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

March 18, 2020

Agenda

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This is the first weekly intelligence report utilizing J.D. Power real-time data from the Power Information Network to track closely developments in the U.S. automotive industry due to COVID-19. The information in this report will be delivered to clients every Wednesday at 12pm EDT.

Beginning, Wednesday, March 25, the email briefing will be followed by a webinar a few hours later. This will give you time to digest the briefing contents and develop any question you may have for our team. More information on the webinar will be forthcoming.

The ways our lives are being altered right now seem unprecedented. The business decisions you face are numerous. These briefings are intended to help you make the right decisions. You'll get actual market data coupled with projections for the forthcoming effects on vehicle sales.

Executive Briefing (1/3): March Market Environment

Pre-Virus Expectations

Sales Outlook Pre-Virus (Baseline)

Prior to the escalation of the COVID-19 virus in the U.S., J.D. Power called for a 2020CY new-vehicle sales forecast of 16.8 million total sales and 13.4 million retail sales, declines of 1.9% and 2.6% respectively from 2019CY. The pre-virus forecast for March 2020 was 1.48 million total sales and 1.15 million retail sales, a decline of 0.5% and 1.7% from March 2019.

Virus Impact To Date

Virus Impact on March New Vehicle Sales To Date

Through Sunday March 15, 371K retail sales have occurred, a decline of 38K units/9% from our baseline. Sales in the week ending March 8th declined only 1% due to the virus, but the decline intensified rapidly. The first four days of the week (March 9-12) saw an 8% drop, followed by Friday through Saturday combined fall of 20%, before posting a 36% decline on Sunday, March 15.

Regional Variation

Virus impact varies greatly across the U.S. with heavily-impacted markets experiencing the greatest virus-related new-vehicle retail sales declines. Seattle remains the most prevalent with virus effects of 18% sales loss, followed by San Francisco and Sacramento at 17%, Los Angeles 16%, Chicago 15% and San Diego 14%. Other markets have shown greater resilience thus far. Detroit and Minneapolis are example of markets without a discernable impact through Sunday March 15.

Outlook For March New Vehicle Retail Sales

Both the virus and its effect on new vehicle sales are expected to grow in severity throughout March. The progression will vary across the country with some markets several weeks behind the worst markets. Beyond the inherent uncertainty of the virus progression, a key determinant of March auto sales will be any legal restrictions on dealership sales operations. Restrictions on consumer activity through shelter-in-place orders may further impact sales if dealership sales operations are not classified as “essential businesses” (vs service operations), which will result in the cessation of new vehicle sales in those markets. Because of this cumulative uncertainty, J.D. Power March retail sales outlook is for a range of 669,000-948,000, which constitutes a decline of 16-41% from March 2019, with 14-39% of the decline attributable to virus effects.

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Outlook for New Vehicle Sales in the First Half of 2020

To understand how the industry may be affected over the next five months, J.D. Power modeled near-term U.S. new-vehicle sales using the market conditions of China as a baseline. J.D. Power created low/medium/high severity scenarios where the virus follows a 12-week cycle of escalation to recovery, cadenced across the U.S. with the sales impacts of -20%/-50%/-80% respectively. The retail sales declines from these scenarios would be 800,000 (low scenario), 1.7 million (medium scenario) and 3.1 million (high scenario) between March and July. Given the progression of the virus in the U.S., coupled with its more advanced progression in Europe, J.D. Power expects the medium scenario is currently most likely (1.7 million unit retail sales loss), but the outlook will change as the virus and associated government, vehicle manufacturer and retailer responses are implemented.

The recent announcements that GM, Ford, FCA and Honda will be pausing production have the potential to create inventory constraints if the pauses are long in duration and consumer demand is resilient. Right now, there is sufficient inventory to support new-vehicle sales for an extended period of time. The extent to which inventory constraints become a factor in vehicle sales will depend on how vehicle demand falls relative to production—and the significance will vary by manufacturer and local market.

Potential for Recovery and Outlook for New Vehicle Sales for Full-Year 2020

Unlike airline seats and food, vehicles are durable goods and have historically demonstrated an ability to recoup sales lost due to short-term disruptions. As such, the auto industry has the potential to recover from virus-related sales disruption. As with other industries, the extent of the recovery will be influenced by the general economic environment post-virus which remains highly uncertain. Beyond that, vehicle sales will be heavily influenced by the actions of vehicle manufacturers with regard to production decisions and discounts, as well as any auto specific government stimulus packages. A critical constraint on the recovery will be the extent to which vehicle manufacturers maintain production during the virus period. If production is halted for an extended period (e.g., a two-month halt equating to 2.0 to 2.5 million units), a commensurate drop in full-year sales is likely as manufacturers do not have the ability to recover the lost production over the balance of 2020. Conversely, if production is maintained and sales decline according to our high impact scenario in the near term, new vehicle inventories have the potential to double by August, which will likely result in the need for significant promotional activity from OEMs (such as widespread use of low interest rate financing for extended loan terms) as well as auto specific government stimulus actions.

Manufacturers' ability to maintain production will be impacted by workers ability to operate in manufacturing facilities, both for vehicle assembly and also for parts manufacturing. Disruption is occurring and will likely spread, but the scale and duration of the disruption is highly uncertain. Our outlook for 2020 vehicle sales will therefore be updated as clarity on production volumes, economic conditions and stimulus activities become transparent. It is clear that our pre-virus outlook of 16.8M is no longer attainable, with sales likely to fall in the range of 14.0 to 16.0 million units dependent upon the factors noted above.

Executive Briefing (3/3): Additional Considerations

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Lease Maturities

1.8 million vehicle leases are due to expire between March and July 2020. Unlike vehicle ownership, lessees are compelled to return to market to lease or purchase a new vehicle or otherwise extend their lease (potentially past warranty), purchase their vehicle outright, or simply return the vehicle without a replacement. Leases accounted for 31% of U.S. retail in 2019 and represent a key opportunity for manufacturers and retailers to maintain a base level of new-vehicle sales during this period of uncertainty.

Sales Without Showroom Visits

A majority of manufacturers and retailers have the ability to sell vehicles with minimal in-person interaction. While the utilization of online buying and vehicle delivery services has been relatively modest to date, it is expected to rise significantly given current conditions. Increasing consumer awareness of new ways to purchase and receive delivery of a vehicle will be a key activity for manufacturers and retailers in the coming weeks.

Used Market

Historically, the used market has outperformed the new vehicle market during economic downturns as consumers look to reduce expenses. Used car retailers are likely to experience similar disruption to new car retailers in the short term. A key variable will be retailers willingness to acquire used vehicle inventory in the face of uncertainty and short-term sales declines. To date, wholesale demand for used vehicles remains strong, but this may change rapidly. The medium-term outlook for the used market is mixed. A large decline in new vehicle sales will reduce the number of vehicles being traded-in, which reduces used vehicle supply and potentially increase prices. Conversely, the potential availability of large discounts on new vehicles post-virus may depress used vehicle prices.

Long Term Implications For The Global Auto Industry

The global nature of the virus, coupled with the global footprint of most vehicle manufacturers has serious implications for manufacturers financial well-being. Plant closures and sales declines across the globe are having an immediate impact on manufacturer profits and cash reserves, which will be compounded by disruption in the U.S. market. This is occurring as auto makers are investing record amounts of capital in electric vehicle and autonomous technology. While it is too early to be definitive, there is a risk that manufacturers will be compelled to reduce investment in new technology in order to sustain core operations. The investment in EVs has been driven in part by current or expected legislation on vehicle emissions in many countries. The virus presents an additional obstacle for manufacturers to overcome as they work toward launching EVs to meet legislative requirements.

Weekly Retail Sales Tracker: March Actual vs 2020 J.D. Power Pre-Virus Forecast

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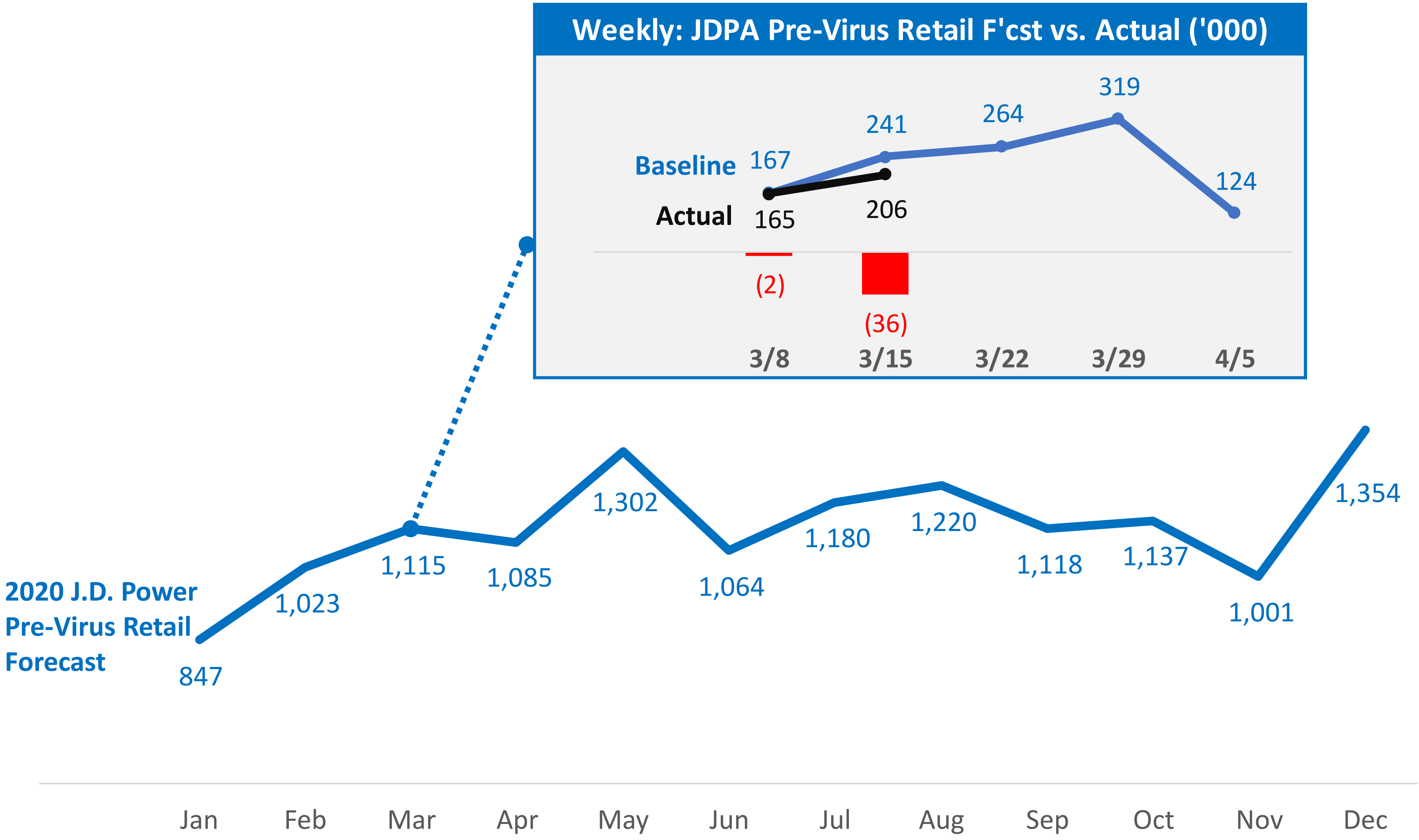

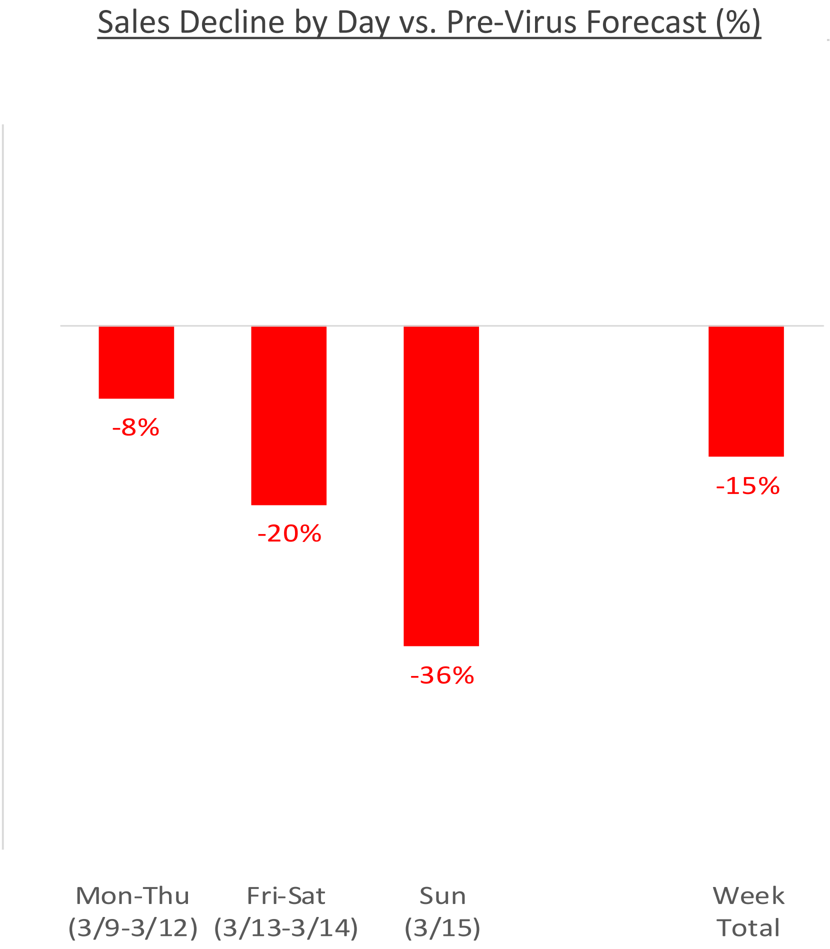

March month-to-date sales are off 38,000 units for a decline from pre-virus forecast of 9%, but the decline intensified rapidly throughout the week. Very soft business during the weekend is expected to be followed up by even weaker demand in the remainder of March

Scenario Analysis (1/2): March Retail Sales Outlook

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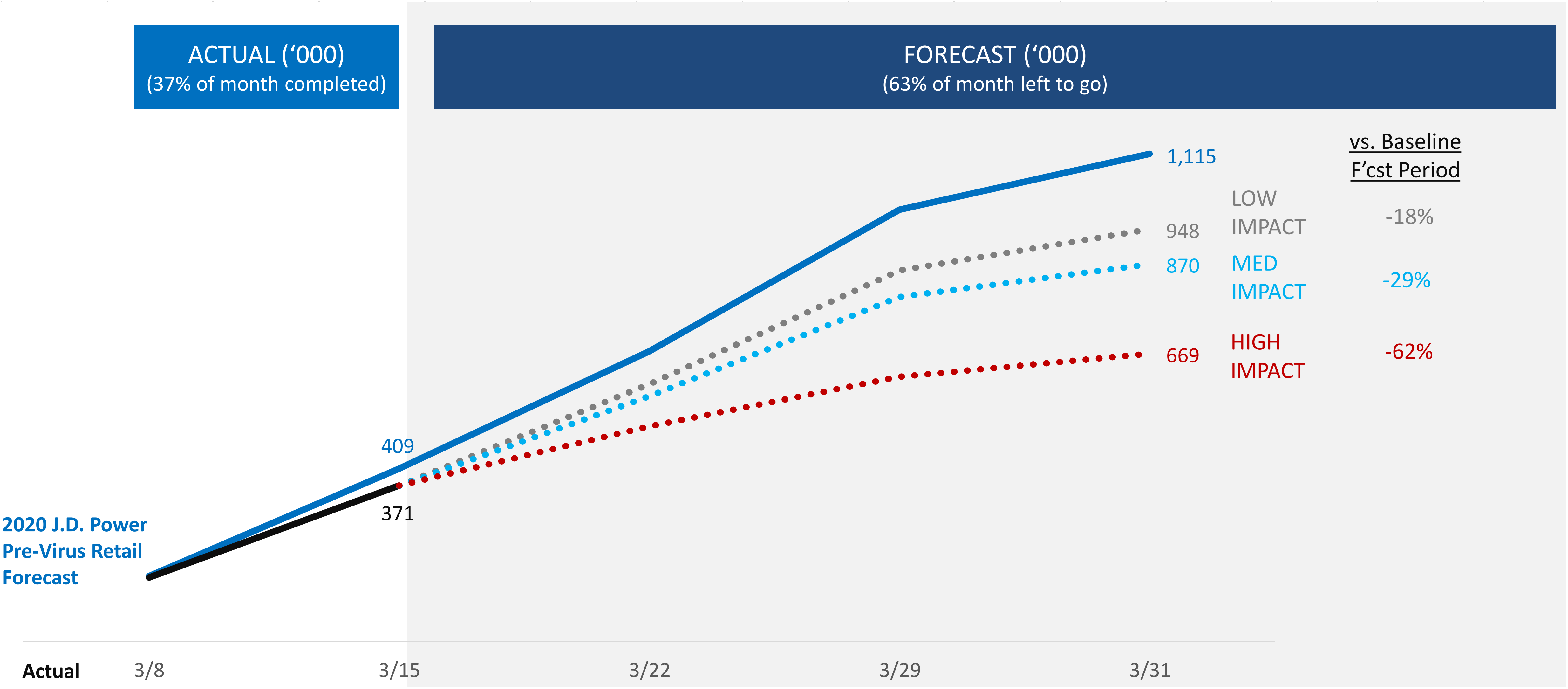

Industry trajectory in the month appears to be heading between the medium and high impact scenarios. At these outcomes, the industry would end lower than pre-virus forecast by 245,000-446,000 and would fall 23% and 41%, respectively, from March 2019

Scenario Analysis (2/2): Monthly Trend and Forecast Impact

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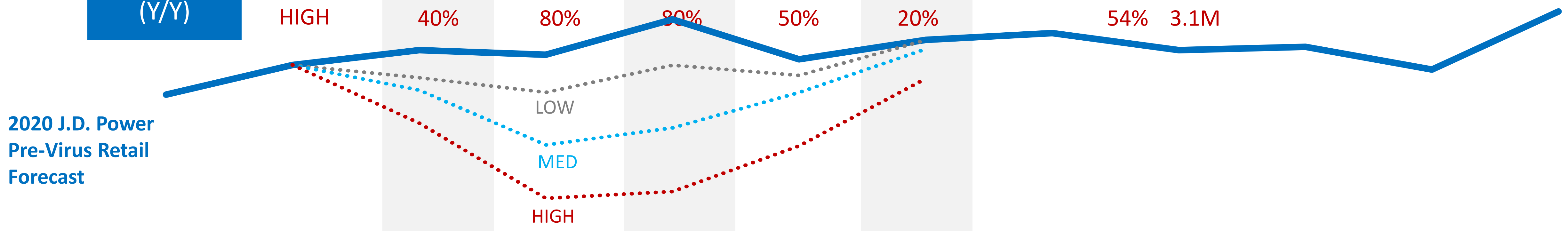
SALES IMPACT (Y/Y)	Phase I RAMP	Phase II RAMP	Phase III PLATEAU/ RECOVER	Phase IV RECOVER	Phase V NORMAL	Total Risk (through July) %	Total Risk (through July) UNITS
LOW	15%	20%	20%	10%	0%	13%	0.8M
MED	22%	50%	50%	20%	5%	30%	1.7M
HIGH	40%	80%	80%	50%	20%	54%	3.1M



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Baseline			1.12	1.08	1.30	1.06	1.18					
LOW			0.95	0.86	1.03	0.96	1.18					
MED			0.87	0.54	0.64	0.86	1.12					
HIGH			0.67	0.22	0.26	0.53	0.94					
Delta vs. Baseline												
LOW			(0.17)	(0.22)	(0.28)	(0.10)	0.00					
MED			(0.25)	(0.55)	(0.66)	(0.21)	(0.06)					
HIGH			(0.45)	(0.87)	(1.05)	(0.53)	(0.24)					

Facing a decline of up to 3 million retail sales, it is clear that our pre-virus outlook of 16.8M is no longer attainable. Industry total sales are likely to fall in the range of 14.0 to 16.0 million units

New Retail Sales (000s) – Data through March 15

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	Mar-19	Feb-20	Mar-20 MTD	Δ Y/Y	Week Ending 2019-03-17	Week Ending 2020-03-08	Week Ending 2020-03-15	Δ vs. Same Wk Last Yr	Δ W/W
National	1,225	1,023	371	-13%	250	195	206	-18%	5%
New York	93	83	27	-6%	18	14	16	-12%	12%
Los Angeles	80	68	25	-20%	16	14	13	-24%	-9%
Chicago	36	27	10	-19%	7	5	6	-25%	0%
Dallas	33	28	11	-9%	7	6	6	-14%	10%
Philadelphia	34	29	10	-10%	7	5	6	-15%	14%
Detroit	31	26	10	6%	6	5	6	-7%	18%
Boston	28	26	9	-5%	6	4	5	-14%	6%
San Francisco	28	24	8	-21%	6	5	4	-27%	-11%
Houston	28	24	9	-12%	6	5	5	-17%	2%
Miami	28	24	10	-9%	6	5	5	-11%	3%
Washington, DC	26	22	8	-14%	5	4	4	-20%	2%
Atlanta	24	19	7	-15%	5	4	4	-18%	6%
Tampa	22	19	7	-10%	5	3	4	-13%	17%
Phoenix	21	18	7	-13%	4	4	4	-17%	-1%
Orlando	20	16	6	-14%	4	3	3	-18%	-1%
Cleveland	19	15	6	-17%	4	3	3	-22%	0%
Seattle	17	14	5	-22%	3	3	3	-22%	-3%
Minneapolis	17	13	5	-3%	3	3	3	-10%	18%
Denver	14	12	5	-6%	3	2	3	-4%	8%
Pittsburgh	14	11	4	-11%	3	2	2	-10%	26%
Sacramento	13	11	4	-21%	3	2	2	-28%	-15%
San Diego	13	11	4	-18%	3	2	2	-22%	-10%
Rest of East	222	183	65	-13%	45	33	37	-17%	14%
Rest of West	85	70	26	-18%	18	14	14	-23%	-3%
Rest of Central	279	229	84	-13%	58	44	47	-19%	6%
Pre-Virus Forecast	1,225	1,023	409	-4%	250	195	241	-3%	24%

MTD sales declined 13% vs. same period last year

Sales improved 5% week-over-week vs. an expected +24%

If sales had performed as forecasted before the virus, sales would have dropped 4%

Note: Sales changes are selling-day adjusted. Y/Y compares MTD results with comparable period last year

Source: PIN DMA Retail Sales Report

Scheduled Industry Lease Maturities ('000)

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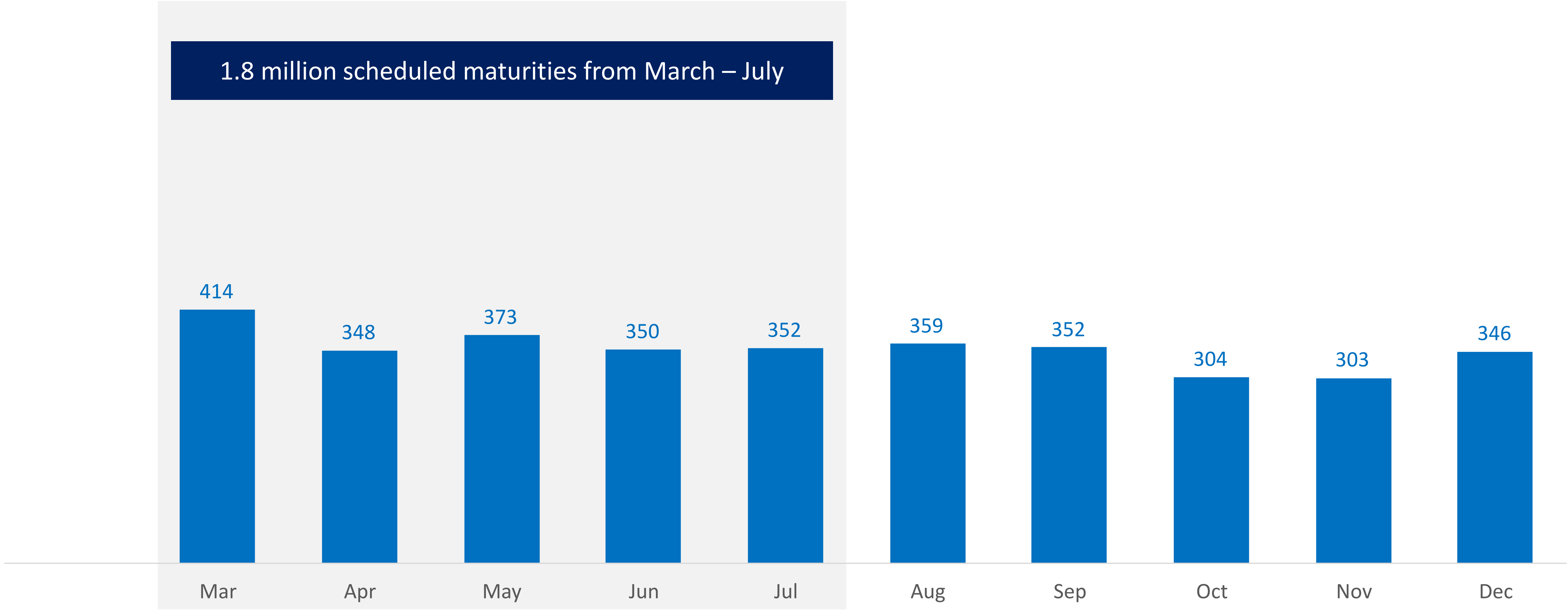

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