Sample Calculation of Revenue from an Amazon Data Center

Based on Payne/FRA Investment Estimates

Charley Payne is a lawyer who represented Amazon to the King George Board of Supervisors.

FRA is the Fredericksburg Regional Alliance:

Fredericksburg City, Caroline County, King George County, Spotsylvania County, & Stafford County

Although Payne represented Amazon, he used FRA investment estimates to calculate expected revenue to King George for various sizes of data center.

A standard building block is a single shell of 250,000 square feet. According to Mangum Economics and FRA, a 250,000 SF data center would have investment estimates of

Real Property Investment of $ 330 million, and
Business Personal Property Investment of $ 670 million

Real Property is land and buildings. Typically, the buildings are a much larger investment than the land (according to FRA).

Business Personal Property (BPP) is the computers, servers, and network equipment that go into the buildings.

The Real Property is taxed at $ 0.68 per $ 100 of value.

The BPP equipment is depreciated each year from the original cost using a factor that lowers the amount of the assessed value that is taxed.

	BPP taxed at
Year 1	50 %
Year 2	35 %
Year 3	20 %
Year 4	10 %
Year 5	5 %

After Year 5, the BPP equipment is taxed each subsequent year at 5 % until the equipment is replaced by new equipment. The new equipment at that point is taxed at 50 % and starts the cycle again.

The depreciated BPP value is taxed at $ 1.25 per 100

A 5 year revenue cycle looks like:

| Revenue Forecast for 250,000 SF Data Center					
Based on Mr. Payne's Estimates					
	Year 1	Year 2	Year 3	Year 4	Year 5
Real Property (millions)	330	330	330	330	330
Real Prop tax at 0.68 per 100	2,244,000	2,244,000	2,244,000	2,244,000	2,244,000
BPP (millions)	670	670	670	670	670
Assessed %	50	35	20	10	5
Depreciated Value of BPP (millions)	335.0	234.5	134.0	67.0	33.5
BPP Tax at $1.25/100	4,187,500	2,931,250	1,675,000	837,500	418,750
Total Revenue	6,431,500	5,175,250	3,919,000	3,081,500	2,662,750
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**

Total yearly revenue is the sum of the Real Property tax and the BPP tax.

The yearly revenue for a single shell varies from about $ 6.4 mil (year one) to about $ 2.7 mil (year five).

Mr Payne assumed every six years the BPP equipment was replaced with new equipment (tech refresh).

So then the new BPP is assessed at 50%, and the cycle starts over again.

The repetitive five-year cycle looks like:

Payne/FRA Single Shell Revenue per Year
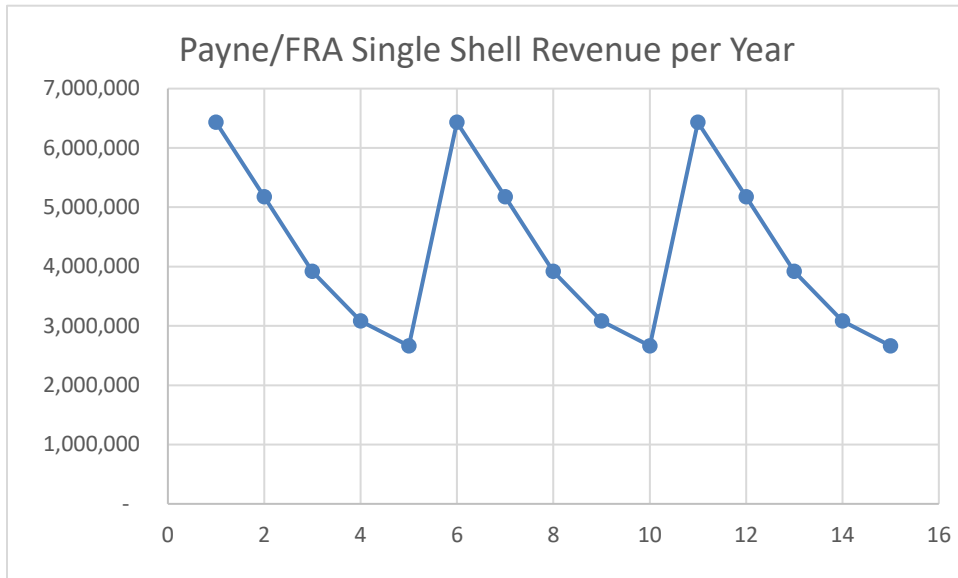
The vertical axis is in dollars.

The horizontal axis in years (1 through 15)

This cycle will continue on and on, until the Real Property is eventually reassessed, or the tech refresh strategy for the BPP changes.

Every five years, the average yearly revenue is $ 4.25 mil.

Mr Payne described a possible maximum build to 7.25 mil SF data center total for King George.

7.25 mil / 250,000 =   29 shells at 250,000 SF each

This is described as full build out.

Revenue at full build out is 29 x 4.25 mil = **$ 123 mil revenue per year**

Unfortunately, it appears **very unlikely** KG will see full build out by 2040.

There are a variety of estimates for the actual expected revenue by 2040. One set of assumptions would estimate about 10 to 12 million dollars per year.

But no one actually knows. The Performance Agreement does not include any solid commitment by Amazon to build any square footage of data center in King George.

There are some indications that Amazon might build 1 mil SF to 1.5 mil SF of data center by 2040.

The Performance Agreement is a document without Amazon commitment.