

		Strengths	Challenges
	Data Accessibility	GPS data generated by smartphone applications is generally accessible through third-party aggregators and private sector technology firms.	NA
	Spatial and Temporal Resolution	GPS data typically has higher spatial (~15m) and temporal resolution (100-1000 data points per day) than other human mobility data sources (CDR).	NA
	Data Management	NA	GPS data requires high performance computing and technical capacity to process and analyse large amounts of data for policy insights.
	Data Quality	GPS data coverage is generally poor in lower-income countries. Data quality is affected by changes to features/settings on smartphone applications that impact the data generation process and thus data quality (i.e. data drift).	GPS data generated from smartphone application usage is biased toward middle and higher income users. In most developing countries, GPS mobility data is unlikely to be representative of lower income or displaced populations impacted by FCV events.
	Cost-Effectiveness	Third-party GPS aggregators and tech companies provide GPS data products as public goods, or under data for good partnership agreements.	GPS data is generally available under subscription through third party aggregators. Additional costs are affiliated with the high-performance computing and data storage needed to process and analyse large amounts of GPS data.
	Data Privacy and Security	GPS data is de-identified using privacy preserving methods and data aggregation to protect individual privacy.	Safeguards need to be in place when working with GPS data to prevent re-identification of anonymized GPS data, particularly when combined with other data, and to ensure that GPS data is stored on secure servers to prevent unauthorized use.

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