

BUSINESS JET MARKET OUTLOOK \ 2024-2028

NEW AND PRE-OWNED BUSINESS JET TRANSACTION FORECAST

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SO, IS THIS WHAT NORMAL LOOKS LIKE?

Welcome to Global Jet Capital's fourth annual Business Jet Market Outlook. We launched this effort back in 2021, at a time when much of the world was still trying to make sense of the COVID-19 pandemic. Well, the pandemic is now clearly in the rear-view mirror and it's fair to say our industry passed its biggest test since the Great Recession (2008-09) with flying colors.

With that said, issues such as lingering supply chain and labor shortages and the imperative towards carbon neutrality remain significant challenges. But what we do know is that our industry's unique value proposition, including immediate and unscheduled access to travel, security, safety, and most of all productivity, enjoys broader appeal than ever before.

After a considerable post-Covid expansion in flight hours, transaction activity, and aircraft values during 2021 and 2022, 2023 presented us with a natural return to more typical conditions. Today, our industry faces the next five years from a higher, broader, and more stable plateau. We see evidence of that in flight activity, which remains a solid 15 percent higher than it was in 2019. We see it in OEM backlogs, which at \$50 billion are 50 percent greater than they were five years ago. We see it in the charter and fractional fleet, which grew by 16 percent, and 40 percent over this period, respectively. We see it in pre-owned inventory levels, which at 7 percent remain well below the 30-year average of 10 percent. And we see it in the remarkable 45 percent growth in global fleet value since 2019 (this will moderate over time as in-service aircraft depreciate, but much of this value is here to stay).

So, as we look out at an uncertain future, unsure of what "black swan" event lurks around the corner, we can take comfort in the fact that our industry has never been in a better place. And it is from this better place that we will continue to deal with our challenges and continue to grow.

EXECUTIVE SUMMARY

THE GLOBAL JET
CAPITAL BUSINESS JET
MARKET OUTLOOK
SUMMARIZES THE
OUTPUTS OF OUR
PROPRIETARY
TRANSACTION FORECAST
MODEL COVERING
THE PERIOD OF 2024
THROUGH 2028.

It reflects our projection of future activity in the business jet market in both the new and pre-owned segments across different geographies.

The business jet transaction market shrank in 2023 as OEMs continued to deal with supply chain and labor constraints and the pre-owned market continued to normalize from a historically strong 2021. Despite some headwinds in 2024, the business jet market remains resilient, and we forecast steady growth over the next five years.

- Total new and pre-owned business jet transaction unit volume is forecast to increase 5.3 percent in 2024 as OEMs increase production to meet large backlogs and the pre-owned market continues long-term growth trends. Transaction dollar volume should increase at a higher rate of 10.7 percent in 2024 due to an expected increase in new heavy aircraft deliveries.
- After years of strong order intake and deliveries limited by supply chain and labor constraints, backlogs at major
 business jet OEMs are significantly higher than they were prior to COVID-19. As a result, manufacturers are expected to
 increase production over the forecast period to fulfill these orders. New deliveries should increase 9.4 percent in 2024
 and grow at an average annual rate of 3.2 percent over the next five years. Deliveries will likely peak in 2027, followed
 by a slight dip in 2028 as backlogs normalize.
- After a couple of years of declines, pre-owned transactions are expected to return to a more typical growth pattern in 2024. Unit volume should increase 4 percent and dollar volume should increase 2.2 percent in 2024. Average annual growth over the next five years is expected to continue at a rate of 3.8 percent. Dollar volume should grow at an average annual rate of 2.3 percent during that time.
- North America is forecast to continue to be the largest market for both new and pre-owned business jets, making up 76.3 percent of the total market. Europe is also an important market and Latin America will remain a significant market for pre-owned aircraft.

KEY THEMES DRIVING THE FORECAST

Business jet demand, measured in dollar volume, is forecast to grow at an annualized rate of 4.4 percent over the next five years. After years of continuing demand from both new and established users, the business jet market is on a solid footing.

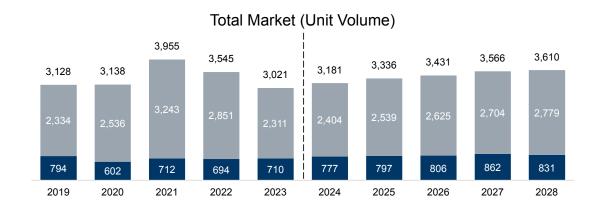
Business jets are primarily business tools and customer demand is closely aligned with overall economic growth. Oxford Economics forecasts global GDP will grow at a year-over-year rate of 2.6 percent in 2024. Despite continued economic uncertainty, growth in 2023 was stronger than expected. Still, the factors that contributed to uncertainty in 2023 remain, including wars in Europe and the Middle East and other geopolitical frictions, persistent inflation, and slow growth in many regions of the world. These factors may negatively impact economic growth over the next few years. They also create downside risks to any forecast, including the forecasts used to build Global Jet Capital's model.

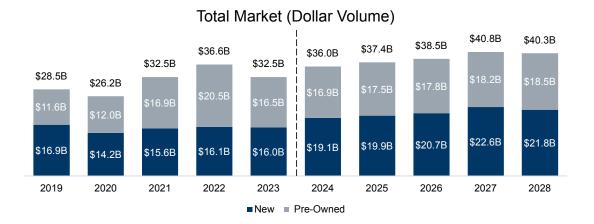
Despite economic uncertainty, the business jet market remains in a strong position. Following early phases of the COVID-19 pandemic, the business jet market experienced an influx of new users. These new users, along with established users, increased demand for business jet flights resulting in total business jet departures increasing 15.1 percent in 2023 compared to 2019. The new users also purchased aircraft and utilized charter and fractional operated aircraft, driving up fleet purchases. While some users returned to commercial airlines as the world reopened, a systemic increase in business jet usage around the world persists.

Heightened demand for business jet flights has resulted in more orders for new aircraft, both from fleets serving customers and from whole owners. When paired with the supply chain and labor constraints at the OEMs, this demand resulted in a 51.3 percent increase in backlogs between 2019 and 2023. Much of the forecast increase in new deliveries over the forecast period will be driven by manufacturers fulfilling these orders. Another factor driving new deliveries will be the certification of new aircraft, particularly in the heavy segment of the market.

After a robust 2021, pre-owned market transactions declined on a year-over-year basis in both 2022 and 2023. Now more in line with historical rates of activity, the pre-owned market is anticipated to grow again in 2024. While the year started off slow, many in the industry report a higher level of activity that will lead to more transactions later in the year. Throughout the next five years, the pre-owned market should steadily rise due to continued economic growth, expanding global wealth, and the usual trade-up patterns that have driven steady growth in this market for 30 years.

TOTAL MARKET OVERVIEW





AFTER EXPERIENCING STRONG GROWTH IN 2021, THE BUSINESS JET MARKET DECLINED IN 2022 AND 2023.

OEM supply chain and labor constraints, along with delays in certification of new aircraft, slowed the increase of new deliveries. Continued market normalization, economic uncertainty that kept some buyers on the sidelines, and inertia between buyers and sellers caused pre-owned transactions to decline over the last two years. Overall, transactions declined 14.8 percent year-over-year in 2023 while transaction dollar volume declined 11.2 percent year-over-year.

Following declines in 2022 and 2023, business jet transactions are expected to increase in 2024. New deliveries are forecast to increase 9.4 percent compared to 2023 as manufacturers are expected to overcome supply chain obstacles and begin delivering new models. Pre-owned transactions are expected to increase 4 percent compared to 2023, as historical trends reemerge. Over the five-year forecast period, a pattern of steady growth is expected to continue. We forecast total transactions will increase at an average annual rate of 3.6 percent, while dollar volume should increase at an annualized rate of 4.4 percent.

NEW MARKET OVERVIEW

Total New Delivery Forecast (Unit Volume)



Total New Delivery Forecast (Dollar Volume)



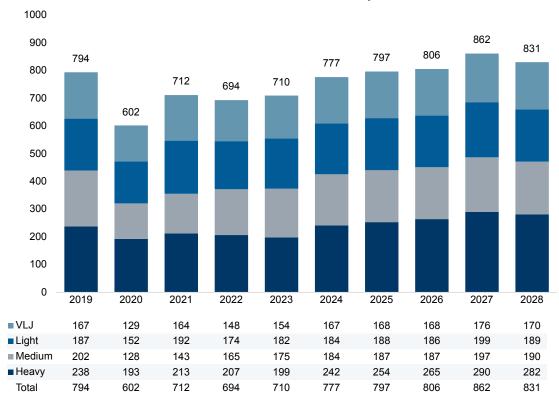
NEW DELIVERIES INCREASED 2.3 PERCENT IN 2023 COMPARED TO 2022. HOWEVER, THESE INCREASES WERE SLOWER THAN EXPECTED AT THE START OF THE YEAR AS MANUFACTURERS DEALT WITH SUPPLY CHAIN AND LABOR CONSTRAINTS THAT PREVENTED THEM FROM INCREASING PRODUCTION AS PLANNED.

With healthy order rates for new aircraft and manufacturers unable to significantly increase production, backlogs have grown. In fact, backlogs for the major OEMs ended 2023 51.3 percent higher than they were at the end of 2019. Factors such as new users entering the market and low pre-owned inventory drove demand during this period. Going forward, demand should be driven by new aircraft models planned to be introduced over the next few years, a return to economic stability, and typical replacement and trade-up patterns.

New deliveries are forecast to increase through 2027 as OEMs work off high backlogs. While supply chain obstacles should not be completely overcome in 2024, new deliveries are forecast to increase 9.4 percent compared to 2023. New delivery dollar volume is expected to increase at an even stronger rate of 19.4 percent with new heavy jet introductions driving a substantial portion of the increase. Overall, the pattern should be a steady increase to meet customer demand.

After rising through 2027, production is forecast to slow in 2028 as backlogs finally normalize. Over the next five years, new deliveries are expected to increase at a 3.2 percent average annual rate, while dollar volume is expected to increase 6.4 percent over the same period. Between 2024 and 2028, new deliveries are forecast to total 4,073 units, valued at \$104.1 billion.

New Business Jet Production by Size



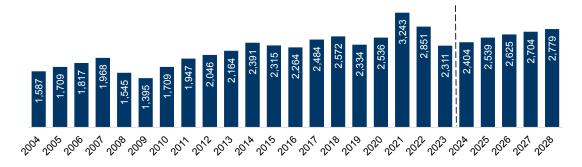
WE EXPECT DELIVERIES OF ALL SIZE CLASSES TO INCREASE DURING THE FORECAST PERIOD, DEMONSTRATING A GENERAL INCREASE IN DEMAND FOR BUSINESS AVIATION.

There are a wide range of business jet types that appeal to users with different missions and budgets, and that dynamic should continue over the next five years.

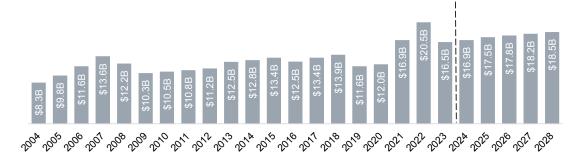
Still, heavy jets should increase at a faster rate than other categories. Heavy jet deliveries are forecast to increase at a CAGR of 7.2 percent between 2023 and 2028. The range and passenger capacity of these aircraft make them increasingly popular. Rebounding international travel will only enhance the appeal of these longer-range aircraft, while the introduction of new heavy jets during the forecast period should further increase the appeal of this category. Other categories of jets should also continue to increase, but at slower rates than heavy jets. As a result, heavy jets are expected to make up 32.7 percent of new deliveries during the forecast period, increasing from 29.9 percent during the previous five years.

PRE-OWNED MARKET OVERVIEW

Total Pre-Owned Transaction Forecast (Unit Volume)



Total Pre-Owned Transaction Forecast (Dollar Volume)



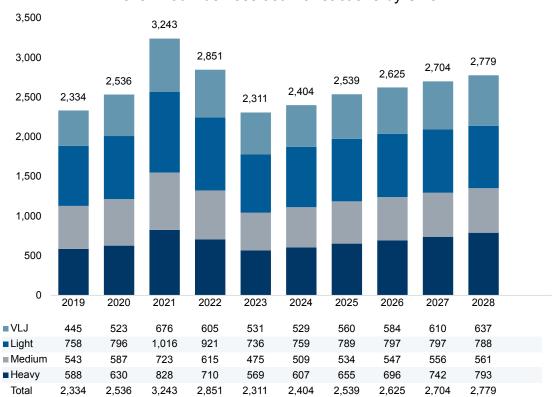
FOLLOWING A VERY STRONG 2021, THE NUMBER OF PRE-OWNED BUSINESS JET TRANSACTIONS DECLINED IN 2022 AND 2023.

In 2023, many sellers held out for high prices seen in the immediate post-COVID period while many buyers waited for prices to drop, creating an inertia in the marketplace. Continued low inventory and economic uncertainty further contributed to a slower market. As a result, transactions declined 18.9 percent while transaction dollar volume declined 19.5 percent in 2023 compared to 2022.

In 2024, pre-owned transactions are expected to restart the historical trend of gradual growth rates. While economic uncertainty remains, economists are increasingly optimistic about future growth. In addition, high volume in late 2023 further indicates a loosening market while high activity in early 2024 should translate into more transactions later in the year. As a result, transactions are forecast to increase 4 percent while transaction dollar volume is expected to increase 2.2 percent year-over-year.

Over the long term, we expect the pre-owned market to continue the rising trend that it has experienced over the past two decades, driven by continued demand and a growing user base. Over the next five years, we forecast there will be 13,050 pre-owned transactions valued at \$88.9 billion. During that time, transactions are expected to grow at an annualized rate of 3.8 percent. Dollar volume should grow at a slower 2.3 percent annualized rate due to normalizing aircraft values over the next five years.

Pre-Owned Business Jet Transactions by Size

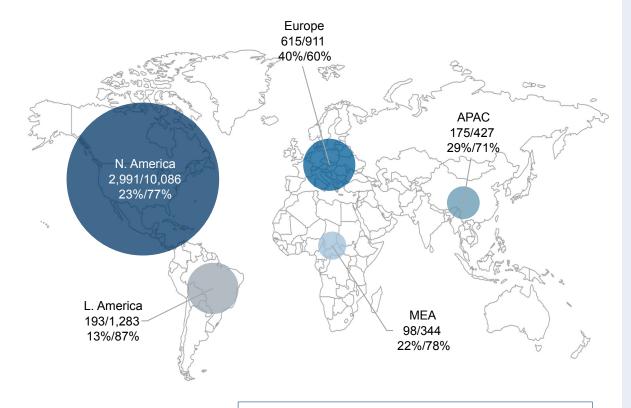


HEAVY JETS HAVE GROWN IN POPULARITY IN THE PRE-OWNED MARKET, DRIVEN BY THEIR LONG RANGE AND HIGH PASSENGER CAPACITY. THESE ARE THE SAME FACTORS THAT ARE DRIVING AN INCREASE IN THE NEW DELIVERY MARKET.

That trend is forecast to continue over the next five years, with heavy jets increasing from 24.6 percent of the pre-owned market in 2023 to 28.5 percent by 2028. During that time, we expect heavy jets will grow at an annualized rate of 6.9 percent compared to 3.8 percent for the wider pre-owned market.

Transactions involving other jets are also expected to increase over the next five years. Since all other classes of jets will increase slower than heavy jets, however, the relative market share of these other classes is expected to decline. By 2028, heavy jets and light jets should be the most popular categories. The two categories are forecast to represent 56.9 percent of the market, with medium jets and VLJs accounting for the remainder.

GLOBAL DISTRIBUTION OF ALL NEW AND PRE-OWNED AIRCRAFT TRANSACTIONS



Top figures indicate new transactions/pre-owned transactions. Bottom figures indicate new ratio/pre-owned ratio.

NORTH AMERICA IS FORECAST TO ACCOUNT FOR 76.3 PERCENT OF THE GLOBAL BUSINESS JET MARKET OVER THE NEXT FIVE YEARS, MAKING IT THE LARGEST REGION FOR BUSINESS JETS IN THE WORLD.

North America has the largest installed base of business jets, strong market maturity, and supporting infrastructure that should drive continued strength in the market.

The North American market is also supported by wide acceptance of pre-owned business jets. Altogether, 77.3 percent of all pre-owned transactions are forecast to take place in North America between 2024 and 2028, with transactions involving pre-owned aircraft accounting for 77.1 percent of all transactions in North America.

While North America should remain the largest market over the next five years, other regions of the world are expected to continue to drive sales of business jets as well. Europe is projected to be the second largest market between 2024 and 2028, with 9 percent of all transactions. Latin America is forecast to be an important market for pre-owned jets, accounting for 9.8 percent of all pre-owned transactions. The remaining transactions are expected to be split between the Middle East and Africa region (MEA) and the Asia Pacific region (APAC).

GLOBAL JET CAPITAL UTILIZES A TOP-DOWN LINEAR REGRESSION MODEL, USING ECONOMIC AND INDUSTRY VARIABLES AS INPUTS TO FORECAST THE BUSINESS JET MARKET.

Model outputs are balanced against Global Jet Capital's in-depth market knowledge and insights to arrive at a detailed five-year forecast covering both new and pre-owned business jet transactions.

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Economic data and forecasts come from Oxford Economics and are based on its analysis of current and expected future market conditions. Forecasts are based on analysis of relevant data at the time they are made. In a dynamic market, data may change rapidly, and unforeseen events may lead to differences between forecasts and actual future events. Global Jet Capital does not guarantee the accuracy or likelihood of these forecasts and these projections should not be construed as advice for any business decisions.

As with any forecast, there are many risks that may result in different outcomes than expected. Upside risks include a reduction in geopolitical conflicts, faster-than-expected economic growth, and a resolution of supply chain and labor issues. Downside risks include a worsening of the geopolitical environment, persistent inflation, economic recession, continued low supply due to low preowned inventory and OEM supply chain difficulties, and stricter regulations around environmental issues.

In 2023, Global Jet Capital forecast that the new market would be worth \$18.5 billion, and that the pre-owned market would be worth \$17.9 billion. By the end of the year, the new market was actually worth \$16 billion (13.6% lower than the forecast), and the pre-owned market totaled \$16.3 billion in transaction value (8.9% lower than the forecast). New transactions ended the year lower than forecast due to supply chain disruptions and delays in new aircraft certification that prevented manufacturers from delivering all planned aircraft. The pre-owned market declined faster than Global Jet Capital's model anticipated. While we expected economic uncertainty and continued normalization following a robust period of sales, the model did not take into account the inertia between buyers and sellers that delayed many sales.

TOTAL BUSINESS JET TRANSACTIONS DECLINED IN 2023 VERSUS 2022.

New deliveries were held back by supply chain and labor constraints at major OEMs, while pre-owned transactions declined due to continued normalization of market dynamics following a robust 2021, economic uncertainty, and inertia between buyers and sellers. Despite a 14.8 percent decline in activity in 2023, there were over 3,000 total transactions, in line with pre-COVID levels.

The new aircraft market was lower than forecast in 2023 as manufacturers continued to struggle with delays in their supply chains and a need for additional workers. Holdups in certification of new aircraft also delayed deliveries. The pre-owned market was also lower than forecast as supply and demand dynamics found a new equilibrium.

Following two years of decline, the business jet market is expected to grow again in 2024. New deliveries should increase to serve the large backlogs OEMs have accumulated over the past two years, while the pre-owned market is now back to more normal levels and should restart a long-term trend of steady growth. Overall, transactions are expected to increase 5.3 percent in 2024 and dollar volume should increase 10.7 percent. Over the next five years, transactions are expected to increase at an average annual rate of 3.6 percent, while dollar volume should increase at a rate of 4.4 percent over the same period.

Between 2024 and 2028, North America should remain the dominant geographic market for business jets, with a strong lead in new deliveries and pre-owned transactions. Europe is also expected to be an important market for business jets, while Latin America is expected to remain a strong market for pre-owned jets. APAC and the MEA should also be important centers of business jet transactions.

SOURCES

FOR PURPOSES OF THIS STUDY, GLOBAL JET CAPITAL HAS RELIED ON VARIOUS SOURCES, WHICH ARE AS FOLLOWS:

Business Jet Transaction Data: JetNet and Global Jet Capital Analysis

Economic Data: Oxford Economics and Global Jet Capital Analysis

Business Jet Flight Data: WINGX and Global Jet Capital Analysis

Global Distribution Map: <u>freeusandworldmaps.com</u>

OEM Data: Company Financial Reports, Jefferies Equity Research, and Earnings calls

Aircraft Valuation Data: Aircraft Bluebook and Global Jet Capital Analysis



globaljetcapital.com