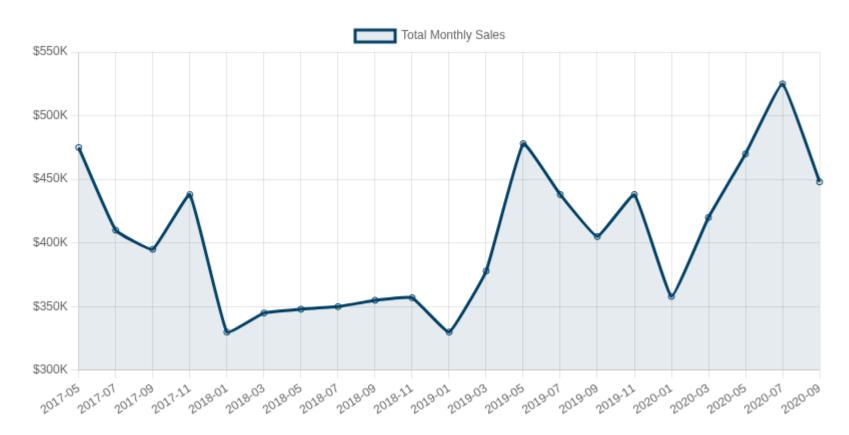
# **Montgomery County's Data Analysis**

An interactive analysis of Montgomery County's sales data reveals a story of volatility, dominance, and a critical mystery from 2018.

### **Finding 1: A Volatile Ride**

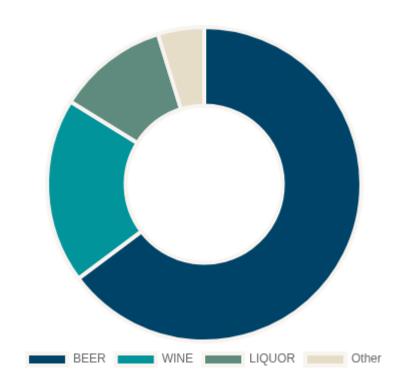
An initial review of total monthly sales reveals a business characterized by high volatility, not smooth seasonality. This suggests revenue is driven by irregular events or inventory cycles. The most significant event is a severe and prolonged sales slump throughout 2018.



### **Finding 2: The Dominance of Beer**

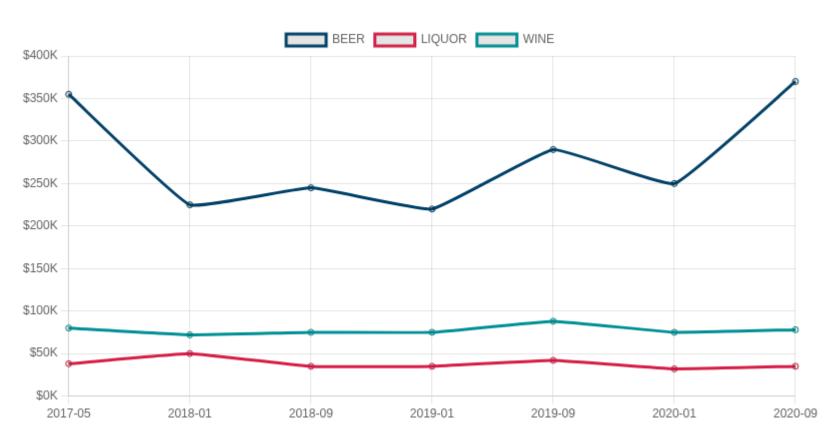
An analysis of sales by product category shows that revenue is overwhelmingly concentrated in alcoholic beverages. **Beer** is the single most dominant category, generating more than three times the revenue of the next highest category, Wine.

3x+
More Revenue from Beer vs. Wine



### **Finding 3: Beer's Performance Dictates Business Health**

By plotting the sales of the top three categories over time, it becomes clear that the overall business performance is a direct reflection of beer sales. The volatility, the 2018 slump, and the 2020 peak are all driven almost exclusively by the performance of the beer category.



# Finding 4: The 2018 Mystery Uncovered

The 2018 slump was not caused by a single supplier failure. It was a catastrophic, across-the-board sales collapse from every major beer supplier, with an average revenue drop of nearly 80%. This proves the slump was a **systemic event** affecting the entire beer operation.

2017 Sales	2018 Sales	% Decrease
\$501,610	\$101,611	~80%
\$479,216	\$106,634	~78%
\$456,780	\$95,939	~79%
	\$501,610 \$479,216	\$501,610 \$101,611 \$479,216 \$106,634

### **Strategic Recommendations**



### Investigate the 2018 Failure

Conduct a high-priority internal review to determine the root cause of the 2018 beer sales collapse to prevent its recurrence.



# **Diversify Supplier Relationships**

While strengthening ties with top partners, actively increase business with second-tier suppliers to mitigate concentration risk.



### **Develop Stable Categories**

Create a long-term strategy to grow the predictable Wine and Liquor categories to diversify revenue and reduce volatility.