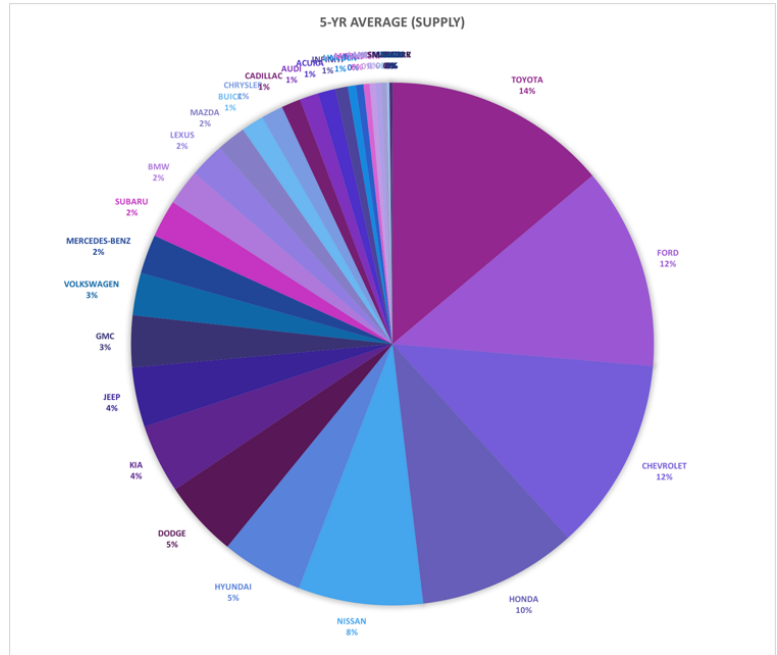


## 2017 BUYER'S GUIDANCE

The CarMax buyer must do a little homework before heading to the auction. For the buyer to get the best deal, they need to understand the supply of vehicles within their target pool.

Additionally, the buyer must know the current trending demand for general makes and select models. Together, knowledge of both the supply and the demand inform the purchasing strategy.

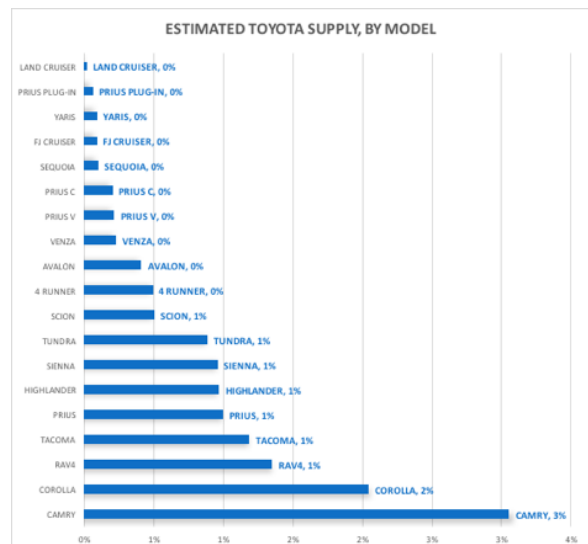
Below we present three general decision-support guidelines for purchasing vehicles in 2017.



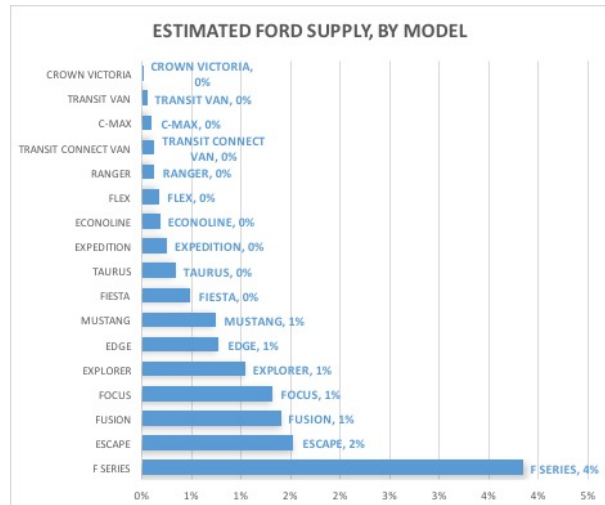
### Estimated Supply

Of the total estimated pool of used cars available to CarMax, nearly 50% will be one of four of the following makes: Toyota, Ford, Chevrolet, and Honda.

**(1) Toyota** – approximately 14% of the available pool of 2017 used cars available to dealers are manufactured by Toyota. With an average of nearly 270K purchases each year represented within the 2017 pool, the Toyota Camry ranks in the highest percentile of the available Toyota supply. Comparably, the Toyota Land Cruiser averages as the lowest selling model within our expected pool. Within the 2017 pool of available used Toyotas, the top supply includes the following models: Camry, Corolla, RAV4, Tacoma, Prius, Highlander, Sienna, and Tundra.

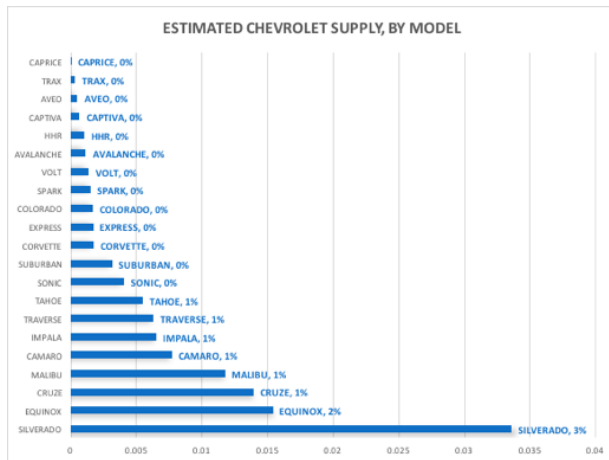


**(2) Ford** – approximately 12% of the available pool of 2017 used cars available to dealers are manufactured by Ford. Between 2011 and 2015, the F-Series ranks top with the highest number of new-vehicle purchases, compared to the Crown Victoria, which ranks lowest in supply, since it is no longer being manufactured. Within the 2017 pool of available used Fords, the top supply includes the following models: Econoline, Edge, Explorer, F-Series, Focus, Fusion, and Mustang.

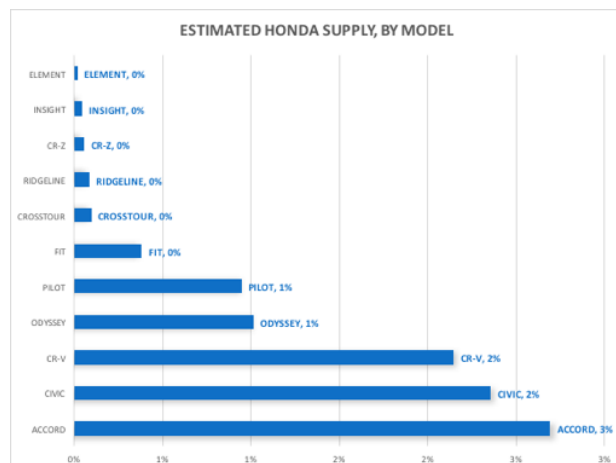


**(3) Chevrolet** – with approximately 12% of the total market share, Chevrolet is the third leading manufacturer representing the 2017 estimated pool of available used cars. Leading the

potential inventory is Chevrolet Silverado, with an average of over 30K purchases between 2011 and 2015. The Chevrolet Equinox also tops this list with an average of approximately 13.6K purchases annually, compared to the Caprice, which averages only 131 purchases annually – the caprice is a specialty-sedan designed for police work. Within the 2017 pool of available used Chevrolets, the top supply includes the following models: Silverado, Equinox, Cruze, Malibu, and Camaro.



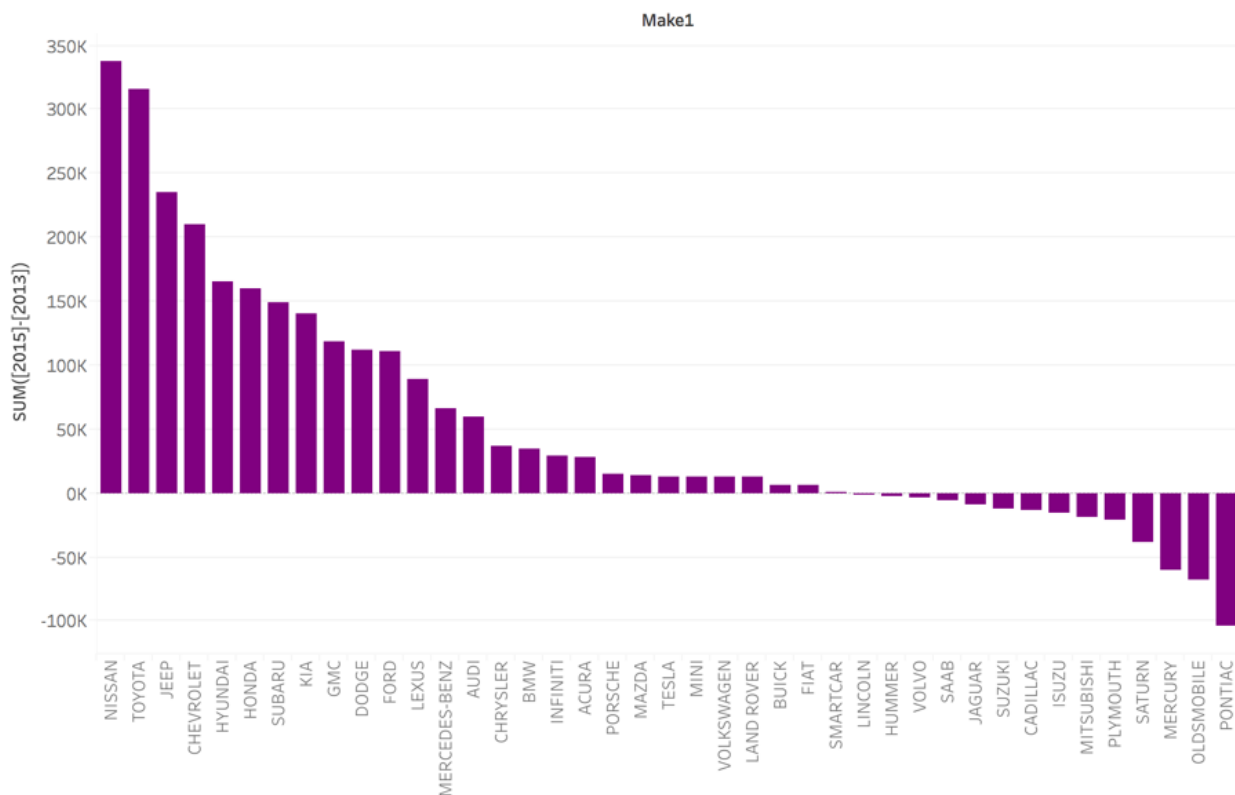
**(4) Honda** – approximately 10% of the available pool of 2017 used cars available to dealers are manufactured by Honda. Between 2011 and 2015, the Accord ranks with the highest number of new-vehicle purchases, averaging approximately 24K, annually. Comparably, the Element ranks lowest in supply, since it is not manufactured in years following 2011, followed by the Insight, which is not manufactured after 2014. Within the 2017 pool of available used Hondas, the top supply includes the following models: Accord, Civic, CR-V, Odyssey, and Pilot.



## Current Demand

In addition to assessing the supply, used-vehicle dealerships must educate themselves on current consumer demands. Unlike supply, which is largely determined by the number of new cars produced and purchased over a span of previous years, demand is measure of how present purchases compare to a recently past year. In this way, demand is relevant to current consumer behaviours, and present baseline assumptions of purchasing trends that may be projected into the near-future.

### Currently Trending, Make



SUM([2015]-[2013]) for each Make1. The data is filtered on Model1, which excludes RAM, RAM PICKUP and RAM\*.

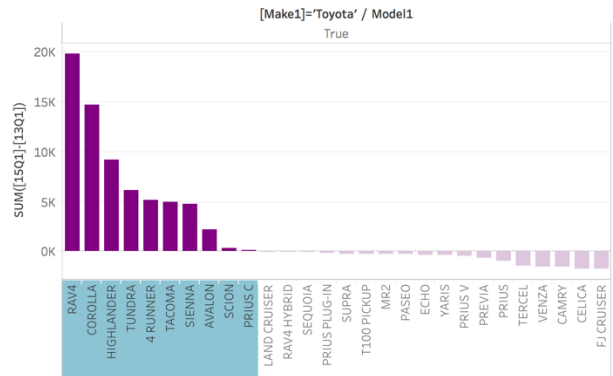
To keep profit margins high, dealerships should consider the following demand scenarios:

## (1) High supply, low or moderate demand

Although Ford ranks high in the 2017 estimated pool of available vehicles, Fords measure only moderate increases in demand compared to other makes within this same pool. The purchase of low-demand vehicles presents to dealerships a future problem of low turnover. To respond to its expected customer's demands in 2017, dealerships should lower Ford supply and increase Nissan, Toyota, Jeep, Honda and Kia supplies.

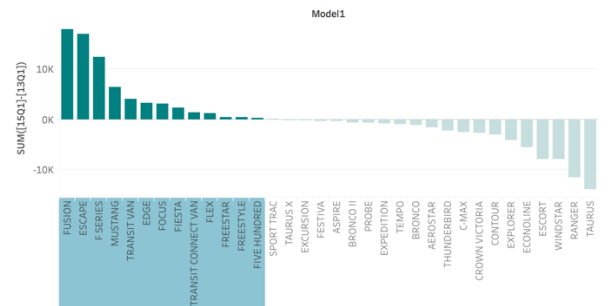
To achieve this, dealerships may choose to direct most of its incentive to Ford made brand to attract the consumers to buy them. The dealer can also offer the same incentive to its customers wanting to trade in their high-demand, low-to-moderate supply vehicles. This way, dealerships will reduce the surplus in low-demand vehicles, and benefit from an increased supply matching customer demands, offered at a higher prices and with reduced lot-times.

Models 'Toyota'



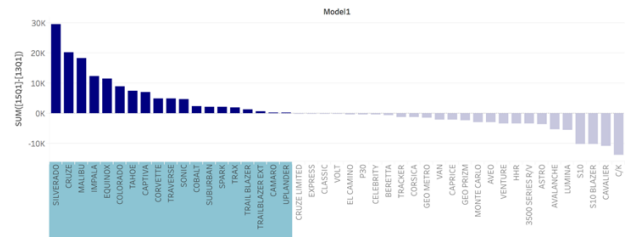
SUM([15Q1]-[13Q1]) for each Model1 broken down by [Make1]='Toyota'. The view is filtered on [Make1]='Toyota', which excludes False.

Models 'Ford'



SUM([15Q1]-[13Q1]) for each Model1. The data is filtered on [Make1]='Ford', which excludes False.

Models 'Chevrolet'



SUM([15Q1]-[13Q1]) for each Model1. The data is filtered on [Make1]='Chevrolet', which excludes False.

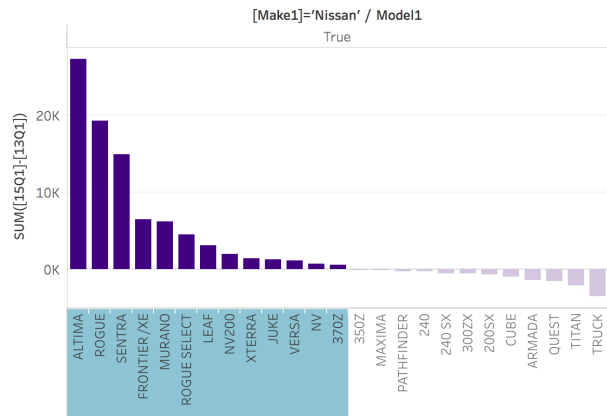
## (2) High Demand, low or moderate supply

In assessing 2013 to 2015 new-car purchases, Nissan ranks at the top list of cars rapidly increasing in demand. However, at a moderate 8% of the total expected supply of available used-vehicles in 2017, dealers may find it challenging to maintain adequate inventories at low levels of investment. When supply is limited in contrast to the demand, there is little room for auctioneers to negotiate any deal. The rule of “first come, first served” applies here.

For high demand, low supply vehicles, the buyer’s strategy should always seek to **buy low and sell high** in order to keep profit margins high. However, when it comes to incentivizing customers, the strategy for increasing supplies of high-demand cars should be to offer strong incentives to sell. Once this car is on the lot, the high demand supports selling at a higher price.

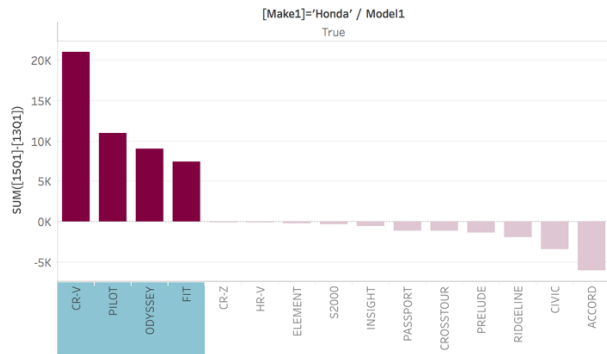
In the case of high demand and moderate supply, Honda fits the profile. Overall, Honda ranks high in current demand, and represents a healthy 10% of the expected 2017 pool of available vehicles. When considering makes of high demand and moderate supply, the dealer should hone in on the demand for the models within a particular make in order to increase its market advantage and to ensure steady inventory turnover. For instance, although the estimated pool of available cars anticipates a high supply of Honda Accords, the demand has shifted dramatically away from Accords and towards Honda CR-Vs.

Models 'Nissan'



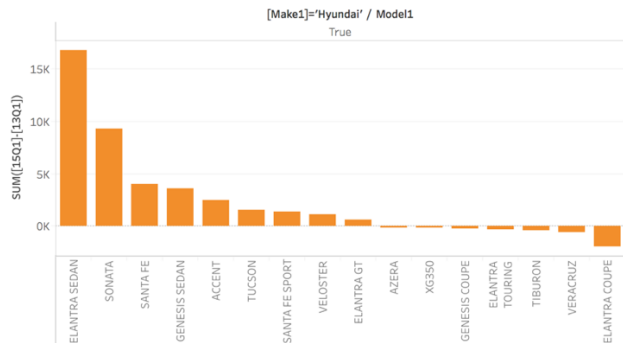
SUM([15Q1]-[13Q1]) for each Model1 broken down by [Make1]='Nissan'. The view is filtered on [Make1]='Nissan', which excludes False.

Models 'Honda'



SUM([15Q1]-[13Q1]) for each Model1 broken down by [Make1]='Honda'. The view is filtered on [Make1]='Honda', which excludes False.

Models 'Hyundai'

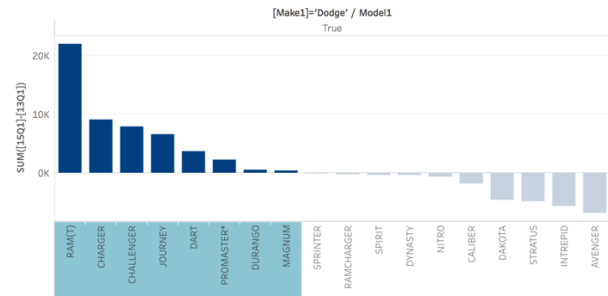


SUM([15Q1]-[13Q1]) for each Model1 broken down by [Make1]='Hyundai'. The view is filtered on [Make1]='Hyundai', which excludes False.

### (3) Moderate demand, moderate supply

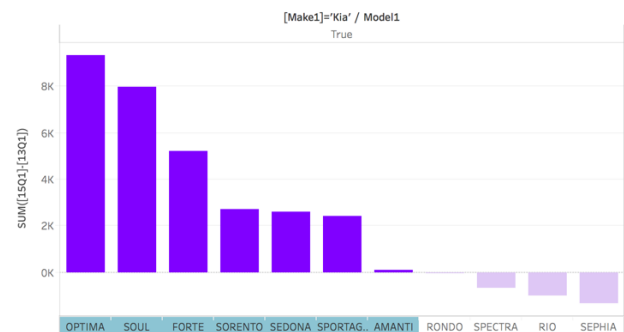
The demand for Kia – specifically, the demand for Kia Optimas and Kia Souls – is high relative to their overall supply. Likewise, Jeep ranks high in demand relative to its supply. On this ground, customers and dealers will benefit from compromises negotiated in the interests of both parties. Since many prospective buyers are flexible in their buying decisions with the right incentives, dealerships should aim to acquire higher-demand models while selling lower demand models in moderate supply relative to the total.

Models 'Dodge'



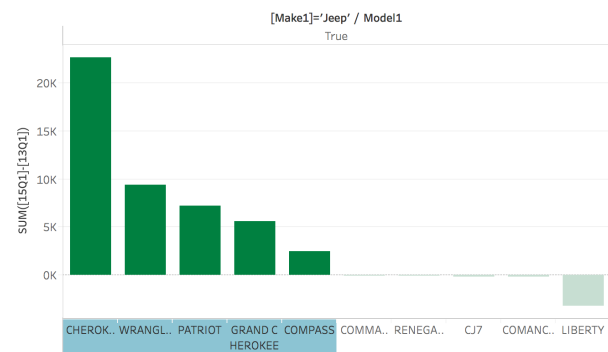
SUM([15Q1]-[13Q1]) for each Model1 broken down by [Make1]='Dodge'. The view is filtered on [Make1]='Dodge' and Model1. The [Make1]='Dodge' filter excludes False. The Model1 filter excludes RAM, RAM PICKUP and RAMP.

Models 'Kia'



SUM([15Q1]-[13Q1]) for each Model1 broken down by [Make1]='Kia'. The view is filtered on [Make1]='Kia', which excludes False.

Models 'Jeep'



SUM([15Q1]-[13Q1]) for each Model1 broken down by [Make1]='Jeep'. The view is filtered on [Make1]='Jeep', which excludes False.

We hope that you find this guide useful. It was a pleasure working with your data.

For questions regarding the information contained herein, please e-mail

[DAPT2018@mymail.vcu.edu](mailto:DAPT2018@mymail.vcu.edu).