



Team Lead, Triangle Transportation Modeling and Analytics Institute for Transportation Research and Education North Carolina State University nita\_bhave@ncsu.edu

### Education

**Georgia Institute of Technology** - Masters of City & Regional Planning, August 2002 **Georgia Institute of Technology** - MS Industrial Engineering, August 2002

University of California, San Diego - BS Management Sciences, June 2000

## **Experience**

# Triangle Transportation Modeling and Analytics, ITRE - Team Lead (Summer 2021 - present)

- Manage the ongoing development and application of the Triangle Regional Model, an advanced trip-based model, and the maintenance of the Triangle STOPS model.
- Serve as the technical lead for both models, including the exploration and implementation of model enhancements, data analytics, and model application.

WSP, USA Inc - Traffic Forecasting Manager / Local Project Operations Manager (Fall 2017 - Summer 2021)

- Supervised all task orders under the NCDOT Traffic Forecasting Oncall Contract and managed forecasting projects for roadway widenings and realignments throughout North Carolina including project coordination, model analysis and runs, traffic flow analysis, data manipulations, report and figure creation
- Monitored financial and operational details of all North Carolina projects; interfaced with all North Carolina Project Managers within the firm to ensure project operations are smooth and profitable

**ThagaConnect, Nepal** - Associate (Fall 2015 – Spring 2017)

- Prepared and delivered training courses on Presentation Skills and Written Communication Skills to senior professionals at the Swiss Embassy, colleagues trained in Nepal and India who want to internationalize their skillsets
- Planned and redeveloped a dilapidated community space and playground, collaborating with numerous stakeholders

Clearbox Forecast Group - Transportation Planning and Modeling Associate (Spring 2012 - Spring 2014)

- Contributed to numerous traffic forecasting efforts by preparing inputs, performing model runs, and analyzing outputs
- Supported roadway network and socio-economic data preparations, ran multiple iterations of various travel demand models, and analyzed resulting flow volumes and intersection turning movements

Martin / Alexiou / Bryson, PLLC - Transportation Planning and Modeling Associate (Spring 2007 - Fall 2011)

- Assisted with travel demand modeling projects such as incorporating various functionalities and preparing model inputs
- Developed and maintained extensive socio-economic and network-related data sets

Triangle Regional Model (TRM) Service Bureau, ITRE - Research Assistant (Fall 2003 - Spring 2007)

- Contributed as a Model Team member, on all model development, validation, calibration and maintenance tasks
- Facilitated the formation of the TRM's transportation analysis zones, roadway network, and transit network
- Organized, promoted, and incorporated stakeholder involvement, participation, and input

## Past and Current Projects

#### Triangle Regional STOPS Model

• Facilitate the creation of a Regional STOPS model, housed at ITRE and available to planners throughout the region

### **NCDOT** Traffic Forecasting

- Completed all project management tasks including scoping, budgeting and scheduling for over thirty forecasting projects
- Performed travel demand model runs, analyzed inputs (networks and socio-economic data) and synthesized outputs
- Used NCDOT analysis tools to generate balanced corridors including daily flows, turning movements, peak hour factors, direction of peak hour flow and truck percentages
- Forecasted projects include widenings, new alignments, bridge replacements and interchange improvements

#### NCMoves2050 - North Carolina Statewide Plan

• Edited deliverables including fact sheets, newsletters, white papers and promotional content

#### City of Raleigh - Bus Rapid Transit (Wake BRT)

- Prepared peak hour traffic volumes for the Western and Southern BRT corridors utilizing sparse data due to the pandemic
- Prepared the project level traffic forecast for the Western Blvd Extension utilizing StreetLight data