The personal economic growth corresponds to commuting time

About

This dataset covers census tracts within King County, Washington. The ACS estimates for these tracts are on a 5-year period from 2010 to 2021. It includes data on total income per person and commuting times to work for each area. Tracts have been categorized as part of the City of Seattle and have been assigned to neighborhood groups known as "Community Reporting Areas."

Data Creation Range: 2010 - 2021

Motivation

The primary purpose behind creating this dataset was due to a research group from the University of Washington's INFO201 course, aiming to investigate the potential correlation between per capita income and commuting times within specific regions.

Composition

This dataset contains various attributes, and for those attributes named numerically, the author will provide specific explanations later on. The most crucial instances in this paper are "Trends_in_the_economy" and "Economic_growth". If a specific area is detected to have experienced economic growth from 2010 to 2021, "Trends_in_the_economy" will display the actual data, and "Economic_growth" will change to "positive" and vice versa. *Trends_in_the_economy will be NA if there is no growth.

Collection

This dataset is provided by the data.gov website and consolidates datasets sampled in Seattle by the American Community Survey.

Preprocessing

This dataset merges two datasets provided by data.gov based on common variables such as "GEOID," "NAME," "JURISDICTION," "CRA_NO," "CRA_GRP," "GEN_ALIAS," "DETL_NAMES," and "TRACT_LABEL." They were combined using the full_join method.

Uses

The dataset has not been utilized for further tasks yet. Our intention is to use this dataset to uncover the potential correlation between commuting times and economic growth in the Seattle area and its surroundings within King County, Washington. It might also serve other purposes such as investigating work patterns and commute durations, as well as the urban development pace from 2010 to 2021 in Seattle and its adjacent regions. Please note that the dataset spans a considerable timeframe, so consideration should be given to geographical locations, commuting patterns, and factors like economic inflation when utilizing the dataset.

Explanation of Attributes

GEOID = Geography ID Number

NAME = Tract Name

B01001_001E = Total Population

B19313_001E = Aggregate income in the past 12 months (in inflation-adjusted dollars)

B19301_001E = Per capita income in the past 12 months (in inflation-adjusted dollars)

CRA_NO = Community Reporting Area ID

CRA_GRP = Community Reporting Area Group

GEN_ALIAS = Community Reporting Area Name

DETL_NAMES = Community Reporting Area Neighborhoods

B08303_001E = Workers 16 years and over who did not work from home

B08303_002E = Less than 5 minutes commute

B08303_003E = 5 to 9 minutes commute

B08303_004E = 10 to 14 minutes commute

B08303_005E = 15 to 19 minutes commute

B08303_006E = 20 to 24 minutes commute

B08303_007E = 25 to 29 minutes commute

B08303_008E = 30 to 34 minutes commute

B08303_009E = 35 to 39 minutes commute

B08303_010E = 40 to 44 minutes commute

B08303_011E = 45 to 59 minutes commute

B08303_012E = 60 to 89 minutes commute

B08303_013E = 90 or more minutes commute

Trends_in_the_economy = Change in per capita income

Economic_growth = Is economic growth true or false