**ISM6155 Project Proposal;**

**St. Petersburg Community Property Value Analysis**

**Group 3**

**Scope:**

The scope of this project includes creating a visual project plan, a project proposal, a user guide, and a video presentation on the property value growth rates of St. Petersburg neighborhoods. We will be using data described in the next section to investigate the overall property-type value growth rates as well as increasingly granular subsets including residential properties, single-family residential, single-family residential which are not homestead, and finally, single-family residential and missing middle properties. With this information, we will develop visualizations and report our findings on the impact of homesteads on the property value growth rates in a video presentation.

**Data:**

The datasets for the years 2015 and 2022, offer a comprehensive insight into the South St. Petersburg Community Redevelopment Area. Each entry is uniquely identified by a Property Identification Number (PIN) and includes attributes such as the Assessment Year, Property Use, Homestead status, Land Square Footage, Acres, Neighborhood designation, Total Gross Square Footage, Just Value, Assessed Value for School and Non-School Districts, Taxable Value for School and Non-School Districts, Land Value, and Physical Address details. Additionally, the datasets provide geographic coordinates (Longitude and Latitude) for precise spatial analysis. The focus of our examination centers on "Taxable Value Non-School District" – in both datasets, serving as the primary variable for property value analysis. An example from the data is a Single-Family Home in the Twin Brooks neighborhood. In seven years, the value escalated from $14,156 to $27,587, a growth rate of 94.88%, reflecting positive trends in property values and potential economic development in the area.

**Methodology:**

We are planning to use statistical software such as R, and Python to perform data analysis, calculate growth rates, and compute mean, and median values. We want to employ tools like Tableau and Matplotlib in Python to visualize property value trends and growth rates across neighborhoods.

**Anticipated Business Outcomes:**

With an aim to support the City of St. Petersburg’s goals, this project anticipates a key business outcome, that is the Impact of homestead on property value growth rates which helps in altering the strategy. However, the project also has a potential to find the Results of CRA in terms of growth which can determine its performance, Captivating Investors with growth trends, Picturize Sustainability, determine areas which require revitalization, new collaborations promoting economic growth of South St. Petersburg Community Redevelopment Area.