

The Goal of this project was to better understand the spending trends, key technologies, programs, vendors, and any other elements I found of importance. The scope of the dataset was from 2016-2021 collection of data focused on the Ground Vehicles Programs. It was requested to focus on data for Abrams Tanks(M1A1), Bradley Fighting Vehicle(M2A1), and the Stryker Armored Personnel Carrier(M1130). The Dataset was over 56000 rows and 14 columns. The primary columns were Vendors, Title(of Contracts), Contracting Office/Agency, Awarded Amount, Fiscal Year, and the Product and Services Code(PSC) name.

Here is my Power BI Dashboard alongside my Python code. My PowerBI Dashboard will allow you to use the slicers to take the larger view of the data down to the more specific view of the Abrams Tanks(M1A1), Bradley Fighting Vehicle(M2A1), and the Stryker Armored Personnel Carrier(M1130). You can also get a visual idea of the main vendors, Contracting Agency and Larger Categories. This as well as the year to year data. Python was used to explore the data and get an idea of what the data will say. There are many dataframes regarding specific questions of the data. Example 1 and example 2.

My Excel Dashboard is another option to understand the data. Primarily I used excel to clean the data and get it to a useable state for Python and Power BI. Here is a link if you want to explore more.

My Primary Observations were the amount of spending for ground vehicles as well as the amount of rows dedicated to medical needs. Although medical was awarded around 663 million dollars, it accounted for nearly 77% of the rows. This is compared to ground vehicles which had almost 30 times more awarded to it at 18.9 Billion Dollars, yet only accounted for 3420 rows or 6% of the rows. I also noticed Stryker seemed to be the parent company of a lot vendors and accounted for 64% of the rows confirmed. The targeting of the data was to look into these specific programs, Abrams Tanks(M1A1), Bradley Fighting Vehicle(M2A1), and the Stryker Armored Personnel Carrier(M1130). Abrams Tanks(M1A1) were involved with over 2 billion in contracts in just 335 columns. The Bradley Fighting Vehicles come just under 1 billion with nearly the same amount of row 336. Lastly the Stryker Armored Personnel Carrier(M1130) came in at a very unimpressive 225k and had only 3 rows involved with.

The Main Vendors were General Dynamics with 1.6 Billion and of 1.9 Billion in Abrams Tanks. Bae Systems had about 650 million of the almost 1 Billion dollars for Bradley Fighting Vehicle. Most of the Investment for Abrams was during 2018. Bradley Fighting Vehicle peaked in 2018 and slowly declined into 2021. The Stryker Armored Personnel Carrier was so minimally invested in. It is shocking and something to pay attention too.