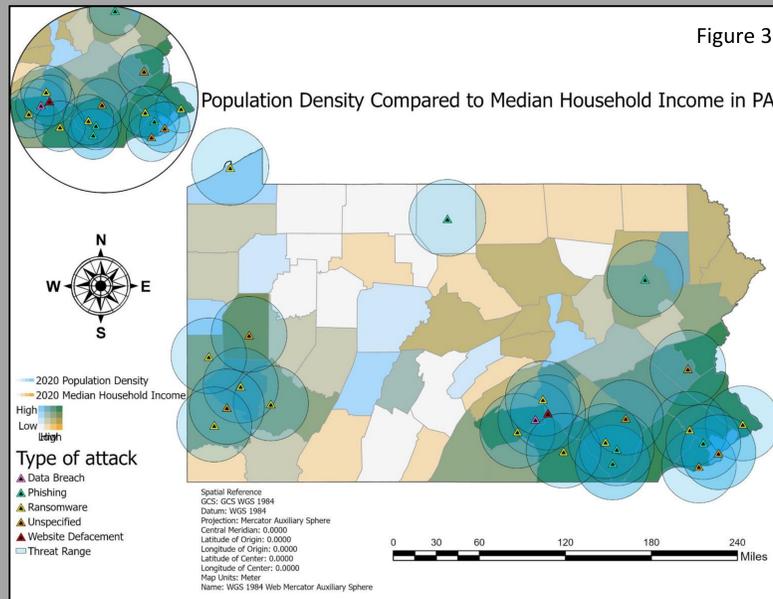# The Safest Place to Live in a Cyber World

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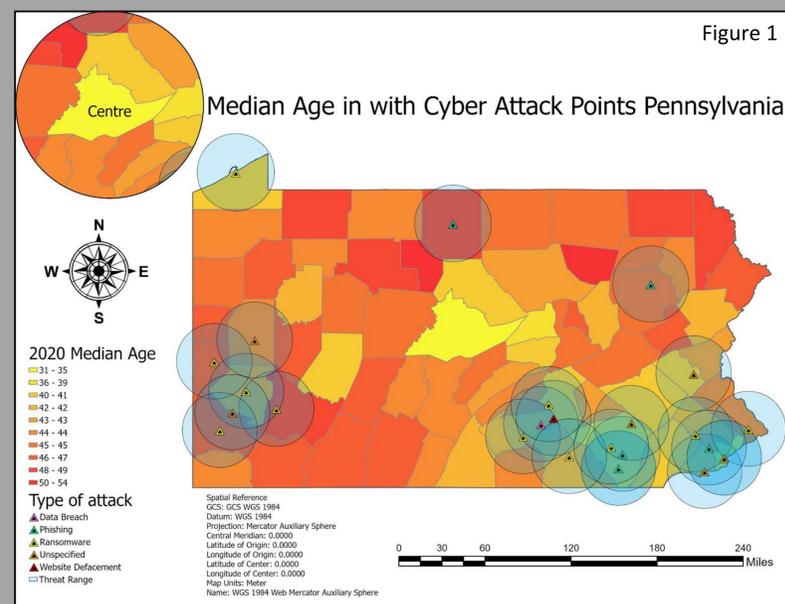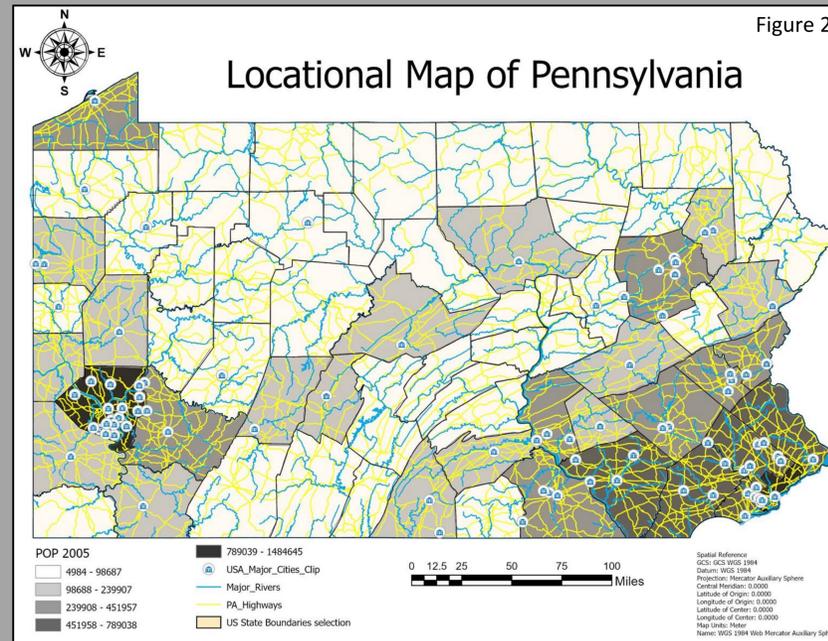## York College of Pennsylvania

Introduction
The internet and electronics are essential in today's world. So, when people attack the security of these things it creates panic and issues within major components in society, like emergency services, healthcare, and state and local government. This assessment of cyber threats seeks to determine what is the safest place to live in a cyber world?

Figure 3

Population Density Compared to Median Household Income in PA

2020 Population Density
2020 Median Household Income
High
Low

Type of attack
▲ Data Breach
▲ Phishing
▲ Ransomware
▲ Unspecified
▲ Website Defacement
☐ Threat Range

Methodology and Data
The clipping tool was used to narrow the types of hacks and county borders to inside of Pennsylvania. Then using my data on the median age by county, I used graduated colors with 10 classes to see where the youngest and oldest counties are in PA. Around each attack I gave it a very generous buffer of which it might have affected. Then for my second map I used bivariate colors to cross reference population density and median household income. For the locational map I used the clipping tool to retrieve highways, cities, and rivers that were located in Pennsylvania. Finally, I used Select By Attribute to create attribute tables just for Pennsylvania.

Figure 2

Locational Map of Pennsylvania

POP 2005
☐ 4984 - 98687
☐ 98688 - 239907
☐ 239908 - 451957
☐ 451958 - 789038
■ 789039 - 1484645

USA_Major_Cities_Clip
— Major_Rivers
— PA_Highways
☐ US State Boundaries selection

0 12.5 25 50 75 100 Miles

Figure 1

Median Age in with Cyber Attack Points Pennsylvania

Centre

2020 Median Age
☐ 31 - 35
☐ 36 - 39
☐ 40 - 41
☐ 42 - 43
☐ 44 - 44
☐ 45 - 45
☐ 46 - 47
☐ 48 - 49
☐ 50 - 54

Type of attack
▲ Data Breach
▲ Phishing
▲ Ransomware
▲ Unspecified
▲ Website Defacement
☐ Threat Range

0 30 60 120 180 240 Miles

Work Cited
- QGIS Development Team, 2021. QGIS Geographic Information System. Open Source Geospatial Foundation Project. http://qgis.osgeo.org
- SecuLore Solutions. "Pennsylvania - Cyber-Attack Archive." SecuLore, 3 May 2021, www.seculore.com/resources/cyber-attack-archive/pennsylvania.
- Stebbins, Samuel. "Youngest County in Every State." 247 Wall St, 24/7 Wall St., 17 Feb. 2020, 247wallst.com/special-report/2019/07/09/youngest-county-in-every-state-3/9/.

Study Area
The area in which I conducted my study was in the state of Pennsylvania. Pennsylvania has a population of almost 19 million people, main highways include I-76 and I-80, and main rivers include Susquehanna and the Delaware river. The capital is Harrisburg and other big cities are Philadelphia, Pittsburgh and Allentown.

Analysis & Discussion
In figure 1 it shows the median age per county, with yellow being young and red being old. Stated by an article by 24/7 Wall St. and also found in my research, Centre County has the youngest population, and no cyber attacks. Figure 3 shows the highs and lows of both population density and median household income. Counties like Chester and Philadelphia are high in both but have a lot of cyber attacks, so center counties like Centre again would be the safest. Finally, Figure 2 shows the population as of 2005 in Pennsylvania by county.

Conclusion & Future Direction
By comparing both figure 1 and 3 you can see that although counties in the Southeast have the most population and wealth, they are also stricken by a lot of cyber attacks. From the data it can be seen that Centre County is the safest place to live in Pennsylvania in a cyber world.