UNECE

UNITED NATIONS
ECONOMIC COMMISSION FOR EUROPE
CONFERENCE OF EUROPEAN STATISTICIANS

20 October 2020

Online Meetings on Migration Statistics 27-29 October 2020

ABSTRACT

Title	Measuring migration in a time of pandemic: predictive modelling and sub-populations in New Zealand
Author Name	Pubudu Senanayake
Author Organization	Statistics New Zealand
Session	Measuring migration at times of the pandemic

New Zealand uses an outcomes-based measure of migration, where the migration status of a border-crossing is determined by the amount of time a person spends in or out of New Zealand. To allow us to produce timely (provisional) estimates of migration, a machine-learning predictive model is used.

The COVID-19 pandemic has severely restricted travel into and out of New Zealand. As a result, the patterns of migration and characteristics of migrants have changed. Our predictive model provides insights into travellers likely to become "migrants" within our current framework, who would traditionally not be thought of as migrants, driven by the imposed travel restrictions. This includes overseas visitors prolonging their stay in New Zealand.
Such patterns raise questions around the fundamental concepts used in migration, such as the delineation between migrants and non-migrants, and the measurement of different population stocks. This is particularly important for policy-makers given that different sub-populations have different legal statuses and different levels of access to services.

We discuss our experience of gaining insights using the predictive model and discuss ideas for extending concepts for migration and population measurement.