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

APRIL 22, 2020

Webinar Dial-in: (562) 247-8422

Passcode: 289-175-474

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



Thomas King
President, Data &
Analytics and Chief

Product Officer



Tyson Jominy
Vice President,
Data & Analytics



Jonathan Banks
Vice President &
General Manager,
Vehicle Valuations

Agenda

1. Retail Sales Impact Through April 19

2. Used Market

3. Sales Outlook

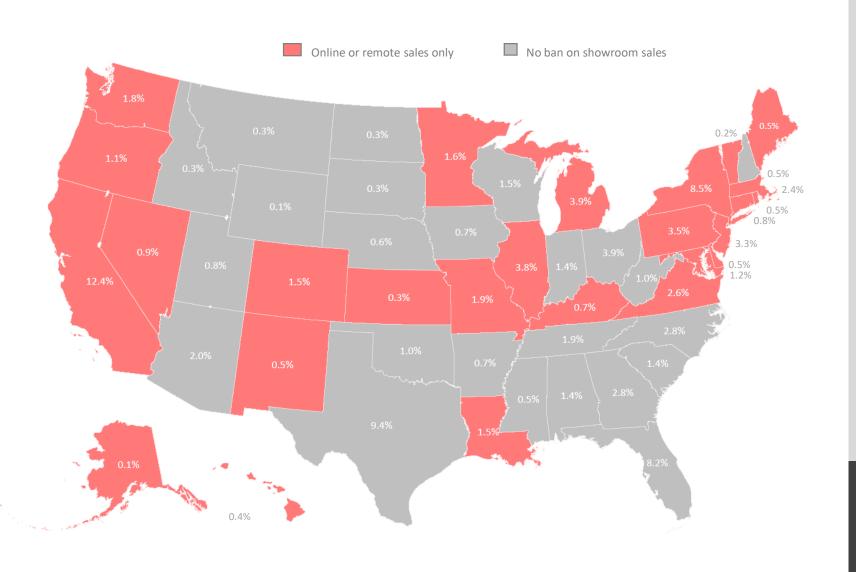
4. Q&A

Appendix

J.D. POWER

1.
Retail Sales
Impact Through April 19

IMPACT: Dealership Sales Operations Are Open in All States



INSIGHT

Dealership Sales Operations

- 24 states (44% of 2019 sales) allow dealership showrooms to remain open
- 26 states (56%) allow only online or remote sales

New This Week:

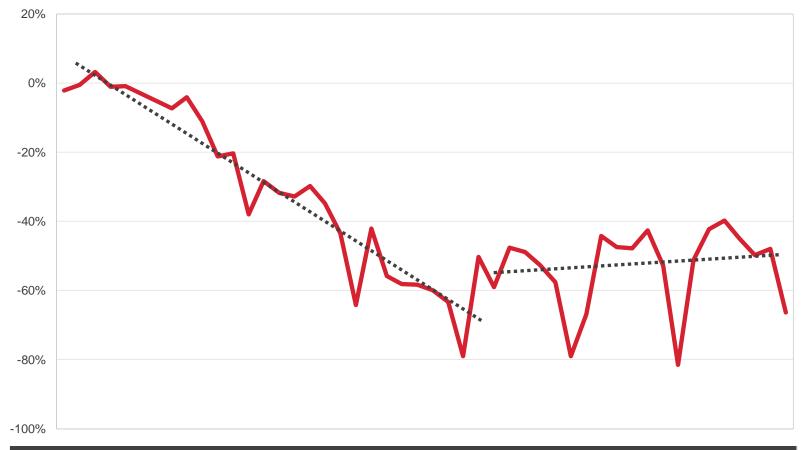
- Department of Homeland Security recommended dealership sales operations be deemed essential business
- Pennsylvania opened online sales on April 20, the last state to do so

KEY TAKEAWAY

All states now allow for car sales either in a showroom or remote/online.

IMPACT: Retail Sales Recovery Has Begun

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



Week Ending	3/8	3/15	3/22	3/29	4/5	4/12	4/19
Retail Sales	-1%	-14%	-36%	-59%	-55%	-51%	-48%

INSIGHT

April Month-to-Date

Retail sales through April 19 are 294,000 units, a decline vs. pre-virus forecast of 51% or 301,000 units.

Weekly Change vs. Forecast

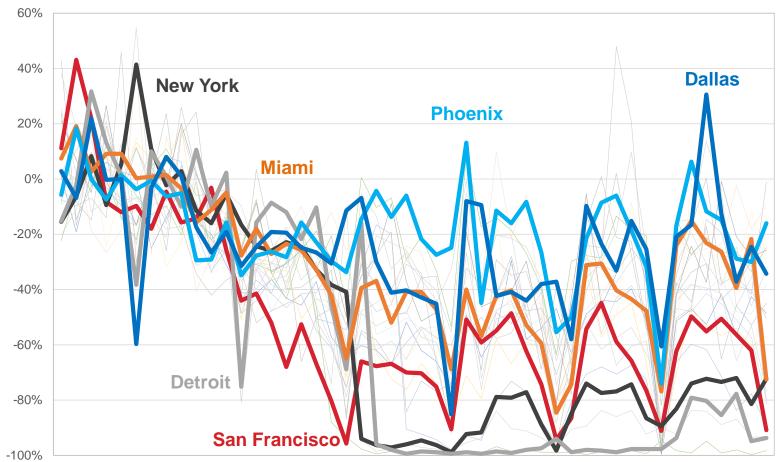
- March 8: -1% or 1,000 units
- March 15: -14% or 35,000 units
- March 22: -36% or 95,000 units
- March 29: -59% or 189,000 units
- April 5: -55% or 143,000 units
- April 12: -51% or 109,000 units
- April 19: -48% or 118,000 units

KEY TAKEAWAY

The week ending April 19 marks three straight weeks of improving conditions. U.S. retail sales are now in recovery.

IMPACT: Sales Recovering Across Major Markets

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



10070							
Week Ending	3/8	3/15	3/22	3/29	4/5	4/12	4/19
San Francisco	-1%	-21%	-71%	-74%	-67%	-69%	-66%
New York	0%	-5%	-30%	-96%	-89%	-80%	-77%
Detroit	10%	1%	-19%	-86%	-99%	-98%	-85%
Miami	8%	-8%	-36%	-47%	-55%	-47%	-34%
Phoenix	0%	-18%	-27%	-18%	-27%	-26%	-14%
Dallas	2%	-13%	-26%	-38%	-27%	-28%	-20%

INSIGHT

San Francisco / New York

Two strong premium and lease markets remain hard hit but are now three weeks from trough.

Detroit

Sales improved rapidly in first week of online sales in heavy lease market.

Miami

Rapid recovery after very quick sales dip in one of strongest luxury markets in country.

Phoenix / Dallas

Pickup sales continue to drive two of the most resilient markets in the country.

KEY TAKEAWAY

While several markets remain depressed, all major markets are showing recovery.

IMPACT: Regional Retail Sales

			Apr-20
	Apr-19	Mar-20	MTD
National	1,055.1	725.5	293.7
Pre-Virus Forecast	1,055.1	1,115.4	594.4
New York	80.8	44.0	8.8
Los Angeles	67.9	44.3	17.1
Chicago	30.8	19.4	9.2
Dallas	28.5	23.9	12.2
Philadelphia	29.7	14.5	1.8
Detroit	26.7	16.9	1.0
Boston	25.2	15.4	5.6
San Francisco	25.2	12.8	4.9
Houston	23.2	19.7	10.2
Miami	23.6	18.4	7.7
Washington, DC	22.6	15.2	6.8
Atlanta	20.2	15.4	6.8
Tampa	18.8	16.2	7.7
Phoenix	17.9	15.3	8.3
Orlando	17.3	13.5	6.5
Cleveland	15.9	11.8	5.4
Seattle	14.7	8.4	2.0
Minneapolis	14.7	11.2	4.8
Denver	12.9	8.5	4.0
Pittsburgh	11.5	5.5	0.1
Sacramento	11.0	6.8	3.9
San Diego	11.4	7.2	2.7
West Palm Beach	10.2	8.1	3.5
Raleigh	10.3	8.0	4.2
Charlotte	10.0	8.0	3.8

			Week Ending	
ΔW/W		2020-04-19	2020-04-12	2019-04-21
+25%		130.1	104.0	245.0
+16%		248.1	213.2	245.0
+35%		4.3	3.2	18.5
+46%		7.7		15.4
+12%		3.9		7.7
+24%		5.5	4.4	6.9
+9%		0.8		6.8
+963%		0.9	0.1	6.2
+17%		2.4	2.1	5.6
+57%		2.3	1.5	5.8
+26%		4.5	3.6	6.0
+49%		3.7	2.5	5.1
+23%		2.9	2.4	5.1
+45%		3.2	2.2	4.7
+19%		3.3	2.8	4.4
+27%		3.5	2.8	4.1
+17%		2.7	2.3	4.0
+29%		2.5	2.0	3.5
+10%		0.9	0.8	3.2
+38%		2.3	1.6	3.6
•	-0%	1.6	1.6	3.2
+88%		0.0	0.0	2.6
+13%		1.6	1.4	2.5
+43%		1.2	0.9	2.4
+24%		1.6	1.3	2.2
+23%		1.8	1.5	2.3
+24%		1.7	1.3	2.3

INSIGHT

April Month-to-Date

While declines are severe, the majority of markets are outperforming the expected 80% decline in sales based on stay-home guidance.

Week Ending April 19

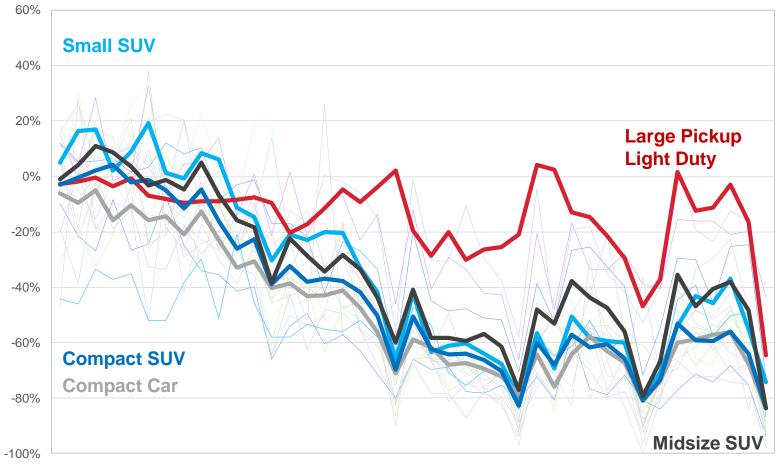
Nearly all markets are exhibiting growth (off of depressed volumes in prior weeks) as dealers adapt and/or selling regulations are clarified.

KEY TAKEAWAY

Volume grew in all top 25 markets last week, except Denver.

IMPACT: Sales Recovering Across Most Major Segments

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



3/8	3/15	3/22	3/29	4/5	4/12	4/19
5%	-11%	-35%	-58%	-51%	-47%	-42%
0%	-17%	-43%	-65%	-64%	-62%	-57%
-2%	-9%	-10%	-25%	-9%	-14%	-16%
-11%	-25%	-48%	-68%	-69%	-64%	-60%
10%	-5%	-31%	-62%	-62%	-52%	-44%
	5% 0% -2% -11%	5% -11% 0% -17% -2% -9% -11% -25%	5% -11% -35% 0% -17% -43% -2% -9% -10% -11% -25% -48%	5% -11% -35% -58% 0% -17% -43% -65% -2% -9% -10% -25% -11% -25% -48% -68%	5% -11% -35% -58% -51% 0% -17% -43% -65% -64% -2% -9% -10% -25% -9% -11% -25% -48% -68% -69%	5% -11% -35% -58% -51% -47% 0% -17% -43% -65% -64% -62% -2% -9% -10% -25% -9% -14% -11% -25% -48% -68% -69% -64%

INSIGHT

Top Segments

The top 5 segments (60% of 2019's retail sales) are down 46% for the week ending April 19

Large Pickup Light-Duty

Large Pickup remains the best performing segment, but sales have declined slightly for two straight weeks.

SUVs

All three major SUV segments have improved for three straight weeks, with the week ending April 19 showing 5-8ppt increases.

Compact Car

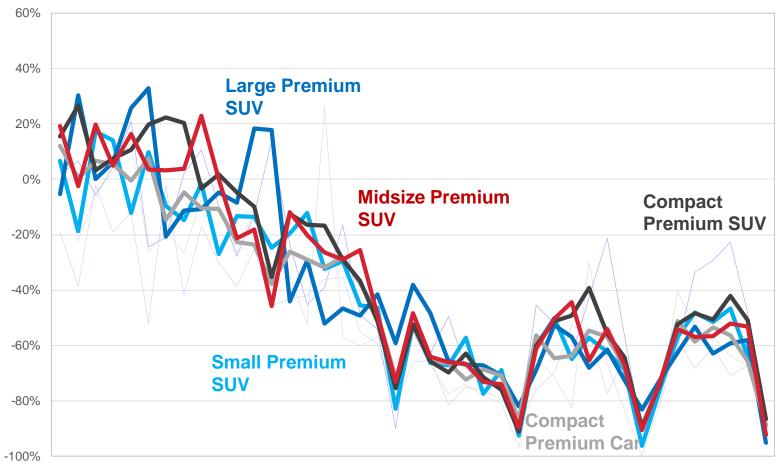
Remains among the hardest hit segments.

KEY TAKEAWAY

Recovery is gaining steam among SUV segments. Large Pickup has declined slightly.

IMPACT: Premium Sales Improving Across Major Segments

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



Week Ending	3/8	3/15	3/22	3/29	4/5	4/12	4/19
Midsize SUV	11%	-8%	-33%	-70%	-59%	-57%	-52%
Compact SUV	12%	-1%	-35%	-71%	-57%	-53%	-50%
Compact Car	4%	-18%	-38%	-69%	-63%	-62%	-59%
Large SUV	14%	-4%	-44%	-64%	-63%	-61%	-58%
Small SUV	-1%	-15%	-37%	-70%	-63%	-60%	-54%

INSIGHT

Top Segments

These 5 premium segments (86% of premium sales in 2019) have all improved for third consecutive week.

Premium sales remain lower than industry overall, but have lower variability in results than mainstream segments.

Impact of Extending Leases

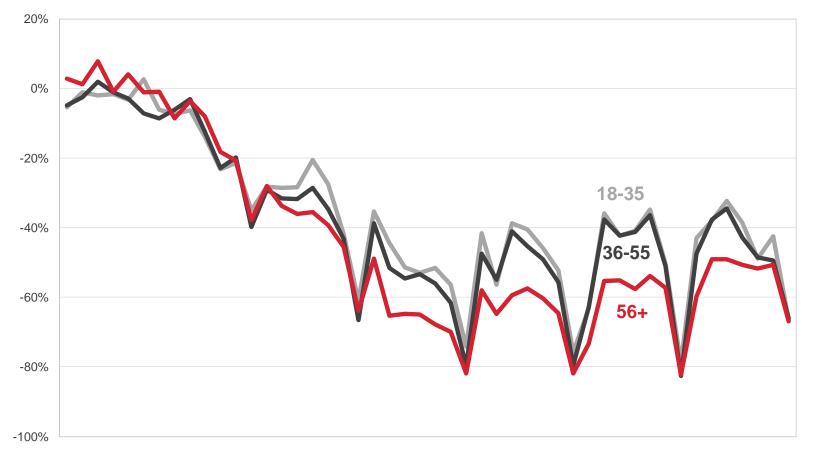
Many premium lessees extended their leases at end of March. Each extension takes that lessee out of market for a full month, so many will return next week (or possibly another five weeks if extended twice).

KEY TAKEAWAY

Premium segments have been steadily improving, but are still lagging non-premium.

IMPACT: Declines Most Severe For Buyers Over 55

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



Week Ending	3/8	3/15	3/22	3/29	4/5	4/12	4/19
18-35	-2%	-16%	-33%	-52%	-50%	-46%	-43%
36-55	-2%	-16%	-37%	-57%	-52%	-47%	-46%
56+	3%	-12%	-38%	-66%	-62%	-59%	-52%

INSIGHT

Sales Decline by Buyer Age

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

April Month-to-Date

- 18-35 years: -46% or 64,000 units
- 36-55 years: -48% or 115,000 units
- 56+ years: -57% or 121,000 units

Week Ending April 19

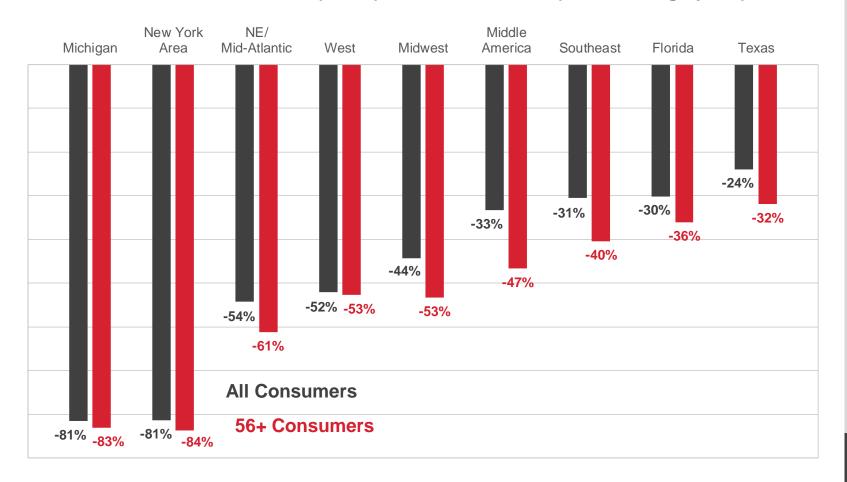
- 18-35 years: -43% or 25,000 units
- 36-55 years: -46% or 47,000 units
- 56+ years: -52% or 46,000 units

KEY TAKEAWAY

Retail sales to buyers over 55 continue to underperform, but last week the deficit to other age groups reduced.

IMPACT: Sales to Mature Buyers Are Recovering More Slowly

Retail Sales: Actual over/(under) Pre-Virus Forecast (Week Ending Apr 19)



INSIGHT

Mature Buyers Are Key Part of Demand

Buyers over 55 accounted for 37% of new-vehicle sales in 2019.

Week Ending April 19

Sales to buyers over 55 declined 55%, while sales to all other buyer age groups dropped only 48%.

Differentiation in performance is more pronounced in markets that more resilient (Middle America, Southeast, Texas, Midwest, and Florida).

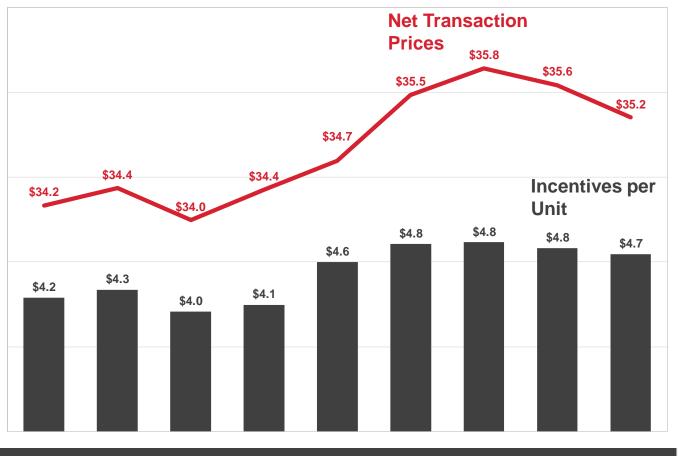
Michigan, NY, and the West Coast show sales declines to 56+ buyers on par with all age groups.

KEY TAKEAWAY

In markets that are recovering, sales to mature buyers are lagging significantly behind younger buyers.

IMPACT: Transaction Prices & Incentive Spend

Net Transaction Prices and Incentive Spending (000s)



Week Ending	2/23	3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19
Incentives % MSRP	10.3%	10.4%	10.0%	10.0%	11.1%	11.3%	11.3%	11.2%	11.1%

INSIGHT

Net Transaction Prices

Transaction prices reached their highest-level on record at \$35,800 during the week ending April 5. Prices declined again in week ending April 19 on lower pickup truck sales mix.

Incentive Spending

Incentives remained near record levels at \$4,700 per unit during the week ending April 19.

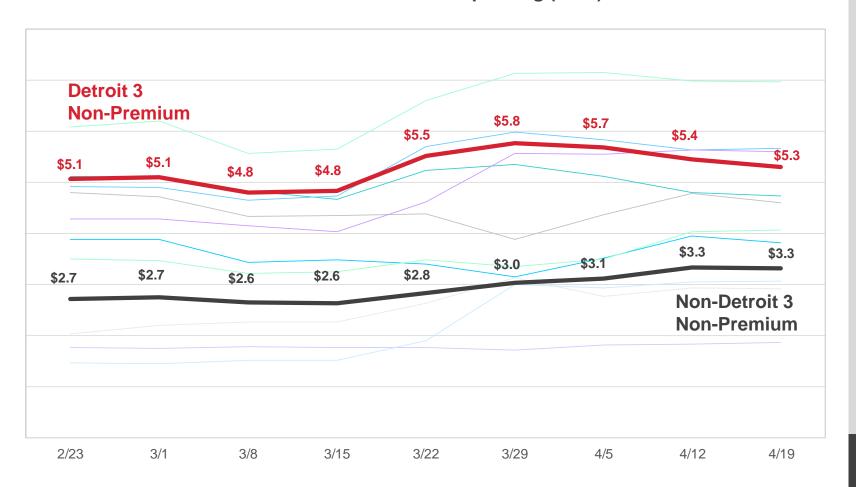
While average incentive spending declined week-over-week, the variance was driven largely by changes in vehicle mix rather than reductions in available offers.

KEY TAKEAWAY

Unlike previous downturns, COVID-19 has not yet led to lower prices. Price contraction remains a risk. Significant potential for incentive escalation in the coming weeks.

IMPACT: Non-Detroit 3 OEMs Are Escalating Incentives

Non-Premium Incentive Spending (000s)



INSIGHT

GM, Ford, and FCA spending has leveled off starting week ending April 12, but still remains elevated vs. pre-virus levels.

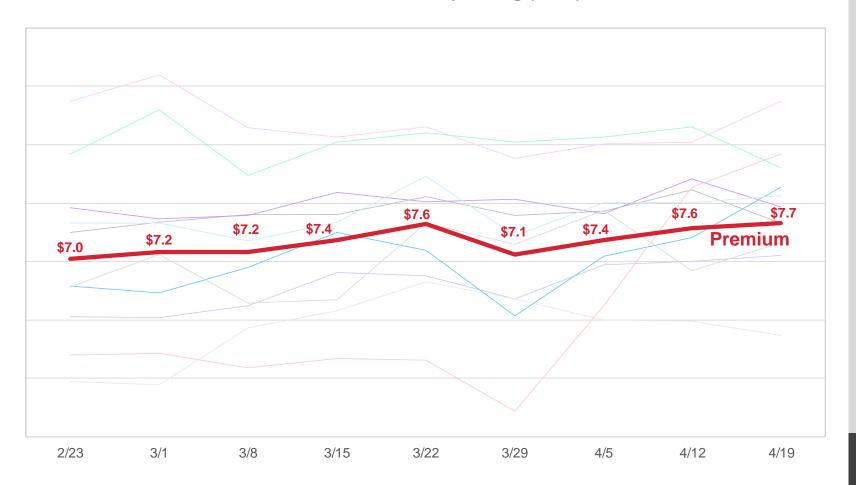
The other non-premium OEMs have escalated their spending levels the past two weeks to \$3.3K in an effort to regain the lost market share from the D3 OEMs.

KEY TAKEAWAY

Non-Detroit 3 automakers are escalating incentives.

IMPACT: Premium Spending Modestly Higher in April

Premium Incentive Spending (000s)



INSIGHT

Premium brands have enhanced incentives the past two weeks with 0% for 72-month offers that increased spending to \$7,700 per unit

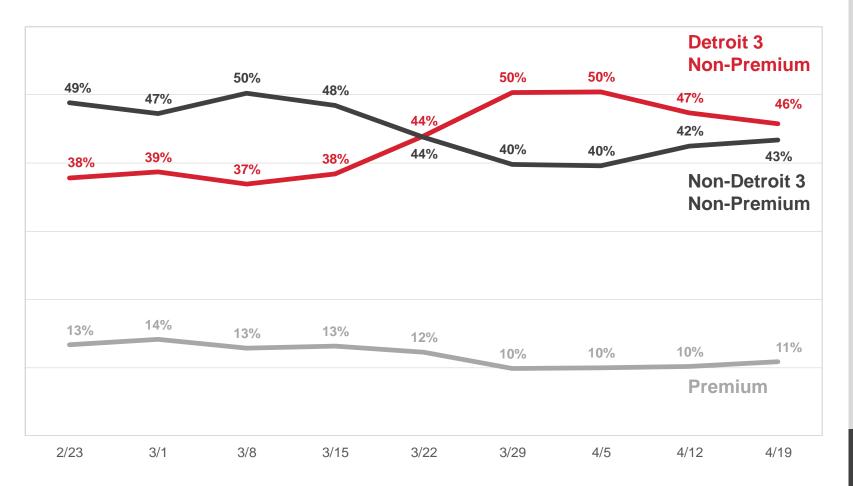
The increased finance offers have more than offset the lower lease mix the past couple of weeks.

KEY TAKEAWAY

Multiple premium OEMs have launched 0% for 72-month programs in an effort to drive more premium sales and offset the reduced the lower leasing activity

IMPACT: Detroit 3 Sales More Resilient Than Other Manufacturers

Share of Industry Retail Sales



INSIGHT

GM, Ford, and FCA retail market share declined slightly in week ending April 19, but remained elevated vs. pre-virus levels.

The decline in Detroit 3 share was due to gains by other non-premium brands, several of which have launched additional incentive programs.

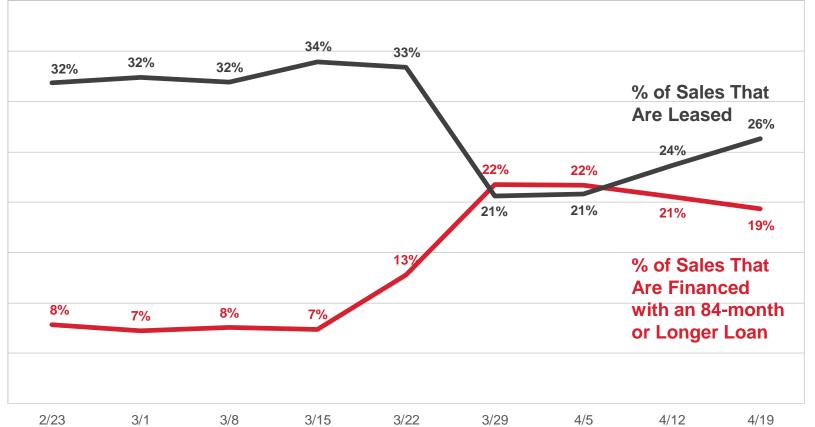
Premium brand market share remains depressed, in part due to their heavier reliance on lease customers who are extending their leases.

KEY TAKEAWAY

Detroit 3 automakers were first to launch 84month loan offers. However, Hyundai, Nissan, and Genesis have now introduced 0% for 84month programs on select models.

IMPACT: How People Are Buying Vehicles





INSIGHT

% of Buyers Taking 84-Month Loans 19% of buyers during the week ending April 19 took an 84-month loan, remaining near recordlevel and over 2x 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.

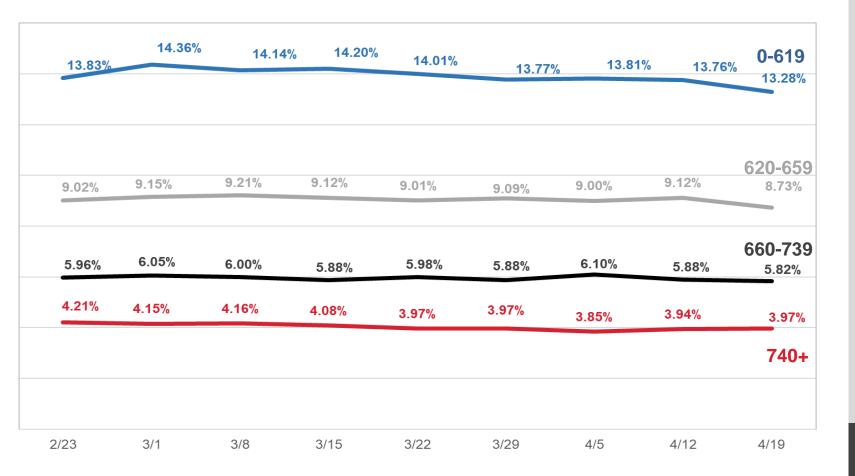
% of Buyers Leasing Their Vehicles 26% of buyers during the week ending April 19 took a lease. While trending higher, leases remain well below normal levels of 30-35%. Many lessees who extended their leases have not yet returned to market, due to the monthly cadence of lease extensions.

KEY TAKEAWAY

84-month loans are running over 2x their previrus rate and leasing remains lower than normal levels.

IMPACT: Interest Rates on Vehicle Loans Are Low, Stable

Non-Captive New Avg APR by Credit Score (64-75 mo)



INSIGHT

APR on Standard Rate Loans

Interest rates on standard rate loans are low, supporting vehicle affordability.

No major disruptions to consumer pricing of rates due to either the crisis or reduction in Fed funds rate.

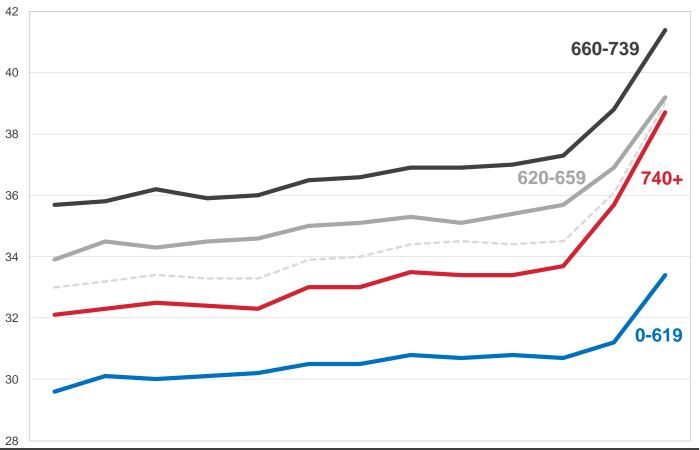
These low rates are a byproduct of both the cost of funds, as well as the competitive landscape among the lenders.

KEY TAKEAWAY

Standard rates remain low.

IMPACT: New-Vehicle Loan Amounts Are Surging

New Vehicle Amount Financed on Loans by FICO Score (\$000s)



Sales Month	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-20	Feb-20	Mar-20	Apr-20
0 - 619	29.6	30.1	30.0	30.1	30.2	30.5	30.5	30.8	30.7	30.8	30.7	31.2	33.4
620 - 659	33.9	34.5	34.3	34.5	34.6	35.0	35.1	35.3	35.1	35.4	35.7	36.9	39.2
660 - 739	35.7	35.8	36.2	35.9	36.0	36.5	36.6	36.9	36.9	37.0	37.3	38.8	41.4
740 - 999	32.1	32.3	32.5	32.4	32.3	33.0	33.0	33.5	33.4	33.4	33.7	35.7	38.7
Industry	33.0	33.2	33.4	33.3	33.3	33.9	34.0	34.4	34.5	34.4	34.5	36.1	39.0

INSIGHT

Loan Amounts Increased

In addition to lenders approving higher loan to value ratios, loan ticket sizes have increased substantially in April.

Increases in amount financed span the full credit spectrum from super-prime to sub-prime.

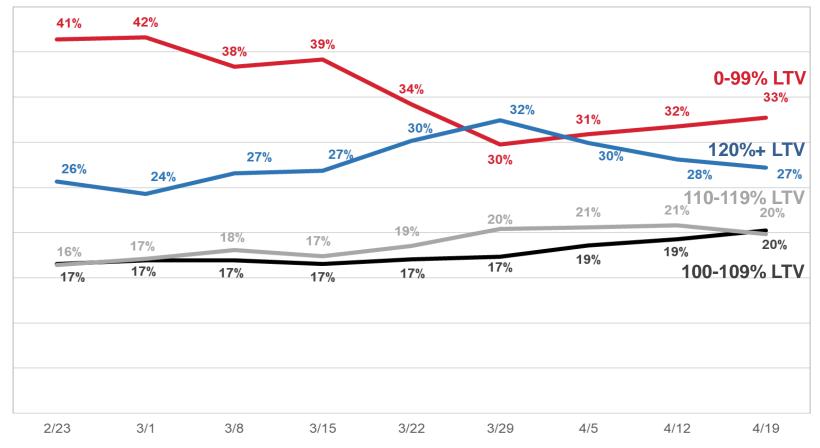
While some of the increase is due in part to higher loan to value ratios, consumers in all credit categories are purchasing higher-contented vehicles.

KEY TAKEAWAY

Consumers in all credit categories are purchasing and financing more expensive vehicles.

IMPACT High Loan-to-Value Originations Are Stabilizing

New LTV Distribution by Week



Average LTV by Week

Week Ending	2/23	3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19
LTV	101.5%	100.9%	102.8%	102.7%	105.4%	108.1%	107.1%	106.5%	105.8%

INSIGHT

Average LTVs

After peaking over 108% the last week of March, LTVs have fallen for three straight weeks. The 105.8% for the week ending April 19 is still above the pre-virus levels of 101-102%.

High LTVs

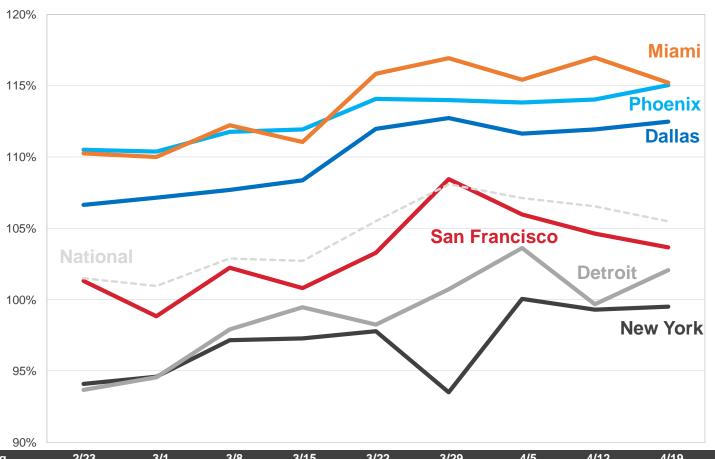
LTV loans over 120% peaked at 32% of all transactions the week ending March 29, the same week that industry sales bottomed out. While trending down, this tier is still elevated from its pre-virus levels.

KEY TAKEAWAY

A much higher proportion of buyers are financing more than the value of their vehicles relative to historical levels.

IMPACT: Loan Structures Are Supporting More Resilient Markets

Loan To Value On Financed Vehicles



30 /0	1								
Week Ending	2/23	3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19
San Francisco	101%	99%	102%	101%	103%	108%	106%	105%	104%
New York	94%	95%	97%	97%	98%	94%	100%	99%	100%
Detroit	94%	95%	98%	99%	98%	101%	104%	100%	102%
Miami	110%	110%	112%	111%	116%	117%	115%	117%	115%
Phoenix	111%	110%	112%	112%	114%	114%	114%	114%	115%
Dallas	107%	107%	108%	108%	112%	113%	112%	112%	112%
National	102%	101%	103%	103%	105%	108%	107%	107%	106%

INSIGHT

Markets that have demonstrated the greatest resilience in the downturn, such as Dallas, Miami, and Phoenix, are demonstrating extremely high loan to value ratios on finance deals.

With average levels of 115-117% over the past five weeks, more than 35% of Miami buyers have stretched their loan to value ratio above 120%.

Conversely, New York and Detroit have maintained relatively lower loan to value relationships.

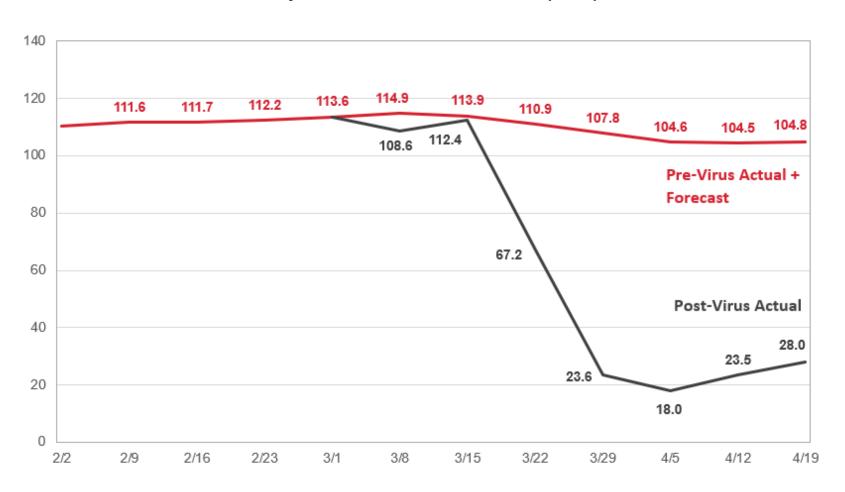
KEY TAKEAWAY

High loan-to-value ratios on finance deals enable consumers to roll negative equity into a new vehicle.



IMPACT: Used Vehicle Auction Volume

Weekly Wholesale Auction Volume (000s)



Notes: Simulcast and physical auction sales for vehicles up to 8 years in age; Lagging reported sales will impact previously reported results; Actual figures through March 1, 2020.

INSIGHT

Wholesale Auction Volume Results

While showing signs of improvement, wholesale auction activity remains severely depressed.
Wholesale volume the week ending April 19 was 73% below our pre-virus forecast for the period.

Impact-to-Date

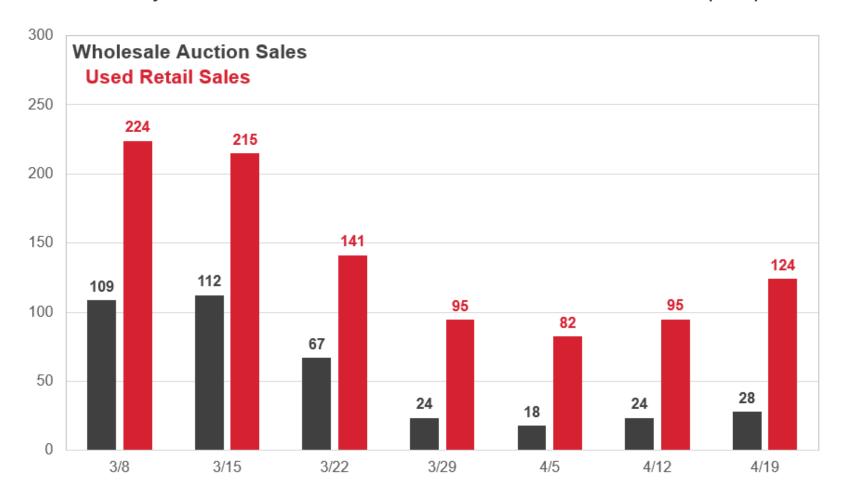
Wholesale sales have totaled fewer than 161,000 units since mid-March, a decline of 419,000 units versus the same period in 2019 and a loss of 369,000 units versus our pre-virus expectations.

KEY TAKEAWAY

The wholesale market has been effectively shut down and is only beginning to recover.

IMPACT: Wholesale Auction and Used Retail Sales

Weekly Wholesale Auction & Used Retail Sales @ Franchise Dealers (000s)



Notes: Simulcast and physical auction sales for vehicles up to 8 years in age.

INSIGHT

Wholesale vs. Used Retail Sales

Used retail sales at franchise dealers are down, but not to the same extent as wholesale auction sales.

Retail sales totaled just under 400,000 units over the past four weeks, while wholesale auction sales reached just 93,000 units.

Pre-virus, there were roughly two used retail sales at franchise dealers for every auction sale. The ratio has averaged more than four used retail sales per auction sale since the week ending March 29.

KEY TAKEAWAY

Dealers are selling down their used retail inventory – much of which was likely purchased before March 15 -- and are reluctant to purchase replacement vehicles.

IMPACT: Used Vehicle Auction Prices Continued Decline

Weekly Wholesale Auction Price Index



Notes: Simulcast and physical auction sales for vehicles up to 8 years in age; Lagging reported sales will impact previously reported results; Actual figures through March 1, 2020

INSIGHT

Wholesale Auction Prices

The rate of decline in wholesale prices slowed last week. Prices fell 1.6% the week ending 4/19 versus the week prior, an improvement over 2.2% average fall recorded in the previous two weeks.

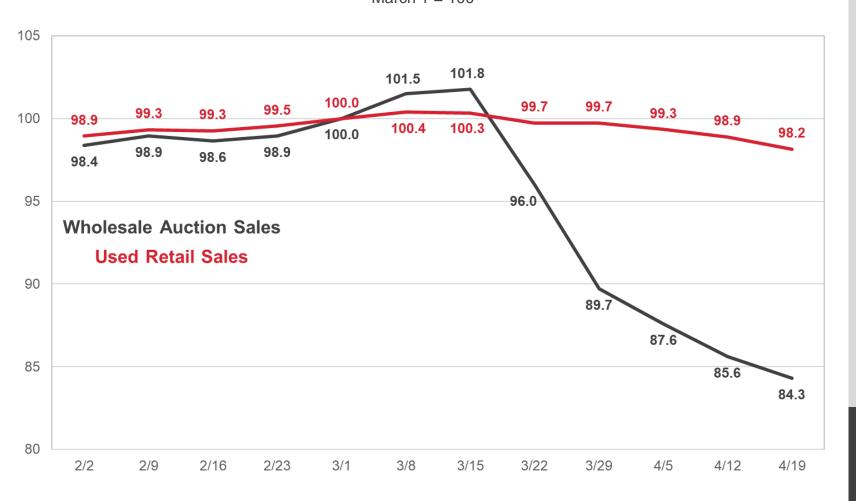
Auction prices are now down 16% versus the beginning of the March.

KEY TAKEAWAY

This week showed another decline in wholesale prices reflecting the low dealer demand for replacing used inventory.

IMPACT: Wholesale Auction Prices vs. Used Retail Prices

Weekly Wholesale Auction & Used Retail Sales Price Indices March 1 = 100



Notes: Simulcast and physical auction sales for vehicles up to 8 years in age. Figures are mix-adjusted.

INSIGHT

Used Retail Prices

Used retail prices continue to be relatively strong. Prices have fallen by an average of just 0.5% on a weekly basis over the past three weeks and are down 2% versus the beginning of March, a 14-point improvement over wholesale losses.

Gap Between Wholesale is Growing

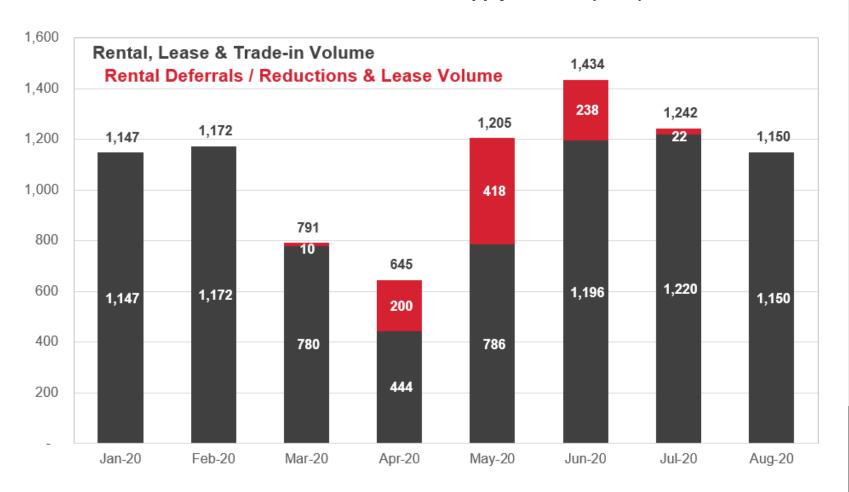
The stark difference between wholesale and retail prices highlights the differences between consumer and dealer demand while also reflecting signs of the supply side impact on auction houses from stay at home orders.

KEY TAKEAWAY

Prices that consumers are paying are similar to pre-virus levels while wholesale prices are plummeting as dealers are apprehensive to buy new inventory.

IMPACT: Used Vehicle Supply

Rental, Lease and Trade-in Supply Outlook (000s)



Notes: Vehicles up to 8 years old.

INSIGHT

Supply Impact

The pandemic has severely disrupted the inflow of rental, lease and trade-in volume. As such, supply outflow over the coming months will also be impacted.

Expectations are that the majority of deferred rental and lease sales from March and April and rental units that will be sold due to fleet reductions will be remarketed by the end of June.

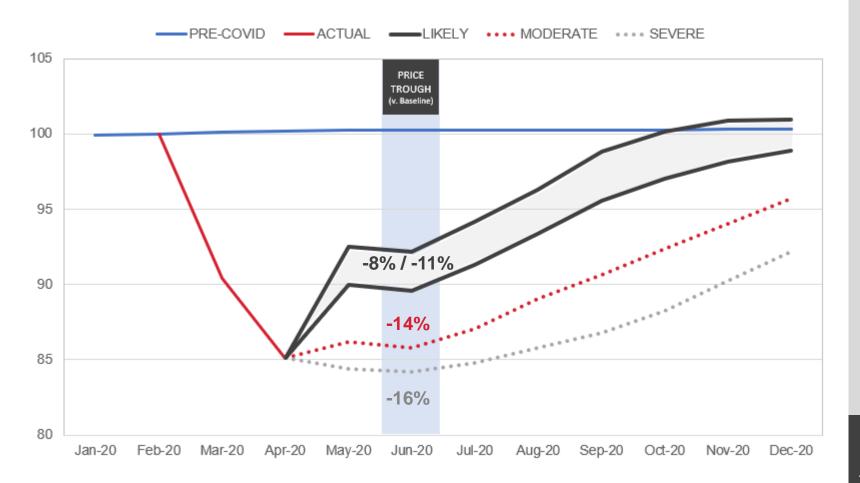
Trade-in volume expectations will be lower over the period due to a reduction in new and used retail sales.

KEY TAKEAWAY

There is a large pool of deferred sales from rental returns and lease maturities that need to come back to the market in the next few months.

IMPACT: Wholesale Price Forecast Scenarios

Auction and Direct-to-Dealer Wholesale Price Scenarios



Notes: Vehicles up to 8 years in age. Actual figures through April 19th

INSIGHT

Wholesale Price Outlook

Wholesale prices are currently 15% below pre-COVID levels in early March, but represent a market fractured by extreme supply and demand forces. J.D. Power Valuation Services believes that wholesale prices will likely recover from the lows witnessed today depending on the duration of the stay at home orders.

Full-Year Estimates

Pre-virus: +0.5%

Likely Scenario: -4% to -6%

Economy opens in early May

Moderate Scenario: -8%

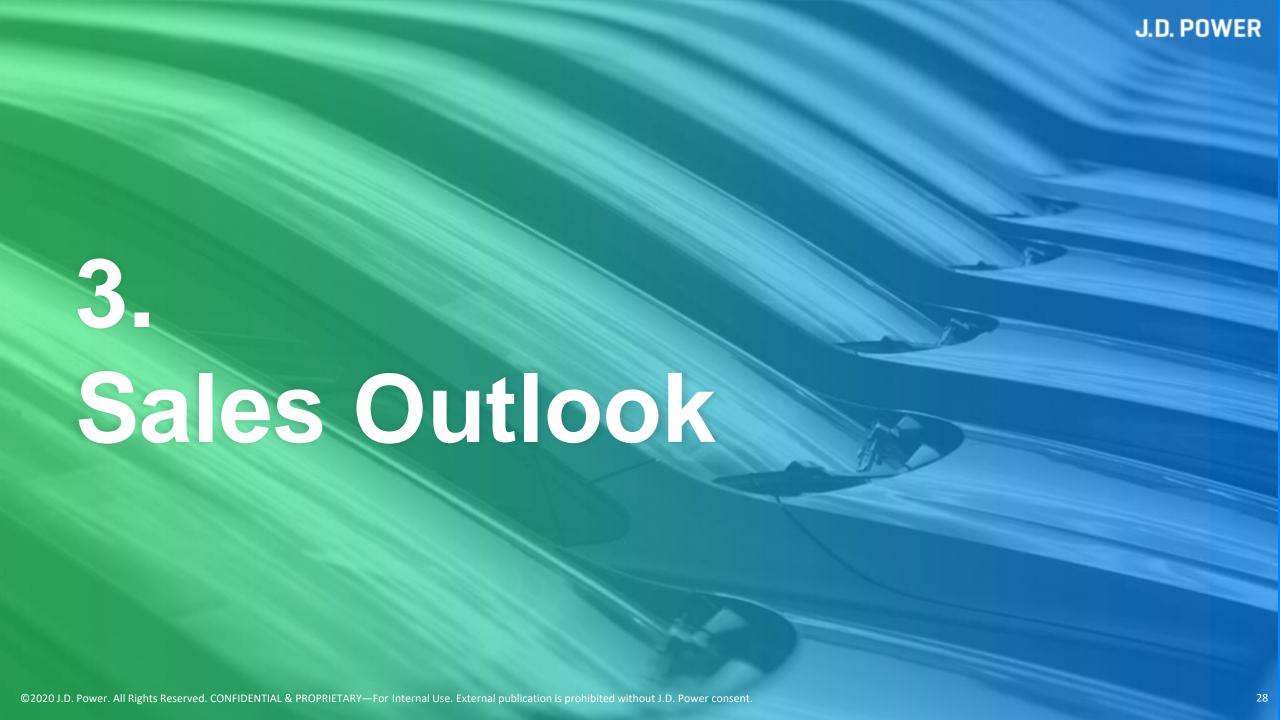
Economy opens in late May/ early June

Severe Scenario: -10%

Economy opens in late June

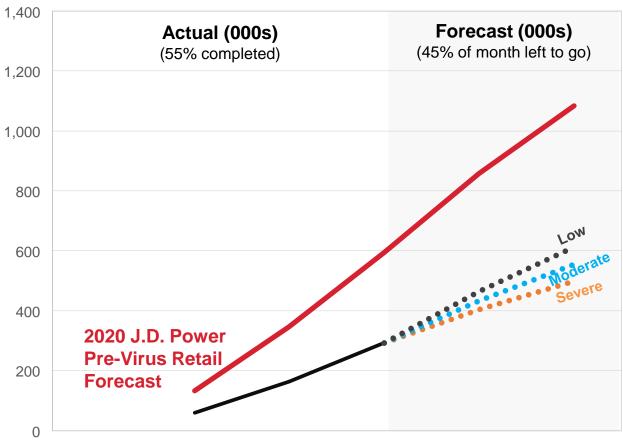
KEY TAKEAWAY

Prices are expected to decline 8% - 16% through June before improving dramatically as the country opens up. Under our Likely Scenario, prices in Q4 will be flat to down 2% versus pre-virus expectations.



OUTLOOK: April Full-Month Retail Sales Forecast

Cumulative Retail Sales



Week Ending	4/5	4/12	4/19	4/26	4/30
Pre-Virus	133	346	594	858	1,085
Low	60	164	294	465	613
Moderate	60	164	294	434	555
Severe	60	164	294	404	500

INSIGHT

April Forecast

J.D. Power April retail sales outlook is for 500,000-613,000 units. This is a decline of 43-54% from our pre-virus forecast, or a sales drop of 472,000-585,000 units.

Sales through April 19 were 294,000 units.

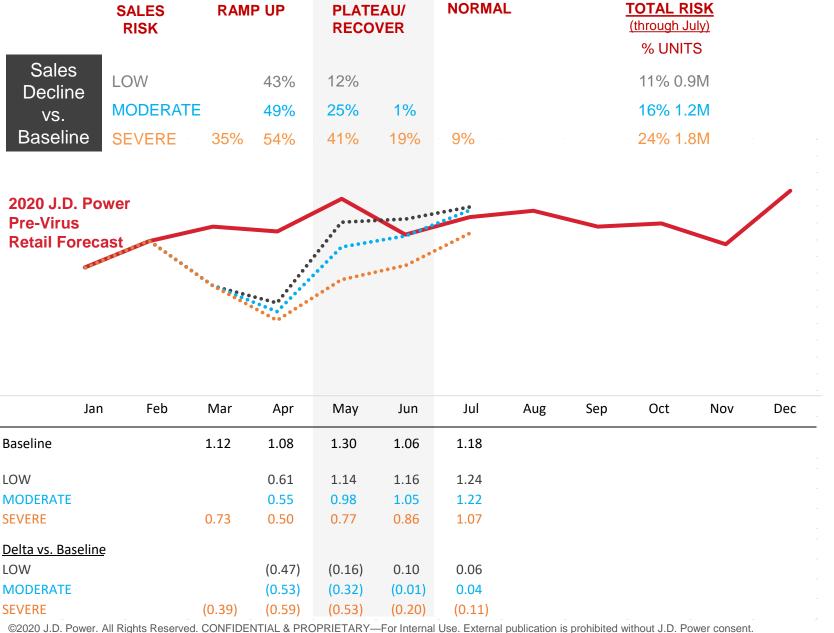
Comparison to April 2019

Compared to April 2019 retail sales of 1,055,100, the moderate scenario represents a decrease of 47%.

KEY TAKEAWAY

Sales are expected to decline 43–54% in April compared to pre-virus forecast.

OUTLOOK: March–July Retail Sales Scenarios



INSIGHT

Sales Impact March-July

The virus is projected to remove 0.9-1.8 million sales over the five months of March-July.

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
- Recovery of sales postponed during March-July
- 2020CY retail sales: 11.3-12.5 million retail sales vs. baseline of 13.4 million
- 2020CY total sales: 12.6-14.5 million total sales vs baseline of 16.8 million

KEY TAKEAWAY

Potential for lost sales through July ranges from 0.9M - 1.8M units.

OUTLOOK: OEM Production Statements

	OEM	Proposed US Mfg. Start Date
Domestic	FCA	May 4 (earliest)
	Ford	May 4 (earliest)
	GM	TBD
	Tesla	May 4
Japanese	Honda	May 1
	Nissan	Mid-May
	Toyota	May 4
	Subaru	May 11
Korean	Hyundai	May 4
	Kia	April 27
European	BMW	May 1
	Mercedes-Benz	April 27
	Volkswagen	April 27
	Volvo	May 4

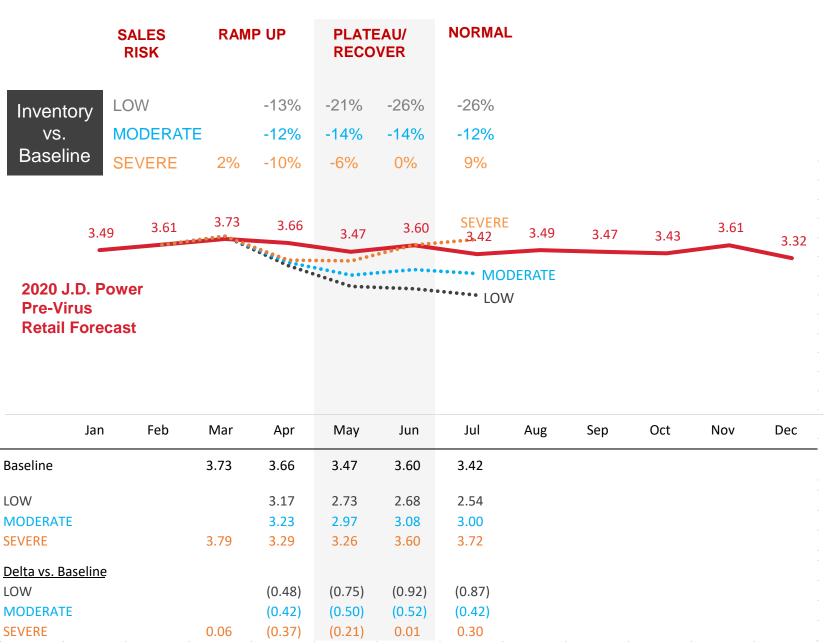
INSIGHT

OEMs are preparing to restart their US manufacturing operation between April end and mid-May depending on the plant location and other safety factors.

KEY TAKEAWAY

Production outlook is uncertain but is likely to resume in May.

OUTLOOK: New Vehicle Inventory



INSIGHT

Scenario Assumptions

Production outlook is uncertain but expectation is that shutdowns will continue through April and resume in May. May production will likely be at lower run rates and/or disrupted by supply chain issues once plants re-open.

Outcome

Inventory projections indicate that additional demand-driven production cuts will not be necessary over and above those already in effect. If sales rebound faster than expected, inventory may fall by 0.9 million units to the 2.5 million level. This remains a sufficient level for the overall industry since it equivalent to a 60 day supply. However, there will likely be constraints for select vehicles.

KEY TAKEAWAY

Production is expected to align with overall demand for most vehicles. Resumption of production in May is key to maintaining normal levels of supply.

IMPACT: Global Vehicle Sales

(000s)	April 2019	April 2020 Forecast	% Change
World	7,194	3,293	-54%
China	1,935	1,620	-16%
Western Europe	1,383	192	-86%
Japan	375	222	-41%
Eastern Europe	361	125	-65%
Brazil	222	37	-83%
South Korea	152	121	-20%
Other	1,148	441	-62%

INSIGHT

Sales Declines are Global

Total sales are forecasted to be down in all major markets of the world. While sales were off 38% globally in March, the April LMC Automotive forecast calls for a decline of 54%.

Scale of global decline reflects challenges faced by global automakers.

China is well into recovery with sales expected to improve 30ppts from March's 46% decline. China's share of global sales is temporarily approaching 50%.

Western Europe is forecasted to be 33ppts worse in April than March.

KEY TAKEAWAY

Global automakers are dealing with global disruption to vehicle sales.

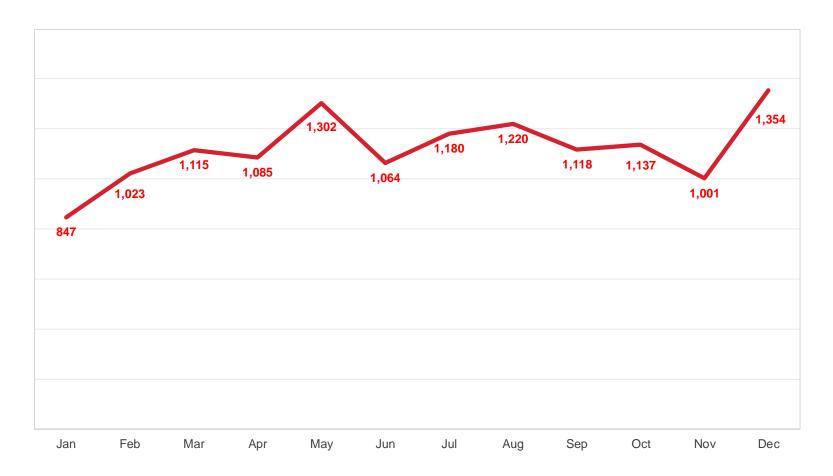


J.D. POWER Next Briefing: April 29, 2 pm EDT ©2020 J.D. Power. All Rights Reserved. CONFIDENTIAL & PROPRIETARY—For Internal Use. External publication is prohibited without J.D. Power consent.



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

Retail Sales Forecast (000s)



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

Prior to the virus, 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 presentation.

IMPACT: How Are Customers Leveraging 0% for 84M Incentives?

Actual Loan Terms for 0% for 84-Month Customers vs. Prior Purchase

		Vehicle Price	APR / Term	Total Down	Monthly Payment
	Prior Purchase	\$38,330	5.0%, 74 months	\$5,181	\$590
Large Pickup Light Duty	New Purchase	\$51,398	0%, 84 months	\$1,003	\$666
	Change	\$13,068	-5.0ppts, +10 months	-\$4,179	\$76
	Prior Purchase	\$33,632	4.4%, 73 months	\$3,819	\$529
Midsize SUV	New Purchase	\$43,729	0%, 84 months	\$607	\$569
	Change	\$10,098	-4.4ppts, +11 months	-\$3,212	\$39
	Prior Purchase	\$27,089	4.9%, 72 months	\$3,044	\$445
Midsize Pickup	New Purchase	\$35,703	0%, 84 months	-\$81	\$481
	Change	\$8,614	-4.9ppts, +12 months	-\$3,125	\$36
	Prior Purchase	\$21,918	5.5%, 71 months	\$3,195	\$364
Small SUV	New Purchase	\$27,599	0%, 84 months	-\$44	\$374
	Change	\$5,681	-5.5ppts, +13 months	-\$3,239	\$10

Notes: Data compares the loan terms of customers who bought in Mar-20/Apr-20 with a 0% for 84mo loan, compared to the loan terms and payments of their previous purchase

INSIGHT

With 0% for 84M incentive offers available, customers are purchasing more expensive vehicles, putting less money down, yet still achieving monthly payments near their prior vehicle payment.

In the case of Large Pickups, customers are selecting a \$13K more expensive vehicle and putting \$4K less money down. But by taking a 0%/84mo loan (with a 10 month longer term and 5ppt lower rate), they are only paying \$76 more per month.

For Small SUV, the monthly payment is even closer to being carryover at +\$10 despite \$6K more expensive vehicles and \$3K less down payment.

KEY TAKEAWAY

84mo Loans are helping customers put less money down, buy more expensive vehicles, yet keep monthly payments aligned with their prior vehicle.

IMPACT: Loan Deals Have Improved, Cash/Lease Deals Stable

Incentive Spend per Unit by Sales Type



INSIGHT

0% for 84 months finance terms are the primary driver of the recent rapid escalation of incentives.

Discounts for cash and lease customers have not yet risen to match the escalation available to finance customers.

A key variable for the coming weeks and months will be the extent to which manufacturers maintain the current strategy vs. escalating cash and lease incentives.

KEY TAKEAWAY

The current dominant tactic of 0% for 84 months is appropriate to maintain sales though the current crisis. However, it is only relevant to non-cash and non-lease customers.

IMPACT: Regional Premium Retail Sales

			Apr-20	
	Apr-19	Mar-20	MTD	
National	134.9	86.8	29.9	-59%
Pre-Virus Forecast	134.9	144.9	73.6	
New York	18.8	10.8	1.9	-80%
Los Angeles	15.1	9.8	3.1	-65%
Chicago	5.0	2.9	1.3	-55%
Dallas	4.4	3.5	1.8	-28%
	4.4	3.5 2.1	-	-87%
Philadelphia			0.3	-92%
Detroit	2.8	1.5	0.1	-67%
Boston	3.3	2.0	0.6	
San Francisco	5.2	2.4	8.0	-75%
Houston	3.8	3.0	1.7	-24%
Miami	6.1	4.7	1.8	-44%
Washington, DC	3.4	2.2	1.0	-47%
Atlanta	2.8	2.2	0.9	-42%
Tampa	2.6	2.2	0.9	-40%
Phoenix	1.9	1.5	0.7	-36%
Orlando	1.9	1.4	0.5	-52%
Cleveland	1.4	1.1	0.4	-44%
Seattle	1.6	0.9	0.2	-76%
Minneapolis	1.1	0.7	0.3	-56%
Denver	1.6	0.9	0.4	-59%
Pittsburgh	1.1	0.5	0.0	-97%
Sacramento	1.2	0.6	0.4	-48%
San Diego	1.9	1.1	0.3	-68%
West Palm Beach	2.6	2.1	0.8	-42%
Raleigh	1.1	0.8	0.3	-38%
Charlotte	1.2	0.9	0.4	-35%

		_		
			Week Ending	,
Δ W/W		2020-04-19	2020-04-12	2019-04-21
+35%		14.0	10.4	30.8
+22%		31.6	26.0	30.8
+23%		0.8	0.7	4.2
+64%		1.5	0.9	3.4
+50%		0.7	0.5	1.2
+41%		0.9	0.6	1.1
+7%		0.1	0.1	1.0
+1034%		0.1	0.0	0.6
+12%		0.3	0.2	0.8
+50%		0.4	0.2	1.2
+27%		0.7	0.6	1.0
+56%		0.9	0.6	1.2
+20%		0.4	0.4	0.7
+30%		0.4	0.3	0.6
+8%		0.3	0.3	0.6
+35%		0.3	0.2	0.5
+13%		0.2	0.2	0.5
+68%		0.2	0.1	0.3
	-6%	0.1	0.1	0.3
+74%		0.1	0.1	0.3
+19%		0.2	0.1	0.4
+68%		0.0	0.0	0.2
+8%		0.2	0.1	0.3
+87%		0.2	0.1	0.4
+15%		0.3	0.3	0.6
+53%		0.1	0.1	0.2
+60%		0.2	0.1	0.2

INSIGHT

April Month-to-Date

Premium declines remain more severe than the industry overall with the sales decline running 8ppts worse.

Week Ending April 19

Nearly all markets are exhibiting growth (off of depressed sales in prior weeks) as dealers adapt and/or selling regulations are clarified.

KEY TAKEAWAY

Every top 25 market is off for the month and any weekly gain is from depressed levels.

IMPACT: Regional Large Light Duty Pickup Retail Sales

Apr-20 Apr-19 Mar-20 MTD Δ National 104.5 103.7 49.4 -159 Pre-Virus Forecast 104.5 117.4 56.9 -2 New York 3.0 1.9 0.6 -59% Los Angeles 3.2 2.9 1.7 -159 Chicago 1.6 1.5 0.8 -99 Dallas 3.5 4.8 2.4 Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91% Boston 1.9 1.6 0.9 -149
National 104.5 103.7 49.4 -159 Pre-Virus Forecast 104.5 117.4 56.9 -2 New York 3.0 1.9 0.6 -59% Los Angeles 3.2 2.9 1.7 -159 Chicago 1.6 1.5 0.8 -99 Dallas 3.5 4.8 2.4 Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91%
Pre-Virus Forecast 104.5 117.4 56.9 -2 New York 3.0 1.9 0.6 -59% Los Angeles 3.2 2.9 1.7 -159 Chicago 1.6 1.5 0.8 -99 Dallas 3.5 4.8 2.4 Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91%
New York 3.0 1.9 0.6 -59% Los Angeles 3.2 2.9 1.7 -15% Chicago 1.6 1.5 0.8 -9% Dallas 3.5 4.8 2.4 Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91%
Los Angeles 3.2 2.9 1.7 -159 Chicago 1.6 1.5 0.8 -99 Dallas 3.5 4.8 2.4 Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91%
Los Angeles 3.2 2.9 1.7 -159 Chicago 1.6 1.5 0.8 -99 Dallas 3.5 4.8 2.4 Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91%
Chicago 1.6 1.5 0.8 -9° Dallas 3.5 4.8 2.4 Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91%
Dallas 3.5 4.8 2.4 Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91%
Philadelphia 1.8 1.1 0.2 -77% Detroit 4.2 3.3 0.2 -91%
Detroit 4.2 3.3 0.2 -91%
1.2 0.0 0.2
Boston 1.9 1.6 0.9 -145
440/
San Francisco 1.0 0.8 0.4 -44%
Houston 3.4 4.7 2.5
Miami 1.3 1.2 0.6 -119
Washington, DC 1.2 1.1 0.7 -3
Atlanta 1.8 1.9 1.0 -3
Tampa 1.5 1.7 1.0
Phoenix 1.7 2.1 1.2
Orlando 1.3 1.4 0.8
Cleveland 1.4 1.5 0.8
Seattle 1.0 0.7 0.2 -56%
Minneapolis 2.4 2.2 0.9 -26%
Denver 1.4 1.2 0.8 -8
Pittsburgh 1.3 0.7 0.0 -97%
Sacramento 1.0 0.9 0.6 -4
San Diego 0.6 0.5 0.3 -199
West Palm Beach 0.6 0.6 0.3 -3
Raleigh 0.9 1.1 0.7
Charlotte 0.8 1.1 0.5

	Week Ending	
2019-04-21		
24.7		20.9
24.7	21.3	24.7
0.6	0.3	0.3
0.8	0.6	0.7
0.4	0.3	0.3
0.8	0.9	1.0
0.5	0.1	0.1
1.0	0.0	0.2
0.4	0.3	0.4
0.3	0.1	0.2
0.9	0.9	1.1
0.3	0.2	0.3
0.3	0.2	0.3
0.4	0.4	0.5
0.3	0.3	0.4
0.4	0.4	0.5
0.3	0.3	0.3
0.3	0.3	0.3
0.2	0.1	0.1
0.6	0.3	0.4
0.4	0.3	0.3
0.3	0.0	0.0
0.2	0.2	0.2
0.1	0.1	0.1
0.1	0.1	0.1
0.2	0.3	0.3
0.2	0.2	0.3

INSIGHT

ΔW/W

+2126%

+23% +57% +34% +21%

: +7%

+12%

+590%

I +14%

April Month-to-Date

Truck markets in Texas and other sunbelt states are growing this month as incentives keep consumers in market.

Week Ending April 19

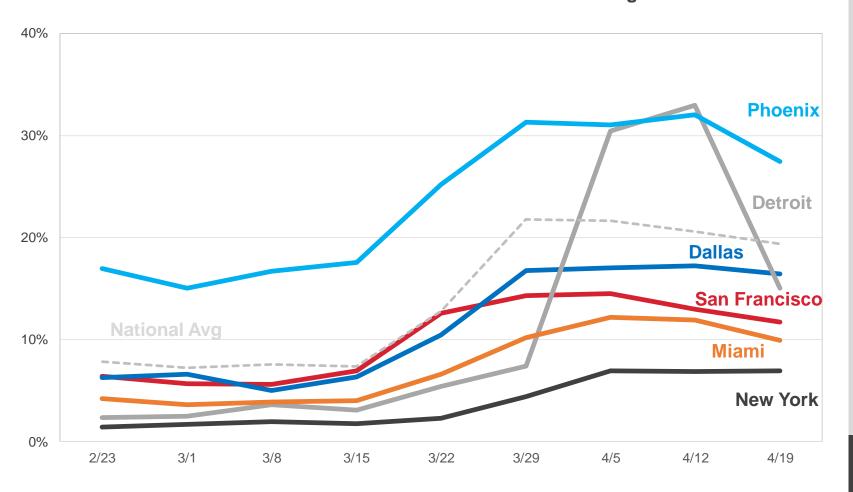
On a weekly basis, most top truck markets continue to show growth, as volumes in 10 out of 25 markets eclipse the same week last year.

KEY TAKEAWAY

The pickup segment remains the most resilient in the industry but not every market is showing strength.

IMPACT: 84 Month Loans Rose In More Resilient Markets

% of Sales That Are Financed with an 84-month or Longer Loan



INSIGHT

Markets that have demonstrated the greatest resilience in the downturn, such as Dallas and Phoenix, are demonstrating high reliance on 84 month and longer loans.

Use of 84 month loans has nearly doubled in Phoenix and remains near 30% in the fourth week since 0% for 84 month programs launched.

Sales volume in Detroit was extremely low in weeks ending 4/5 and 4/12, but consumers that managed to purchase vehicles in those weeks went into 84 month and longer loans at high rates.

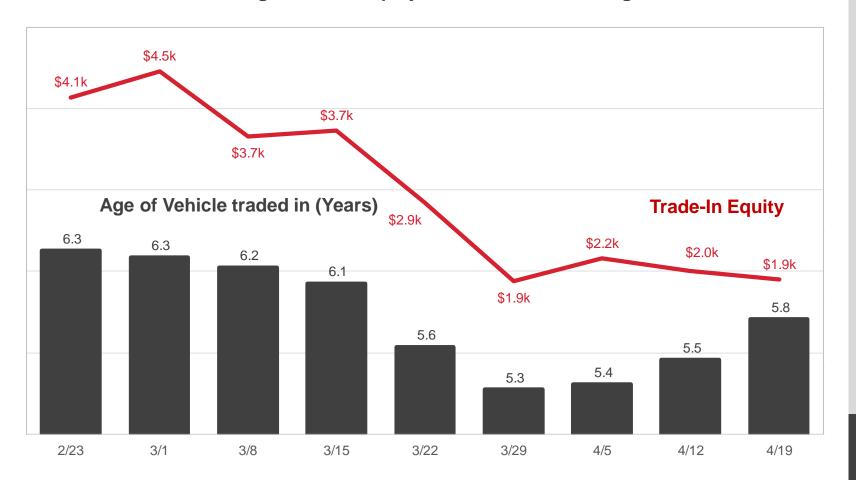
While 84 month loan mix in New York has risen, it is not approaching levels of resilient markets.

KEY TAKEAWAY

While 84 month loan usage has increased in most markets, more resilient markets relied heavily on this tactic to maintain relatively higher sales volume.

IMPACT: Trade-In Equity Has 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 by the end of March. Since then, vehicle age has been rebounding towards pre-virus levels. [Note: most segments increased in age week-over-week within the range of +0.2 to +0.6 years with no notable exceptions]

Trade-In Equity

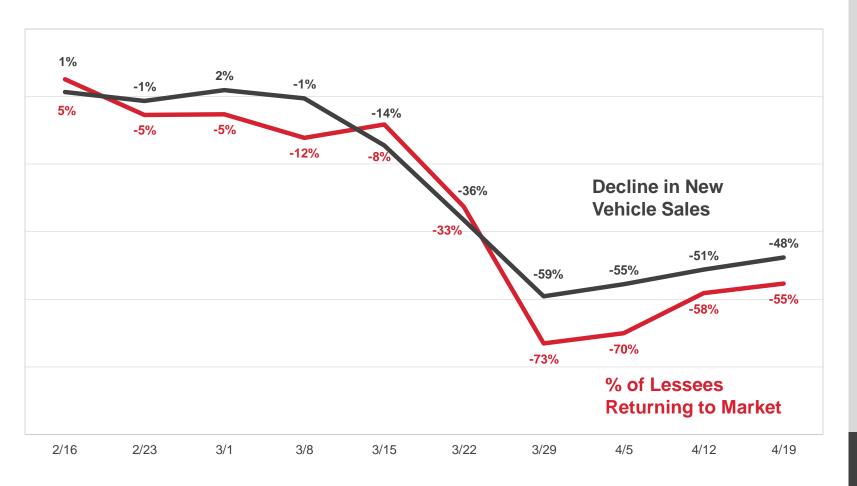
The decline in equity likely reflects higher loan balances carried on younger vehicles traded in and lower trade values on used vehicles. Pickup segments are still driving the week-over-week decline through 4/19. [Note: Week-over-week change Large Pickup – LD (-\$200), Large Pickup – HD (-\$2300), Midsize Pickup (-\$500)]

KEY TAKEAWAY

Trade-in age is normalizing but trade-in equity remains low

IMPACT: Lessees Starting to Return to Market

% of Lessees Returning to Market vs. Decline in New Vehicle Retail Sales



INSIGHT

Returning lessees in market dropped by 73% during the last week of March, a rate that is 14ppts worse than the new vehicle sales decline.

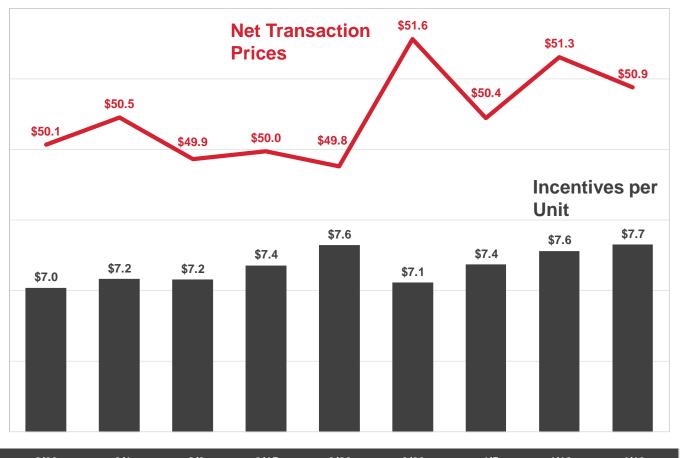
In April, there has been improvement in the number of lessees returning to market. They still lag overall all sales by 7ppts (-55% vs -48% in new vehicle sales).

KEY TAKEAWAY

Almost 75% of lessees have stayed out of the market due to their ability to extend leases. As April progresses, a gradual return to market is becoming apparent.

IMPACT: Premium Transaction Prices & Incentive Spend

Net Transaction Prices and Incentive Spending (000s)



Week Ending	2/23	3/1	3/8	3/15	3/22	3/29	4/5	4/12	4/19	
Incentives % MSRP	11.9%	12.0%	12.1%	12.4%	12.8%	11.8%	12.3%	12.6%	12.7%	

INSIGHT

Net Transaction Prices

Premium transaction prices grew to \$51,600 during the week ending March 29 driven by a week-over-week drop in lease mix and a higher sales mix of Large SUVs. Prices remained elevated through the week ending April 19.

Incentive Spending

Incentives dropped to \$7,100 in the week ending March 29 due to lower lease spending and mix. Spending increased in the following three weeks as premium nameplates enhanced their supported finance offers to keep up with mainstream nameplates.

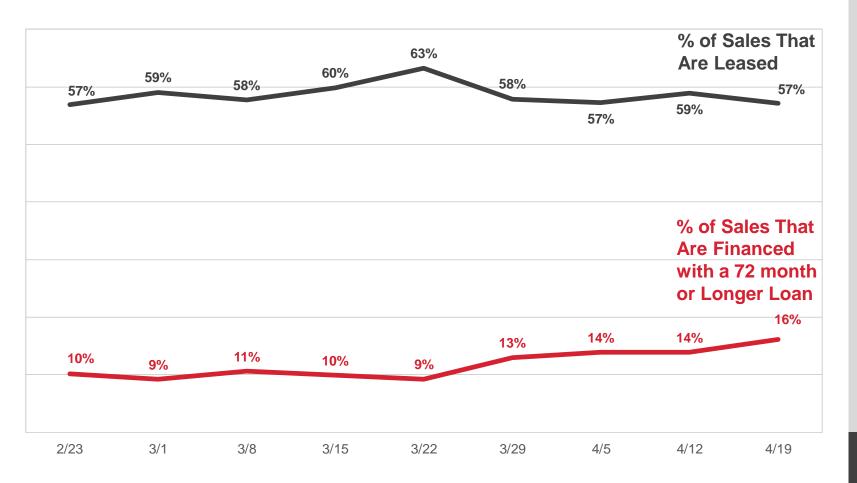
Supported finance mix grew from 10% in the week ending March 29 to 18% in the week ending April 19.

KEY TAKEAWAY

Premium nameplates are following the lead of mainstream in offering enhanced supported finance offers.

IMPACT: How People Are Buying Premium Vehicles

Share of New Vehicle Sales by Purchase Type



INSIGHT

% of Premium Buyers Taking 72 month or Longer Loans

16% of buyers during the week ending April 19 took a 72-month or longer loan, the highest ever level for premium and 60% above pre-virus levels.

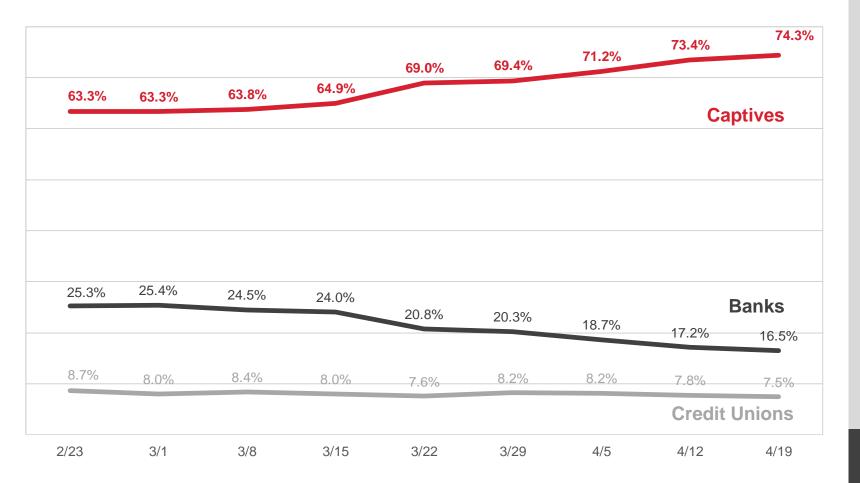
Unlike non-premium segments, 0% for 84 month loans are not currently available, with 0% for 72 month loans only available on a modest portion of premium vehicles.

KEY TAKEAWAY

While still low relative to mainstream vehicles, the number of luxury buyers opting for long-term loans is up 40% from pre-virus levels.

IMPACT: Captive Lenders Benefit From Strong APR Offers

Share of New Vehicle Loans and Leases



INSIGHT

Captive %

Captive lenders captured 74.3% of loans and leases in week ending April 19, the highest level in recent history.

Higher captive mix is due to supported 84-month loans from the Detroit 3 and continued rebound in leasing across most SUV & pickup segments.

KEY TAKEAWAY

Strong finance offers are supporting sales and enabling captives to increase their share of loans.

IMPACT: Regional Used Sales

			Apr-20	
	Apr-19	Mar-20	MTD	Δ Υ/Υ
National	932.2	684.7	269.7	-54%
Pre-Virus Forecast	932.2	1,004.8	573.4	-2%
New York	39.5	20.9	3.4	-86%
Los Angeles	37.0	23.8	9.4	-61%
Chicago	32.6	22.5	9.3	-55%
Dallas	32.9	25.3	11.9	-43%
Philadelphia	23.3	13.8	1.4	-90%
Detroit	11.4	7.4	0.4	-95%
Boston	19.2	12.5	3.5	-68%
San Francisco	17.8	8.4	3.3	-71%
Houston	19.5	15.1	6.9	-44%
Miami	14.0	10.6	3.5	-60%
Washington, DC	22.8	16.8	7.5	-47%
Atlanta	21.3	16.4	6.6	-50%
Tampa	15.6	13.4	5.2	-47%
Phoenix	22.7	17.7	8.8	-36%
Orlando	13.7	10.8	4.4	-49%
Cleveland	20.8	13.6	6.4	-50%
Seattle	10.9	6.6	1.3	-81%
Minneapolis	25.6	19.1	8.7	-45%
Denver	16.3	8.8	3.5	-68%
Pittsburgh	9.7	6.2	0.0	-100%
Sacramento	6.4	4.6	2.5	-38%
San Diego	5.5	3.8	1.6	-53%
West Palm Beach	8.5	6.6	2.4	-54%
Raleigh	9.4	8.2	3.6	-39%
Charlotte	13.4	10.0	4.4	-47%

,	Week Ending		
2019-04-21	2020-04-12	2020-04-19	Δ W/W
221.7	95.9	124.1	+29%
221.7	208.5	222.1	+7%
9.2	1.2	1.5	+25%
8.8	2.9	4.5	+55%
7.8	3.5	4.0	+16%
8.2	4.3	5.9	+36%
5.6	0.6	0.5	-9%
2.9	0.0	0.3	+715%
4.5	1.4	1.5	+3%
4.0	1.1	1.6	+40%
4.7	2.6	3.1	+19%
3.3	1.2	1.6	+32%
5.3	2.5	3.5	+41%
5.0	2.4	3.2	+31%
3.6	2.0	2.2	+15%
4.9	3.1	4.1	+34%
3.1	1.6	2.0	+22%
4.8	2.2	3.1	+39%
2.4	0.5	0.6	+20%
6.5	3.1	4.0	+32%
4.2	1.4	1.5	+5%
2.4	0.0	0.0	+481%
1.4	0.8	1.2	+39%
1.2	0.5	0.8	+39%
2.0	0.8	1.2	+46%
2.2	1.3	1.6	+21%
3.2	1.6	2.0	+29%

INSIGHT

April Month-to-Date

Used vehicle sales declined more than new vehicle sales in 22 out of 25 markets. Used sales are significantly lagging new sales in Texas, Florida, Denver, and Phoenix.

Week Ending April 19

Half of the top markets exhibited a stronger rebound in used sales relative to new sales, but comparisons are against a lower baseline.

KEY TAKEAWAY

Every top 25 market is under stay-home orders and experiencing declines. However, the impact of recent stay-home guidance has been less than expected.