Smart Cities: Worth it or not?

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Overview

Globally, people are migrating to urban communities. Predictably, managing cities and the expectations of their residents is growing in complexity. One concept that may prove helpful is Smart City.

"The smart city concept integrates information and communication technology ('ICT'), and various physical devices connected to the Internet of things ('IoT') network to optimize the efficiency of city operations and services and connect to citizens." Smart city – Wikipedia.

Within the US this concept is controversial. Some view it as a government intrusion into their privacy. Others see it as a way to harness technology to enhance their prosperity.

This project seeks to answer two questions. Does the deployment of "Smart City Concept" technologies and policies create a better environment for people living in major US cities as of 2023? If so, what features of the concept create the greatest impact for the least cost (to include privacy)?

Goals

1. **Confirm or deny that US cities investing in Smart City technologies are improving using common metrics.**
2. **Visually illustrate what areas of urban planning are benefiting most from investment in Smart City features; environment, infrastructure, government, society, education, quality of life, mobility, and economy.**
3. **Identify best practices.**

Specifications

This project will examine the declared US Smart Cities of Austin, Boulder, Boston, Charlotte, Chicago, Dallas, Denver, Pittsburgh, Los Angeles, New York, Philadelphia, Phoenix, San Francisco, San Jose, Seattle, Washington, DC against other major US Cities. Where possible, government or institutional metrics will be used to answer success criteria. Key constraints to this project include: pliability of a Smart City definition and availability of city investment data. Data sources required include Smart City features, US city investment in these

features, measurements of US city progress or decline, measurements of US city population confidence and US city rankings.

Key data sources (so far)

1. uaScoresDataFrame.csv
   City Quality of Life Dataset | Kaggle
2. Smart_City_index_headers.csv
   https://data.world/atbventures/smart-cities/file/Smart_City_index.csv
3. SmartCityIndex-2023-V8.pdf
   Smart City Observatory - IMD business school for management and leadership courses