Year Sales Results (%)



99%

Franchised Dealerships Open (as of 4/3)

66%

Showroom Traffic Relative to Normal Levels (as of 4/3)

INSIGHT

February Sales Results

During the height of the impact from the virus, auto sales in China fell 96% during the first week of February before improving slightly each subsequent week.

March Sales Results

Through the first two weeks of March, sales have recovered somewhat and were down only 47% from last year. With a gradual easing of restrictions, showrooms are now almost fully open. Significant marketing and incentive activity has accompanied the recovery.

KEY TAKEAWAY

While China auto sales are recovering, through mid-March the recovery has been only partial.

IMPACT: EU March 2020 Sales Results

March 2020: Year-over-Year Sales Results (%)



UK
-44%



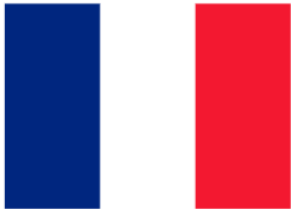
ITL
-85%



GER
-38%



ESP
-69%



FRA
-72%

INSIGHT

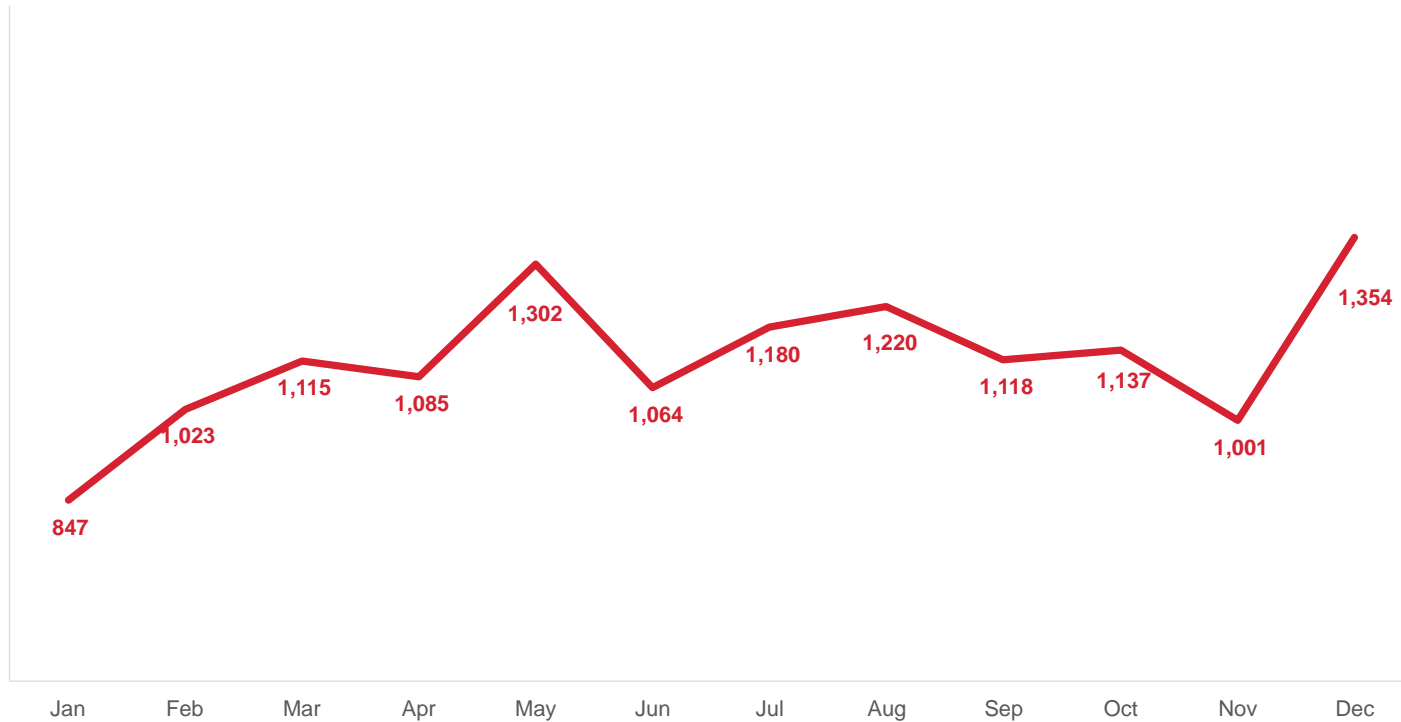
EU March Sales Results

The impact from the virus has had similar effects on the European market, with Italy (-85%) posting the largest decline, followed by France (-72%) and Spain (-69%).

KEY TAKEAWAY

All global markets are tracking toward similar declines around 80%

IMPACT: J.D. Power 2020 Pre-Virus Retail Forecast



INSIGHT

2020 Pre-Virus Full Year Forecast

Prior to the escalation of COVID-19 in the U.S., J.D. Power expected annual total sales of 16.8 million and retail sales of 13.4 million, declines of 1.9% and 2.6% respectively from 2019.

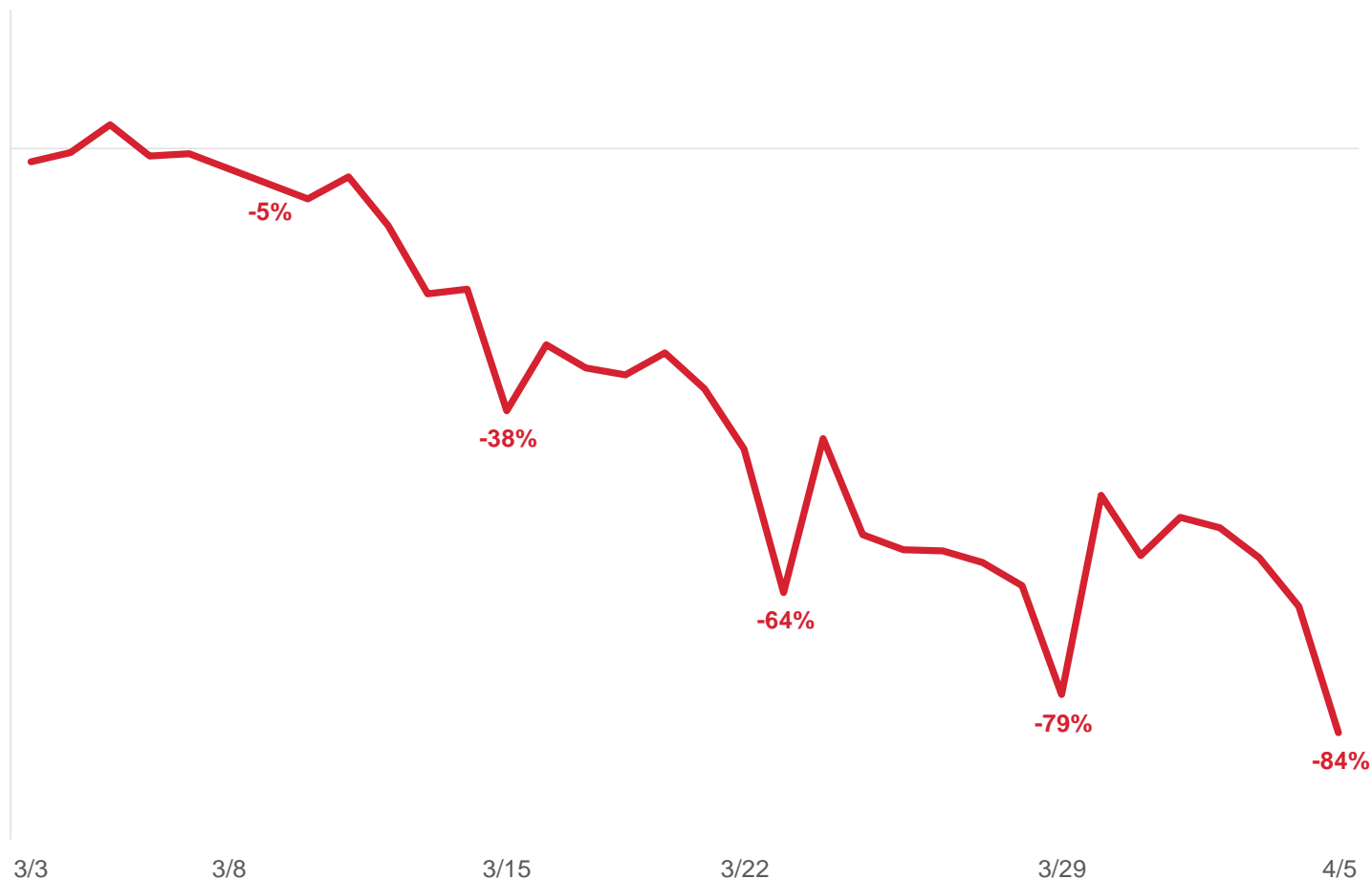
Pre-Virus April Forecast

The pre-virus forecast for April 2020 was 1.36 million total sales and 1.09 million retail sales, declines of 0.8% and 1.1% respectively from April 2019.

KEY TAKEAWAY

April new-vehicle retail sales were forecasted to fall 1.1% from last year. This forecast is the baseline expectation for all sales analyses in this deck.

IMPACT: National Retail Sales Daily Change Through April 5



INSIGHT

March Retail Sales

March retail sales ended at 725,000, a decline vs. pre-virus forecast of 390,000/-35% and a drop of 500,000/-41% from March 2019.

Weekly Change vs. Forecast

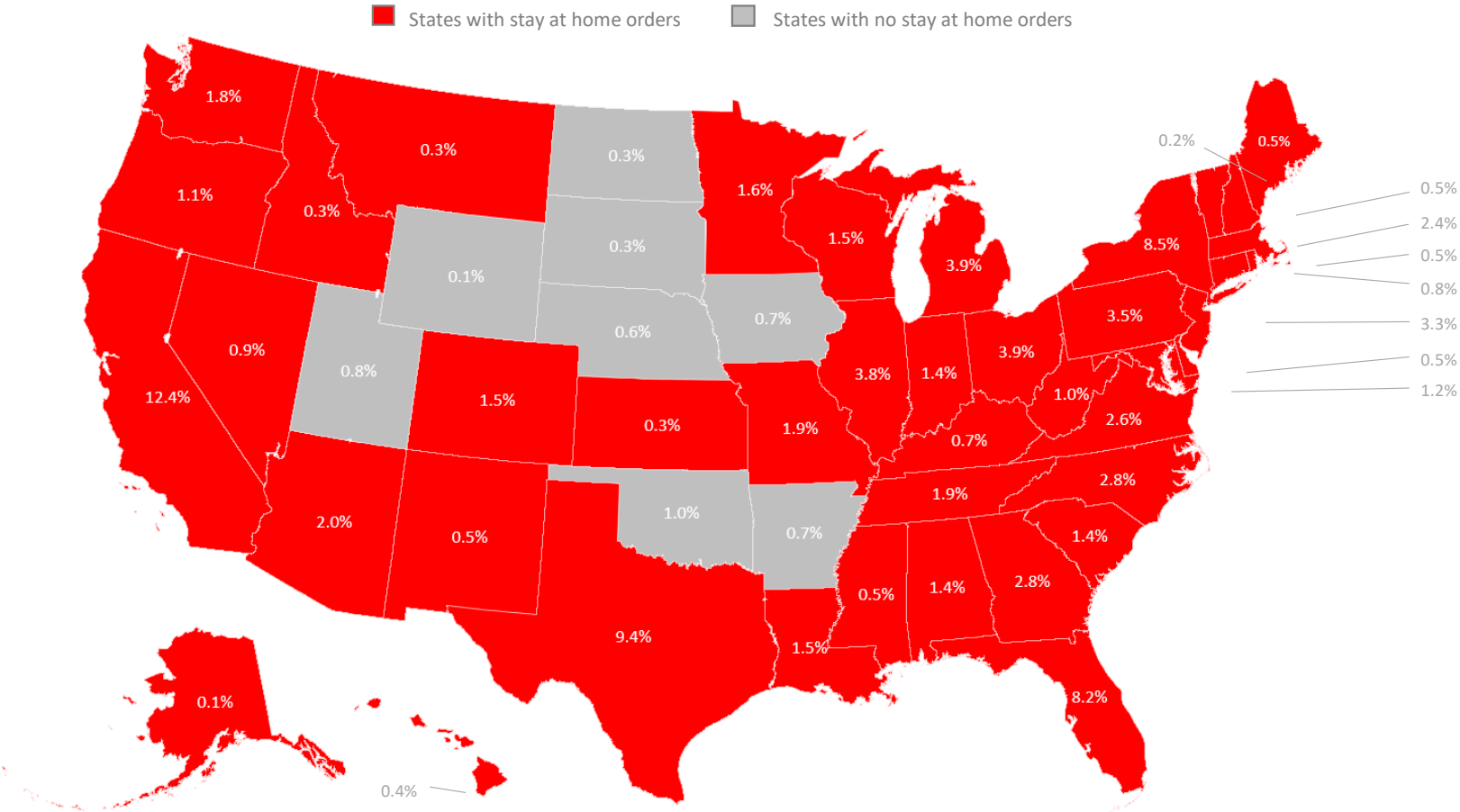
- March 8: -1% or 1,000 units
- March 15: -15% or 35,000 units
- March 22: -36% or 95,000 units
- March 29: -59% or 189,000 units
- April 5: -59% or 152,000 units

The decline for the week ending April 5 was similar to the decline for the previous week, despite the expectation of a larger decline due to broader stay-home regulations. This may be indicative of the industry adapting sales operations to match the current environment, but it may also be a temporary anomaly.

KEY TAKEAWAY

April starts where March left off: Sunday sales fell 84%.

IMPACT: stay-home Orders by State



INSIGHT

New stay-home Orders

This week Texas, Florida, Georgia, South Carolina, and Missouri added stay-home orders, but all continue to allow automotive sales.

Dealership Sales Operations

- 24 states (44% of 2019 sales) allow for dealership sales operations to remain open
- 26 states (56% of 2019 sales) have restricted sales completely or allow only for online or remote sales

States Opening Up Online Sales

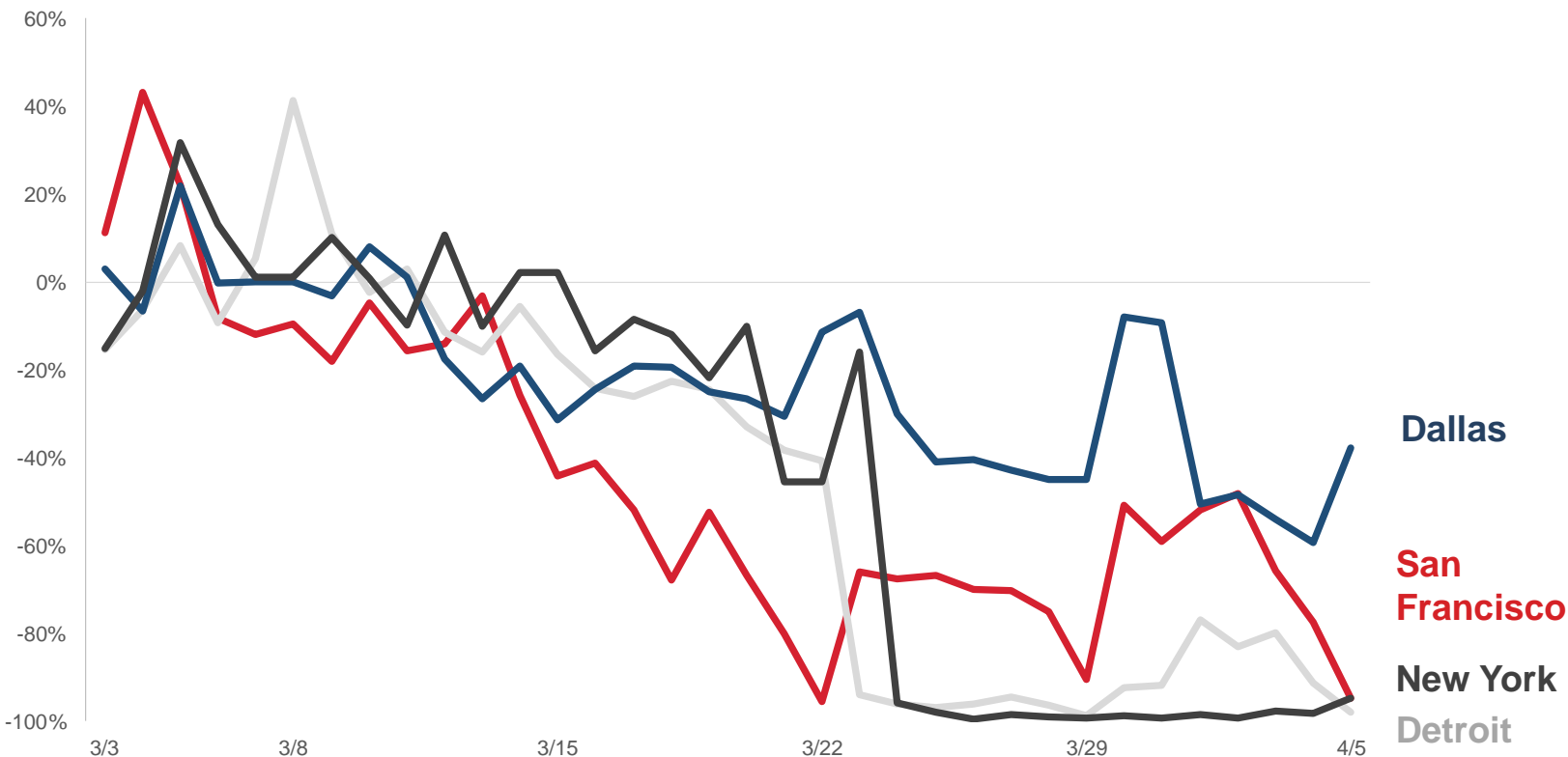
Stay-home orders are being clarified everyday to allow dealers to complete online or no-contact sales. This past week Washington and New Jersey clarified orders to allow online or remote sales.

KEY TAKEAWAY

42 states and over 300 million Americans are currently under stay-home orders. Sales will be minimal until shelter orders are lifted.

IMPACT: Regional Retail Sales Daily Change Though April 5

Retail Sales: Actual over/(under) Pre-Virus Forecast



INSIGHT

Dallas

Despite local stay-home order, Dallas remains one of the most resilient markets in the country. Sales were off 50%

San Francisco

Volatility in volumes, but declines of 80%.

New York/Detroit

Near zero sales in these markets.

KEY TAKEAWAY

Regional disparity persists, but even resilient markets are exhibiting further sales deterioration.

IMPACT: Regional Retail Sales

	Apr-20			Δ Y/Y	Week Ending			Δ W/W
	Apr-19	Mar-20	MTD		2019-04-07	2020-03-29	2020-04-05	
National	1,055	725	50	-61%	207	130	105	-19%
Pre-Virus Forecast	1,055	1,115	133	2%	207	319	257	-19%
New York	81	44	1	-85%	15	1	2	117%
Los Angeles	68	44	4	-62%	15	7	6	-15%
Chicago	31	19	1	-61%	6	3	3	-13%
Dallas	29	24	2	-53%	6	5	4	-18%
Philadelphia	30	15	0	-92%	5	0	0	59%
Detroit	27	17	0	-98%	5	1	0	-94%
Boston	25	15	1	-78%	5	2	1	-39%
San Francisco	25	13	1	-72%	5	2	2	12%
Houston	23	20	2	-41%	5	5	4	-19%
Miami	24	18	1	-61%	5	4	3	-29%
Washington, DC	23	15	1	-56%	5	3	2	-23%
Atlanta	20	15	1	-58%	4	3	3	-23%
Tampa	19	16	1	-58%	3	4	3	-36%
Phoenix	18	15	2	-39%	4	4	3	-31%
Orlando	17	13	1	-53%	3	3	2	-23%
Cleveland	16	12	1	-53%	3	2	2	-14%
Seattle	15	8	0	-87%	3	1	0	-66%
Minneapolis	15	11	1	-49%	3	3	2	-34%
Denver	13	9	1	-66%	3	1	1	-12%
Pittsburgh	12	6	0	-98%	2	0	0	0%
Sacramento	11	7	1	-49%	2	1	1	0%
San Diego	11	7	1	-58%	2	1	1	20%
West Palm Beach	10	8	1	-58%	2	2	1	-34%
Raleigh	10	8	1	-39%	2	2	1	-23%
Charlotte	10	8	1	-44%	2	2	1	-12%

INSIGHT

April Month-to-Date

Nearly all top 25 markets are showing declines in excess of 50%. The weak exit rate from March combined with late arriving stay-home orders in many states means the industry still has yet to reach the bottom.

Week Ending April 5

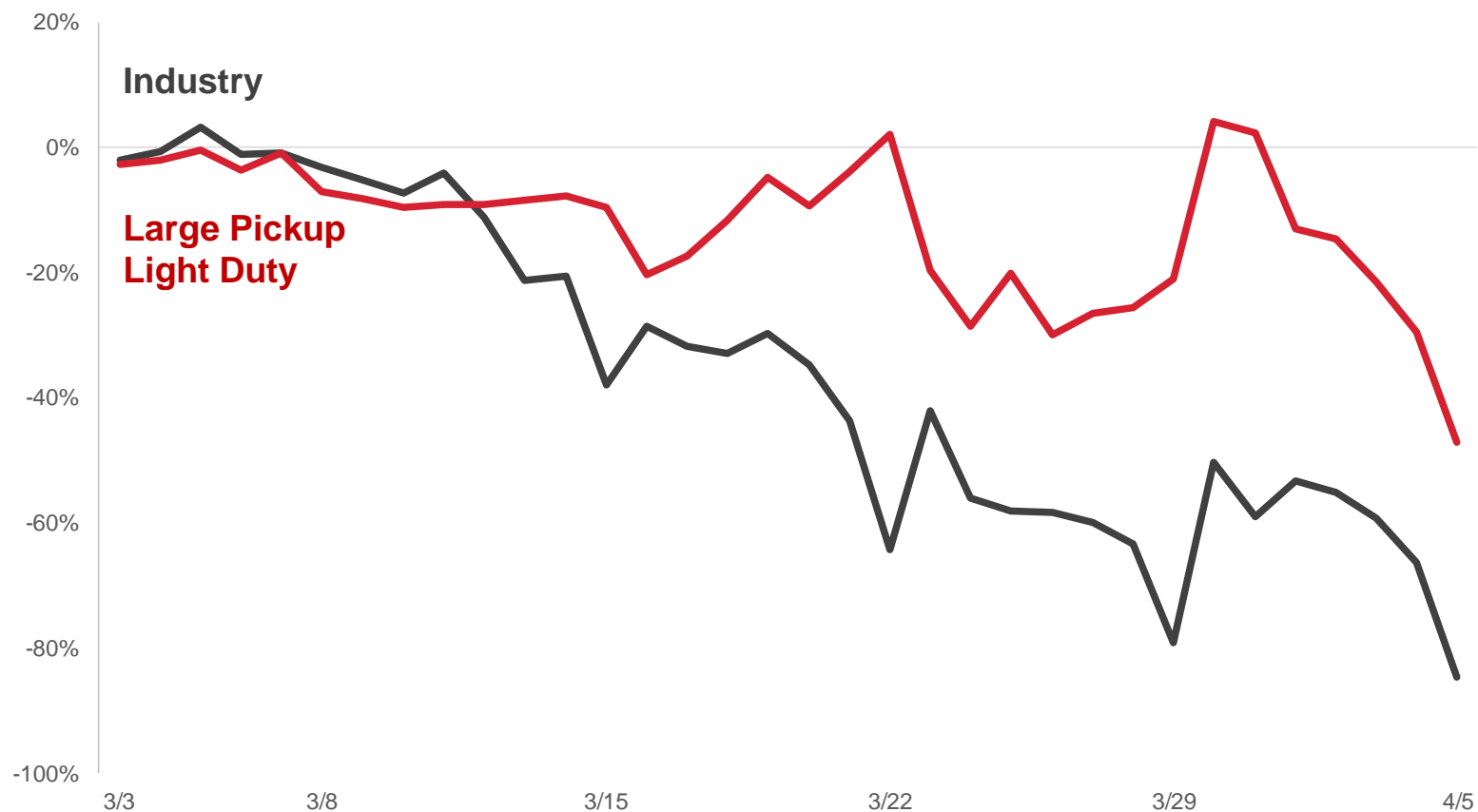
The strong gains for New York and Philadelphia, while stemming from a small baseline, may be driven by New Jersey clarifying orders to allow online sales this week.

KEY TAKEAWAY

Every top 25 market is under stay-home orders, including local orders in Texas, and entered April without momentum.

IMPACT: Pickup Sales Exhibiting Greater Resilience

Retail Sales: Actual over/(under) Pre-Virus Forecast



INSIGHT

Light-Duty Pickup

LD Pickup sales for the week ending April 5 were down 10% compared to 59% for the industry. The resilience is driven primarily by the availability of unprecedented incentive programs on certain pickups, specifically loans with 0% APR for 84 months, plus up to six months of payment relief.

Key Source of Revenue & Profitability

LD Pickups carry net transaction prices of \$42,000 and are among the most profitable vehicles sold by OEMs.

Risks of Longer-Term Loans

84 month loans increase the length to positive equity by eight months (49 months vs. 41 for 0%/72 months) and may extend the ownership cycle.

KEY TAKEAWAY

March ended with a surge in pickup sales, but there was a subsequent decline as the week ending April 5 progressed.

IMPACT: New Vehicle Incentives Pressuring Used Market

Example: New vs Used Vehicle Payments

	Feb-20	Mar-20	Change
New Vehicle Price = \$45,000	Loan APR/Term	0%, 72 months	0%, 84 months
	Monthly Payment	\$625	\$536
Used Vehicle Price = \$30,000	Loan APR/Term	5%, 72 months.	5%, 72 months.
	Monthly Payment	\$483	\$483
Payment Difference	\$142	\$53	-\$89

INSIGHT

84-Month Loans = Powerful Lever

Growing availability of 0% loans for 84 months reduces monthly payments on new vehicles to unprecedented levels.

Impact on Used Vehicle Sales

For many vehicles, particularly those that have historically depreciated slowly, 0% for 84 month offers reduce new vehicle payments to levels that are close to used vehicle payments.

Short-term result will be consumers switching from used to new vehicles.

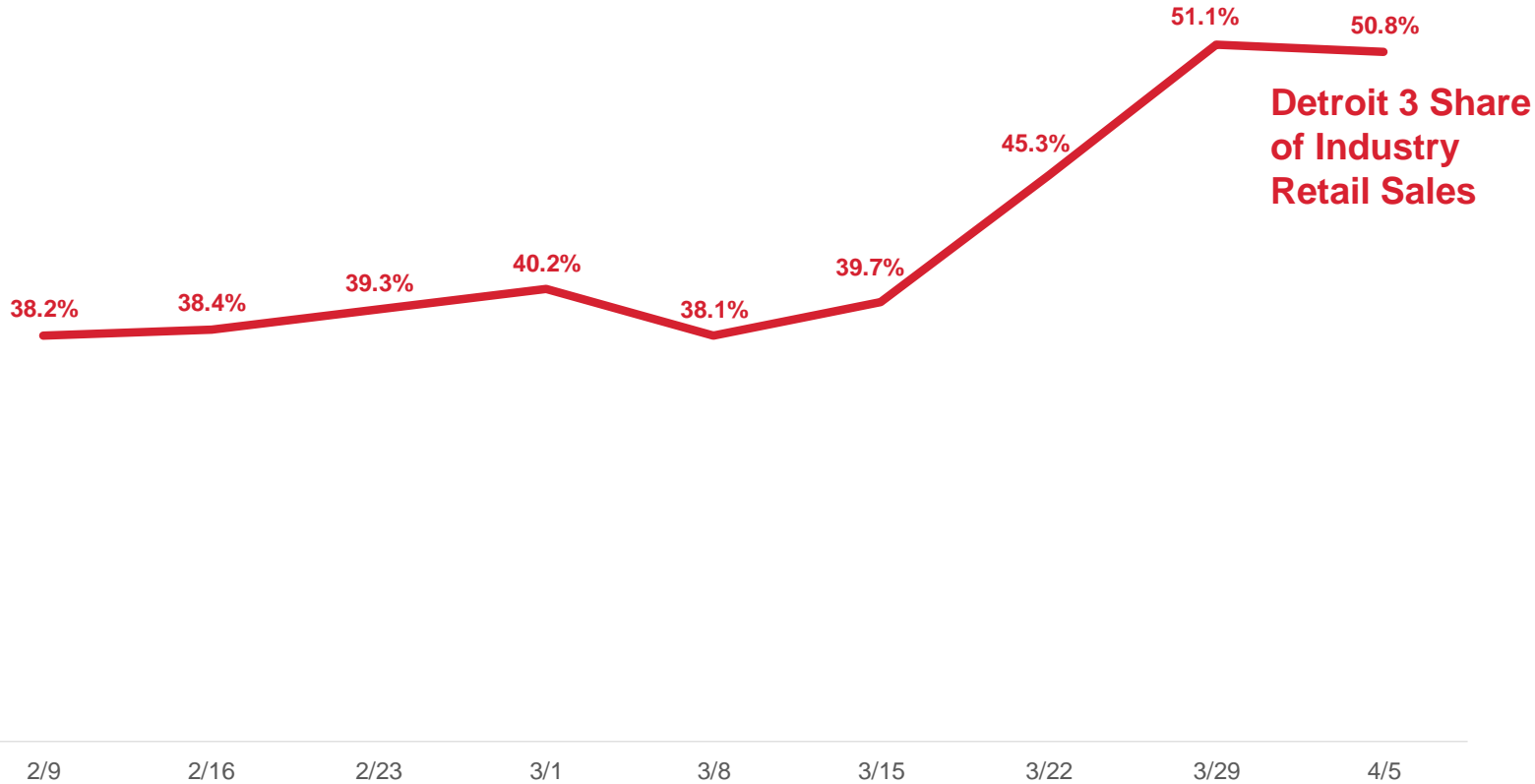
Longer-term result will be depression of used vehicle values.

KEY TAKEAWAY

Significant reduction in the relative payment for a new vehicle will cannibalize used vehicle sales and put significant downward pressure on used vehicle prices.

IMPACT: Detroit 3 Sales Exhibiting Greater Resilience Than Other Manufacturers

Share of Industry Retail Sales



INSIGHT

Detroit 3

GM, Ford, and FCA retail market share remained above 50% for a second consecutive week for the first time since 2006. Detroit 3 share rose 11pts since week ending 3/15.

Drivers of Resilience

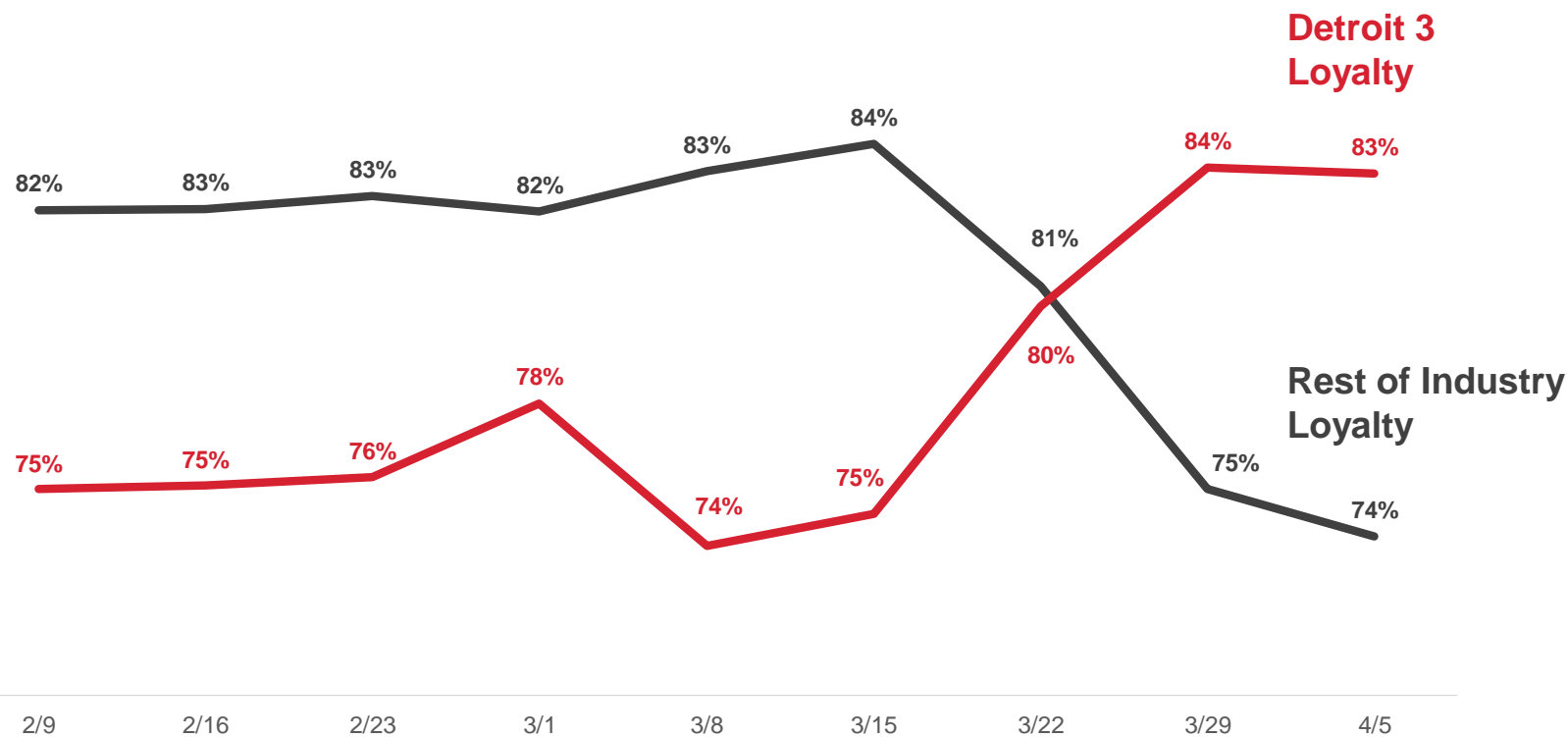
84-month loan offers powered sales for Detroit 3 automakers as incentive spending reached record levels in the second half of March.

KEY TAKEAWAY

Detroit 3 automakers were first to launch 84-month loan offers. However as new incentives launched on April 1, Hyundai, Nissan, and Genesis have introduced 0% for 84-month programs on select models.

IMPACT: Detroit 3 Benefitting from Record Customer Loyalty

Migration Pattern of Customers Trading In a Vehicle



INSIGHT

Detroit 3 Loyalty

Among customers trading in a Detroit 3 vehicle, 83% purchased/leased a new Detroit 3 vehicle in week ending April 5. The last two weeks are the 4th and 5th highest levels on record behind September 2001 and September 2004.

Rest of Industry Loyalty

Loyalty to non-Detroit 3 brands fell to 74% in week ending April 5, which is the lowest level since July 2006.

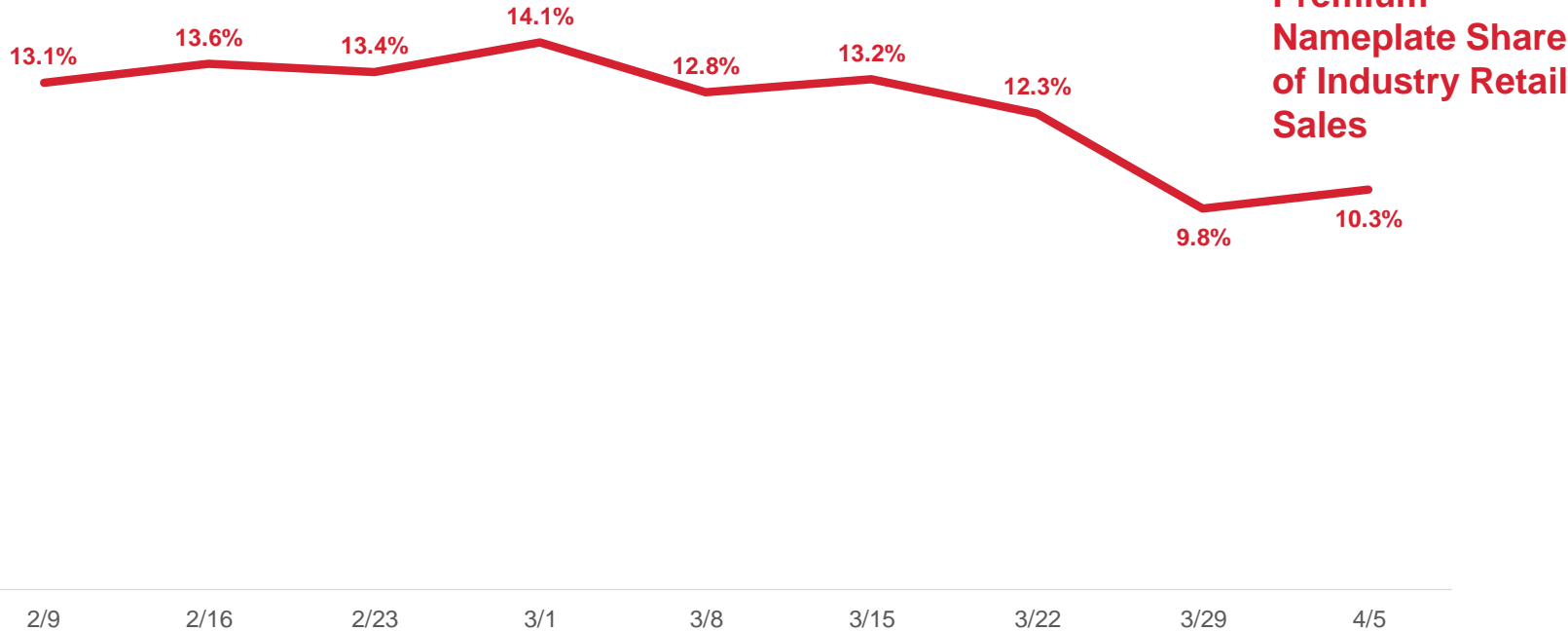
Japanese import brands have been impacted the most with increased defection to Detroit 3 vehicles.

KEY TAKEAWAY

Strong messaging is attracting current Detroit 3 vehicle owners and helping them to remain loyal and is also enabling conquest of major competitors.

IMPACT: Premium Nameplate Market Share

Share of Industry Retail Sales



INSIGHT

Premium Share of Industry

Premium nameplates recovered 0.5ppts of share in week ending 4/5, but remain far below typical levels.

Drivers

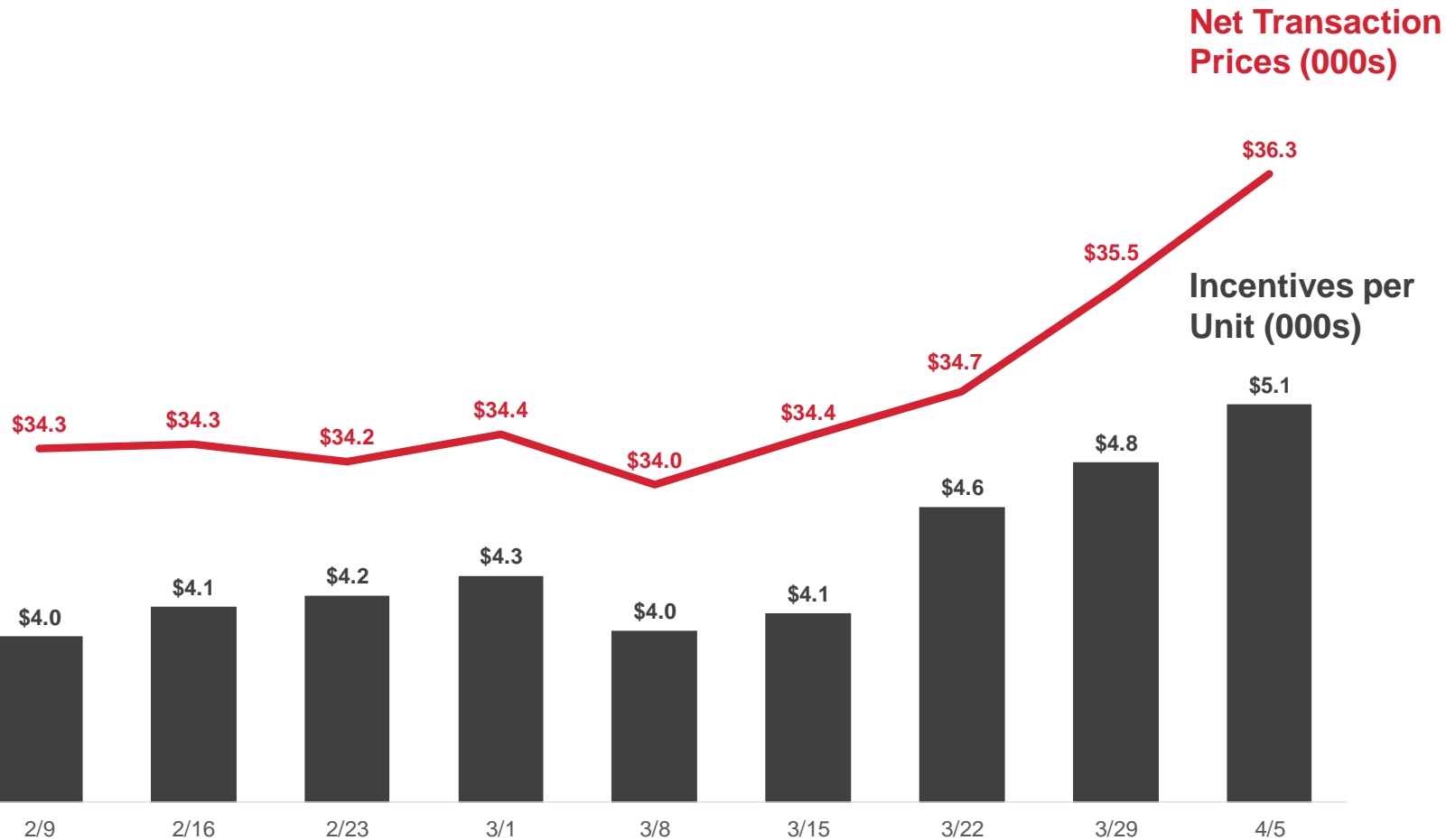
Premium nameplates are particularly impacted by the decline in sales of the New York market, which historically accounts for 14% of premium sales.

The high percentage of premium vehicles that are leased (57%) means that there is likely to be significant pent up demand to be released as restrictions are removed.

KEY TAKEAWAY

Lessees are staying out of market and will be a source of recovery for premium when they return.

IMPACT: Transaction Prices & Incentive Spend



INSIGHT

Net Transaction Prices

Transaction prices reached their highest-level on record at \$36,300 during the week ending April 5. Higher pickup truck sales mix drove the increase in transaction prices vs. week ending March 15.

Incentive Spending

Incentives reached a record level of \$5,100 per unit during the week ending April 5.

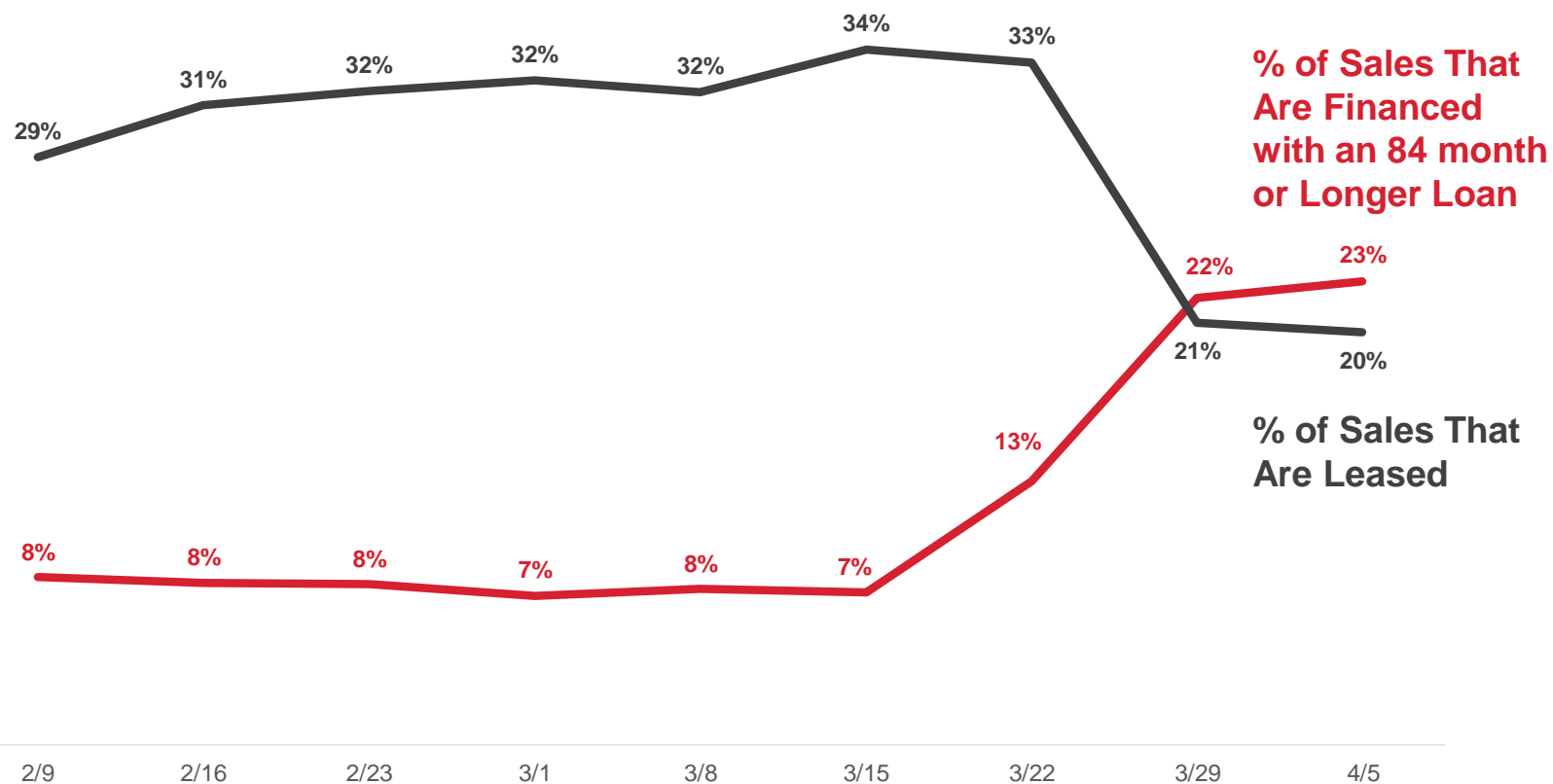
Incentives rose in nearly every mainstream segment. Spending fell in several premium segments due to lower lease penetration.

Light-duty pickup incentives per unit reached \$7,300 (highest ever). The pre-virus high was \$6,700 in week ending Dec 1, 2019.

KEY TAKEAWAY

Unlike previous downturns, COVID-19 has not led to lower prices. Sustaining higher transaction prices will lead to greater profitability post-virus.

IMPACT: How People Are Buying Vehicles



INSIGHT

% of Buyers Taking 84-Month Loans

23% of buyers during the week ending April 5 took an 84-month loan, the highest-ever and 3x more than pre-virus levels of 7-8%.

0% for 84-month loans are available on a variety of vehicles, but are particularly popular with pickup truck buyers. 43% of light-duty sales during the week ending April 5 had this term, compared to normal levels of 13-16%.

% of Buyers Leasing Their Vehicles

20% of buyers during the week ending April 5 took a lease, compared to normal levels of 30-35%. The decline is consistent with customers whose leases are maturing postponing their purchase, coupled with larger sales declines for high lease markets (New York) and vehicle segments (premium).

KEY TAKEAWAY

84-month loans are running 3x their pre-virus rate and the decline in leasing is consistent with lessees extending their leases.

IMPACT: Retail Sales by Buyer Age

Retail Sales: Actual over/(under) Pre-Virus Forecast



INSIGHT

Sales Decline by Buyer Age

Since mid-March, retail sales to buyers 56+ years have declined at a faster pace than younger customers.

56+ accounted for 37% of new-vehicle sales in 2019 and was the only group that grew.

March Final Sales Change

- 18-35 years: -32% or 81,000 units
- 36-55 years: -34% or 151,000 units
- 56+ years: -38% or 158,000 units

Week Ending April 5 Sales Change

- 18-35 years: -55% or 33,000 units
- 36-55 years: -57% or 58,000 units
- 56+ years: -65% or 61,000 units

KEY TAKEAWAY

For the week ending April 5, retail sales to buyers 56+ years continued to underperform the rest of the industry by over 9ppts.

IMPACT: Retail Sales by Credit Score

Retail Sales: Actual over/(under) Pre-Virus Forecast



INSIGHT

Credit Tier Variation

Since mid-March, retail sales to buyers with the best credit (FICO scores over 720) declined at a faster pace than those with worse credit. 720+ FICO buyers account for about 65% of new-vehicle sales.

March Final Sales Change

- Over 720 FICO: -38% or 273,000 units
- Under 720 FICO: -30% or 117,000 units

Week Ending April 5 Sales Change

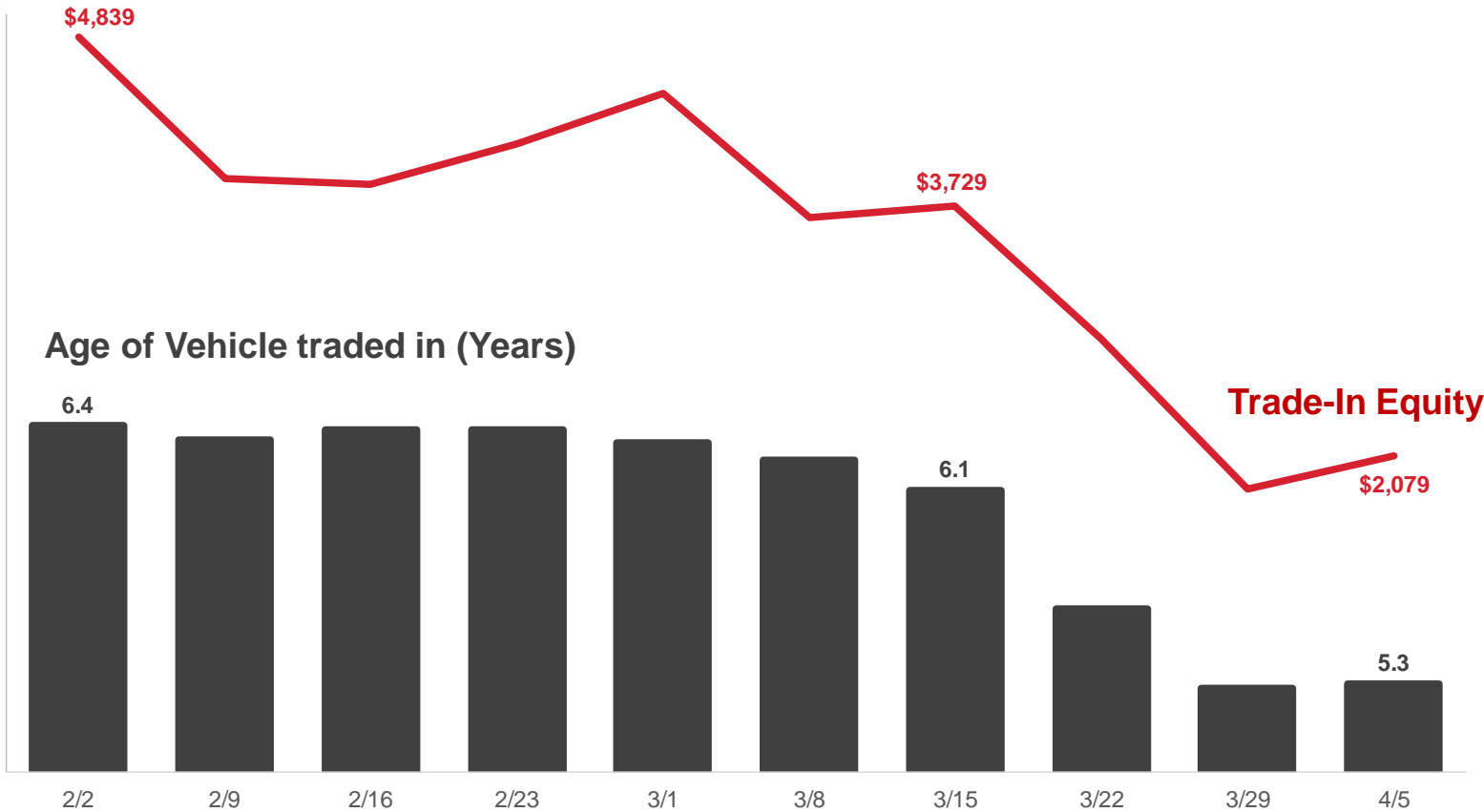
- Over 720 FICO: -62% or 105,000 units
- Under 720 FICO: -54% of 47,000 units

KEY TAKEAWAY

For the week ending April 5, retail sales to buyers with credit scores over 720 underperformed the rest of the industry by 8ppts.

IMPACT: Trade equity and trade-in age dropped significantly

Average Trade-In Equity and Trade-In Vehicle Age



INSIGHT

Trade-In Age

The average age of all vehicles traded in dropped by nearly a full year since mid-March to the lowest level since the recession.

Trade-In Equity

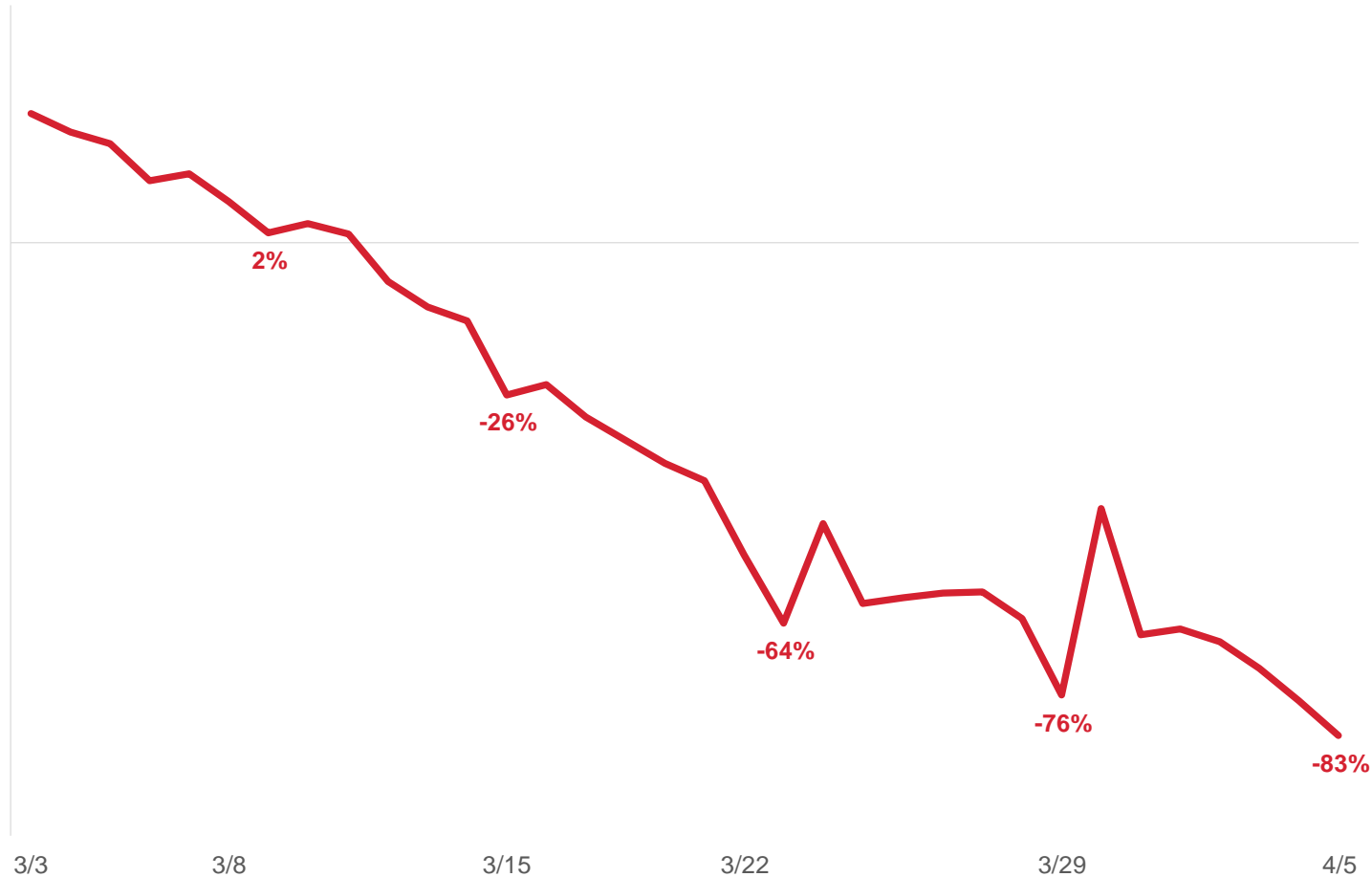
The decline in equity likely reflects higher loan balances carried on younger vehicles traded in and lower trade values on used vehicles.

KEY TAKEAWAY

Consumers that are in market are taking advantage of the incentive programs available.

IMPACT: National Used Sales Daily Change Through April 5

Used Retail Sales: Actual over/(under) Pre-Virus Forecast



INSIGHT

Month-to-Date Impact

Used-vehicle sales are falling at a similar rate to new vehicle sales.

Escalating Risk to Used Prices

Retail prices have been stable, but cash flow issues may drive prices down at dealerships able to operate.

Auction (wholesale) volumes have fallen sharply due to disruption to physical auction operations (see next slide).

Consequences if Prices Fall

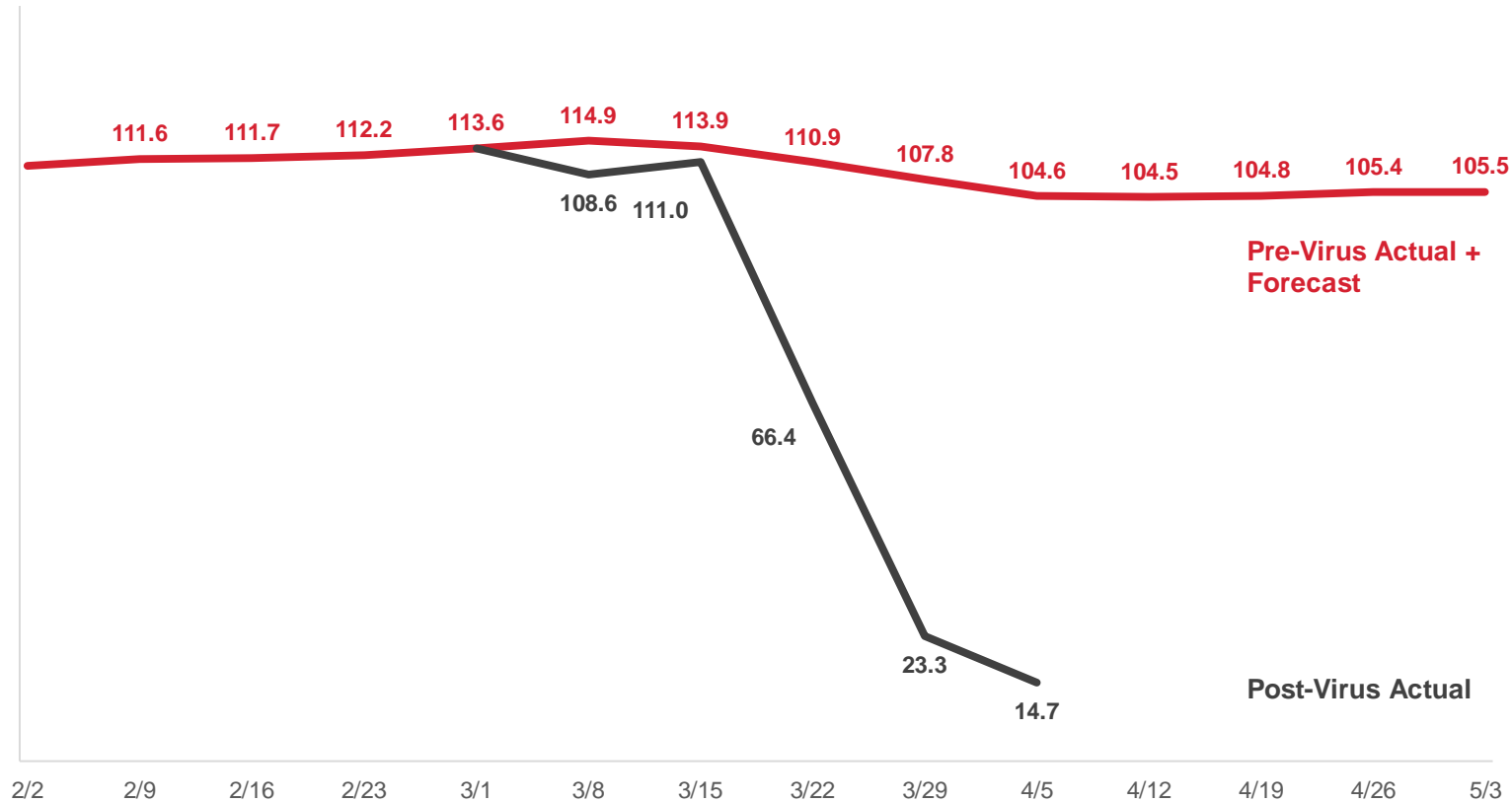
Losses on used vehicles in inventory will compound cash flow and profit issues for retailers. OEMs may realize losses on off-lease vehicles. Consumers will receive less for their trade-ins decreasing their purchasing power.

KEY TAKEAWAY

Used sales at franchised dealers fell faster than new sales in the past week: -67% vs. -59%

IMPACT: Used Vehicle Auction Volume

Weekly Wholesale Auction Volume (000s)



INSIGHT

Wholesale Auction Volume Results

Auction volume totaled fewer than 15,000 units the week ending 4/5, a loss of $\approx 90\%$ versus the pre-virus average of 113,000 units per week.

Impact-to-Date

Auction volume spanning weeks ending 3/8 - 4/5 totaled 324,000 units, down 41% or 228,000 units from the pre-virus forecast.

Regional Performance

The more stringent stay-home measures enacted in Florida last week pushed auction volume down 60%, the most among major states. While down dramatically from pre-virus levels, auction activity is highest in the Mid-Atlantic, Texas, and Desert Southwest (e.g., AZ, NV).

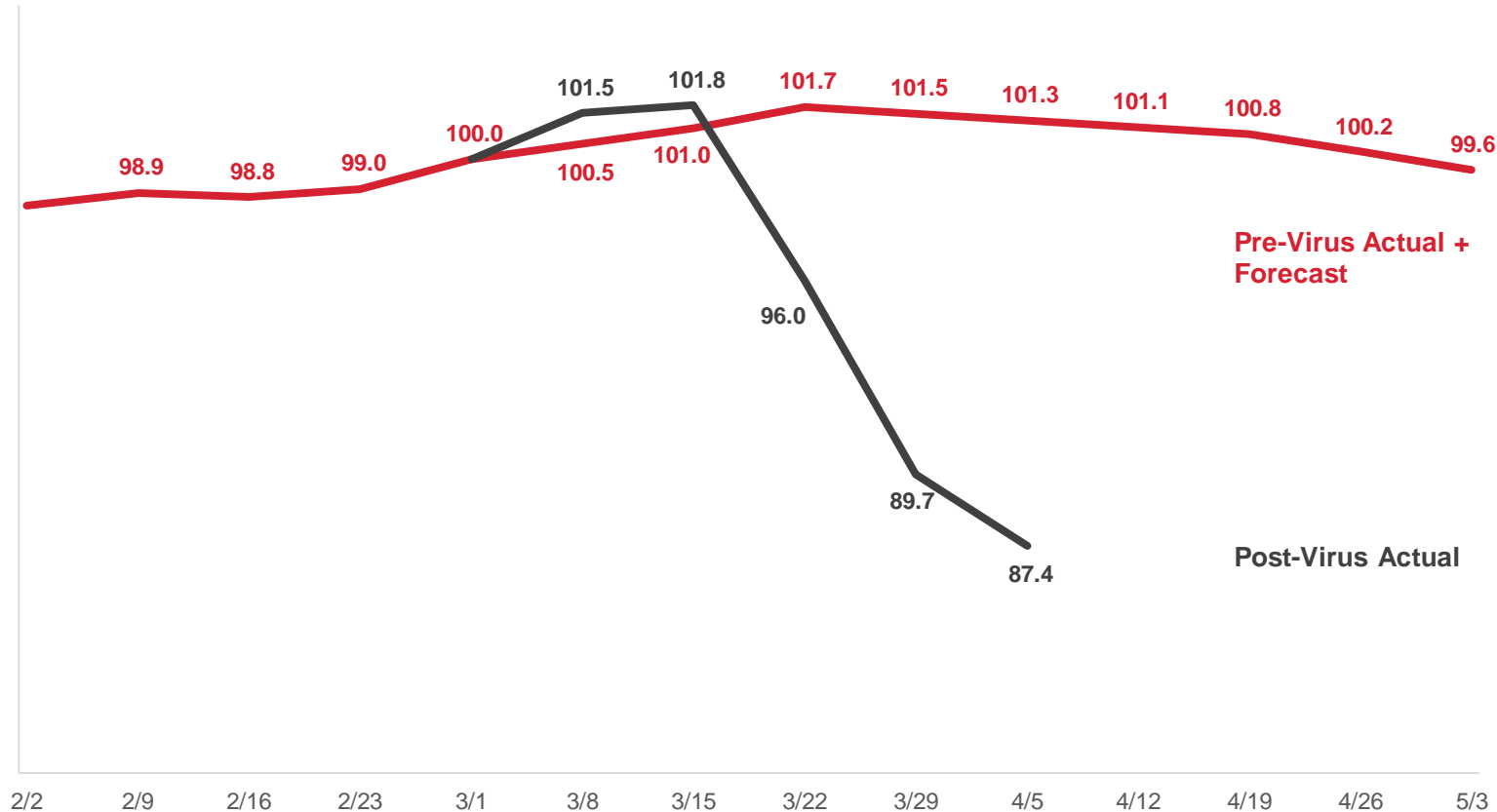
KEY TAKEAWAY

Wholesale auctions have effectively ceased to be a meaningful channel for either used vehicle acquisition or disposition.

Notes: Vehicles up to 8 years old; Simulcast and physical auction sales only; Lagging reported sales will impact previously reported results; Actual figures through March 1, 2020

IMPACT: Used Vehicle Auction Prices

Weekly Wholesale Auction Price Index
(March 1 = 100)



INSIGHT

Auction Prices Continue to Fall

After falling by an average of more than 6% over the two weeks prior, auction prices fell another 2.6% last week. Auction prices ended the week of April 5 14% lower than pre-virus forecast. Note that prices are typically strongest in March-April.

Impact to Retail Prices

Used retail prices continue to hold up better than wholesale prices, falling just 1% in week ending April 5 versus the prior week on a mix adjusted basis.

Used retail prices were 1% lower the week of April 5 versus the end of February 2020, while wholesale auction prices were 13% lower.

KEY TAKEAWAY

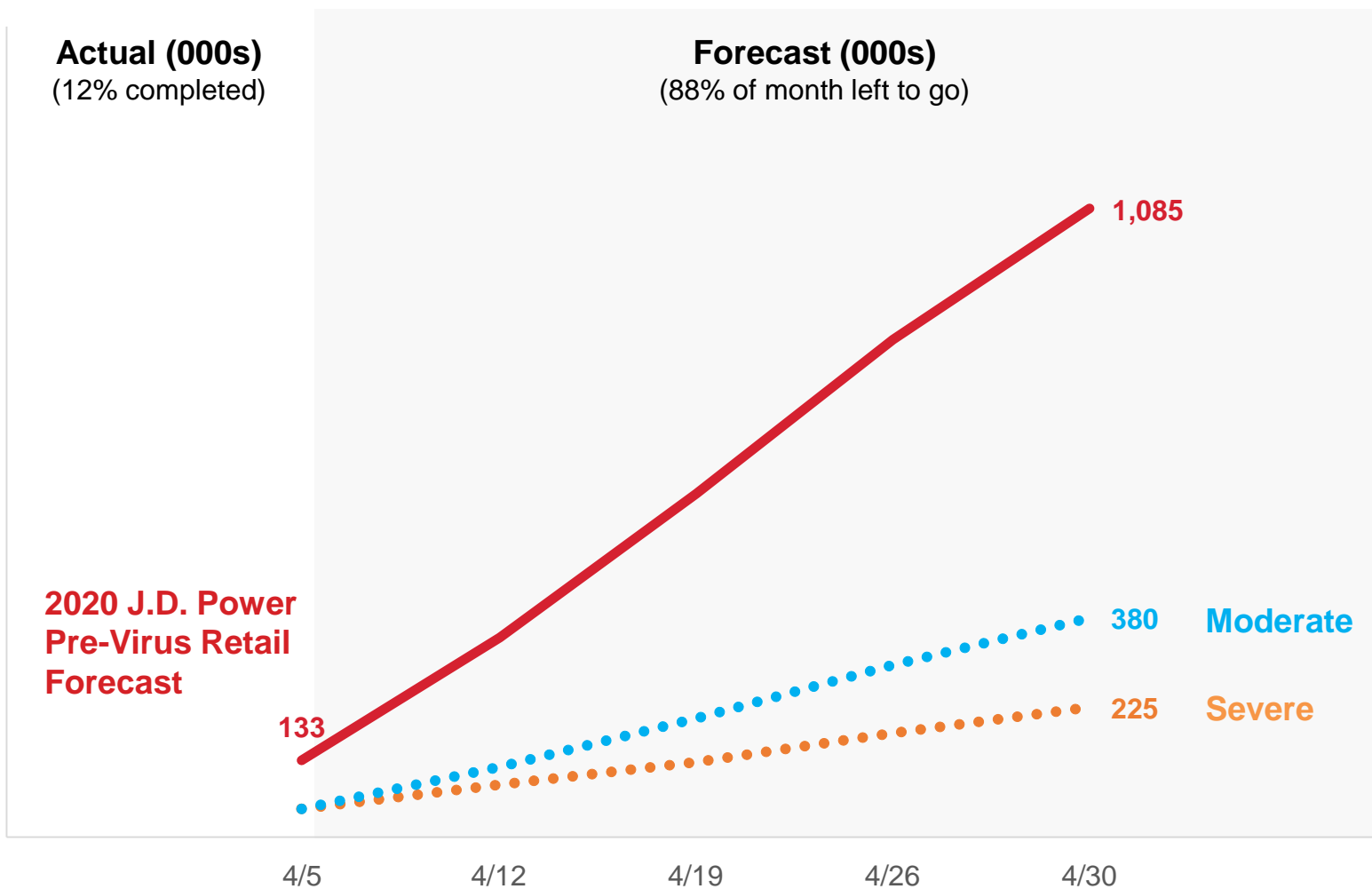
For the small number of vehicles sold at auction last week, wholesale prices fell 14%.

Notes: Vehicles up to 8 years old; Simulcast and physical auction sales only; Lagging reported sales will impact previously reported results; Actual figures through March 1, 2020

2. Sales Outlook

OUTLOOK: April Full-Month Retail Sales Forecast

Retail Sales: Actual over/(under) Pre-Virus Forecast



INSIGHT

Comparison to April Forecast

J.D. Power April severe scenario retail sales outlook is for 225,000-380,000 units. This is a decline of 65-79% from our pre-virus forecast, or a sales drop of up to 860,000.

Comparison to April 2019

Compared to April 2019 retail sales of 1,055,100, this represents a decrease of up to 830,000, or a drop of up to 79%. Compared to April 2019 total, April 2020 sales are expected to fall 909,000 units.

KEY TAKEAWAY

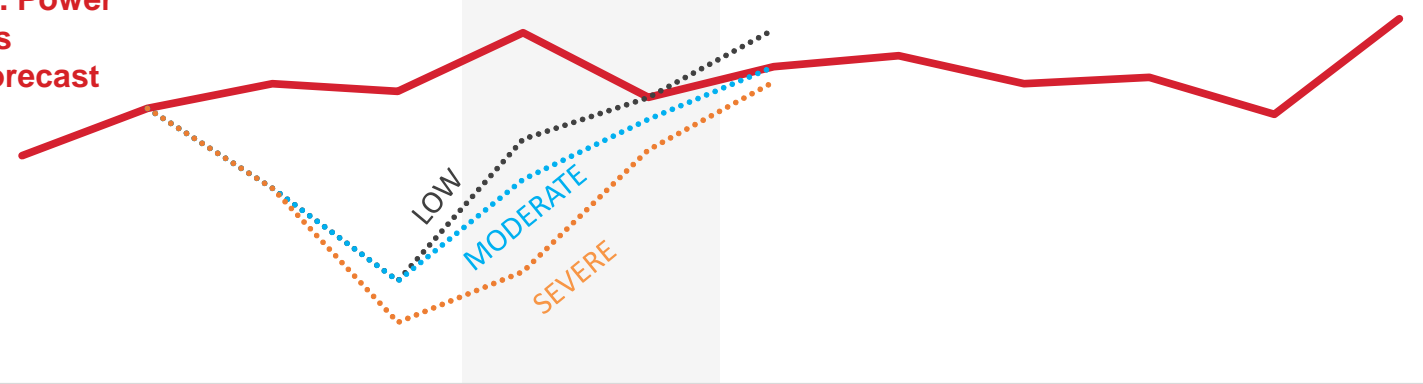
Sales are expected to decline 65–79% in April.

OUTLOOK: March–July Retail Sales Scenarios

Sales vs. Baseline

	RAMP UP		PLATEAU/RECOVER		NORMAL	<u>Total Risk</u> (through July)	
						%	UNITS
LOW			30%	0%	0%	24%	1.4M
MODERATE	65%		42%	8%	0%	30%	1.7M
SEVERE	35%	79%	68%	18%	5%	42%	2.4M

2020 J.D. Power Pre-Virus Retail Forecast



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Baseline			1.12	1.08	1.30	1.06	1.18					
LOW					0.91	1.06	1.31					
MODERATE				0.91	0.76	0.98	1.18					
SEVERE			0.73	0.23	0.41	0.87	1.12					
<u>Delta vs. Baseline</u>												
LOW					(0.39)	(0.00)	0.13					
MODERATE				(0.17)	(0.55)	(0.08)	(0.00)					
SEVERE			(0.39)	(0.86)	(0.89)	(0.19)	(0.06)					

INSIGHT

Sales Impact March-July

The virus is projected to remove 1.4-2.4 million sales over the five months of March-July. Key driver of actual outcome is duration and severity of stay home regulations.

Full-Year Outlook

Recovery/ full-year sales will be determined by:

- Deterioration of economic conditions
- Mitigation of economic conditions through government and OEM stimulus actions (estimated net decline for new vehicle demand is 10-30% decline)
- Recovery of sales postponed during March-July (50-75% potential recovery rate)
- 2020CY retail sales: 10.5-12.5 million retail sales vs. baseline of 13.4 million.
- 2020CY total sales: 12.2-14.9 million total sales vs baseline of 16.8 million.

KEY TAKEAWAY

Potential for lost sales through July ranges from 1.4M – 2.4M units. Recovery of those units will be determined by a combination of factors

OUTLOOK: What is the Sales Outlook for the Full Year?

Retail Sales (000's)	Pre-Virus Baseline	Virus Sales Scenarios		Sales Change: Baseline vs. Scenarios	
		Severe	Low	Severe	Low
Jan-Mar	2,985	2,595	2,595	(390)	(390)
Apr-Jul	4,631	2,629	3,666	(2,002)	(965)
Jan-Jul	7,616	5,225	6,261	(2,392)	(1,355)
Aug Dec	5,829	4,080 <small>*Assumes demand falls 30%</small>	5,246 <small>*Assumes demand falls 10%</small>	(1,749)	(583)
Pent-Up Demand from Mar-Jul to be recovered in 2020CY	n/a	1,196 <small>*Assumes 50% of 2.4M lost Sales Return to Market</small>	1,016 <small>*Assumes 75% of 1.6M lost Sales Return to Market</small>	1,196	1,016
CY 2020 Retail Sales	13,445	10,501	12,524	(2,945)	(922)
Memo: Fleet Sales	3,336	1,668 <small>*Assumes 50% decline</small>	2,335 <small>*Assumes 30% decline</small>	(1,668)	(1,001)
CY 2020 Total Sales	16,781	12,168	14,859	(4,612)	(1,922)

INSIGHT

Key Variables

1. What is the economic situation and impact on demand for new vehicles? Initial estimate is a range of 10-30% reduction in demand for new vehicles
2. How much pent-up demand will be released once stay-home restrictions are lifted: Scenario assumes severe case with 50% of lost sales from March-July recovered, low scenario of 75% of lost sales recovered.

2020 Retail Sales Outlook

10.5-12.5 million retail sales vs. baseline of 13.4 million sales

KEY TAKEAWAY

2020 retail sales expected to be between 10.5-13.4 million units

OUTLOOK: New Vehicle Inventory

INSIGHT

Scenario Assumptions

Production outlook is uncertain but domestic and many global facilities are shut for at least two weeks based on virus-driven restrictions. Expectation is that shutdowns will be extended and production will be disrupted by supply chain issues once plants re-open. Baseline assumption is production declines of 75% in April, 33% in May and 10% in June

Outcome

Sales declines will lead to rising inventories if manufacturers resume production once they are able. Inventory projections indicate that demand-driven production cuts will be necessary over and above those driven by consumer and business restrictions.

KEY TAKEAWAY

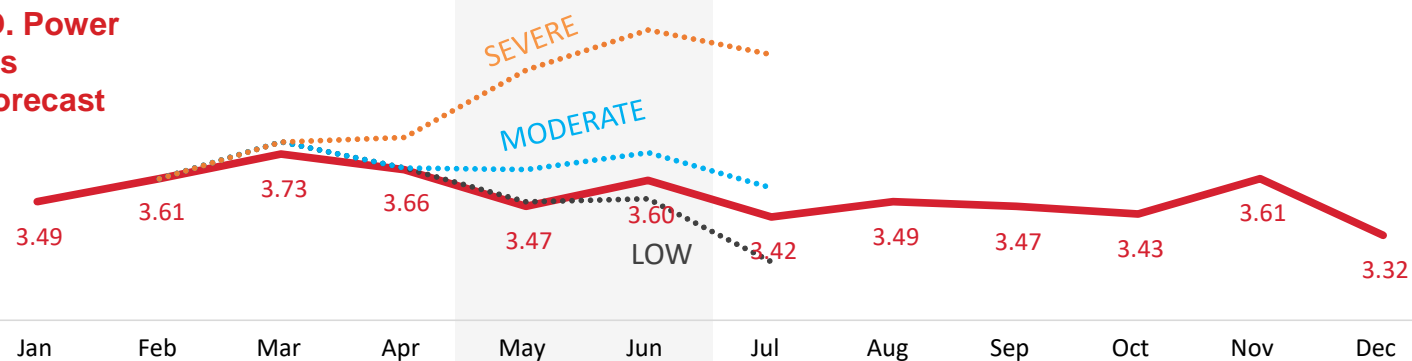
Despite virus-driven restrictions, production cuts will likely be necessary to align with overall demand

Inventory vs. Baseline

RAMP UP **PLATEAU/RECOVER** **NORMAL**

LOW			1%	0%	%
MODERATE	0%		5%	4%	4%
SEVERE	2%	4%	19%	21%	24%

2020 J.D. Power Pre-Virus Retail Forecast



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Baseline			3.73	3.66	3.47	3.60	3.42					
LOW					3.49	3.50	3.19					
MODERATE				3.49	3.65	3.74	3.56					
SEVERE			3.79	3.81	4.15	4.35	4.23					
<u>Delta vs. Baseline</u>												
LOW					0.02	(0.09)	(0.23)					
MODERATE				(0.16)	0.18	0.14	0.14					
SEVERE			0.06	0.16	0.68	0.75	0.81					

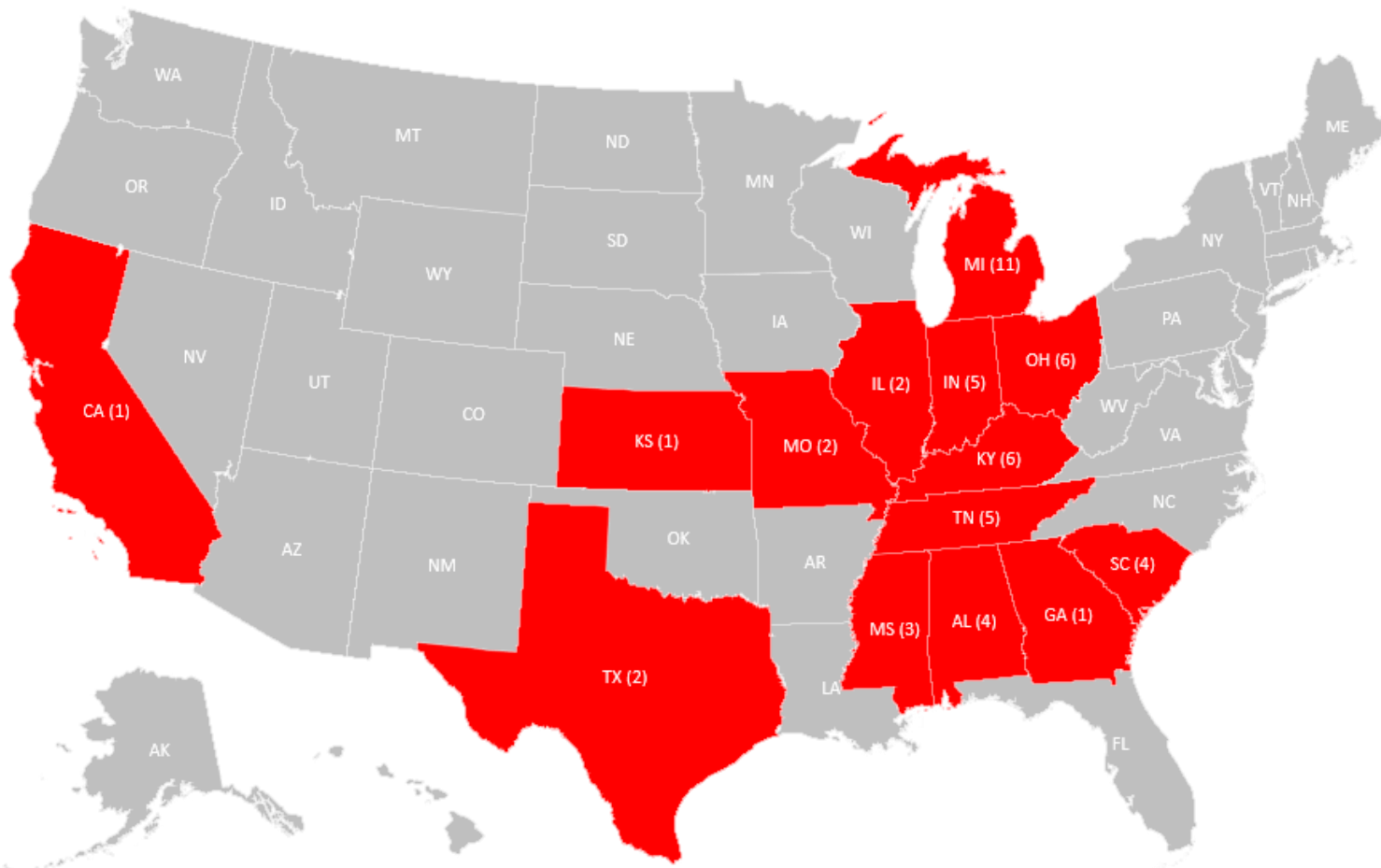
3.

Path to Restarting Manufacturing

Doug Betts, President Automotive Division

IMPACT: Automotive Manufacturing – What's at stake?

U.S. Automotive Manufacturing Plants by State



INSIGHT

An typical auto factory, producing a high-demand vehicle, produces a vehicle every 55 seconds and runs 6 days a week, 21 hours a day.

There are 53 assembly plants in the U.S. spread out over 14 states.

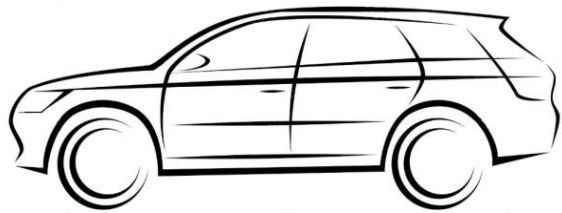
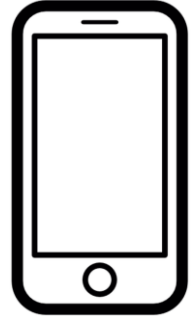
The value of vehicles produced for consumption in the U.S. is approximately \$11 billion per week.

There are thousands of supplier plants that are tied to the operations of these vehicle assembly plants.

KEY TAKEAWAY

The automotive industry is vital to the U.S. economy. Approximately 10 million Americans depend on the automotive industry for their livelihood.

IMPACT: Health & Safety Challenges in Manufacturing



INSIGHT

Unlike many other industries, vehicle production has a high degree of automation and the potential to be restarted subject to appropriate safety protocols.

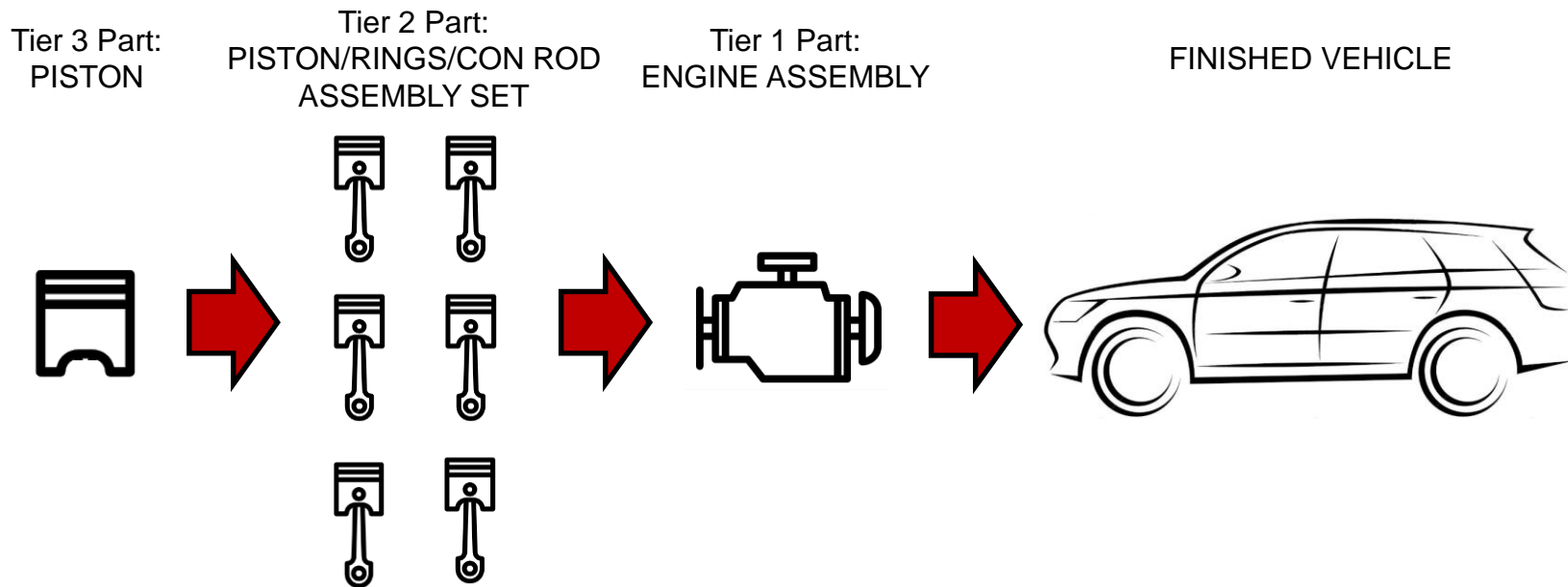
Automotive OEMs are already working on modifications to their work methods and are supporting suppliers with their analysis.

KEY TAKEAWAY

Worker safety is the priority for the auto industry. Plants have the potential to be restarted while ensuring worker safety.

IMPACT: Manufacturing supply chain complexity

Automotive Industry Supply Chain Dependencies



INSIGHT

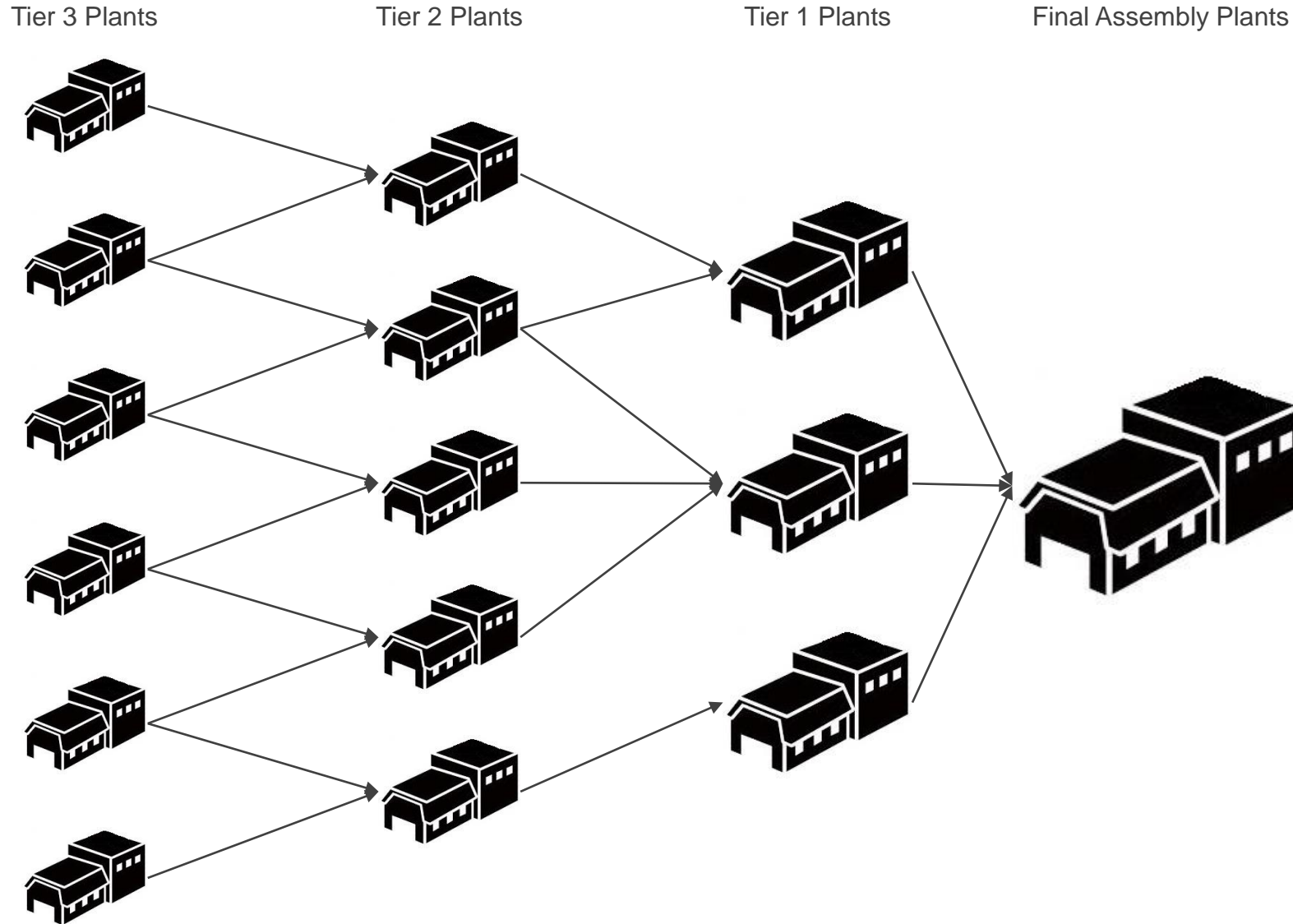
Supply chains are multi-layered synchronized and highly interdependent:

- **Tier 1 Part:** Used directly in the process of assembling a vehicle. Typically there are ~2,500 tier 1 parts that go into a vehicle assembly plant to build a single type of vehicle.
- **Tier 2 Part:** Feed into tier 1 supplier factories to build Tier 1 parts
- **Tier 3 Part:** Feed tier 2, etc.

KEY TAKEAWAY

Tens of thousands of individual parts are managed through the automotive supply chain coming together at the right time and place in order to assemble a vehicle.

IMPACT: Manufacturing re-start guidelines



INSIGHT

All U.S. vehicle final assembly plants, as well as supply chain Tier 1, 2, 3 factories, are currently shut down.

The shutdowns across the supply chain were not synchronized therefore significant parts supply imbalances exist.

Timing to full re-start is unclear as it is subject to a health risk status and operating guidelines that currently do not exist.

Smaller suppliers need the support of OEM partners in preparing re-start readiness.

KEY TAKEAWAY

One national set of operating guidelines can give the industry something to focus on towards a path of re-starting the plants, and the entire supply chain, simultaneously.

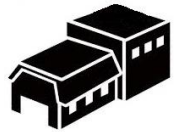
IMPACT: Model year transition challenges

Tier 2 Plants

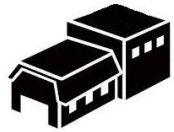
Tier 1 Plants

Final Assembly Plant

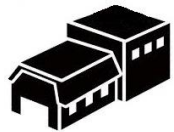
Finished Vehicles



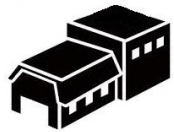
5K Model Year '20 parts in pipe



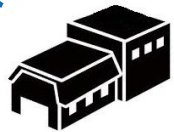
Model Year '20 parts finished
Model Year '21 parts in production



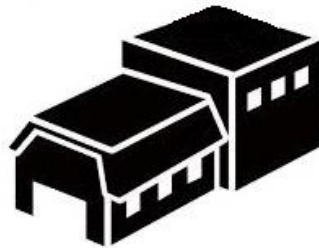
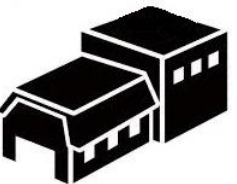
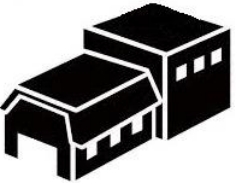
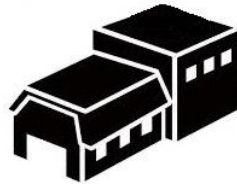
35K Model Year '20 parts in pipe



Model Year '21 tools not completed
Can only build Model Year '20 parts



17k Model Year '20 parts in pipe
Starting Model year '21



- Obvious but, each vehicle needs all the parts
- Mixing 2021 and 2020 parts is not always an option

INSIGHT

Model year transition typically occurs in the fall of each year with changes ranging from full new model to “carry-over”.

All model year changes include updates to meet regulatory requirements, many not visible to consumers.

Examples of regulatory requirements:

- Software and hardware updates to comply with emissions monitoring requirements
- Vehicle design changes to meet revised requirements (e.g. a light in the instrument cluster showing if headlights are on or not)
- Vehicle content changes to meet revised requirements (e.g. Rear view cameras added as required versus optional equipment)

By regulation, OEMs cannot build the same model year vehicle in two consecutive Januarys.

KEY TAKEAWAY

Untangling the parts pipeline related to model year and regulatory requirements will create significant economic impact. Regulatory requirements related to 2021 model year transition should be pushed out.

4. Q&A

Next Briefing: April 15, 2pm EDT

Appendix: March 2020 & Q1 2020 Results

INSIGHT

March 2020

	Units (000s)		SAAR (M)		Y/Y (Units)		Y/Y (% - Non DSR)		Y/Y (SAAR)	
	Pre-Virus	Actual	Pre-Virus	Actual	Pre-Virus	Actual	Pre-Virus	Actual	Pre-Virus	Actual
Total	1,479	983	16.9	11.2	(126)	(623)	-8%	-39%	(0.4)	(6.1)
Retail	1,115	725	12.8	8.3	(110)	(500)	-9%	-41%	(0.5)	(5.0)
Fleet	364	258	4.1	2.9	(16)	(123)	-4%	-32%	0.1	(1.1)
Fleet Mix	25%	26%								

March 2020

Total SAAR came in at 11.2M, a decline of 6.1M from last year. Total sales of 963,000 declined 39% or 623,000 units from the prior year. This is primarily due to a decline in retail sales, which fell 41% or 500,000 units from last year.

Fleet sales were stronger than retail, down only 32% from last year, accounting for 26% of total sales.

Q1 2020

	Units (000s)		SAAR (M)		Y/Y (Units)		Y/Y (% - Non DSR)		Y/Y (SAAR)	
	Pre-Virus	Actual	Pre-Virus	Actual	Pre-Virus	Actual	Pre-Virus	Actual	Pre-Virus	Actual
Total	3,937	3,469	16.8	14.9	(53)	(521)	-1%	-13%	(0.0)	(1.9)
Retail	2,985	2,623	13.1	11.6	(34)	(396)	-1%	-13%	0.1	(1.4)
Fleet	952	846	3.7	3.3	(18)	(124)	-2%	-13%	(0.3)	(0.7)
Fleet Mix	24%	24%								

Q1 2020

Total SAAR of 14.9M, represents a decline of 1.9M from last year. Total sales declined 13% or 521,000 units from the prior year.