Internship
at the Office of the Chief Economist of Infrastructure Vice-Presidency at the World Bank

Background

The Infrastructure Vice-Presidency (GGIVP) was formed on July 1st, 2018 with a view to strengthening institutional focus on the infrastructure sectors, defined to include Digital Development, Energy & Extractives and Transportation, as well as the cross-cutting Infrastructure Finance, PPPs & Guarantees Group. In addition to being one of the highest lending Practice Groups in the World Bank, GGIVP also takes leadership on key corporate priorities – Digital Development and Maximizing Finance for Development – as well as being an important contributor to Climate Change.

The infrastructure Chief Economist's Office (INFCE) was established in July 1st, 2019 to spearhead research activities on infrastructure economics that address critical knowledge gaps and to provide broad strategic guidance on the content and focus of GGIVP's analytical program. For these purposes the office undertakes various activities: producing background papers for infrastructure flagship reports, contributing research papers and policy notes on policy issues of strategic importance, identifying Infrastructure data priorities, and improving data curation, mapping and diagnostics.

The office works closely with the leading economists and acts as a liaison between GGIVP and the Chief Economist Offices of other Practice Groups as well as the six Regional Vice-Presidencies to forge partnerships on agendas of mutual interest.

Duties and accountabilities

The main objective of the intern is to assist the office in fulfilling its functions by providing research, analytical and organizational assistance. Depending on the task, the intern will report to Maria Vagliasindi (Lead Economist at INFCE), Fan Zhang (Senior Economist at INFCE), Mathilde Lebrand (Economist at INFCE), and Anshul Rana (Consultant at INFCE) and shall maintain close working relations with the other team members in the office. The main accountabilities of the role holder will include the following:

1) Contributing to micro-econometric analysis using STATA and/or R, MATLAB, and handling Geospatial Data

2) Supporting analytical work (Flagship reports), for example by synthesizing information and reviewing academic literature, conducting independent data collection and analysis, and contributing to the drafting of research studies and policy notes;

<u>Create Spatial Database of aid investments in DRC</u>

It will consist in creating a database of past investments in DRC from international donors (World Bank, ADB, EU, etc) in all sectors if possible, with a focus first on infrastructure (transport, electricity, ICT, water). It will rely on past work done by Aiddata to identify such investments based on diverse sources (news, Internet etc) and geolocate such investments. Based on this work, we will complete

the missing data and improve the information that accompany the identification of each project, especially for infrastructure investments. The final product should be a list of projects that are geolocalized when possible.

Create a global Database of road characteristics

We want to collect and create a database about road transport networks for all countries. Information such as the number of kms, the types of roads, the quality of roads are of interest. Given that there is no reliable global database, we need to complete existing sources of information. We have a first source of global information whose coverage is very incomplete. We want to collect information from government sources and WB documents, as well as other sources such as humanitarian logistics web sources.

Create a global spatial database of waterways

We want to complement the available transport information for roads, rail, air and maritime on the Global Infra Map by adding a spatial layer for waterways. The work will consist in building a geospatial layer of waterways in the world and complement it with available characteristics (ports, navigability, etc). It will rely on a first review of waterways in the world done by the unit.

Collecting information on incentive policies for electrical vehicle adoption

Collect information on financial and non-financial incentives adopted by countries to encourage the uptake of electrical vehicles. Pay special attention to the variation over time for the incentives and the variation of consumer purchase incentives across EV models (for example, US subsidy is tied to battery size while China's subsidy is tied to driving range). Help match incentives to different vehicle models to facilitate the analysis on policy effectiveness.

Supporting the flagship on the decarbonization of the transport sector.

Collect data on carbon emissions from transportation by mode and by units of transport. Support the analysis on the trend and drivers of emissions from transport.

3) Contributing to Infrastructure data initiatives, such as data curation and management

4) Assisting with other activities of the office, as needed

Qualifications

We have multiple positions and are interested in candidates who can offer one or more of the following specialized skills:

- Expertise with desk-based research
- Expertise with collection and management of datasets
- Experience in analyzing household survey data, skills and experience in geospatial data
- Expertise in economic geography
- Experiences in econometric analysis
- Basic skills to use statistical packages, including STATA and Microsoft Office
- Background in Infrastructure (Energy, Transport, Digital)

The candidates are also expected to have the following qualifications:

- Education: Graduate-level training in economics or related fields
- Strong analytical and conceptual skills
- Strong oral and communication skills in English
- Ability to deliver results effectively in support of the team.
- Highly motivated and results-oriented with initiative, persistence and a positive attitude.
- Ability to take personal ownership and accountability to meet deadlines.
- Ability to work under pressure and work flexibly on a range of assignments and adjust to and prioritize a variety of evolving tasks.

The contract will last for 6 months, from July to December 2021.

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