**Analyzing Factors Influencing Complaint Types in Seattle**

Name

Date

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Every year, the Seattle Department of Construction and Inspections (SDCI) gets thousands of complaints regarding construction, abandoned structures, and land use. These complaints are classified into distinct sorts, which are referred to as RecordTypeDesc. This study will investigate how location, OpenDate, Description, Demographic, and property-related variables effect RecordTypeDesc. This study will assist local officials, stakeholders, and policymakers in making informed decisions and successfully allocating resources.

**Objectives**

1. Recognize patterns and trends in complaint type distribution.
2. Investigate the association between different complaint categories and variables such as location, time, and property-related aspects.
3. Determine whether there are any links between different sorts of complaints and specific circumstances.

**Methodology**

The SDCI Open Data Portal will be used to obtain the data for this project. Before being evaluated, the data will be cleansed and pre-processed. The data will be analyzed using the statistical methods listed below:

a) ***Exploratory Data Analysis (EDA)***

Visualization of complaint type distribution.

Analysis of temporal patterns.

b) ***Statistical Analysis***

Hypothesis testing to identify factors significantly associated with complaint types.

Regression analysis to assess the strength of these associations.

c) ***Geospatial Analysis***

Mapping complaint types to geographic locations.