TechnoMetrica Auto Demand Index

August 2016



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Methodology

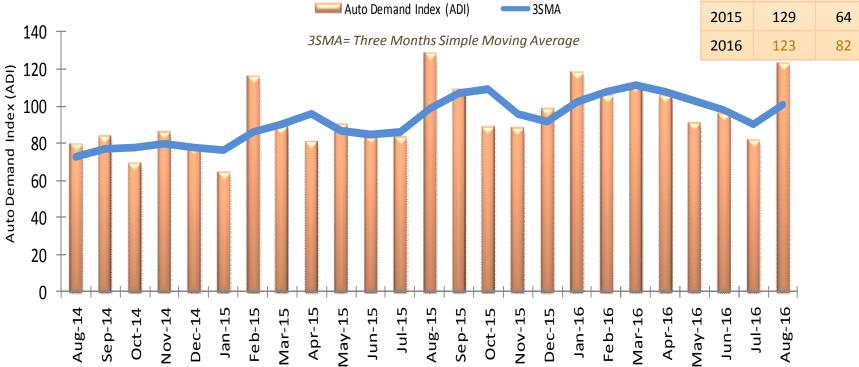
- TechnoMetrica's Auto Demand Index is a forward looking early (monthly) indicator of consumers' intent to purchase or lease a new vehicle within the next 6 months. The index has been set to an initial value of 100 based on demand levels between February 2007 and April 2007.
- The Auto Demand Index is based on the responses Americans give to the question:
 - How likely is it that you will buy or lease a new vehicle within the next 6 months? Would you say very likely, somewhat likely, not very likely or not at all likely?
- We express purchase intent as an index score that varies as a linear function of the percentage of consumers who are either "very" or "somewhat" likely to purchase or lease a new vehicle within the next 6 months.
- Higher index readings correspond to greater demand or intent to purchase/lease new automobiles.
- The index and its movement is projectable to the national market for new automobiles, which consists of over 100 million U.S. households with drivers.
- Each month, TechnoMetrica uses a monthly Random Digit Dial (RDD) telephone survey to collect the survey data, with a sample size of around 900 respondents. The margin of error is +/- 3.2 percentage points. The August Survey was conducted between July 29th and August 4th, 2016.

Auto Demand Index (Overall)

Due to a number of recent economic developments, such as lower gas prices and an improving labor market, Americans' intent to acquire new vehicles accelerated sharply this month. After declining 14 points, or 50%, in July, the Auto Demand Index level climbed 41 points this month to attain a score of 123, its highest reading since August 2015.

Base = All Respondents

	High	Low
2010	97	56
2011	94	49
2012	105	49
2013	86	64
2014	88	73
2015	129	64
2016	123	82



Auto Demand Index Moving Averages

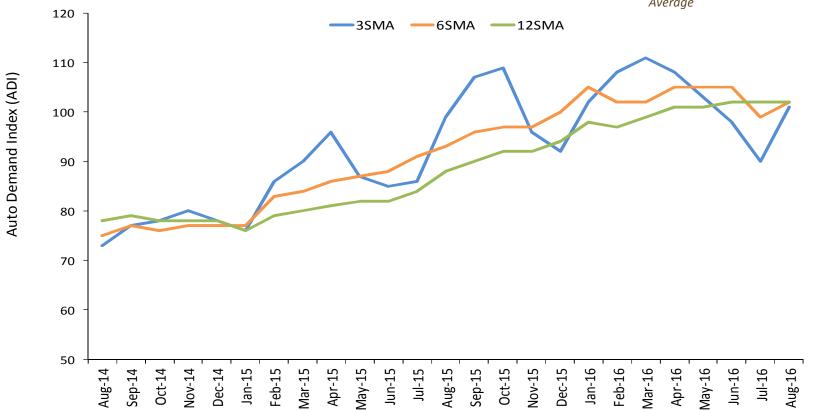
Base = All Respondents

This month, the Auto Demand Index score surpassed all three of its moving averages, indicating that purchase intent will accelerate at a steady pace in the near future. August's ADI topped both its 12-month and 6-month moving averages (102) by 21 points, and stands 22 points above its 3-month average of 101. After declining four straight months, the 3-month moving average increased by eleven points in August.

3SMA= Three Months Simple Moving Average

6SMA = Six Months Simple Moving Average

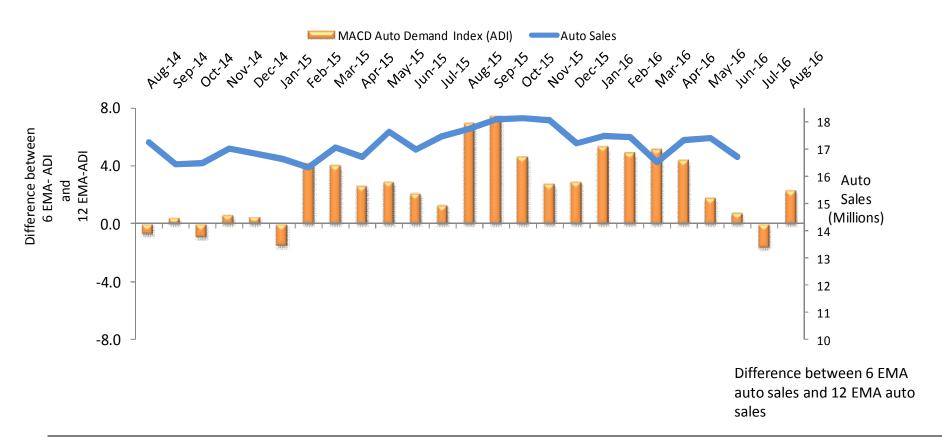
12SMA = Twelve Months Simple Moving Average



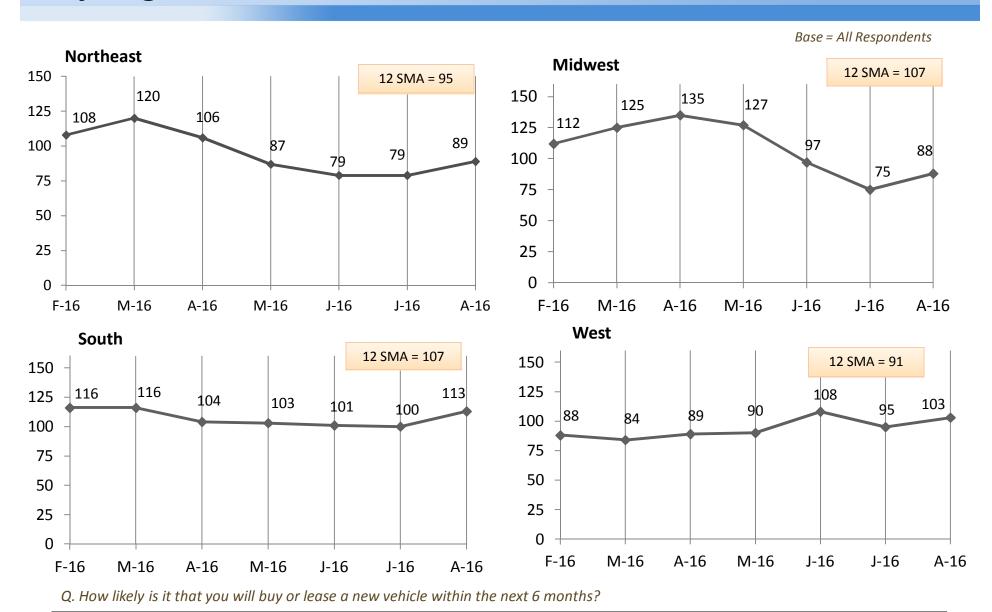
Momentum: Moving Average Convergence Divergence

Momentum= Fast Average (6-month exponential moving average) minus Slow Average Base = All Respondents (12-month exponential moving average)

After entering negative territory for the first time in 18 months in July, our momentum indicator (MACD) gained 3.9 points this month, registering a positive reading of 2.3. Accordingly, the Auto Demand Index will regain its positive momentum in the near future. Thus, TechnoMetrica anticipates that new vehicle sales will increase significantly in the coming months, driven by encouraging signs of an improving U.S. economy.

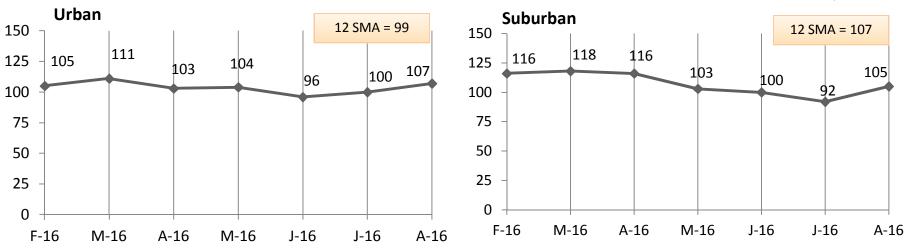


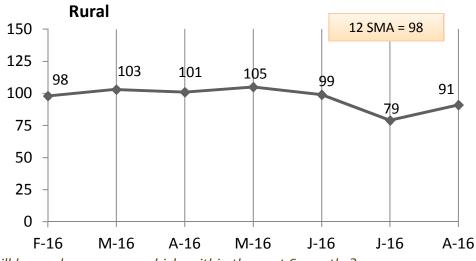
By Region 3 SMA



By Area Type 3 SMA

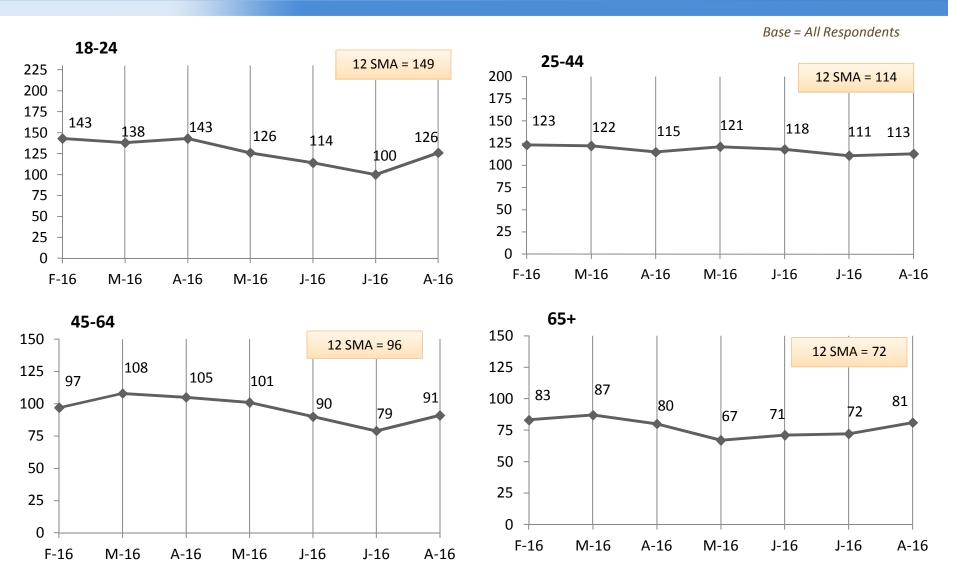






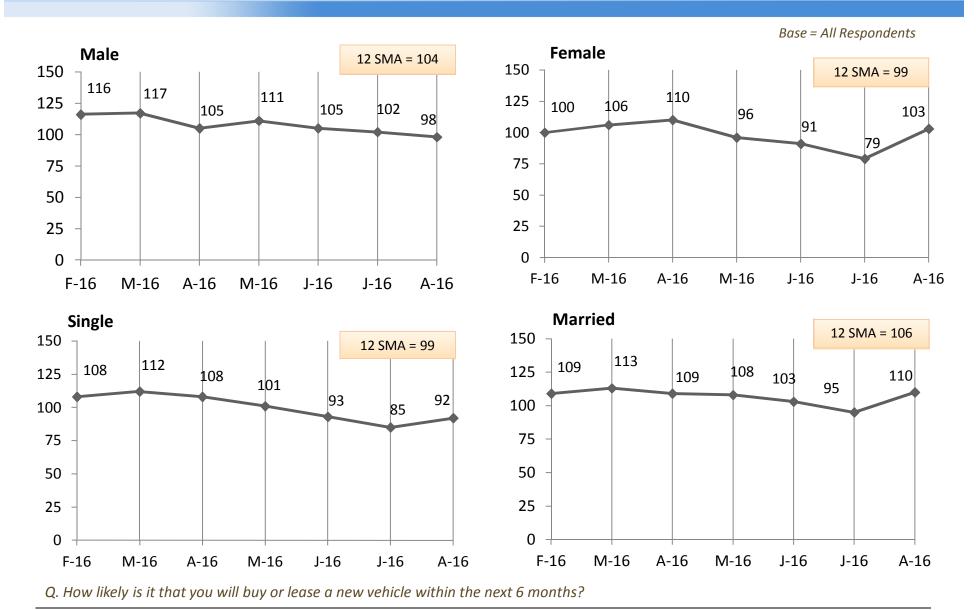
Q. How likely is it that you will buy or lease a new vehicle within the next 6 months?

By Age 3 SMA

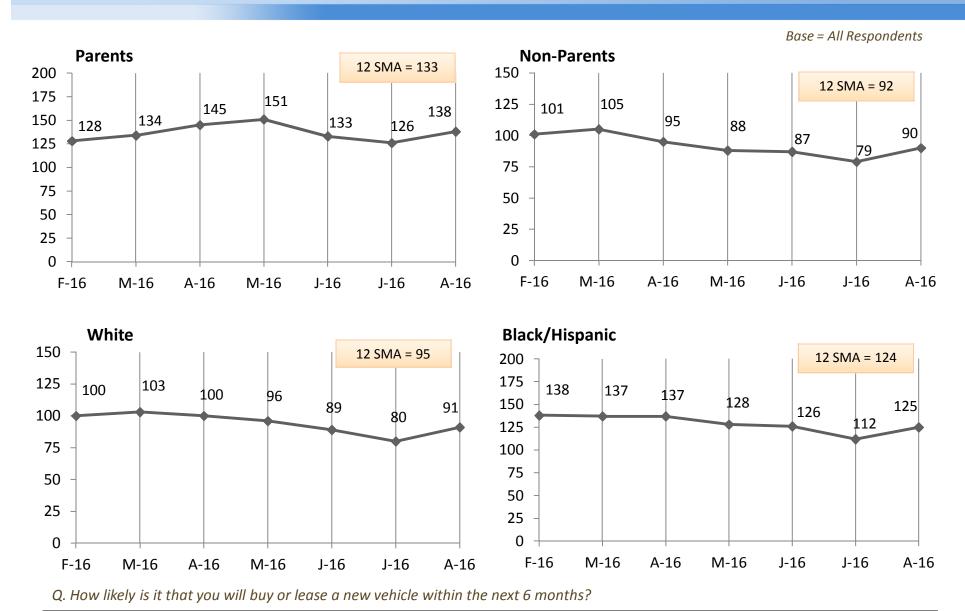


Q. How likely is it that you will buy or lease a new vehicle within the next 6 months?

By Gender and Marital Status 3 SMA

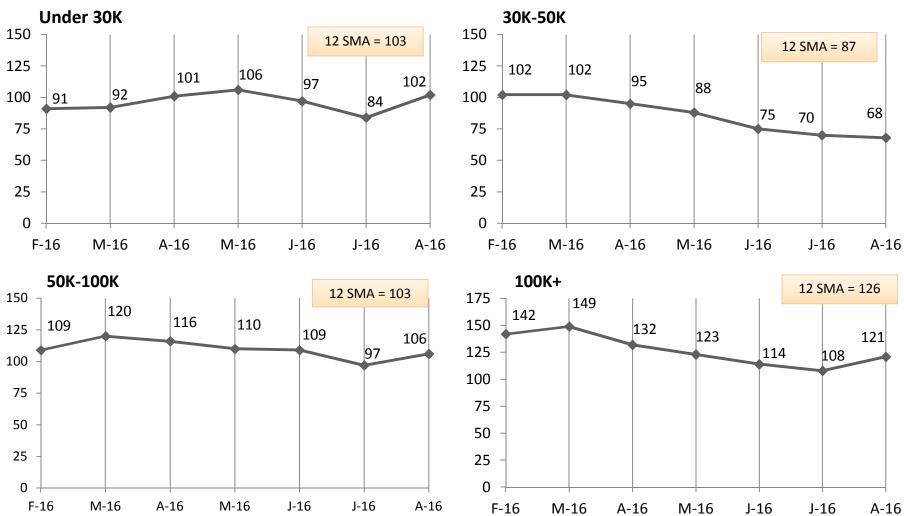


By Parental Status and Race/Ethnicity 3 SMA



By Household Income 3 SMA

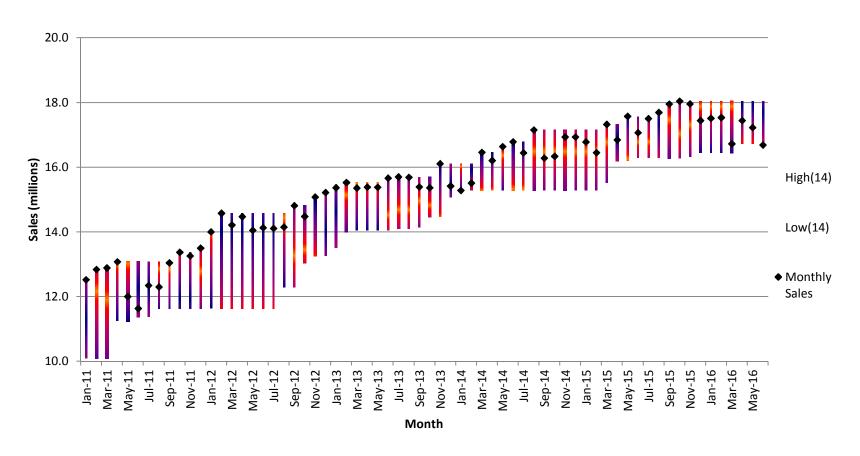




Q. How likely is it that you will buy or lease a new vehicle within the next 6 months?

Auto Sales Progression

Auto Sales Progression

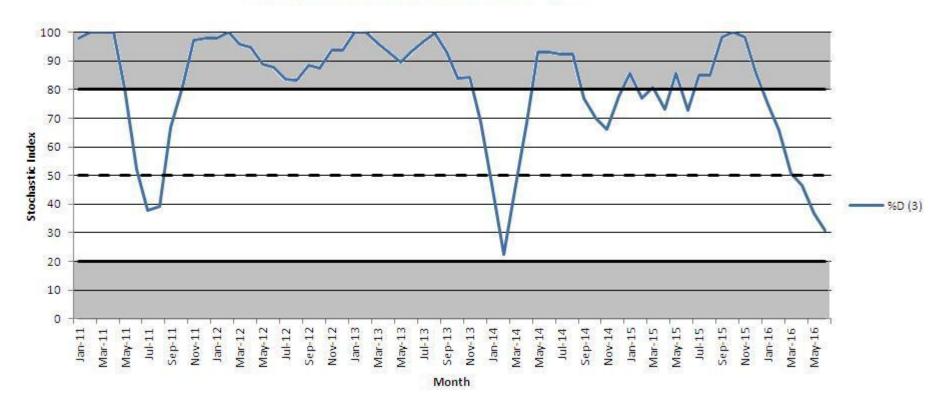


^{*} The auto sales progression chart shows monthly sales in relation to the most recent 14 months. The high-low lines provide a comparison for the current sales with the most recent 14 months.

Slow Stochastic Index

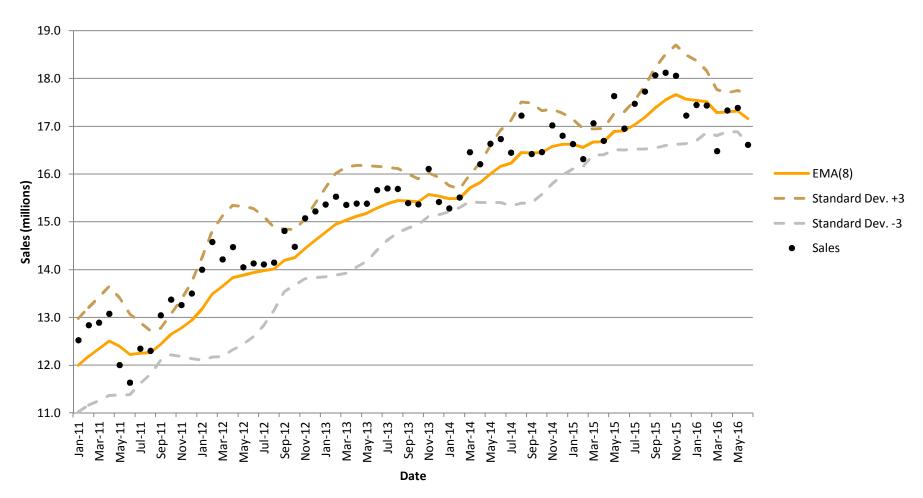
Although momentum for the Slow Stochastic Index has slowed significantly in the past year, we anticipate that the Index has reached a turning point and will avoid bottom territory. Thus, auto sales should accelerate at a higher rate in the near future.

Auto Sales Slow Stochastic Index



^{*} The Slow Stochastic Index aids in identifying the tops and bottoms of auto sales.

Auto Sales Channel (2011-2016)

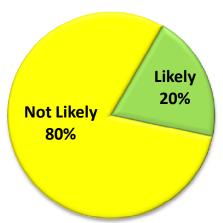


^{*}The sales channel indicates whether there is an upward or a downward trend. The upper channel is 3 standard deviations above the 8-month EMA and the lower channel is 3 standard deviations below the 8-month EMA.

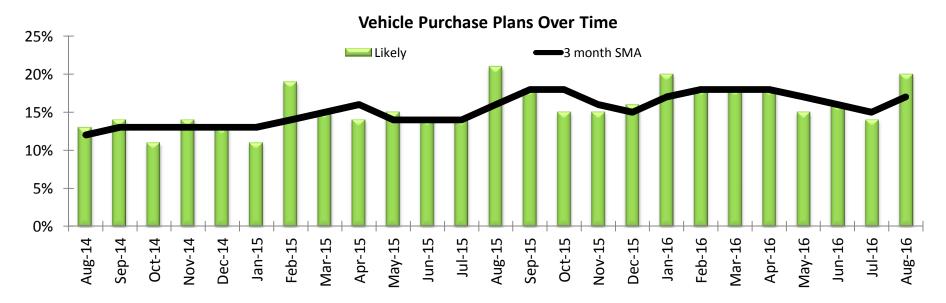
Vehicle Purchase Plans

August 2016

Base = All Respondents



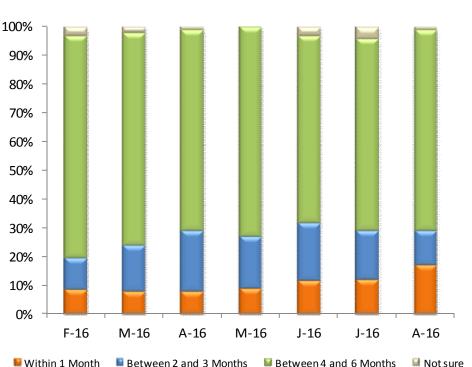
This month, the share of Americans who say they are likely to purchase or lease a new vehicle within the next six months increased by six points from July, to a rate of 20%. This represents the highest percentage of Americans planning to acquire a new vehicle since January of this year.



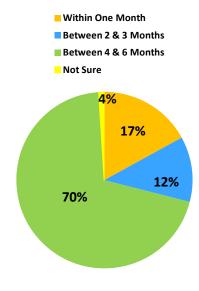
Vehicle Purchase/Lease Time Frame

August 2016

Base = Potential Buyers



	Average Time Frame (Months)
Feb-16	4.35
Mar-16	4.25
Apr-16	4.15
May-16	4.21
Jun-16	4.00
Jul-16	4.06
Aug-16	4.03



In August, the share of likely vehicle buyers planning to purchase or lease a new vehicle within one month improved by five points from the previous month, to a rate of 17%.

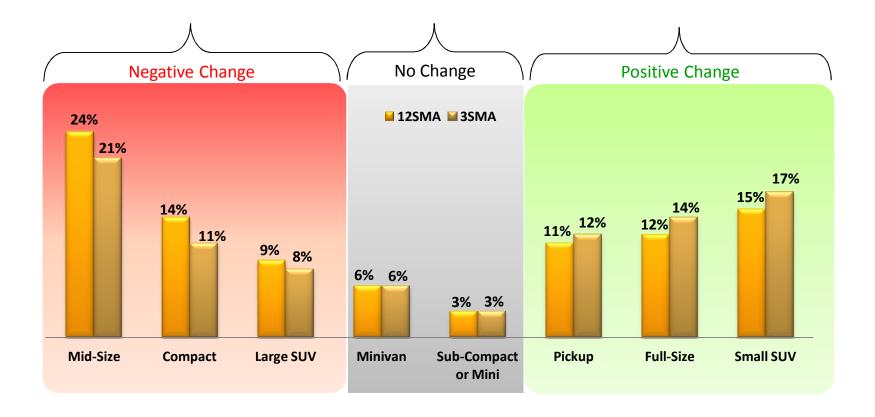
Nearly one in five drivers who are likely to acquire a new vehicle (17%) report that they will do so within one month, a gain of five points from July. Meanwhile, 12% of likely buyers say they will make a purchase within the next 2 to 3 months, with seven in ten reporting that they are planning to do so further out (within 4 to 6 months).

Q. Will you make your purchase within the next month, 2 to 3 months, or in 4 to 6 months?

Vehicle Type Momentum

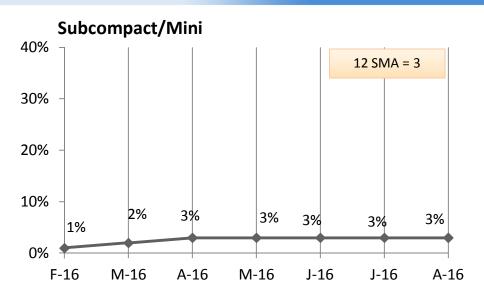
August 2016

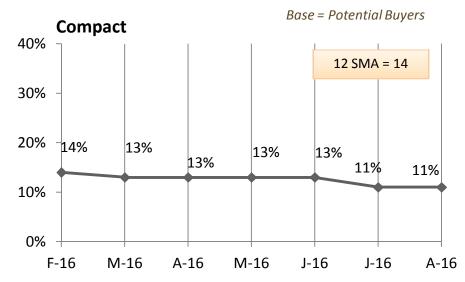
Base = Potential Buyers

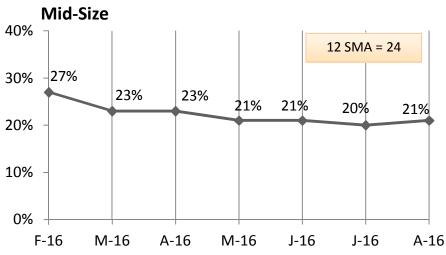


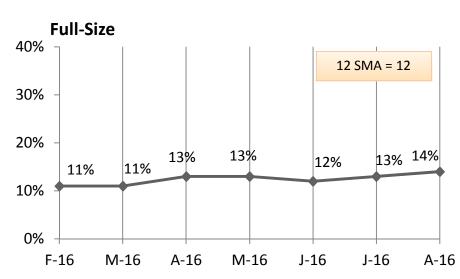
Q. What type of vehicle are you most likely to buy or lease?

Preferred Vehicle Types Over Time - 3 SMA

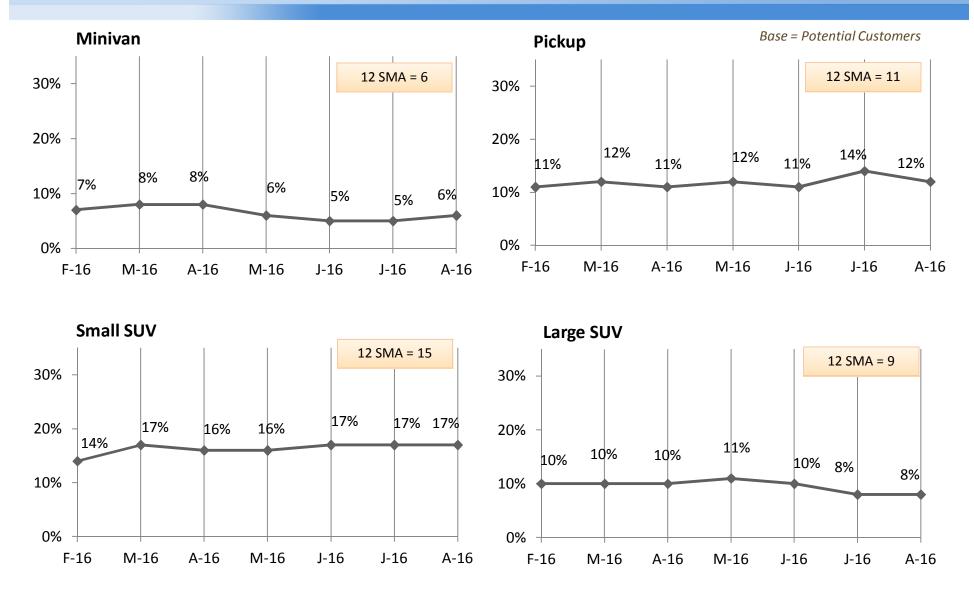








Preferred Vehicle Types Over Time - 3 SMA

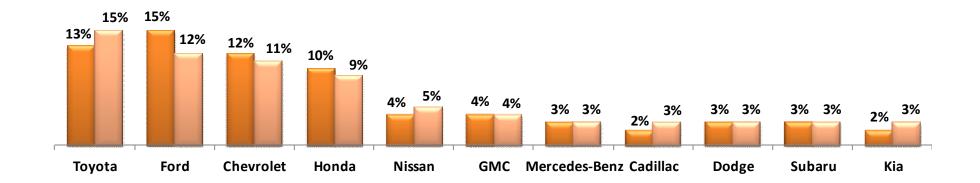


Top Ten Brands Consumers Would Buy Today

August 2016

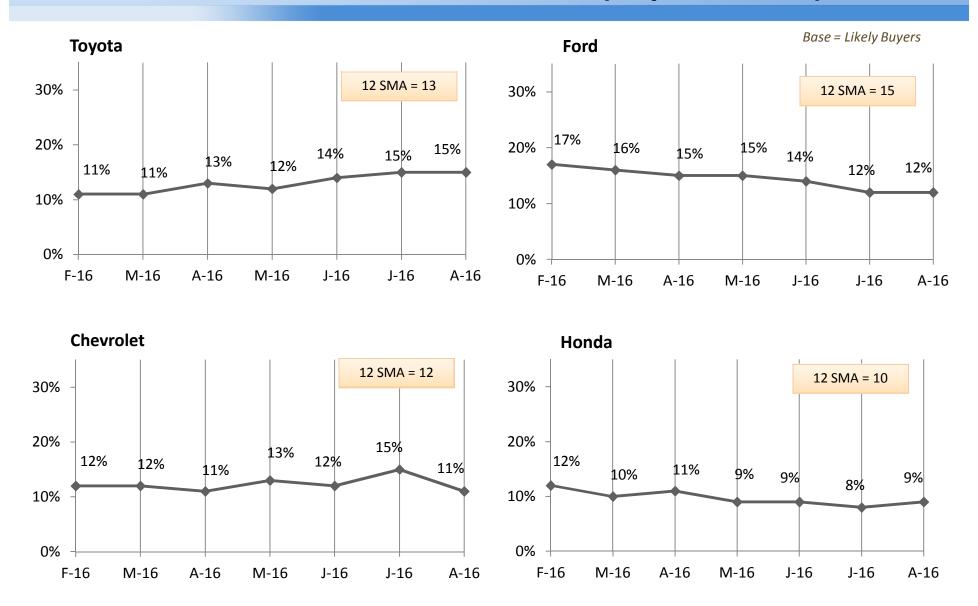
Base = Likely Buyers

■ 12 Month Average ■ 3 Month Average

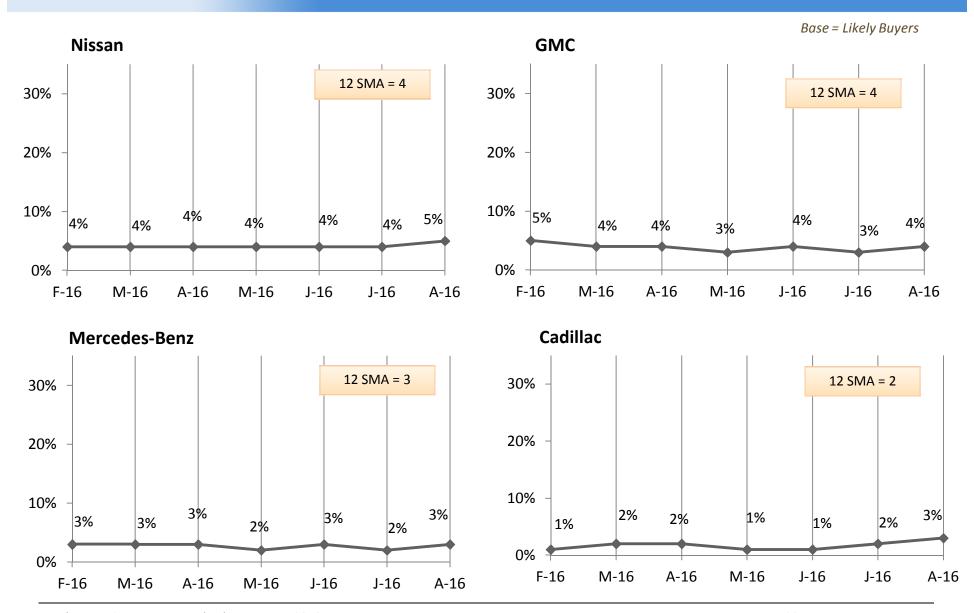


*Sorted by 3SMA

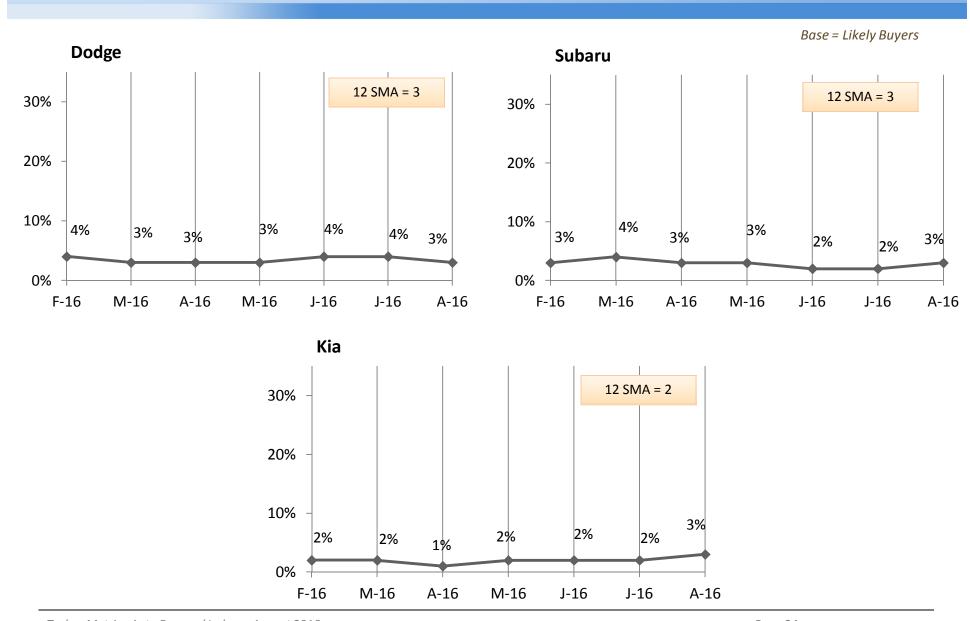
Brand Preference Over Time 3 SMA (Top 4 Brands)



Brand Preference Over Time 3 SMA (Brands 5 to 8)



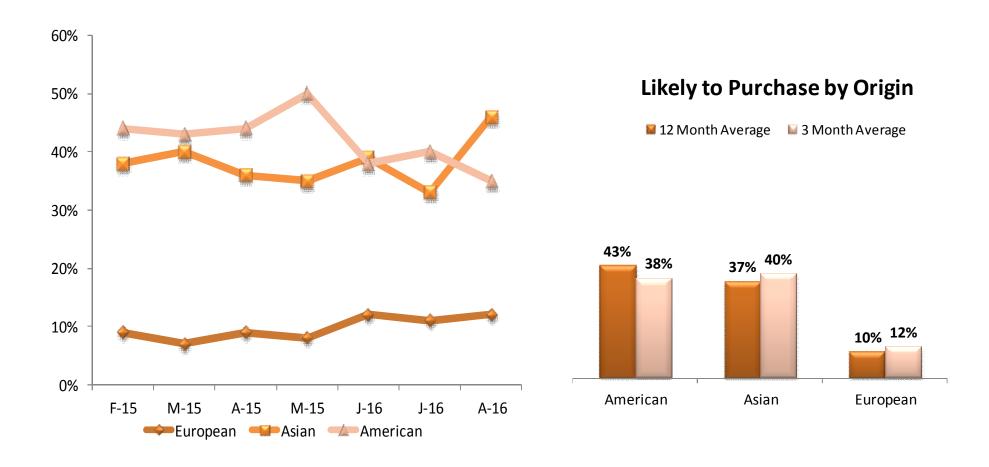
Brand Preference Over Time 3 SMA (Brands 9, 10, & 11)



By Vehicle Origin

August 2016

Base = Likely Buyers

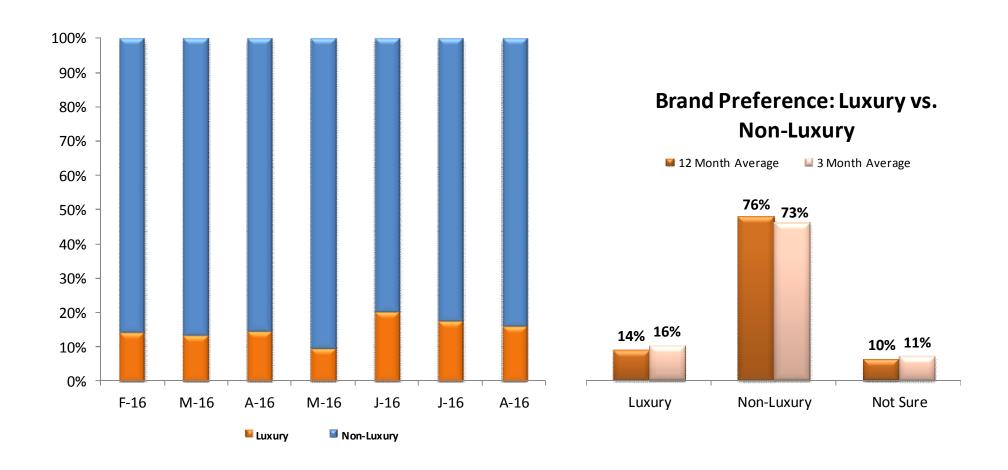


Q. If you were to buy a vehicle today, what brand would you buy?

Luxury vs. Non-Luxury

August 2016

Base = Likely Buyers



Q. If you were to buy a vehicle today, what brand would you buy?

Conclusions

- Vehicle purchase intent among Americans improved sharply this month, as consumers displayed greater confidence in the overall U.S. economy, due to such positive developments as steady jobs growth, declining gas prices, and low interest rates. After falling fourteen points in July amid Brexit fears, the Auto Demand Index level gained 41 points this month to attain a score of 123, its highest reading since August 2015.
- The Auto Demand Index score topped each of its short- and long-term moving averages this month, indicating that purchase intent will accelerate sharply in the near future. August's ADI eclipsed both its 12-month and 6-month moving averages (102) by 21 points, while supassing its 3-month average of 101 by 22 points. After declining four straight months, the 3-month moving average increased by eleven points in August.
- The Index regained its positive momentum in August, as our momentum indicator, which entered negative territory for the first time in 1 ½ years last month, grew by 3.9 points to a score of 2.3. Thus, we anticipate that new vehicle sales will increase significantly in the coming months, driven by encouraging signs indicating an improving U.S. economy.
- Regarding demographics, purchase intent grew among 21 of the twenty-three segments that TechnoMetrica tracks on a monthly basis. Millennials aged 18 to 24 and women drivers posted the largest increases in purchase intent this month, as the groups' ADI scores gained 26 points and 24 points, respectively. Intention to acquire a new vehicle was also stronger among Americans earning less than \$30K in annual income, a segment that registered an eighteen point climb in the Index. Meanwhile, consumers earning an income between \$30K and \$50K and the male demographic represented the only two groups that posted declines in purchase intent.
- This month, the share of consumers who indicated that they were likely to acquire a new vehicle in the next six months increased by six points from July, to 20%. This represents the highest percentage of Americans planning to purchase a new vehicle since January of this year. Regarding vehicle preference, mid-size vehicles and small SUVs remain the most desired vehicle types among likely buyers, while preference for full-size vehicles displayed accelerated growth among consumers.
- Among Americans intending to acquire a new vehicle in the near future, Toyota reclaimed its spot as the most preferred brand in August, garnering a 15% share of likely buyers. Meanwhile, Ford, the choice brand of 12% of prospective buyers, improved one position to claim second place this month. Preference for Chevrolet vehicles (11%) declined by four points in August, as the brand slips from the top position to take third place. Regarding the land of origin of the vehicles that consumers intend to purchase, Asian brands surpassed American-made vehicles in consumer preference. Close to half of likely buyers (46%) intend on acquire Asian autos, while 35% plan on acquiring vehicles made in America.

Contact Information

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