

BPDA POSITION DESCRIPTION

TITLE: SENIOR RESEARCH ASSOCIATE – DATA MANAGER / ECONOMIST

GRADE: J

STATUS: Exempt

DEPARTMENT/DIVISION: RESEARCH

BPDA OVERVIEW

The Boston Planning & Development Agency (BPDA) is the planning and economic development agency for the City of Boston. The BPDA plays a far-reaching role in shaping the City. We are a self-sustaining agency and our love for Boston inspires us to make our City an even better place to live, work, and connect. The Boston Planning and Development Agency (BPDA) is committed to attracting and retaining a diverse staff with diverse experiences while continuing to work to build and sustain an equitable and inclusive work environment, where cultural diversity is celebrated and valued. We believe every member on our team enriches our agency and allows us to see a broad range of ways to understand and engage with our city, identify challenges, and discover, design, and deliver solutions.

The BPDA Research Division strives to understand the current environment of the city to produce quality research and targeted information that will inform and benefit the residents and businesses of Boston. The Research division compiles and analyzes current, historical, and comparative data on the city of Boston. The department conducts research on Boston's economy, population, and commercial markets for all departments of the BPDA, the City of Boston, and related organizations.

SENIOR RESEARCH ASSOCIATE – DATA MANAGER POSITION SUMMARY

Under the direction of the Director of Research, create, manage, and execute major research projects on Boston's population, economy, and government policies. Prepare research reports, maintain databases and perform statistical analysis.

GENERAL RESPONSIBILITIES

include but are not limited to the following:

- Plan, design, and develop methodology of research studies on Boston's economy and population, utilizing core knowledge of economic principles.
- Manage, execute and coordinate research projects, including survey research studies.
- Prepare memoranda, policy documents and research reports that are written clearly and precisely.
- Create presentations and data visualizations that encapsulate key research findings in an engaging manner for non-technical audiences.
- Present research work to BPDA and City staff, community organizations, businesses, universities, and the general public.
- Monitor Boston's real estate market, working with commercial real estate data including vacancies, sublease, and rent data to identify and assess development and real estate trends.
- Identify and assess trends in Boston's labor market. Work with core labor market databases (Bureau of Labor Statistics) understanding data limitations at the municipal level. and provide updates to the department's labor market assessment tool.

- Identify and assess trends that may impact the City’s population and demographics working with various data sources including the US Census Bureau’s databases (tabular and microdata).
- Oversee Division’s economic impact and forecasting models. Enhance existing methodology and review modeling results. Implement economic impact models (e.g. Implan or REMI) for projects such as estimating direct and indirect job impacts of real estate development.
- Create and maintain datasets necessary for the Division’s research through techniques such as web scraping and API data retrieval. Work with Big Data, tidying datasets and performing supervised machine learning to identify strong patterns in the data
- Process and visualize geospatial data using ESRI ArcMap and ArcGIS Pro, including geocoding, spatial joins, projections, and automatic feature labeling
- Lead development of new data tools and projection models - for example, the development of a population projection model for Boston's neighborhoods.

QUALIFICATIONS

Work requires a Master’s degree in economics, statistics, data science, or related field. Five years of research experience are preferred. Desired technical skills include the following:

- Knowledge of data analysis/visualization libraries and tools Pandas and Jupyter and understanding of big data processing
- Proficiency in programming languages, especially Python, R and SQL
- Advanced Excel skills including advanced Excel functions, Macro, and Microsoft Visual Basic for Applications (VBA) programming
- Strong quantitative and statistical skills. Advanced proficiency in statistical software STATA, including regression and classification and exploratory data analysis (EDA)

WORK ENVIRONMENT:

Normal office environment.

PHYSICAL REQUIREMENTS:

Little or no exertion.

SCOPE:

May provide functional direction to Research Associates, Research Assistants, students and interns.