## THOR MORRIS (PREVIOUSLY DODSON)

Transportation Economist experienced in conducting research and applied analysis, maintaining and developing models, combining dissimilar datasets, and providing guidance on a wide variety of projects.

♠ Ashland, OR, USA♠ dobothor.github.io

### CAREER

# Economist: Federal Highway Administration **2021-Present**

#### **Core Responsibilites**

- National Highway Construction Cost Index (NHCCI)
  - Lead research program on highway construction cost estimation
  - Calculate and publish quarterly NHCCI value. Maintain and update code
  - Conduct analysis on cost factors to produce quarterly narrative article
  - Oversee peer review panel for analysis of NHCCI and related cost indices
  - Answer questions and analysis requests regarding highway costs
- Externality Cost Assessment Tool (ECAT)
  - Lead research program on highway externality cost estimation
  - Maintain and develop tool and associated models
  - Expand application of tool and stay up to date on the state of the practice
- Benefit Cost Analysis (BCA)
  - Review and revise BCA for highway discretionary grant applications
  - Contribute to research on updates of USDOT BCA Guidance
- Supporting Other Projects
  - Providing technical expertise on data, econometrics, and methodologies
  - Highway Revenue Forecasting, Highway Cost Allocation, Mobility Trends, Marginal Cost of Highway Use, Mile-Based User Fee, various NCHRP projects

#### **Notable Accomplishments**

- NHCC
  - Automated the quarterly NHCCI calculation procedure, saving time and reducing risk of user error. Coordinated data stream for repeated analysis
  - Developed new automated procedures for input data quality checks, discovering and correcting several issues in the source data
- ECAT
  - Updated the methodology for quantifying the cost of highway noise and air pollution using advances in the field
  - Developed the Inequity Identification Tool (IIT), quantifying disparities in exposure to highway externalities at the county level for the US
  - Conducted a symposium on highway externality cost estimation, bringing together experts and State DOT and MPO practitioners

# Economics PhD Program University of Washington

**#** 2015-2021

Seattle, WA

Independent Instructor

- Intro and Intermediate Economics, Industrial Organization and Price Analysis Dissertation Research Papers
- The US Interstate Highway's Effect on Agglomeration
- Roads as Economic Environment: An Agent Based Spatial Economic Model
- Roads and the Economy: Location Theory, Economic Geography, Cost-Benefit Analysis, Market Access, and Graphs

## **COMMUNITY**

Eagle Scout, Master Gardener, OCF Recycling Crew Volunteer, Green Seattle Partnership Land Restoration, Student Mentor, Ashland Streets for Everyone Volunteer

## **EDUCATION**

#### PhD Economics

#### University of Washington

₩ Sep 2015-2021

Seattle, WA

Dissertation Topic: Roads and Economy

Relevant Coursework: Micro and Macro Economic Theory, Econometric Theory and Application, Time Series, Game Theory, Contract Theory, Natural Resource Management, Public Policy

#### M.A. Economics

#### **University of Washington**

Focus: Microeconomic Theory and Time Series

#### **B.A.** Economics

#### **Oregon State University**

## Sep 2011—Dec 2014 ♥ Corvallis, OR

Minor in Mathematics, Thesis: Exploring Maslow's Hierarchy of Needs Empirically

## **SKILLS**

Programming

Python

**GIS Software** 

GitHub SAS

SAS

Java

**MS SQL Server** 

Machine Learning

Lasso Random Forest

Neural Net



Soft Skills

Research and Support Team Leader

Team Leader Presentation



## OTHER INTERESTS

Tennis, Piano, Traveling, Gardening, Philosophy, Community, riding my motor-bike on less used US State Highways and country roads, camping, appreciating nature, neighborhood potlucks