Curriculum Vitae Tahsin Tabassum

stahsintabassum-bd.github.io/tahsin.tabassum/

Education

The University of Oklahoma (OU)

OK, USA

Master's in Regional and City Planning (MRCPL)

Fall'23-Spring'25

Grade: 4.00 out of 4.00

Major Courses: Traffic Analysis, Design and Control; Transportation Geography and Planning; Intelligent Data

Analytics; Advanced GIS and Spatial Analysis; GIS for Land Use Planning

Course To be taken: Analytics and Metaheuristics

Thesis: Optimizing Oklahoma city's Transit Network for Equity and Efficiency through Exploring Transportation

Justice, Transit Deserts, and Multimodal Safety **Supervisor:** Professor Ladan Mozaffarian

Projects:

- Analyzing Factors Influencing Non-Motorist Crash Occurrence and Severity in Oklahoma: A Macroscopic Analysis of Transportation Safety
- Exploring Transportation Justice and Equity through the 'Transportation Justice Threshold Index Framework (TJTIF)' in Municipalities of Oklahoma County, Oklahoma
- Mapping Transit Equity through Identifying the Transit Deserts in the Oklahoma City
- A GIS-based Accessibility Analysis for Parks in the City of Dallas, Texas, United States
- Developing Zoning Framework for Taft, An All Black Town in Oklahoma

Bangladesh University of Engineering and Technology (BUET)

Dhaka, Bangladesh

Bachelor of Urban and Regional Planning (BURP)

Spring'17-Spring'22

Grade: 3.47 out of 4.00

Major Courses: Traffic and Transportation Study; Transportation Policy and Planning; Operations Research and Systems Analysis; Elements of Civil Engineering Structures; Elements of Solid Mechanics; Construction Materials; Basic Environmental Engineering; Mathematics I (Algebra and Geometry, Matrix Algebra); Mathematics II (Differential Calculus, Integral Calculus, Differential Equation); Statistics for Planners I (Summarizing Data, Basic Probability Distributions, Decision Analysis); Statistics for Planners II (Decision Making, Regression and Correlation Analysis, Forecasting); Programming Techniques

Thesis: A Study on the Distribution of and Equity in Accessibility to Health Facilities in Dhaka (North and South) City Corporation, Bangladesh

Supervisor: Professor Md. Musleh Uddin Hasan

Projects:

- The Impact on Travel Mode Preferences in the Rural Area of Bangladesh During COVID-19
- Impacts of COVID-19 Pandemic on Travel Behavior of People in Dhaka, Bangladesh
- Assessment of Utility and Safety Facilities of Large Scale kutcha bazars (kitchen markets) in Dhaka city, Bangladesh
- A study on the Roles of the Local Government in Tackling COVID-19 Pandemic, Ward-21, Dhaka North City Corporation, Bangladesh

Professional Experiences

Department of Regional and City Planning, OU

OK, USA

Graduate Teaching Assistant

August'24-Present

Responsibilities:

Leading discussion sessions, Facilitating lab, Grading and providing timely feedback, Assisting with course management on Canvas, Holding office hours for student support

Graduate Research Assistant

August'23-Present

Projects:

1. Mapping Transit Equity: A Spatial Analysis of Transit Deserts and Infrastructure Gaps in Oklahoma City **Supervisor:** Professor Ladan Mozaffarian

Responsibilities: Literature review, Transit demand analysis, Transit supply analysis, Transit gap identification, Mapping and visualization, Writing paper

2. A Study to Analyze the Mental Health Condition and the Accessibility to Resource Centers of LGBTQ Communities in California.

Supervisor: Professor Bryce C. Lowery

Responsibilities: Spatial data collection from Google Earth Pro, Mapping LGBTQ resource centers with provided facilities

3. Affordable Housing in Cities of Oklahoma.

Supervisor: Professor Bryce C. Lowery

Responsibilities: Meetings with stakeholders, Data collection from Zillow, Mapping different type of housing units

Enertech

GIS Intern

Kansas, USA

June'24-July'24

Manager: Robby Howe

I was involved in several projects of the pipeline such as Integrity Management, Public Awareness, Geofencing, Liaison Services.

Responsibilities:

Managed data: pulling, cleaning, deduping, and quality control for accuracy; Digitized features, geocoded, and analyzed spatial data using geoprocessing tools; Engaged with stakeholders through meetings and training programs; Created dashboards, published AGOL web layers, and built web apps for data visualization; Involved in rooftopping, versioning and Geofencing

Centre for Climate Change and Environmental Research, BRAC University

Bangladesh

January'23-July'23

Research Assistant
Supervisor: Professor Ainun Nishat

Completed projects:

1. To Reduce Road Traffic Accidents in Relation to Achieve SDG: Challenges and Strategies.

- 2. Ethnic Communities in Bangladesh: Their Struggle Against Adverse Impact of Climate Change.
- 3. The Climate Change Impact on Ready-made Garment (RMG) Workers in Bangladesh.
- 4. Scale-up Adaptation for Resilient Infrastructure, with a Focus on Building Capacity to Integrate Climate Adaptation and Resilience into Infrastructure Projects in Bangladesh.
- 5. Introducing Climate Resilient Infrastructure.

Responsibilities:

Proposal writing for grants; Literature review; stakeholders mapping; Coordinating meetings with stakeholders; Community engagement data collection through questionnaire surveys, key informant interviews, focus group discussion; Conducting workshops; Organizing events; Data analyses using statistical methods and GIS; Report writing.

WaterAid Bangladesh

Bangladesh

July'21-September'21

Manager: Saief Manzoor-Al-Islam

I worked as a part of 'Composite Actions for Climate Migrants in Urban Slums (CACMUS) Project' under 'Climate Resilience Program'. I have got the opportunity to conduct research on developing a Water, Sanitation and Hygiene Poverty Index of the slums under the project areas during my internship.

Expertise

Intern

Traffic Analysis: PTV Vissim, PTV Visum **Programming Language:** Python, R

GIS and Remote Sensing: ArcGIS Pro, ArcMap, QGIS, ArcGIS Online, Alteryx

Auto CAD and 3D Design (Sketchup)

Qualitative Analysis: NVivo

Microsoft Office Suite and Project

LaTeX

Graphic Design: Adobe Illustrator, Photoshop

Publications

Journal

1. **T. Tabassum**, L. Mozaffarian "Mapping Transit Equity: A Spatial Analysis of Transit Deserts and Infrastructure Gaps in Oklahoma City" - To be submitted in *Journal of Transport Geography*

- 2. **T. Tabassum**, L. Mozaffarian "Exploring Transportation Justice and Equity through the Transportation Justice Threshold Index Framework (TJTIF) in Oklahoma, USA" To be submitted in *Transportation Research Interdisciplinary Perspectives*
- 3. **T. Tabassum**, L. Mozaffarian "A Systematic Literature Review on Transportation Equity and Justice" To be submitted in *Transport Reviews*
- 4. **T. Tabassum**, L. Mozaffarian "Analyzing Factors Influencing Non-Motorist Crash Occurrence and Severity in Oklahoma: A Macroscopic Analysis of Transportation Safety" In preparation

Conference

- 5. **T. Tabassum**, L. Mozaffarian "A Spatial Analysis of Transit Deserts and Infrastructure Gaps in Oklahoma City" In *International Conference on Transportation & Development (ICTD 2025)*, American Society of Civil Engineers (ASCE)
- 6. **T. Tabassum** "Exploring Transportation Justice and Equity through the 'Transportation Justice Threshold Index Framework (TJTIF)' in Municipalities of Oklahoma County, Oklahoma" In *Association of Collegiate Schools of Planning (ACSP) Annual Conference 2024 -* **Ed McClure Award for Best Master's Paper**
- 7. **T. Tabassum**, L. Mozaffarian "A GIS based Accessibility and Equity Analysis of Urban Parks in Dallas, Texas, USA" In *Association of Collegiate Schools of Planning (ACSP) Annual Conference* 2024 [Abstract available in conference proceedings Track 5: Research in Motion (RiM)]
- 8. **T. Tabassum**, F. Zohora, S. Manzoor-Al-Islam, N. Tahsin "Developing Evidence on Water, Sanitation and Hygiene Facilities in the Climate Vulnerable Slums through WASH Poverty Index: A Case Study on Slums in Rajshahi City Corporation, Bangladesh" In *9th International Conference on Water and Flood Management (ICWFM)*, 2023 [Abstract available in conference proceedings]
- 9. **T. Tabassum**, M. Mahjib Hossain, S.N. Nipa, R. Khanum, A. Nishat "Assessment of Vulnerability and Identification of Adaptation Strategies in Haor Region, Bangladesh: A Case Study on Tahirpur Upazila, Sunamganj district, and Itna Upazila, Kishoreganj district" In *9th International Conference on Water and Flood Management (ICWFM)*, 2023 [Abstract available in conference proceedings]

Poster

- 10. **T. Tabassum** (Presenting Author), L. Mozaffarian "Mapping Transit Equity: A Spatial Analysis of Transit Deserts and Infrastructure Gaps in Oklahoma City" In *Oklahoma Transportation Research Day, Organized by Oklahoma Department of Transportation (October 2024)*
- 11. **T. Tabassum** (Presenting Author), S. Roy Chowdhury "A Study on the Distribution of and Equity in Accessibility to Health Facilities in Dhaka (North and South) City Corporation, Bangladesh" On GIS DAY, Organized by Center for Spatial Analysis, University of Oklahoma (November 2023)

Awards and Honours

Gilbert Ludeman Memorial Scholarship, OU

2024-2025

Christopher C. Gibbs Endowed Enrichment Scholarship, OU	2024-2025
Ed McClure Award for Best Master's Paper, ACSP	2024
Robberson Travel Grant, OU	2024
'Top 10' teams of Green Inclusive Business Champion, Greentech Foundation, BD	2021
Champion of Commonwealth ICT and Telecommunication's Global Competition, UK	2020

Extracurricular Involvement

Student Member, American Planning Association	Fall'24 - Present
Secretary, Student Planning Association (SPA) - OU Chapter	Spring'24 - Present
Member, Institute of Transportation Engineers (ITE) - OU Chapter	Spring'24 - Present
Vice-President, BUET Photographic Society	February'21 - May'22
Director, BUET Career Club	February'21 - May'22
Co-Campus Ambassador, Bangladesh Youth Climate Network	July'20 - July'21

Blogs and Newspaper Articles

- 1. **T. Tabassum**, "Mental Health in Slums the Case of Bangladesh Among Other Developing Countries" (July 2021)
- 2. **T. Tabassum**, R. Khanum, S. N. Nipa, "Ethnic communities in Bangladesh: Their struggle against the adverse impact of climate change" (April 2023)

References

Prof. Ladan Mozaffarian

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Associate Professor, Division of Planning, Landscape Architecture and Design, OU

Email: cwarnken@ou.edu Prof. John C. Harris

Director & Associate Professor, Division of Planning, Landscape Architecture and Design, OU

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