Automotive Market Trends
Q1 2022

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Director, Product Data and Implementation

June 2022

Today's speaker

Marty Miller

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Experian Automotive

What's on the road

VIO by model year, segment, age and market share

U.S. light duty vehicles through March 31, 2022.

New, Used and other market changes Industry news and special market analysis:

- *Average Vehicle Age Myths & Facts*
- *Used Vehicle Market Analysis*
- *Electric Vehicle Market Analysis*

Experian Automotive

Driving the automotive industry forward

The right vehicles. The right customers.
The right data to know the difference.

- We deliver an integrated perspective using the highest quality automotive information and market intelligence focused on these key areas:
  - **Automotive Credit**
  - **Automotive Marketing**
  - **Vehicle Market Statistics**
  - **AutoCheck® Vehicle History**
- Our success comes from delivering actionable insights and lasting partnerships with our clients

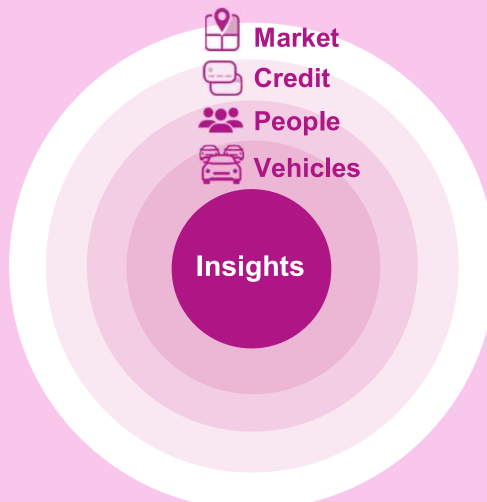
https://www.experian.com/automotive/auto-data

The **power of Experian data**

Your unified source of automotive data. Enabling you to link insight into action

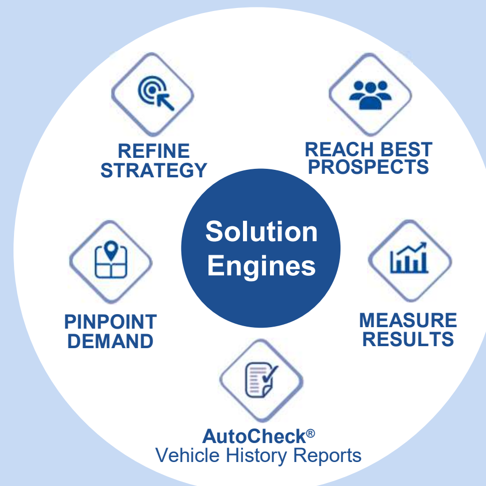
Best-in-class data, unified and enhanced

Experian's vehicle, consumer, online and credit data enable unified data intelligence to identify and target vehicle buyers.



Creating unparalleled market-wide insights

Use our unparalleled insights to turn competitive market strategies into action.

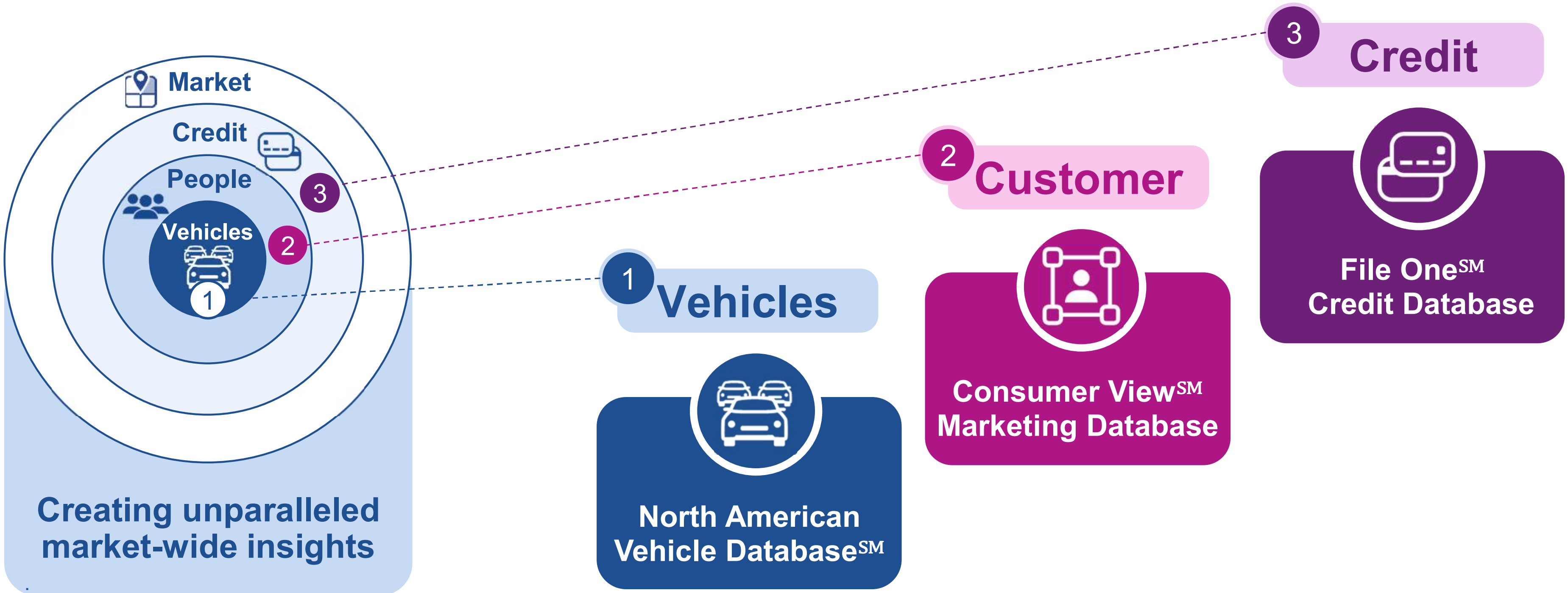


Powering innovative solution engines that drive results

For instance, Experian marketing solutions pinpoint car shoppers, automate media planning and optimize results with the most sophisticated attribution models.

It takes **3 things to sell a vehicle...**

Experian is the only primary data source for *all* 3



U.S. & Canada total Vehicles in Operation (VIO) = **333.2M**

Light Duty

Passenger Cars, Light Trucks, Vans

Cars and GVW Class 1 – 3

Medium & Heavy Duty

Large Vans, Delivery Trucks, Buses, RVs, Cement Trucks, Semi-Tractors

GVW Class 4 - 8

Power Sports

Motorcycles, All-Terrain, Utility Task, Snowmobiles

Source: Experian Automotive VIO as of March 31, 2022 (all motorized, registered vehicles)

Q1 2022

Velocity
Vehicles in Operation

What's on the road today?

LIGHT DUTY VEHICLES

Changes in U.S. vehicles in operation

Light duty vehicles* over the last 12 months

Q1 **2021** Total*
280.6
MILLION
Vehicles on the road

Q1 2022 VIO changes

14.5
MILLION
NEW Vehicles Registered

11.2
MILLION
Vehicles went out of operation

41.8
MILLION
USED vehicles changed owners

=

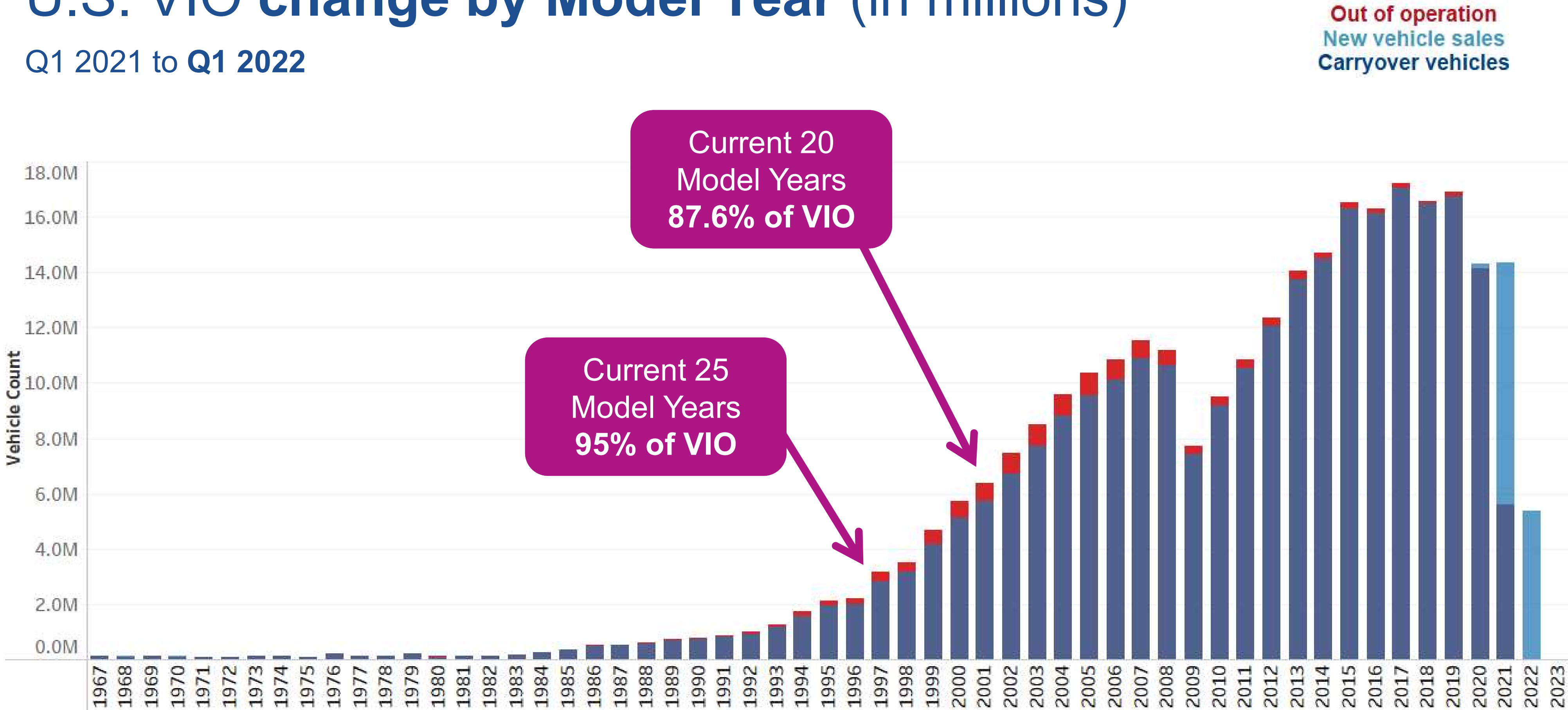
29.8%
Total VIO changes[1]

Q1 **2022** Total*
283.9
MILLION
Vehicles on the road

*U.S. Vehicles in Operation data as of March 31, 2022 sourced from Experian Automotive, including U.S. and Puerto Rico (U.S. light duty vehicles only).
1 – includes estimated annual households that relocated with the same vehicle(s)

U.S. VIO **change by Model Year** (in millions)

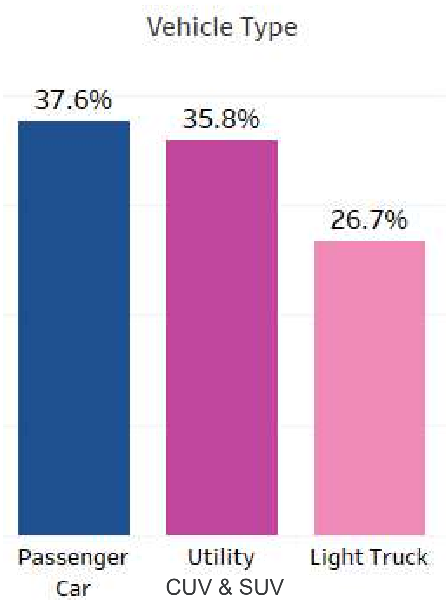
Q1 2021 to **Q1 2022**

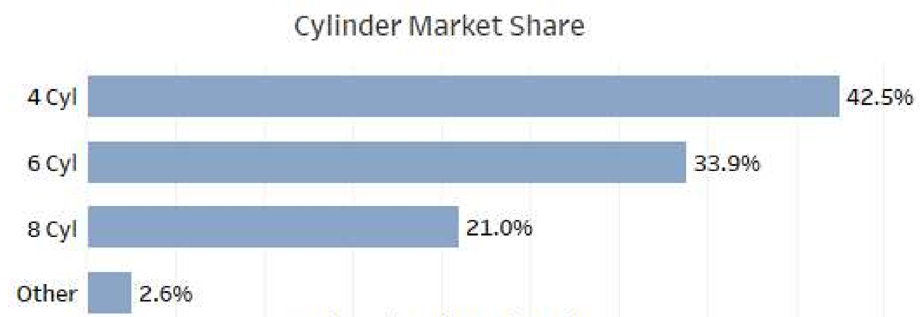


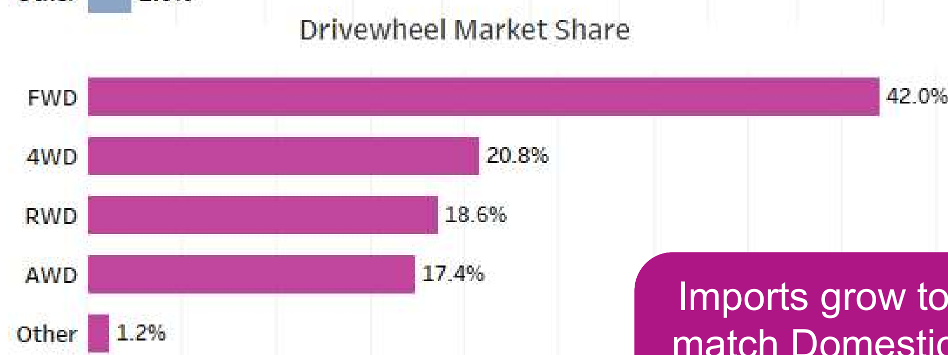
Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

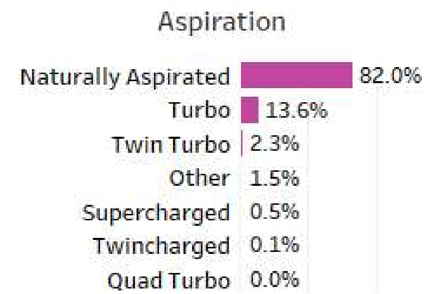
U.S. Summary Stats – **for all light duty VIO**

as of Q1 2022





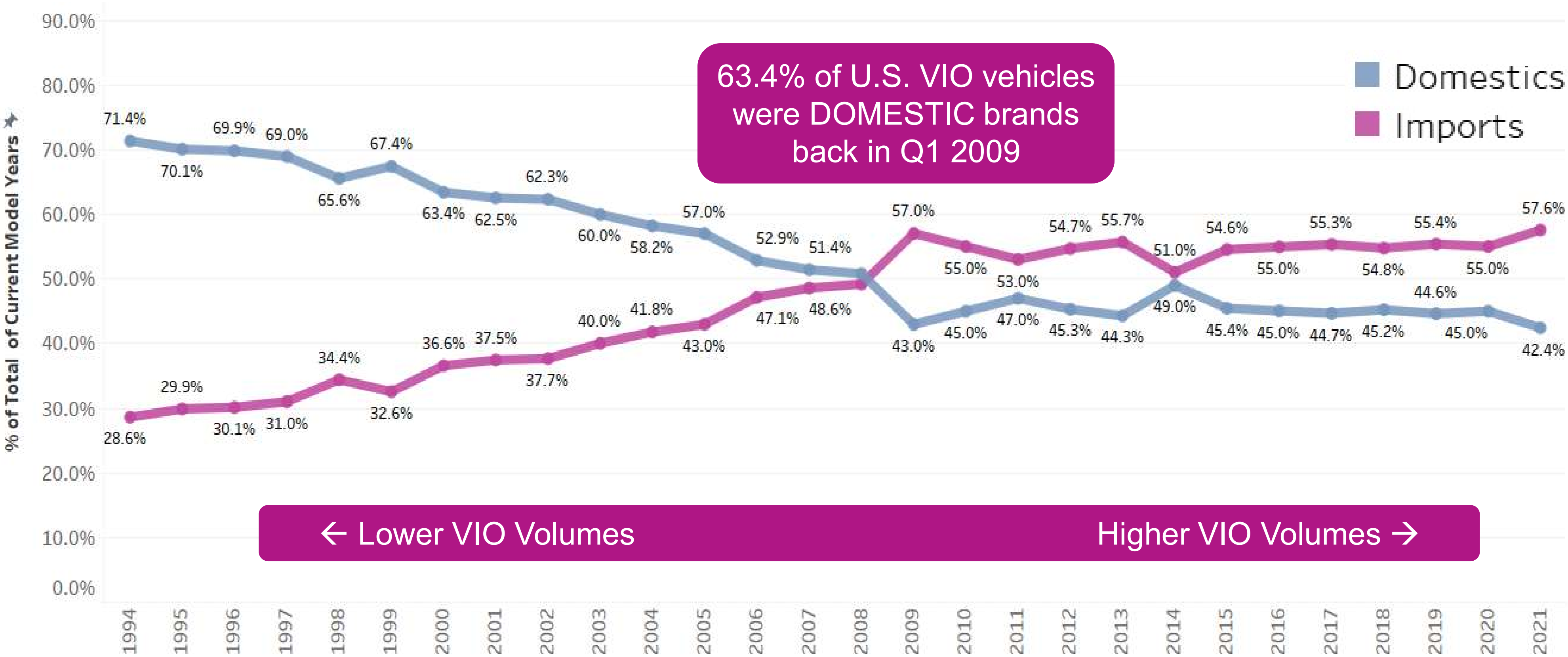




Imports grow to match Domestic brands in U.S. for the 1st time

Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

What changed for brands? Current VIO mix of Dom/Imp brands

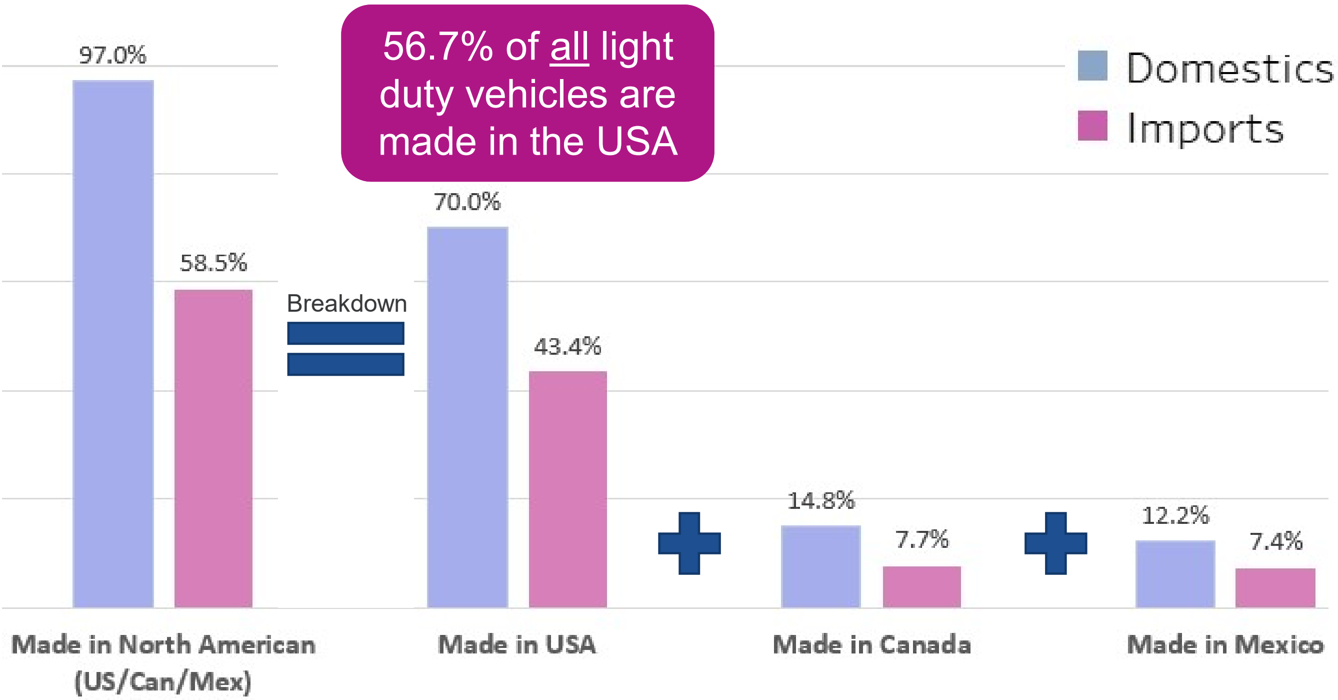


	Domestics	Imports
1994	71.4%	28.6%
1995	70.1%	29.9%
1996	69.9%	30.1%
1997	69.0%	31.0%
1998	65.6%	34.4%
1999	67.4%	32.6%
2000	63.4%	36.6%
2001	62.5%	37.5%
2002	62.3%	37.7%
2003	60.0%	40.0%
2004	58.2%	41.8%
2005	57.0%	43.0%
2006	52.9%	47.1%
2007	51.4%	48.6%
2009	43.0%	57.0%
2010	45.0%	55.0%
2011	47.0%	53.0%
2012	45.3%	54.7%
2013	44.3%	55.7%
2014	49.0%	51.0%
2015	45.4%	54.6%
2016	45.0%	55.0%
2017	44.7%	55.3%
2018	45.2%	54.8%
2019	44.6%	55.4%
2020	45.0%	55.0%
2021	42.4%	57.6%

Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

Where are they made? Current VIO mix of Dom/Imp brands

56.7% of all light duty vehicles on U.S. roads today were produced in the U.S.A. (Dom and Imp)

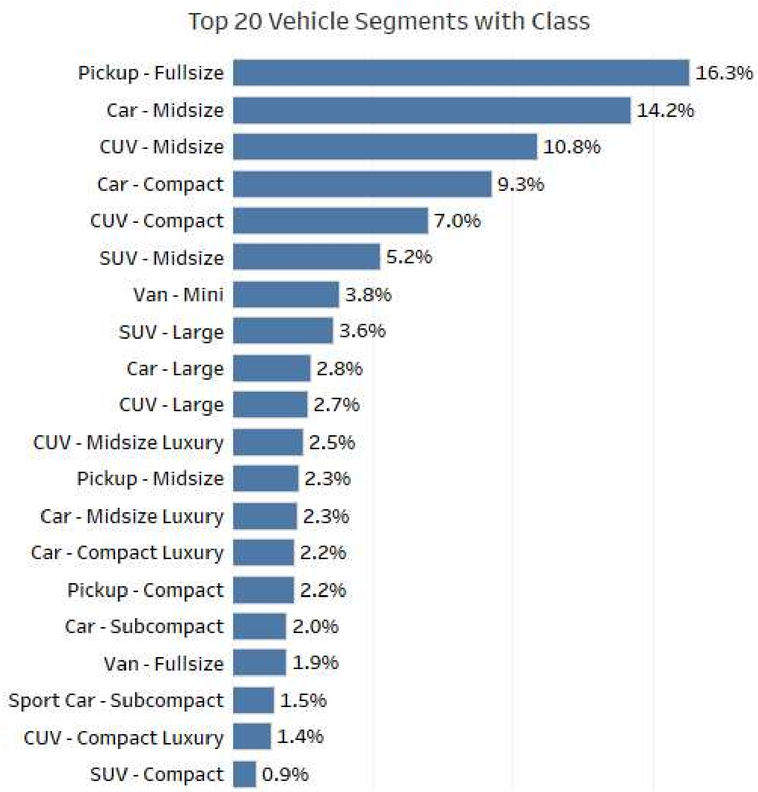


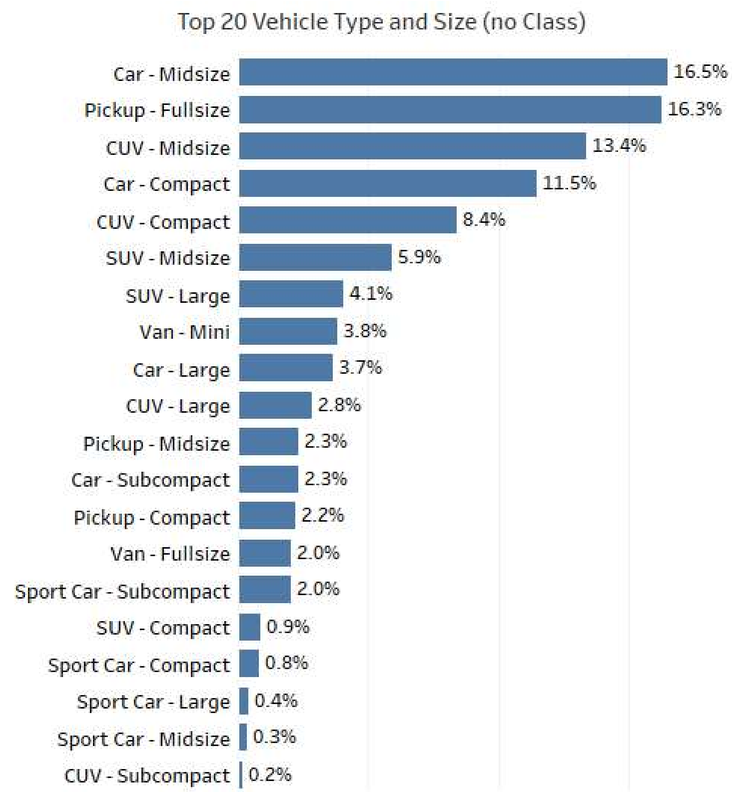
22.2% of IMPORT brand vehicles were produced in Japan (largest country supplier outside N.A.)

Of all vehicles produced in the U.S.A., 61.8% of vehicles are DOMESTIC brands

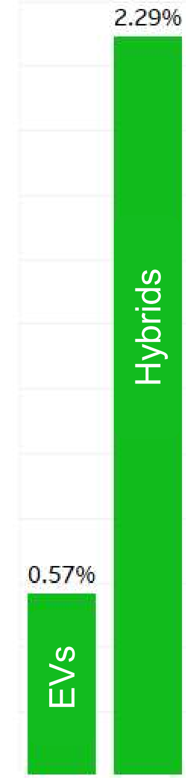
Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

U.S. VIO **Top 20 segments** on the road market share





Hybrid, Electric & Hydrogen Vehicles

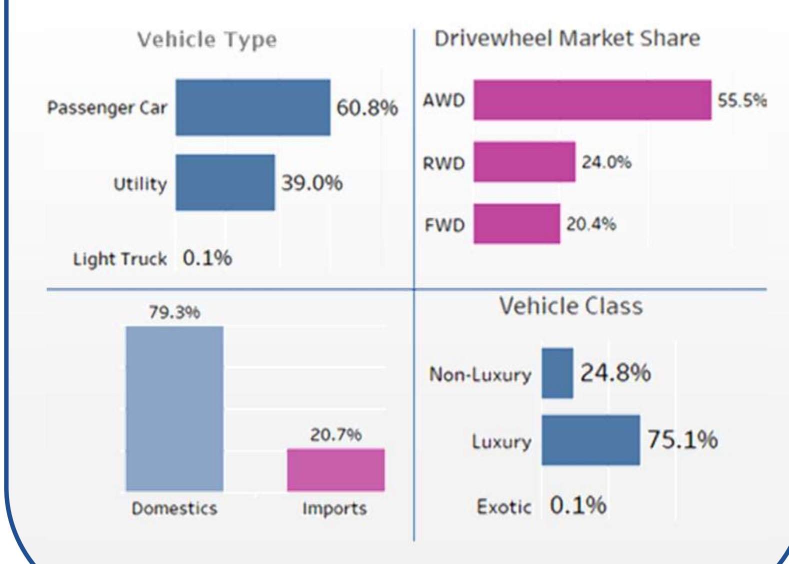


Source: *Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)*

U.S. Vehicles in Operation

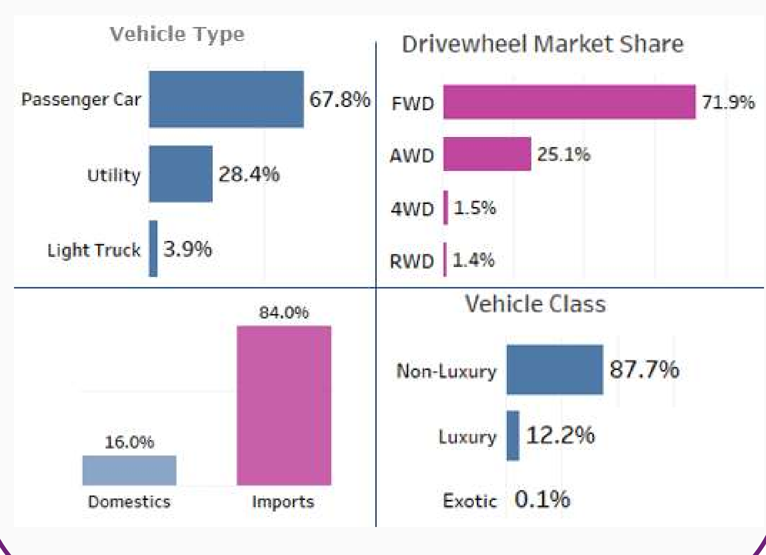
EVs versus Hybrids – Mirror comparison

EVs
Average Age: **3.8**



Mirror comparison

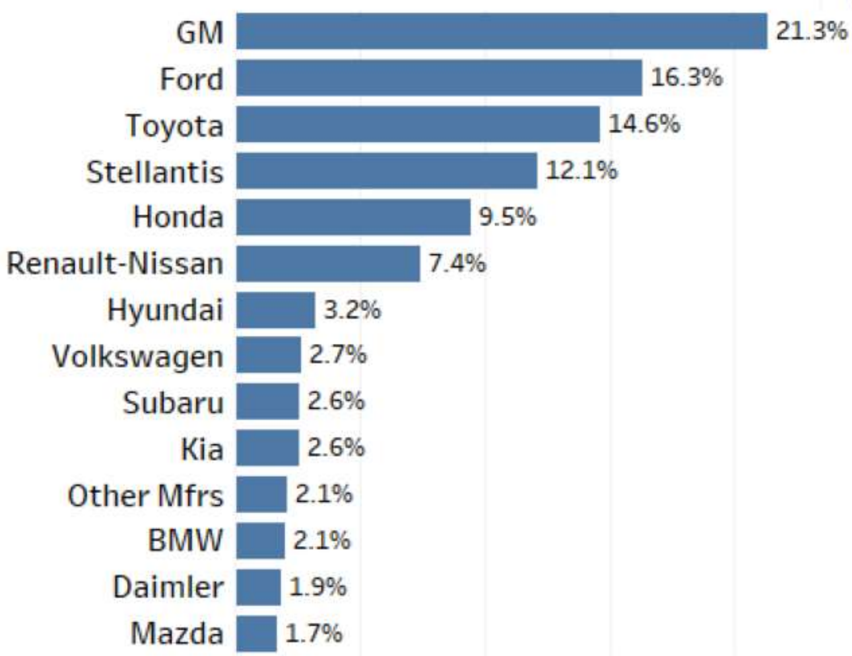
Hybrids
Average Age: **7.6**

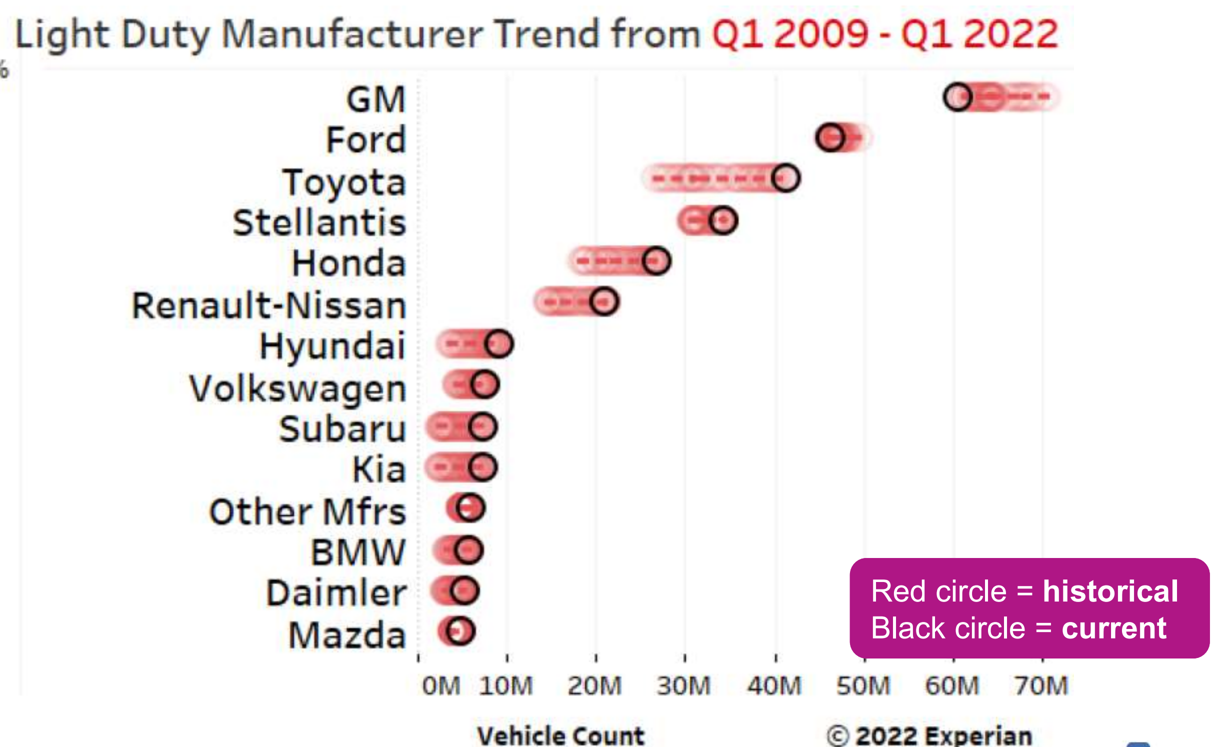


Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

U.S. VIO by manufacturer market share vs volume trend

GM declining, Toyota growing

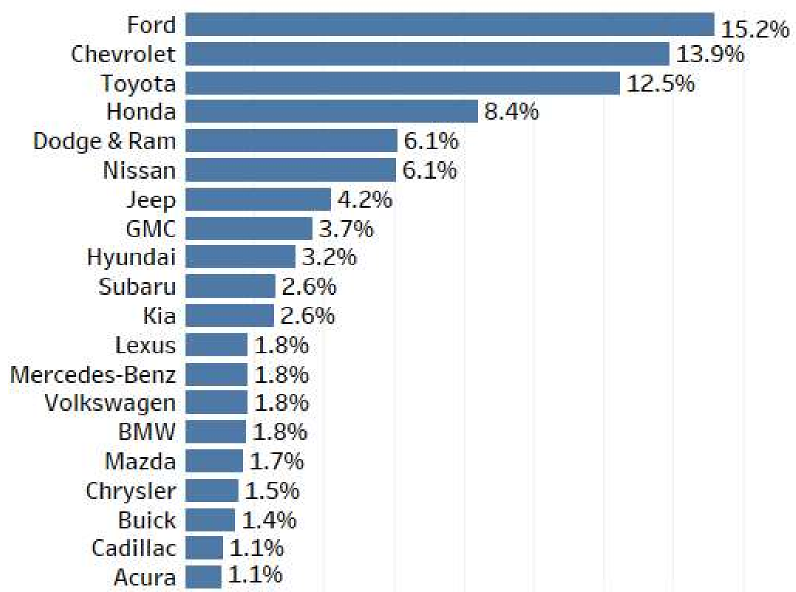




Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

U.S. VIO Top 20 brands market share vs volume trend

Chevrolet down, Toyota up



Red circle = **historical**
Black circle = **current**

Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

The aftermarket “**Sweet Spot**” overview

“Post” and “Pre” Sweet Spot defined

The Aftermarket “Sweet Spot”

- 6 to 12 model year old vehicles
- Aged out of general OEM manufacturer warranties for any repairs
- Likely require more part replacement & services (e.g. shocks, timing belt service, engine repairs) that may be performed by aftermarket service shops using parts from aftermarket part manufacturers
- Sizing the Sweet Spot helps identify overall market potential and changes can have implications to those that service it

“Post Sweet Spot” vehicles

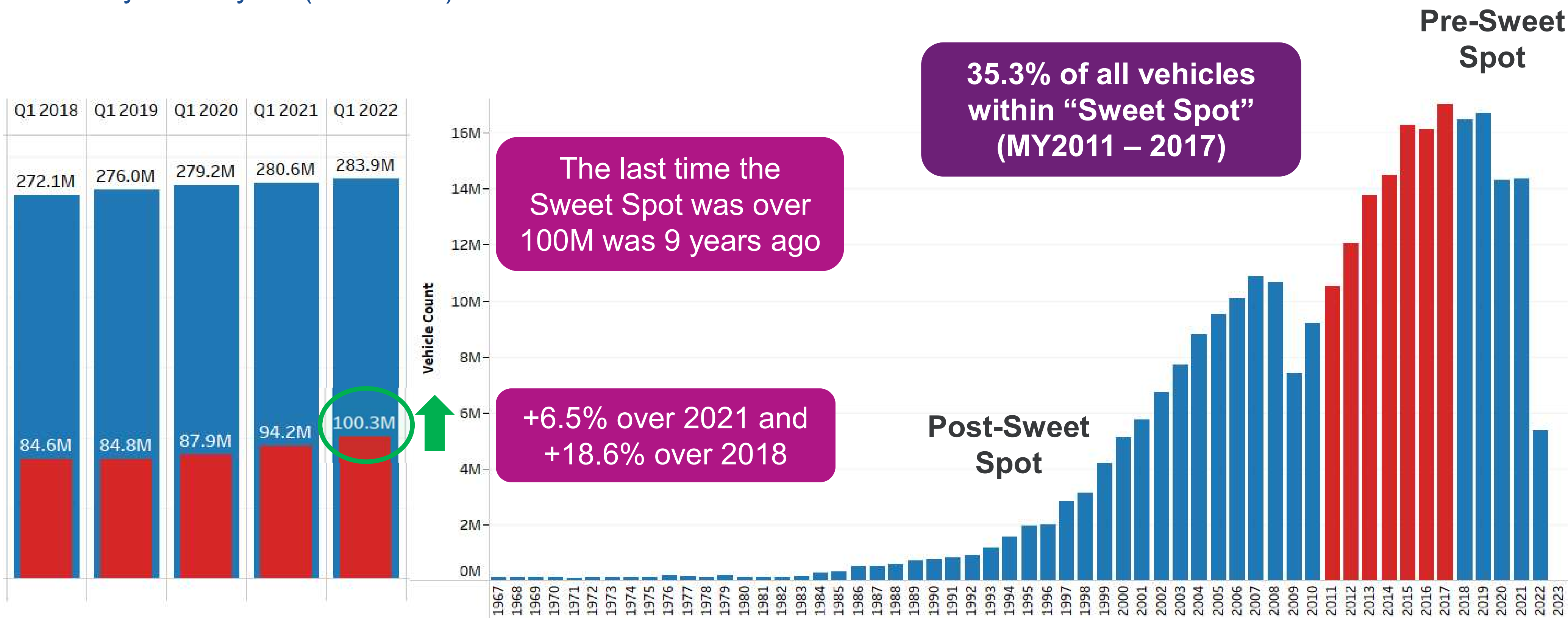
- 13 model years old & older
- Less costs may be spent to service them due to their age and lower vehicle value

“Pre Sweet Spot” vehicles

- 5 model years old & newer; many covered by the vehicle’s manufacturer warranty
- Identifies models coming into the Sweet Spot

U.S. trend of **total VIO compared to sweet spot volumes**

VIO by model year (in millions)



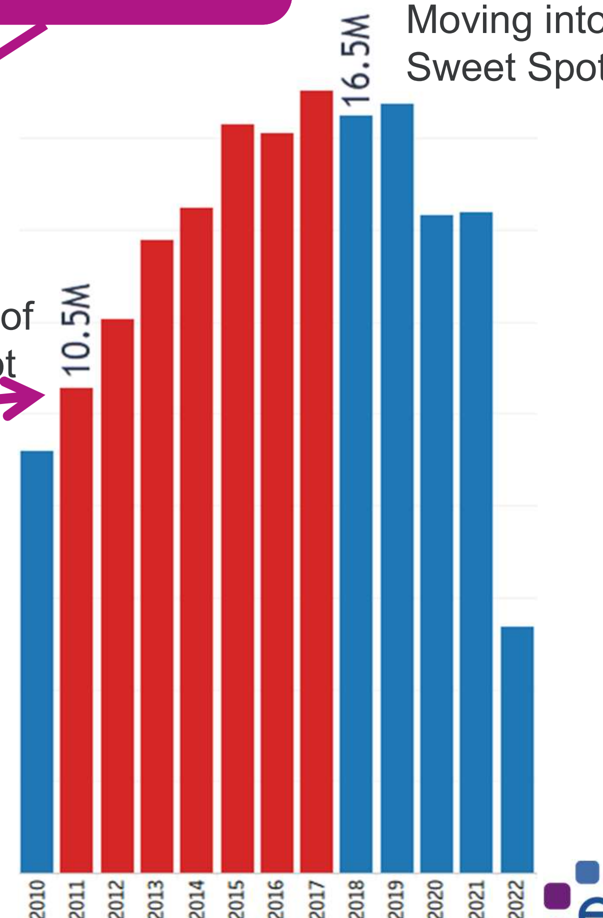
Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

U.S. Sweet Spot

Opportunities and Growth

Highest Sweet Spot Volume: **104M** (Q1 2011)
Highest Sweet Spot Share of VIO: **43.2%** (Q1 2010)
(VIO 2008 and newer)

This max volume record will be broken over the next 12-18 months



Over the next few years, more opportunities for Sweet Spot growth are coming as low volume Model Years in 2011, 2012 are replaced by higher volume Model Years in 2018, 2019

Source: Experian Automotive VIO as of March 31, 2022 (light duty registered vehicles)

U.S. Average Vehicle Age – What is it?

Facts

What it is…

- A metric that shows the overall mean (average) age of vehicles based on a calculation of the age times the volume of the vehicles in operation
- The metric is affected by an increase or decrease in the new vehicle registrations over time
  - A decrease in new vehicles increases the average age initially
- The overall **average age will naturally increase** every year as more model years and vehicles are added to the base of vehicles on U.S. roads

Myths

What the Average Age does not indicate…

- Vehicles are **lasting longer** or **more durable**
- People are owning or **keeping their vehicles longer**
- Signals potential growth or decline for **Aftermarket service dollars**

Myth: Higher Avg Age = ‘More durable’ or ‘Longer lasting’

Question – How would you define a durable or longer lasting vehicle?

A 15-year-old pickup with 380,000 miles, engine has failed and needs replacement, transmission needs fixed and cost to repair everything is $12,000; Current market value $3,700 if operational.

A 15-year-old sportscar with 36,000 miles, runs though in need of $12,000 in service; Current market value $71,000

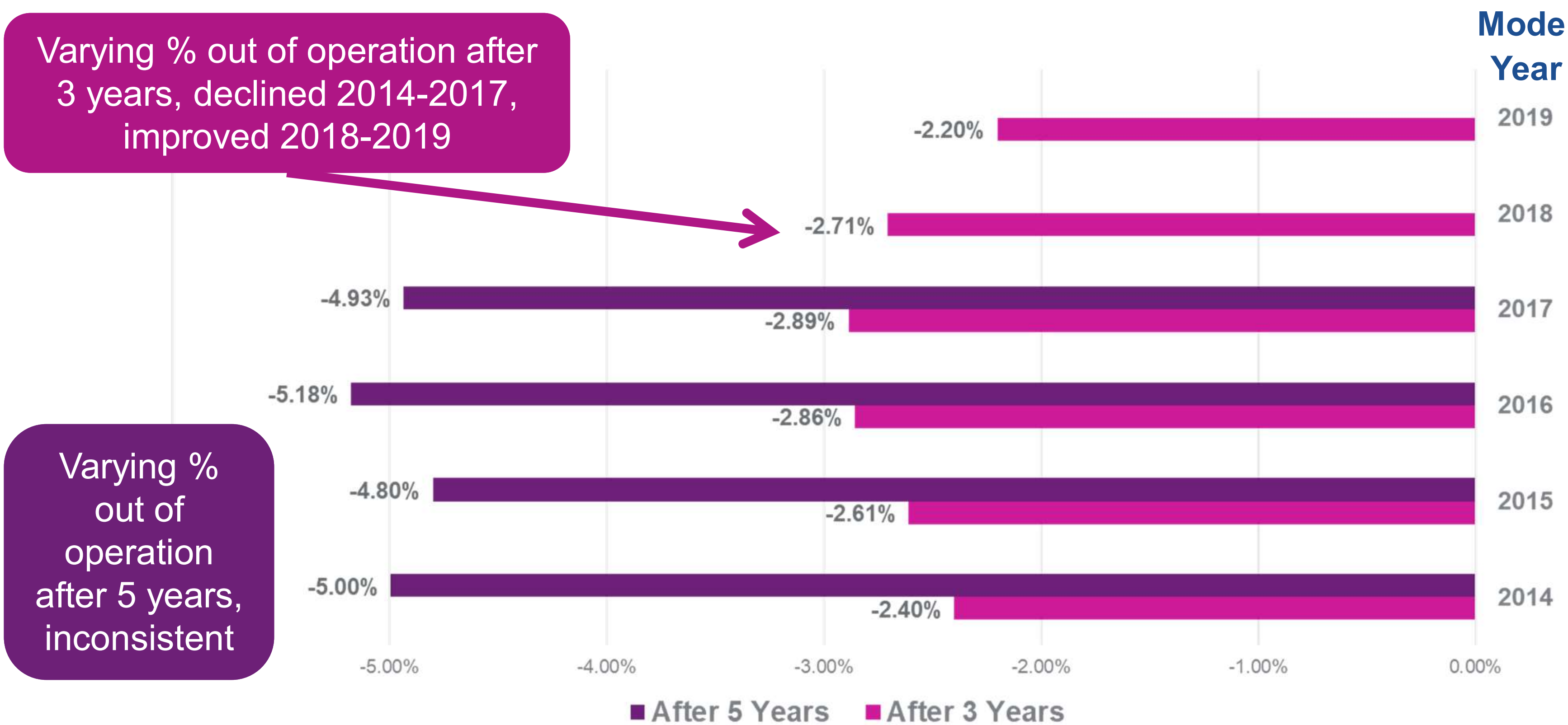
The pickup in this example has clearly had frequent use, seems ‘durable’ for lasting 380k miles, but is likely to go out of operation due to the costs to repair vs vehicle value. Once out of operation, it is not used in the Avg Age calculation.

The sportscar, in great shape and low miles, clearly worth fixing because of high market value, has an owner who can afford an expensive vehicle and is likely to invest more money into to retain the value and keep it operational. Does that make this vehicle longer lasting or more durable than the pickup?

The ***Avg Age*** metric measures the mean of an ever-growing market size and does not relate to durability or longer lasting.

Myth: Higher Avg Age = 'More durable' or 'Longer lasting'

Analysis of Model Year changes over time demonstrate various changes not effected by Avg Age



Debunked!
The Avg Age metric does not relate to durability or longer lasting

Myth: Higher Avg Age = ‘longer ownership’

Are people really hanging onto their vehicles longer than in the past?

Debunked!
The Avg Age metric does not relate to longer ownership

	Calendar Year				
Vehicle Type	**2018**	**2019**	**2020**	**2021**	**Q1 2022**
Exotic	3.00	3.04	3.11	3.01	N/A
Luxury	4.41	4.29	4.19	4.10	4.16
Non-Luxury	4.88	4.81	4.73	4.57	4.36
All Vehicles	↑ **4.81**	↓ **4.73**	↓ **4.65**	↓ **4.50**	↓ **4.35**
Avg Age	↑ **11.54**	↑ **11.61**	↑ **11.72**	↑ **11.88**	↑ **12.10**

Length of ownership (in years) varies by vehicle type

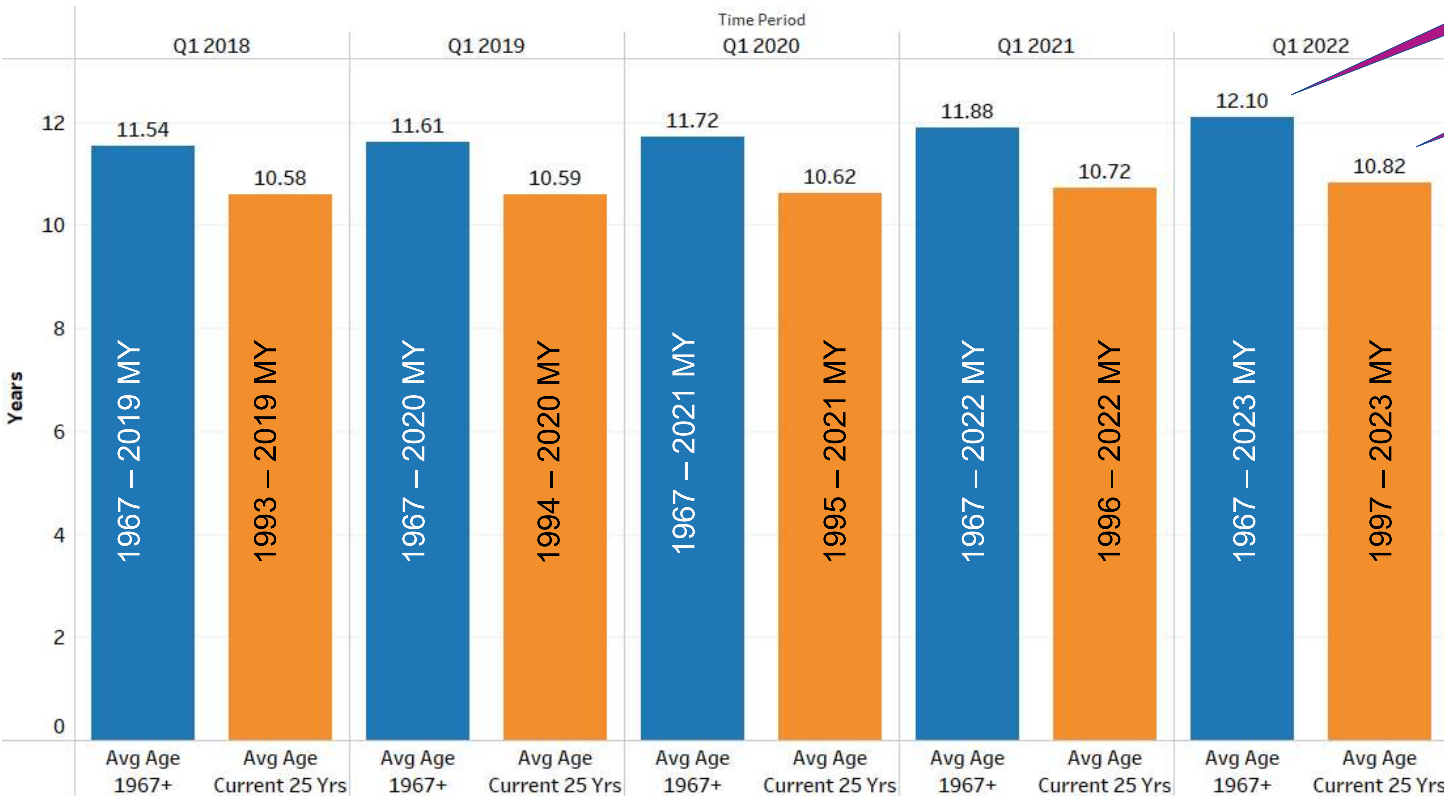
Length of ownership ***decreasing*** since 2019

Avg Age ***increased*** each year

Source: Experian Automotive Loyalty Disposal as of February 28, 2022 (light duty registered vehicles)

Myth: Avg Age = Growth for Aftermarket service $$
Fact: Avg Age - Use a weighted calculation

All vehicles 1967+ (includes collector vehicles) vs **Current 25 Model Years** (weighted)



FALSE-POSITIVE Includes a larger vehicle base than prior years

Uses a weighted “Apples-to-Apples” comparison

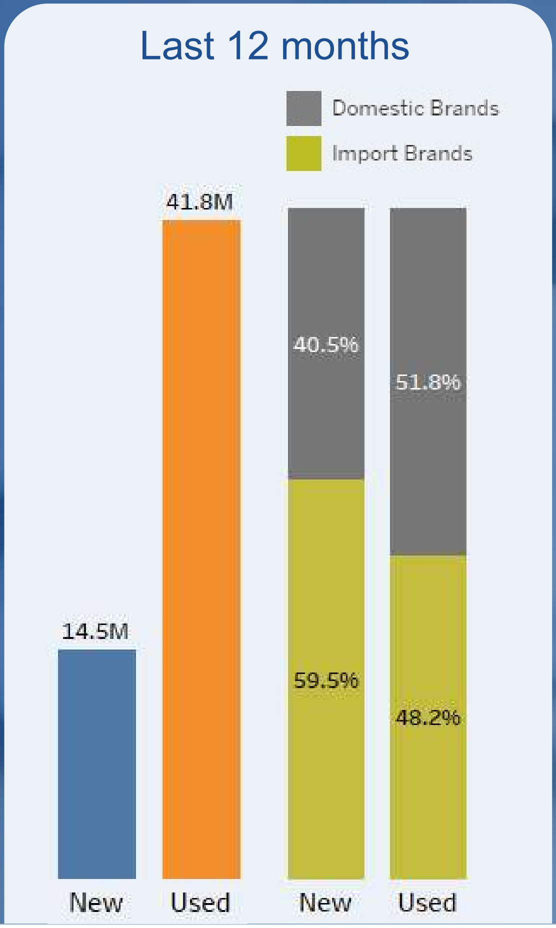
A ***weighted*** Avg Age calculation focuses more on daily driver vehicles, not collectible vehicles

Debunked! As new registrations lower, it causes the weighted Avg Age to increase – meaning less Sweet Spot $$$ in the near future

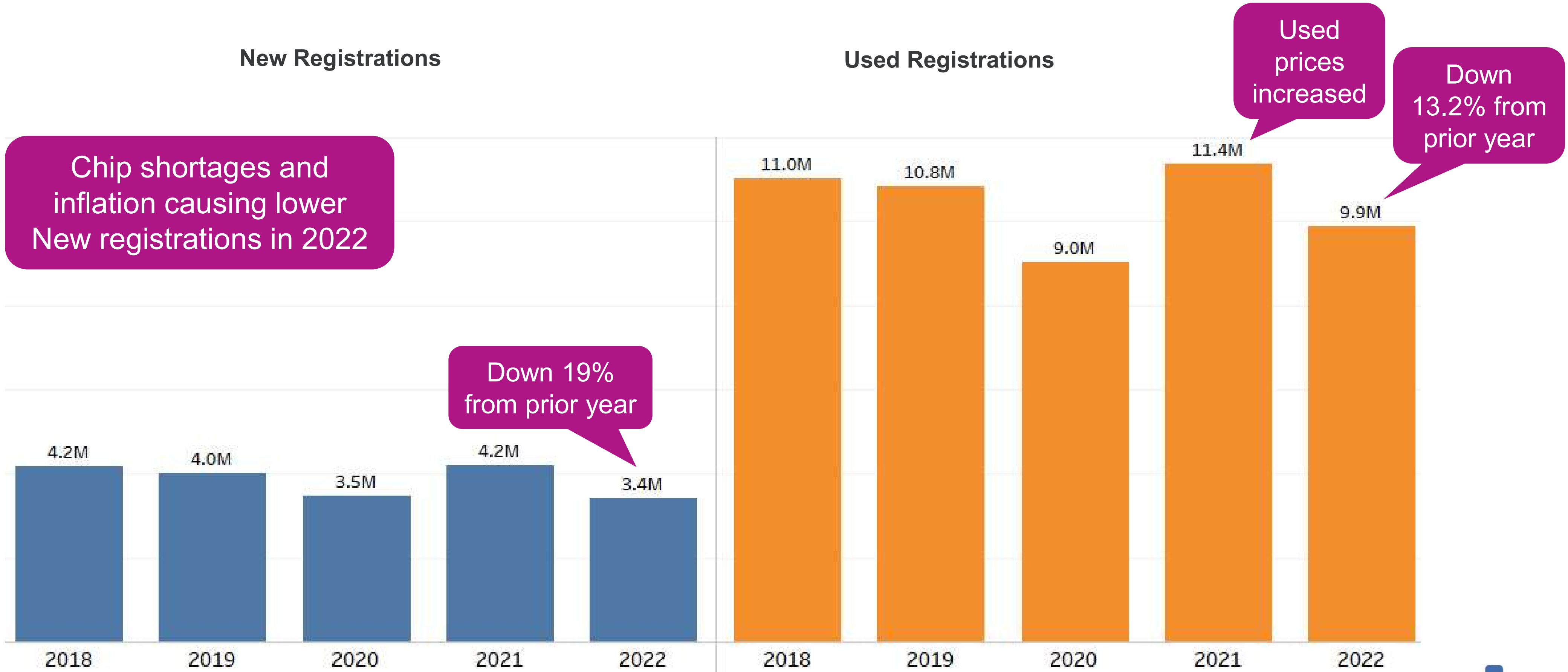
Source: Experian Automotive VIO as of March 31 of each year (light duty registered vehicles)

Q1 2022
New & Used Vehicles

- Volumes of New vs Used and Domestic vs Import over the last 12 months
- Market analysis through the 1st quarter
- Chip shortages continue and scrambles for Used vehicles drives up market prices



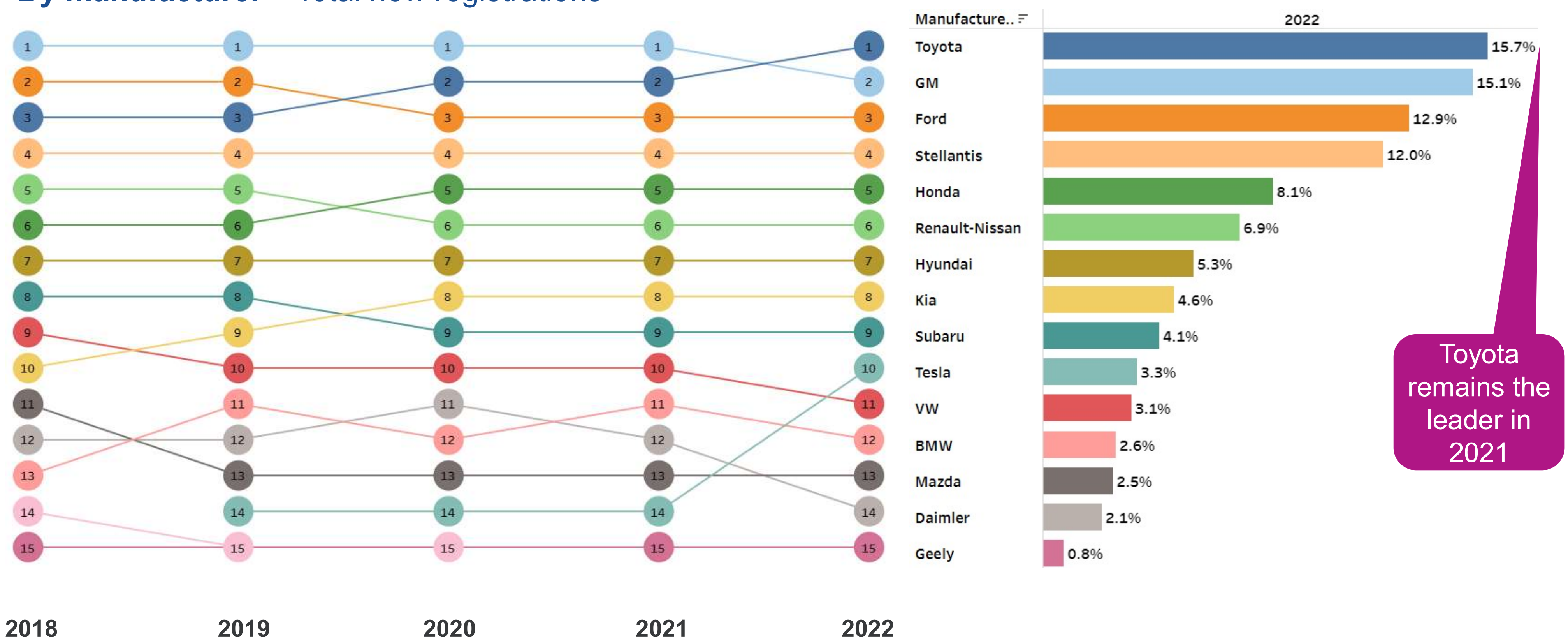
New and Used vehicle registrations through the 1st quarter



Source: Experian Automotive as of January through March of each year (U.S. light duty vehicles only)

New vehicle Mfr rank and share through the 1st quarter

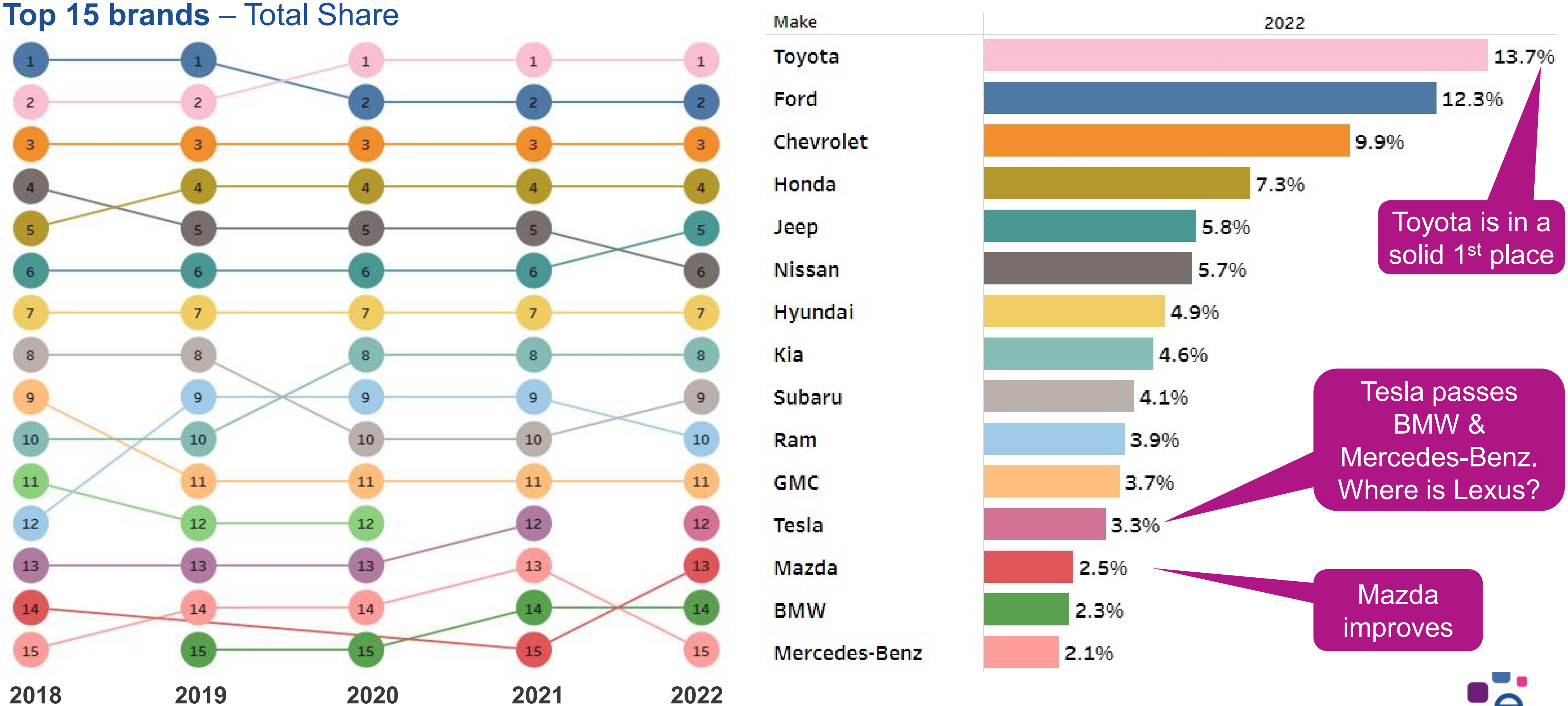
By manufacturer – Total new registrations



Source: Experian Automotive as of January through March of each year (U.S. light duty vehicles only)

New vehicle Make rank and share through the 1st quarter

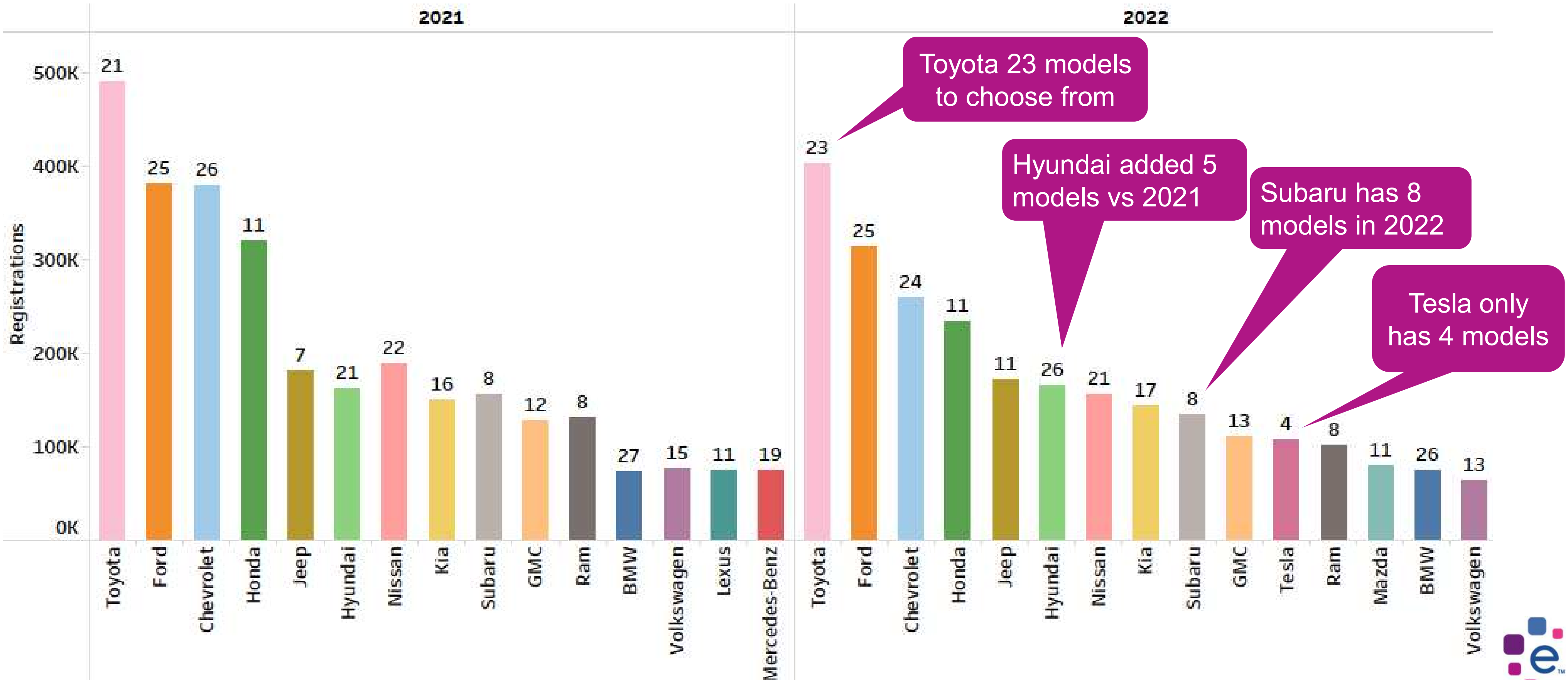
Top 15 brands – Total Share



Source: Experian Automotive as of January through March of each year (U.S. light duty vehicles only)

New vehicle share through the 1st quarter

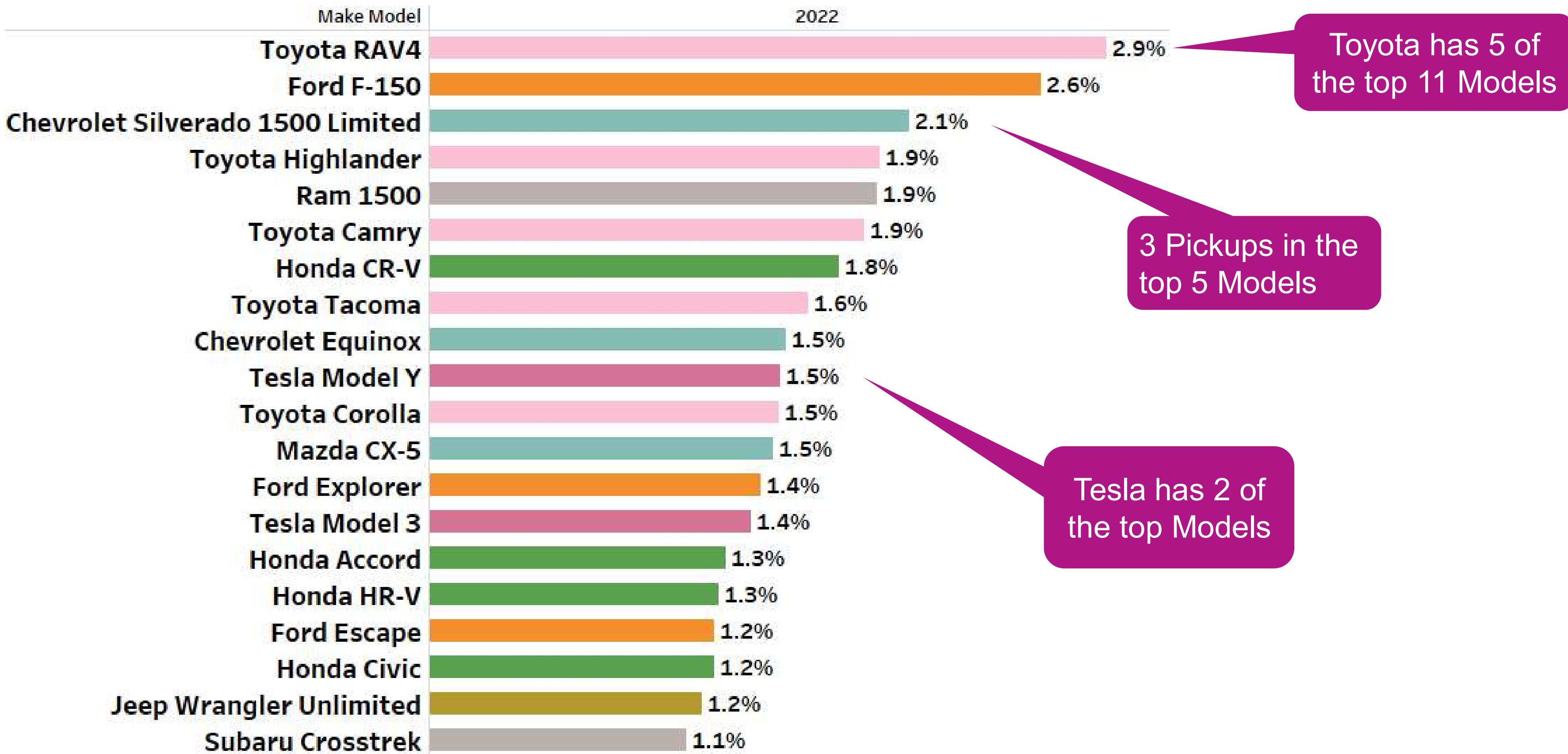
By top 15 Brands – Total Registrations and Count of Models (2021 vs 2022)



Source: Experian Automotive as of January through March each time period (U.S. light duty vehicles only)

New vehicle share through the 1st quarter

By top 20 make/models – Total Registrations (color coded by Make)

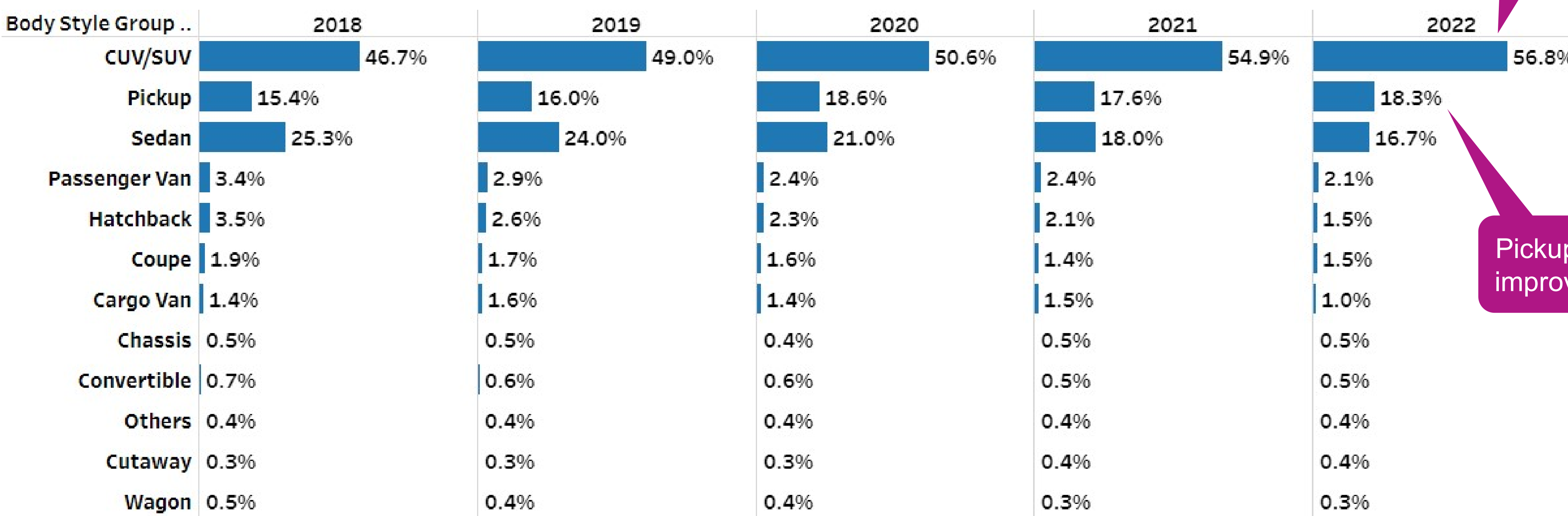


Source: Experian Automotive as of January through March 2022 (U.S. light duty vehicles only)

New vehicle registrations through the 1st quarter

By body style type – Total Registrations

Utilities continue to grow

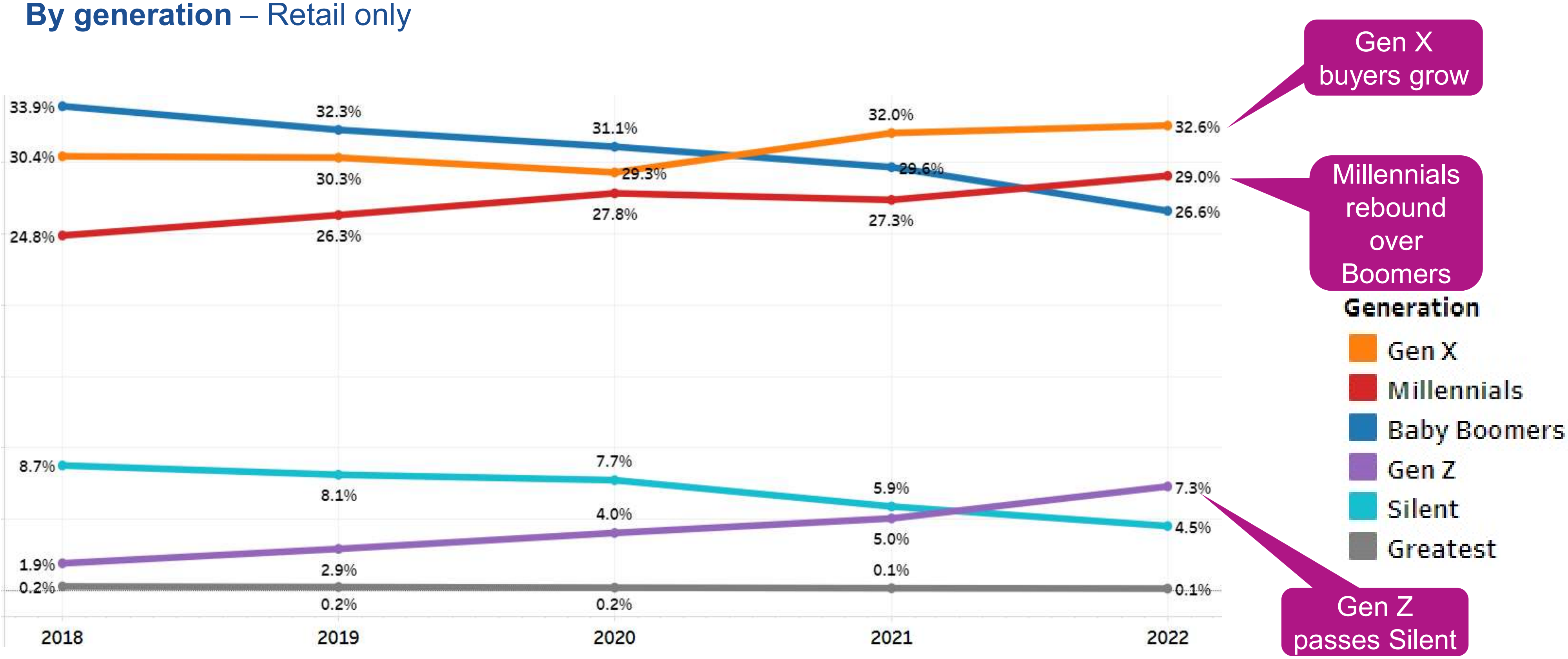


Pickups improve

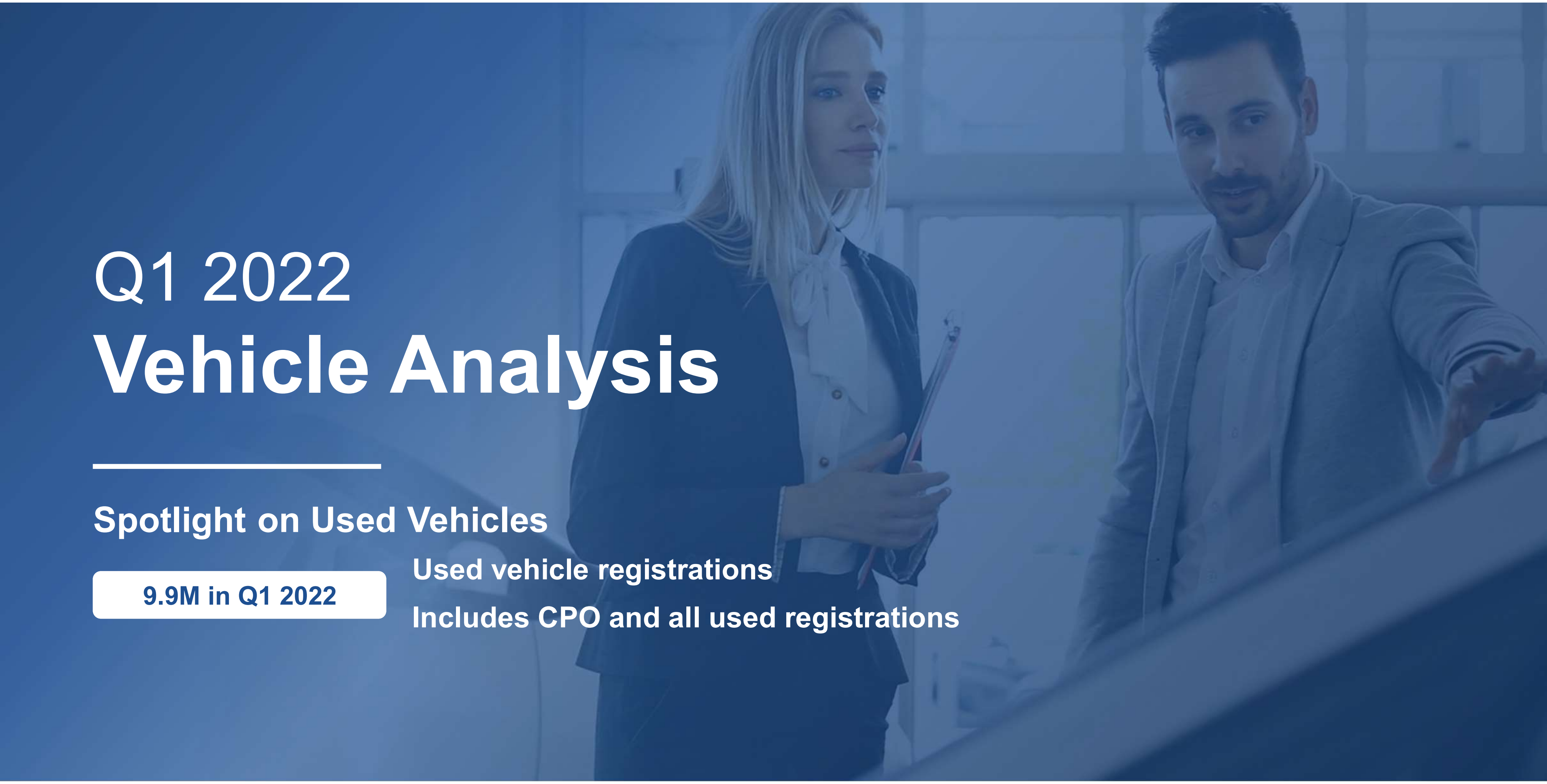
Source: Experian Automotive as of January through March of each year (U.S. light duty vehicles only)

New vehicle registrations through the 1st quarter

By generation – Retail only



Source: Experian Automotive as of January through March of each year (U.S. light duty vehicles only)



Q1 2022
Vehicle Analysis

Spotlight on Used Vehicles

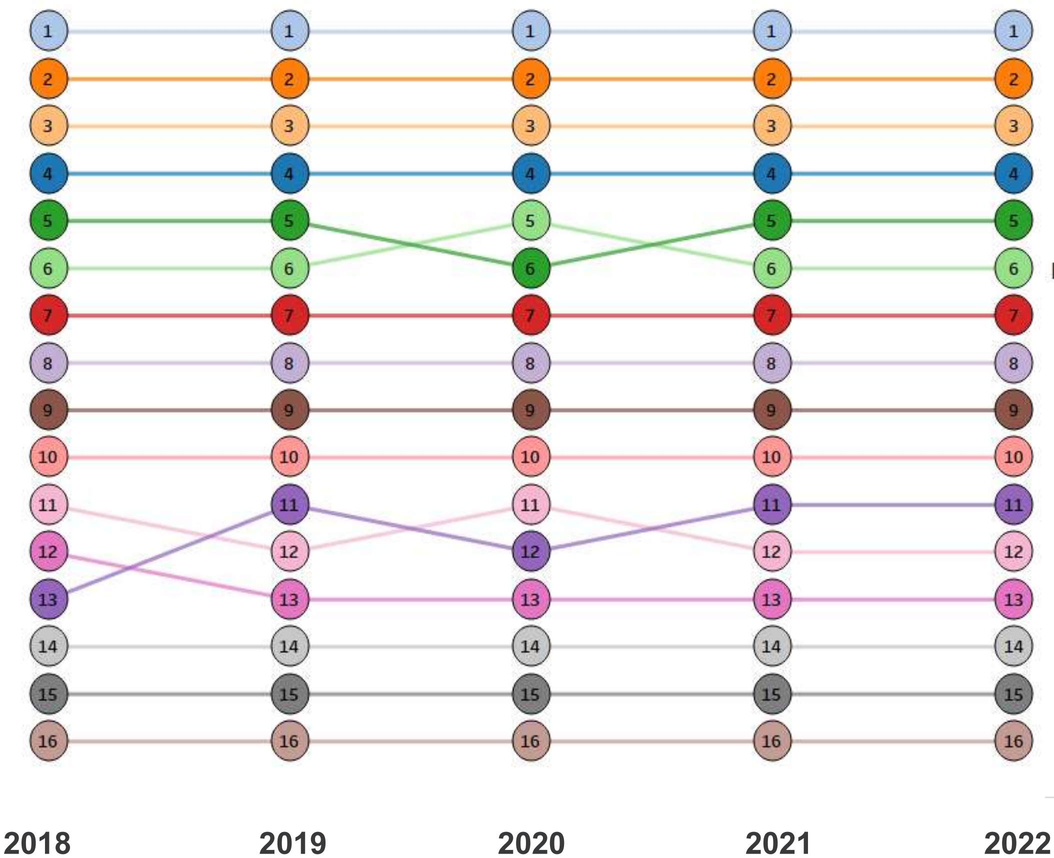
9.9M in Q1 2022

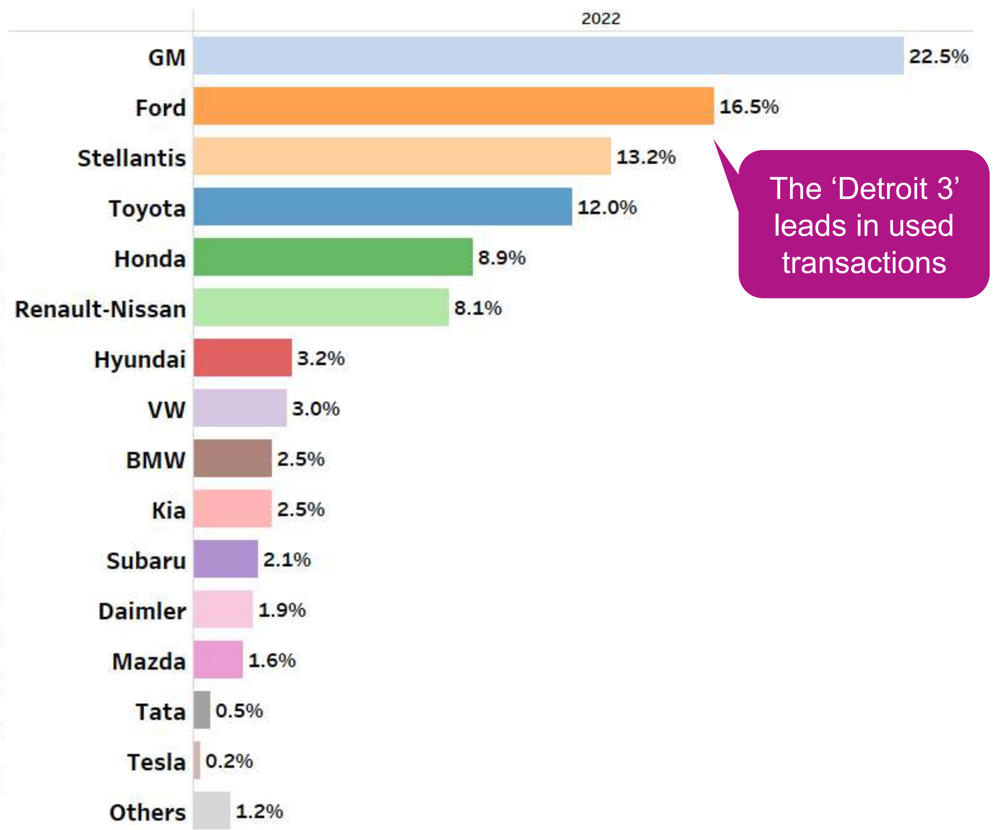
Used vehicle registrations

Includes CPO and all used registrations

Used vehicle registrations through the 1st quarter

More domestic manufacturer vehicles change hands

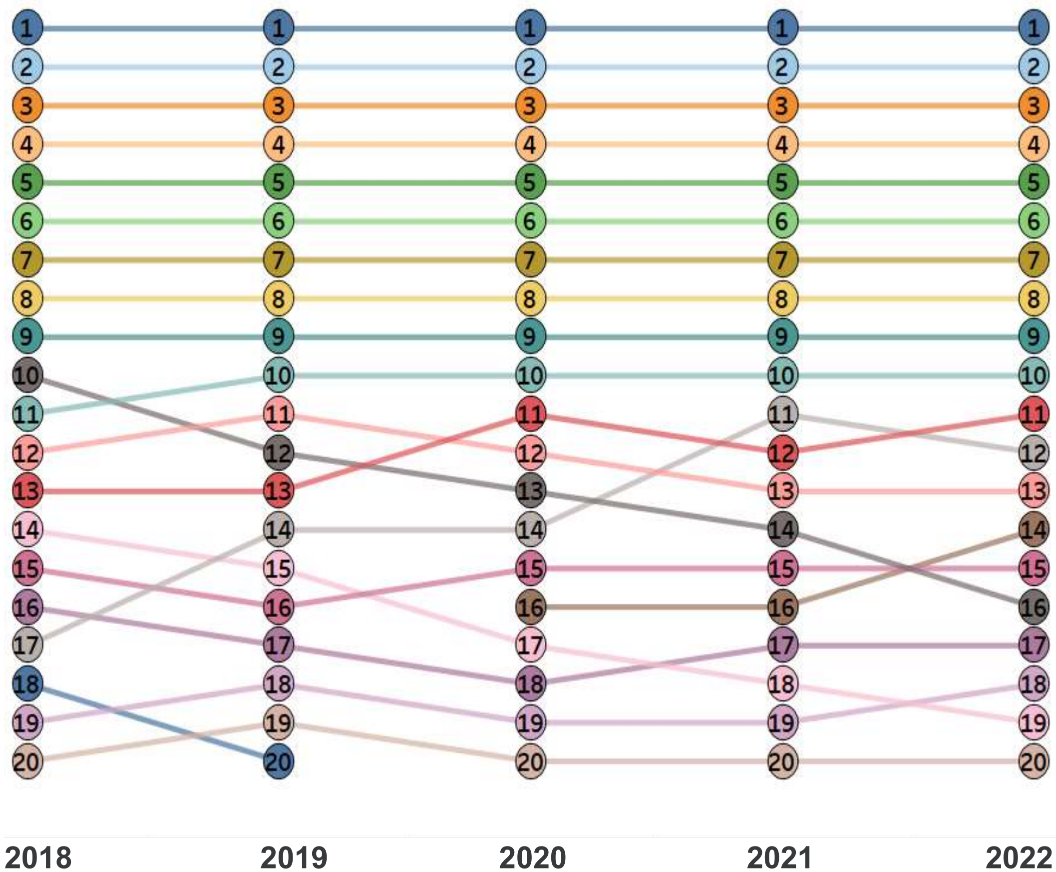


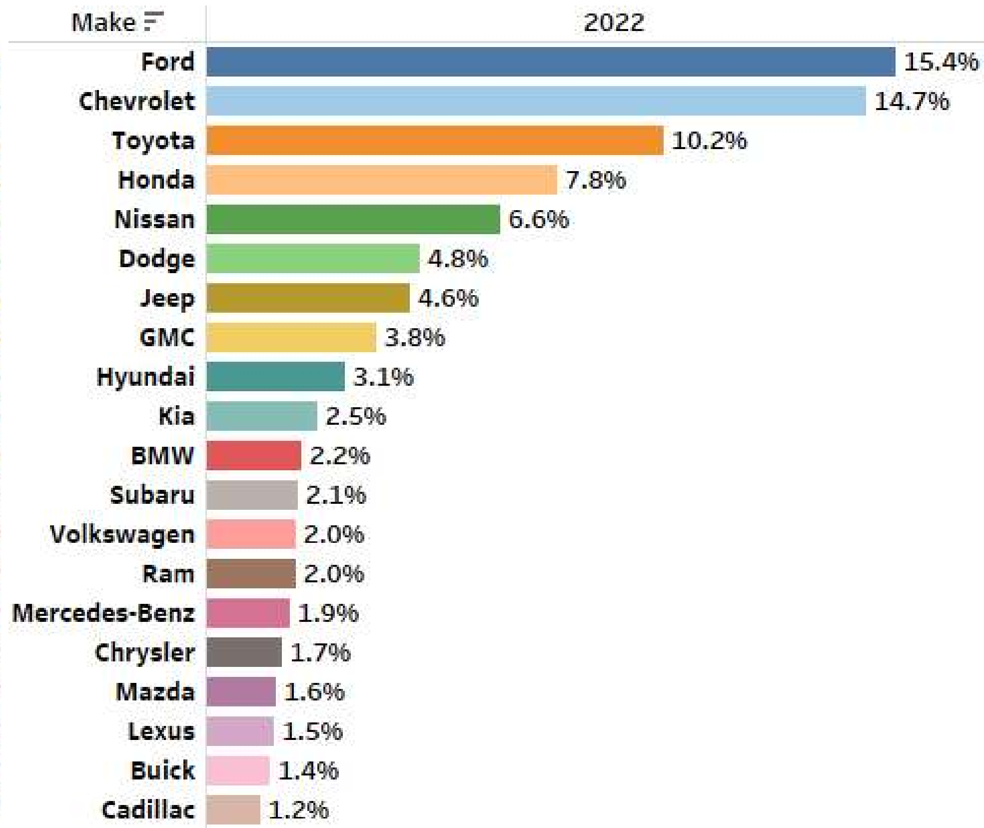


Source: Experian Automotive as of January through March of each year (U.S. light duty vehicles only)

Used vehicle registrations by brand through the 1st quarter

Consistency in the top 9 brands year over year





Source: Experian Automotive as of January through March of each year (U.S. light duty vehicles only)

Used registrations by body style

Used registrations favor CUV/SUV, though Sedan is a close 2nd overall

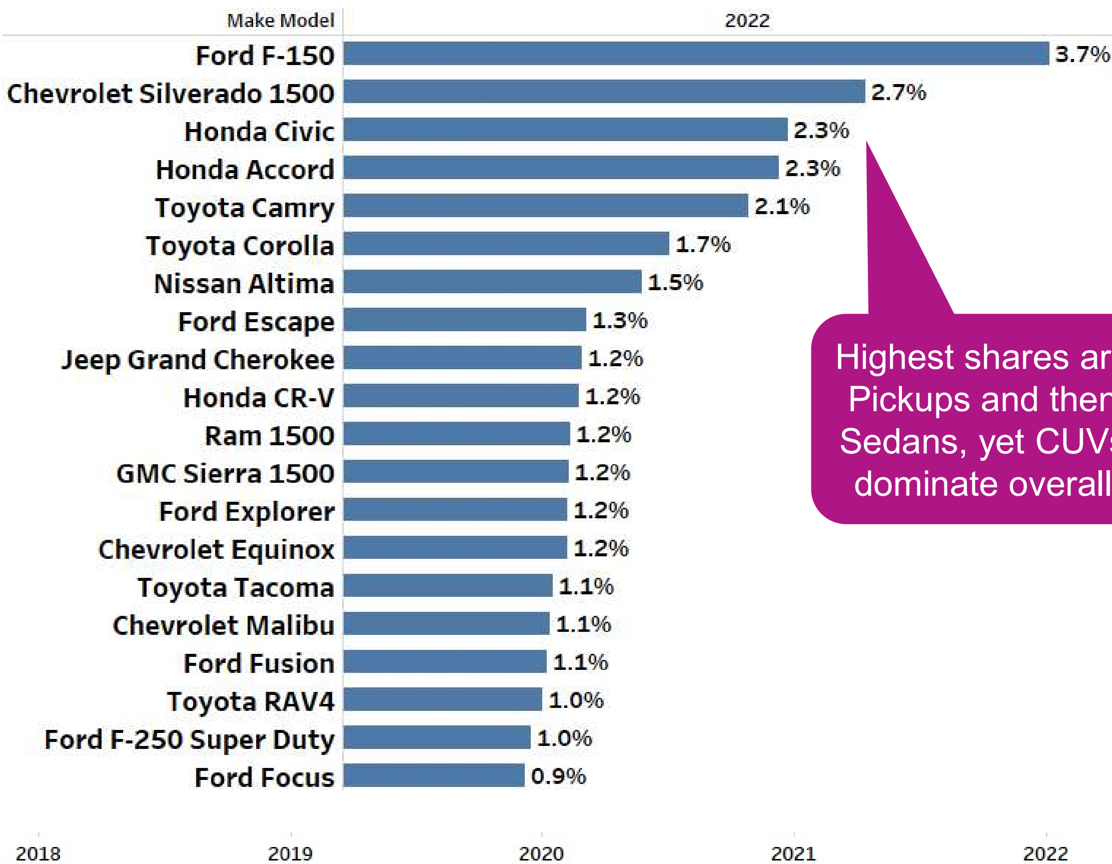
Body Style Type	2018	2019	2020	2021	2022
CUV/SUV	27.9%	29.7%	31.5%	33.0%	32.8%
Sedan	35.8%	34.5%	33.1%	31.4%	30.7%
Pickup	17.7%	17.9%	18.5%	18.8%	19.8%
Coupe	4.8%	4.4%	4.1%	3.9%	4.0%
Van	4.7%	4.5%	4.2%	4.2%	3.8%
Hatchback	4.0%	3.9%	3.8%	3.7%	3.8%
Other	1.9%	1.9%	1.9%	2.1%	2.3%
Convertible	1.4%	1.4%	1.3%	1.3%	1.4%
Wagon	1.9%	1.8%	1.6%	1.5%	1.4%

Sedans are popular used vehicles, yet declining to CUV/SUV

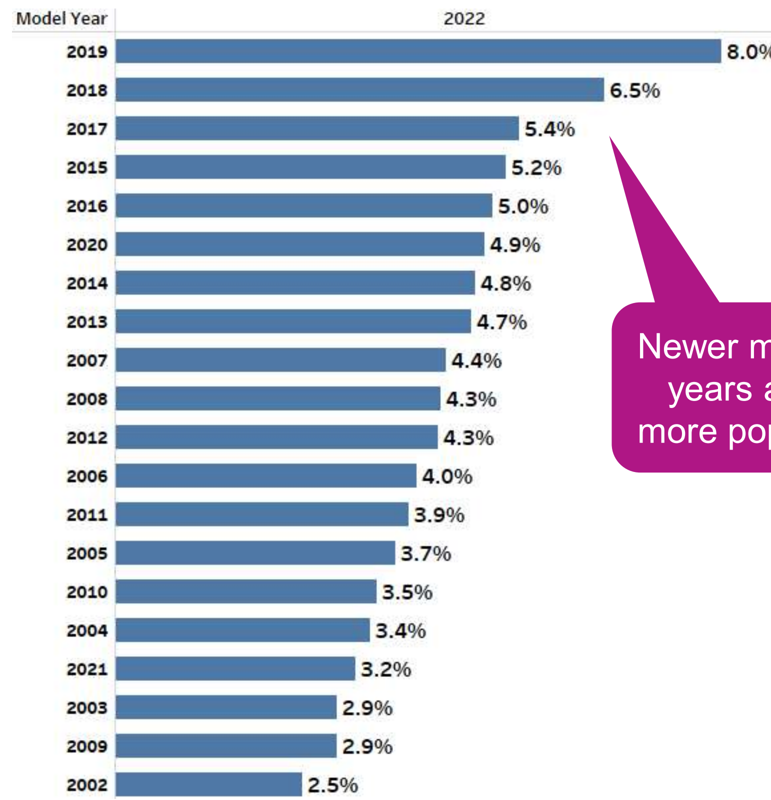
Source: Experian Automotive as of January through March of each year (U.S. light duty vehicles only)

Used registrations by Make/Model and Model Year

Used registrations favor popular models



Highest shares are Pickups and then Sedans, yet CUVs dominate overall

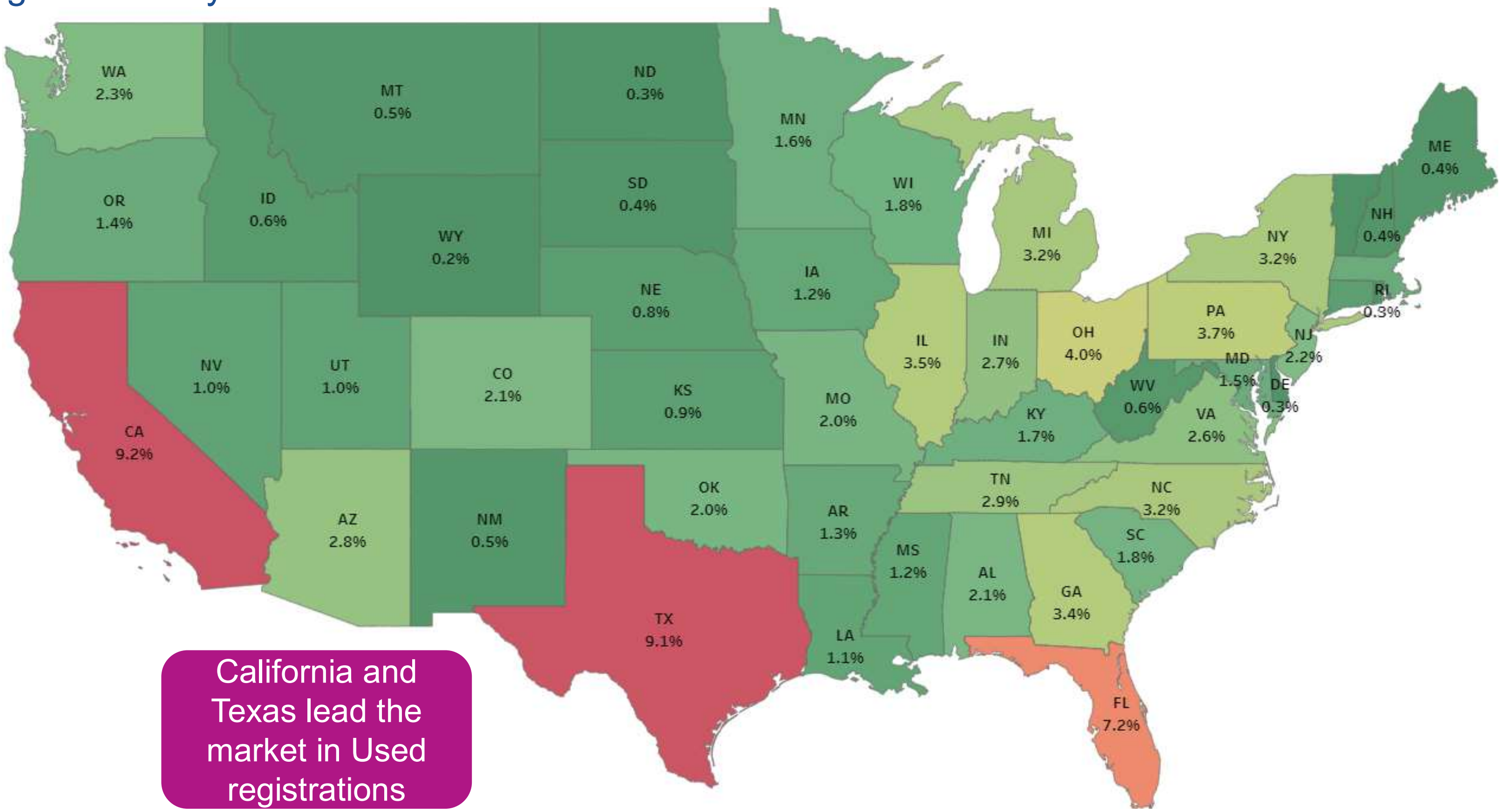


Newer model years are more popular

Source: Experian Automotive as of January through March of 2022 (U.S. light duty vehicles only)

Used vehicle registrations – where are they being bought?

Used registrations by state over the last 12 months



Source: Experian Automotive as of April 2021 through March of 2022 (U.S. light duty vehicles only)

Q1 2022

Vehicle Analysis

Spotlight on the electric & hybrid vehicle market

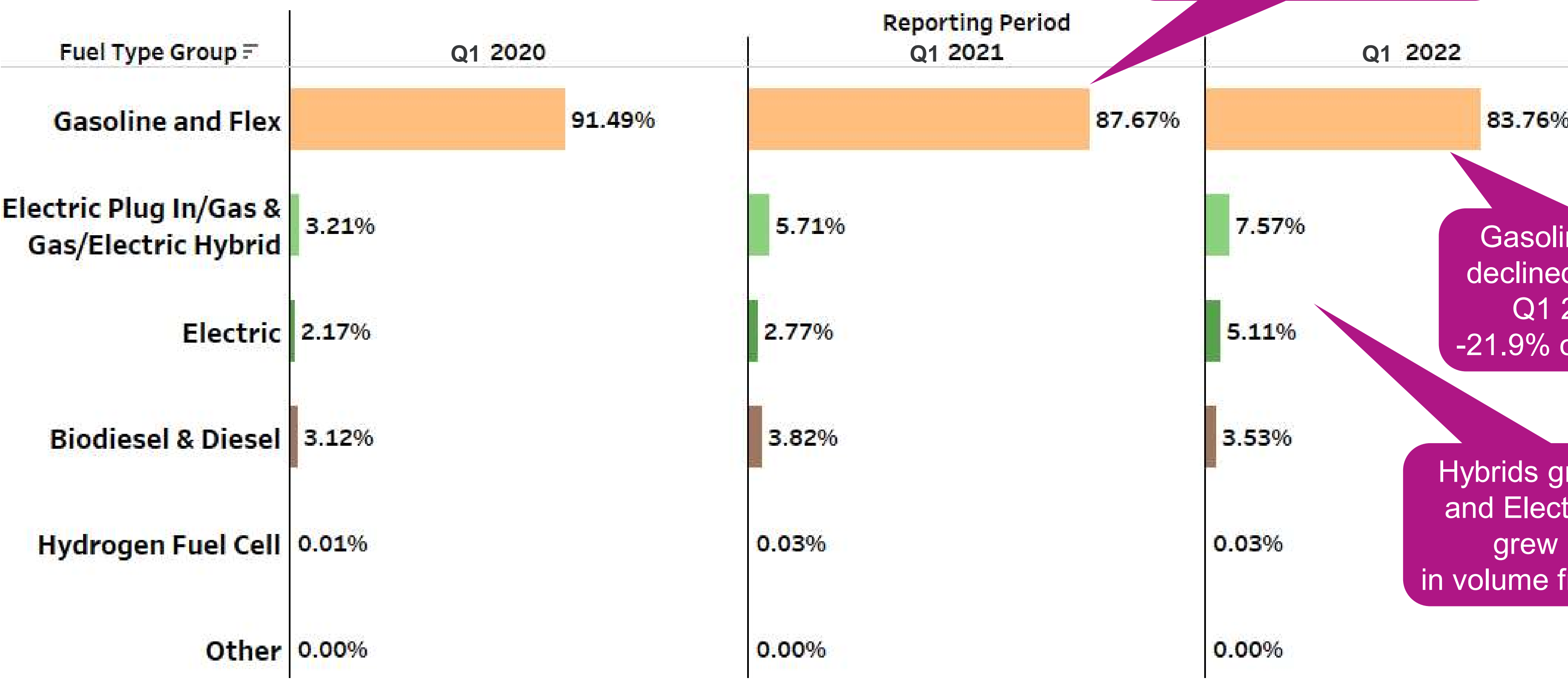
Electric Vehicles
4.64% of Q1 2022
New Registrations

Hybrid Vehicles
7.18% of Q1 2022
New Registrations

U.S. Fuel type share

New registrations volumes for Q1 of each time period

Gasoline volumes grew 16% over Q1 2020



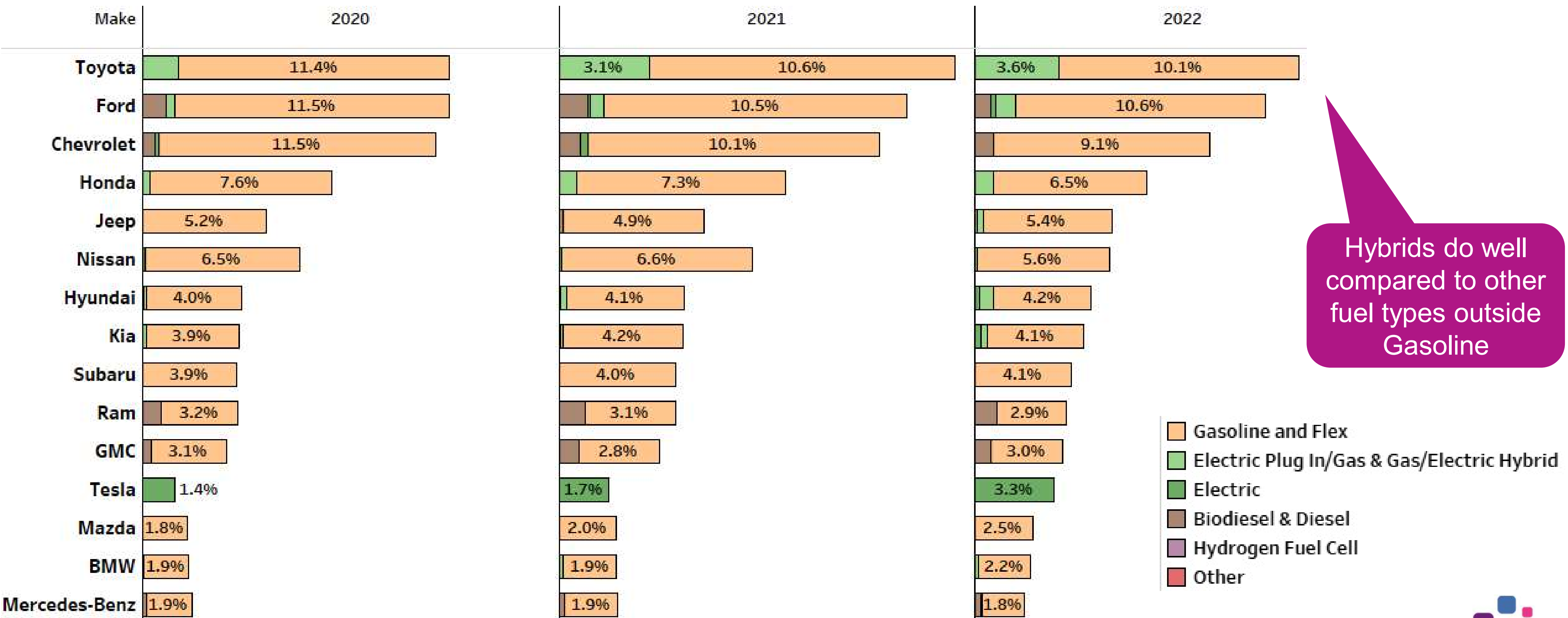
Gasoline volumes declined -9.5% over Q1 2020 and -21.9% over Q1 2021

Hybrids grew +10.7% and Electric vehicles grew +60.4% in volume from Q1 2021

Source: Experian Automotive new registrations as of January through March of each year (U.S. light duty vehicles only)

U.S. Fuel type share by Brand

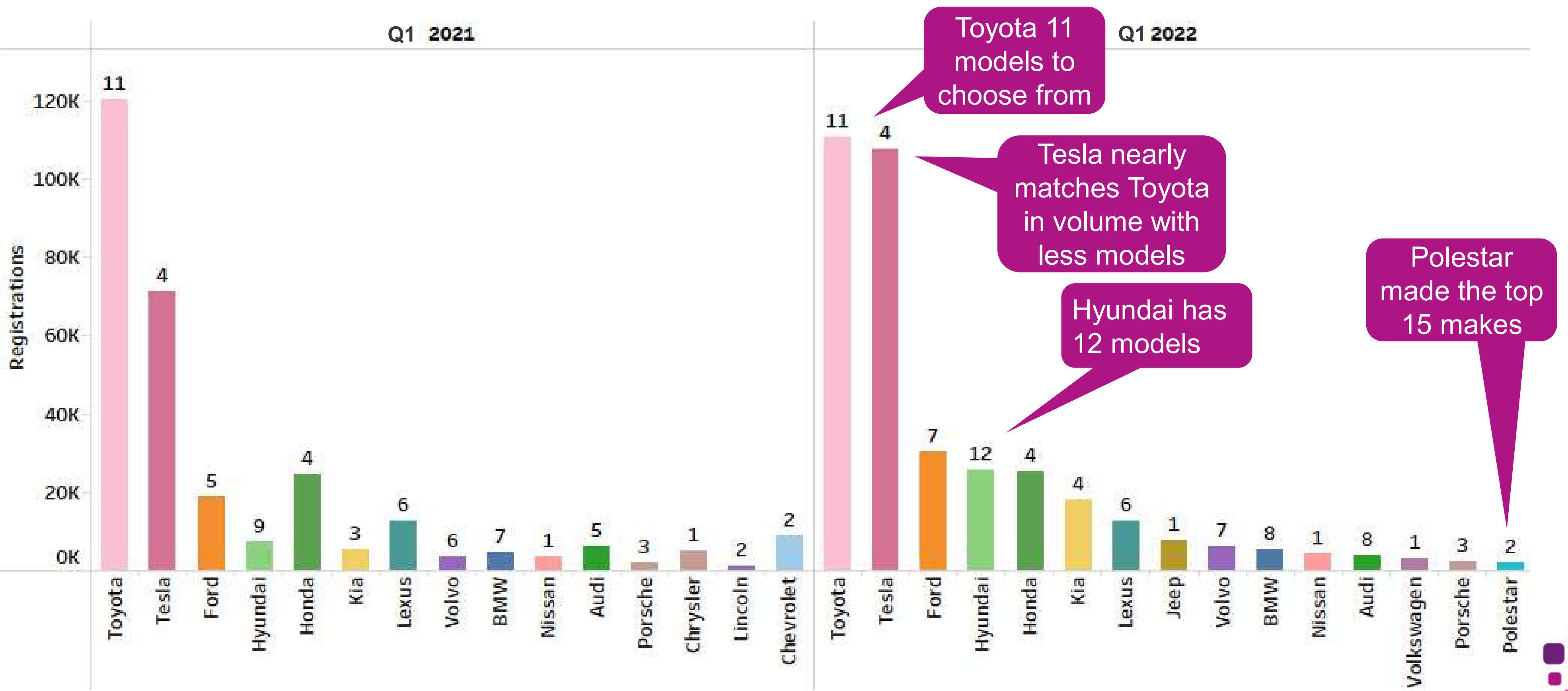
New registrations (top 15) for Q1 of each time period



Source: Experian Automotive new registrations as of January through March of each year (U.S. light duty vehicles only)

Electrics & Hybrids "Electrified" new registrations - 1st quarter

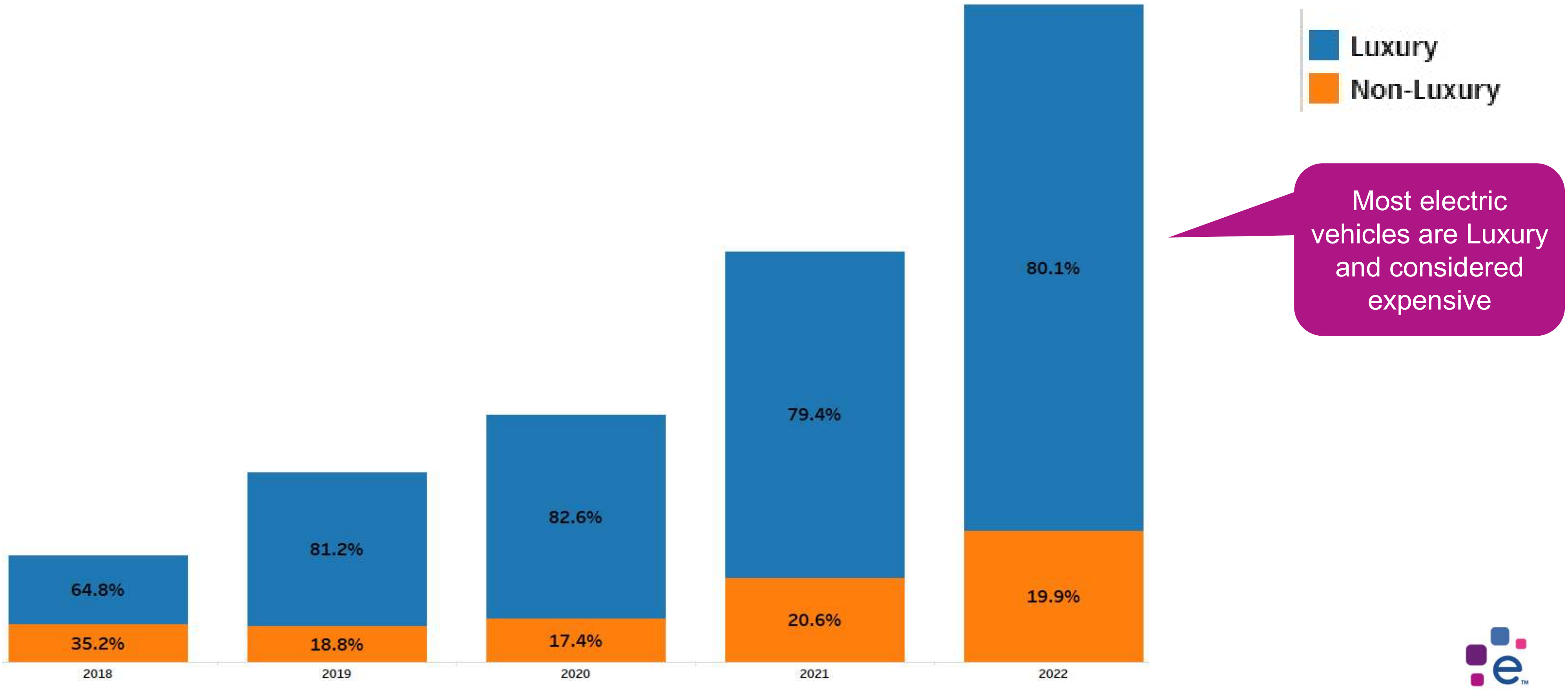
By top 15 Makes – Total Registrations and Count of Models (2021 vs 2022)



Source: Experian Automotive as of January through March each time period (U.S. light duty vehicles only)

Pure Electric share by Class

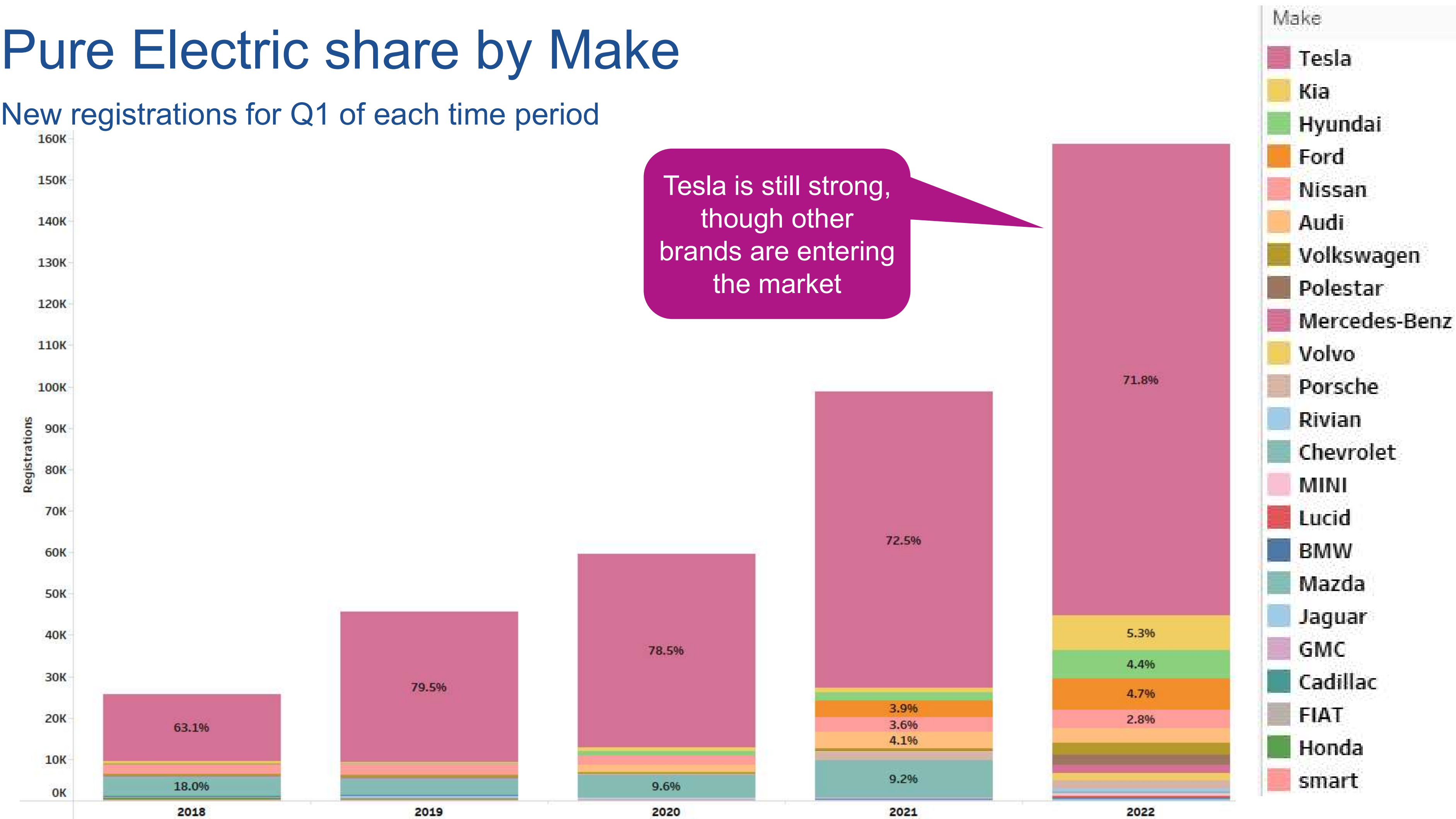
New registrations for Q1 of each time period



Source: Experian Automotive new registrations as of January through March of each year (U.S. light duty vehicles only)

Pure Electric share by Make

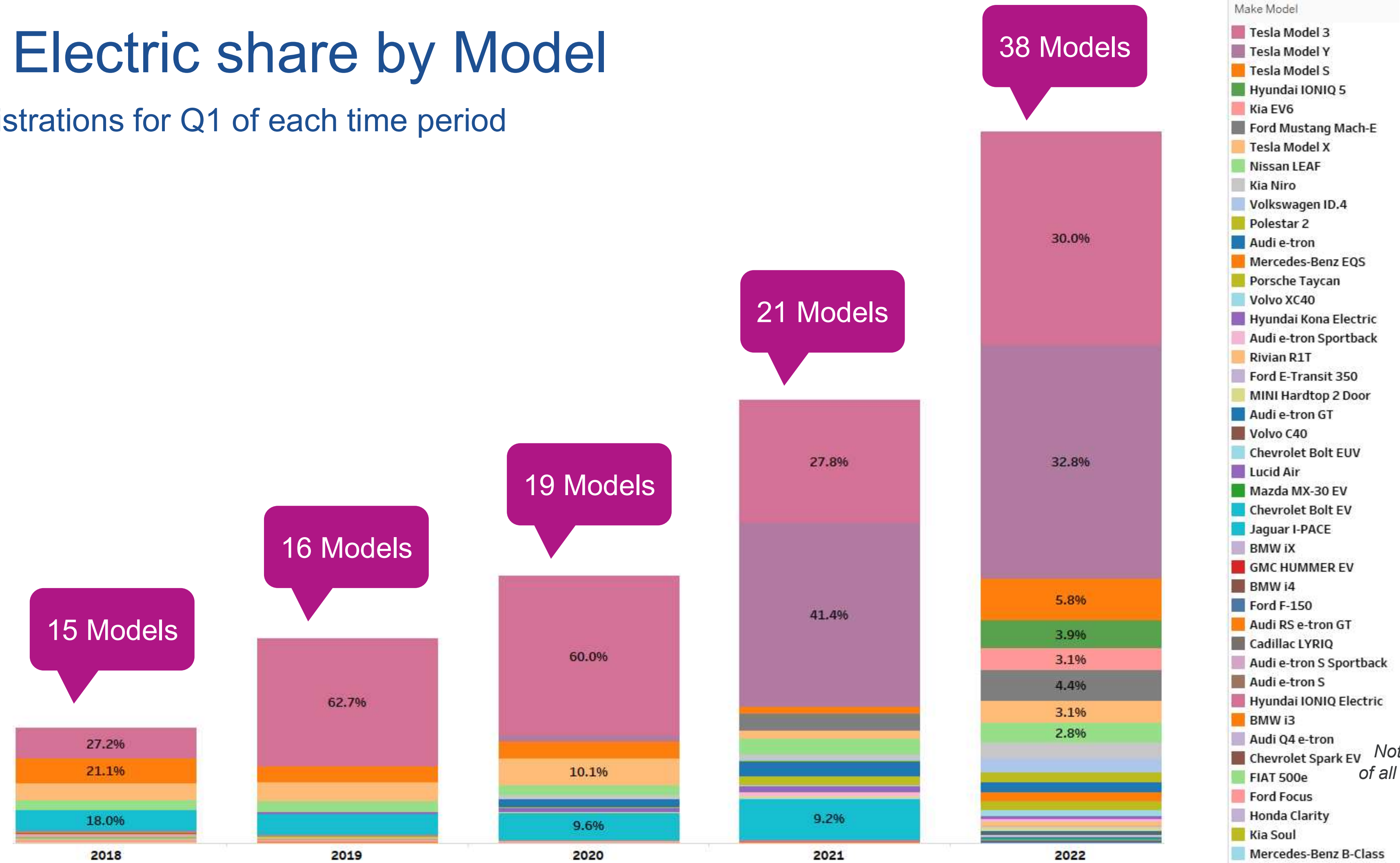
New registrations for Q1 of each time period



Source: Experian Automotive new registrations as of January through March of each year (U.S. light duty vehicles only)

Pure Electric share by Model

New registrations for Q1 of each time period



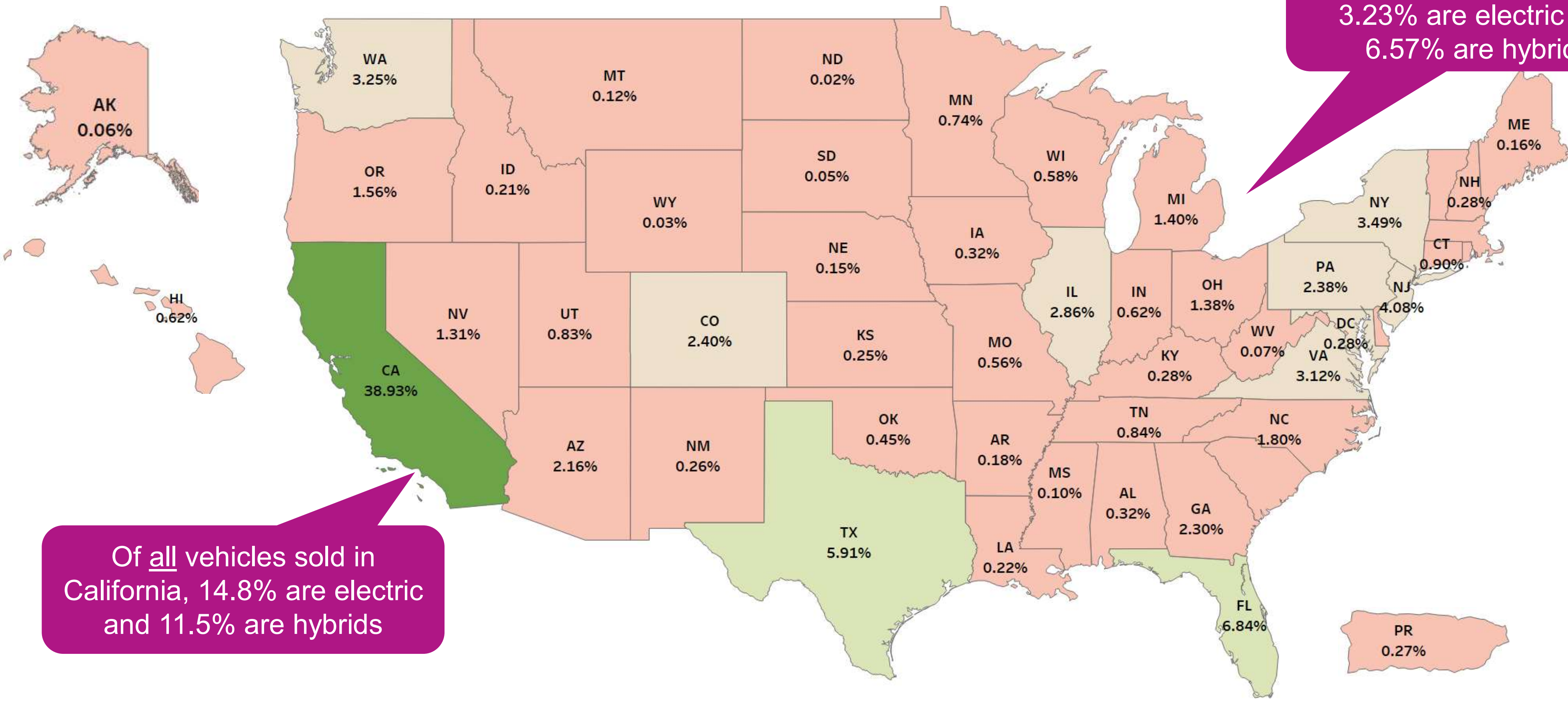
Not a complete list of all electric models

Source: Experian Automotive new registrations as of January through March of each year (U.S. light duty vehicles only)

U.S. New Pure Electric registrations by state share

New registrations January – March 2022

Of all vehicles sold in every state except California, 3.23% are electric and 6.57% are hybrids



Of all vehicles sold in California, 14.8% are electric and 11.5% are hybrids

Source: Experian Automotive New registrations January – March 2022 (light duty registered vehicles)

Q1 2022 **Summary**

Driving the automotive industry forward

- Total light duty VIO is currently at **283.9 million** in the U.S. market. The big news this quarter within VIO is there **now is a 50/50 mix of Domestic vs Import brand names** on U.S. roads.
- The aftermarket **Sweet Spot** continues to grow and is **up 6.5%** over last year and has **increased to over 100M in volume for the first time in 9 years.** The Sweet Spot is expected to grow for the next several years and surpass a previous high of 104M in 2011.
- **Myths have been debunked that link the Average Age to durability, higher service opportunities or longer vehicle ownership.** The Fact was shown when an increase in the weighted Average Age occurs, it signals a future drop of the Sweet Spot volume as less new vehicles are currently entering the market.
- **New registration volumes are down to 14.5M over the last 12 months**, and the wild ride has shaken up the top models, the top generations who buy them and the availability of certain models.
- By manufacturer and by make name, **Toyota is the light duty brand leader of new registrations** for Q1 2022. Toyota has 5 of the top 11 new model registrations which has pushed them to the top spot.
- **Used vehicle registrations are most Domestic brands,** and while the top models are pickups and sedans, the overall favorite vehicle type is a CUV.
- **Electric vehicles (EVs)** in Q1 2022 **continue to increase in registrations volume** with nearly 38% occurring in California. The **number of available EV models has increased to 38** with Tesla dominating the EV market this quarter.

Today's **Presentation**

Q1 2022

Thank You!

Experian Automotive is prepared to meet your needs with an integrated solution statically designed to drive your business forward.