**2023 IAOS Young Statistician Prize  
Joint First Place**

**It’s time to build: a small area estimation methodology for time-to-event data**

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| Mr. Nelson Chua  Data Scientist  Australian Bureau of Statistics  <http://www.abs.gov.au/>  Canberra, Australia | Mr. Benjamin Long  Data Scientist  Australian Bureau of Statistics  <http://www.abs.gov.au/>  Sydney, Australia |

**Abstract**

There is an ever-present demand for statistical agencies to improve the timeliness, granularity and cost-efficiency of their official statistics. Our methodology for small area estimation using time-to-event data addresses these demands, as it utilises existing data sources to produce timely estimates at finer levels of geography. We illustrate this methodology with our application to the Australian Building Activity Survey, which has been successfully repurposed to obtain small area estimates of newly completed dwellings with associated uncertainty estimates. The methodology is widely applicable, and we discuss further subject areas where it can be introduced to improve value for users of official statistics.

1. Introduction
2. Time-to-event modelling
3. Small area estimation
4. Application
5. Conclusion

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