

Predicting salaries in the GTA

A Bayesian approach

Andrés Castillo

Supervisor: Prof. Eric Miller

Department of Civil and Mineral Engineering

University of Toronto

2023

Outline

1. Research motivation

2. Modelling labour markets

- | Labour market components
- | ILUTE framework

3. Predicting salaries

- | Data sources
- | Model structure
- | Model specification
- | Variable selection
- | Model validation and results

4. Conclusion and future work

Research motivation

Why we talk about labour markets in transportation?

Research motivation

Modelling labour markets

How we integrate labour markets in transportation models?

Modelling labour markets

Labour market components

Modelling labour markets

ILUTE framework

Predicting salaries

From point estimates to probability distributions

Predicting salaries

Data sources

Predicting salaries

Model structure

Predicting salaries

Model specification

Predicting salaries

Variable selection

Predicting salaries

Model validation and results

Conclusions and future work

Conclusions

Future work

Questions?

Thank you for your attention!