Motivations:

The motivation for this study arises from the need to address the challenges and opportunities associated with the rapid growth and changing demographics of Lisbon's administrative area. The current administrative boundaries, established by the Portuguese Law nr. 56 of November 8th, 2012, were created in response to a growing population and a need for more decentralized governance. However, as Lisbon's population continues to diversify and urbanize, the current administrative framework may no longer be adequate to meet the needs of the city's residents. As such, there is a pressing need for a comprehensive and data-driven redistricting plan that can adapt to changing circumstances, account for the city's diverse needs, and ensure equitable representation for all communities.

Moreover, the proposed redistricting plan has the potential to address longstanding issues related to urban planning, such as access to public services, political representation, and community cohesion. By utilizing advanced data analysis techniques and engaging with key stakeholders, this study aims to develop a redistricting plan that reflects the evolving needs and priorities of Lisbon's residents. Ultimately, this research can serve as a model for other urban centers facing similar challenges related to demographic shifts, urbanization, and administrative restructuring, thereby contributing to a more equitable, functional, and responsive urban governance framework.