Equitable Transportation Planning Curriculum for Urban Planning and Transportation Programs and Applied Learning Workbook
Tia Boyd, Kristine Williams, FAICP, Carolyn McAndrews, Ph.D., Yicong Yang, Anurag Pande, Ph.D.
Shams Tanvir, Ph.D., Peng Chen, Ph.D.

Executive Summary:
Transportation is needed to access jobs, food, health care, recreational and open spaces, and other important services and destinations. Equity in transportation planning helps to ensure equal access to affordable and reliable transportation, as well as fairness in the distribution of its benefits and burdens. Without inclusive processes, transportation planning can overlook the needs of and negatively impact low-income communities, minorities, persons with disabilities, older adults, children, and other traditionally underserved populations.

The Transportation Equity Curriculum will provide emerging planning and engineering professionals with the training and tools needed to successfully integrate equity into transportation decision-making processes. Students taking courses that use these materials will gain an appreciation for the historic impetus to consider equity and a deeper understanding of related concepts, including accessibility, mobility, affordability, and sustainability. Beyond this foundational knowledge, emerging professionals will acquire skills that can be put into practice and propel equity to the forefront of the transportation planning profession.

The curriculum introduces various topics of relevance to equity in transportation. It is divided into nine modules: History and Theory of Transportation Equity; Identifying Underserved Communities and their Needs; Equity in Travel Analysis; Involving Underserved Communities; Evaluating Plans and Projects; Access to Opportunity; Equity of Emerging Modes; Transportation, Public Health, and Equity; and Equity in Transportation Funding. The final report contains the modules, activities, and other relevant information and serves as a guidance document to support the instructor in delivering the course materials and preparing the course syllabus. The instructional resources provided for the curriculum, include the module outlines, activities, handouts, and PowerPoint Slides with lecture notes. The module outlines, activities, and handouts are provided in the guidance document with PowerPoint slides provided as separate downloadable files.

Assignments related to the Transportation Equity Curriculum modules are included in the Transportation Equity Workbook that was prepared under supplemental funding, with assignments designed to reinforce module lectures, encourage independent exploration of topics presented in the class session, and in some cases, allow students to practice skills used in practice. Instructions, resources, instructor notes, example applications, and a sample rubric are provided to support instructors in delivering the assignments and evaluating students’ capabilities upon completion of each assignment.
Scope of Problem:
Although equity has become a prominent issue in transportation planning and other professions, many professionals still grapple with transitioning from equity as a concept to equity as actionable practice (Shilon et al., 2020). Educators have the difficult task of ushering the future generation of professionals to a more robust understanding of equity in practice (Lung-Amam et al., 2015). To accomplish this goal, transportation programs should provide students numerous opportunities to learn about equity through active learning and by engaging with underserved communities (Lung-Amam et al., 2015; Shilon et al., 2020).

Policy Alternatives:
A comprehensive curriculum that exclusively focuses on equity in transportation decision-making processes will advance equity in transportation policy and decision-making processes. Additionally, assignments that enforce lessons and encourage students to “think outside of the box” will move the transportation profession away from historically prescriptive approaches to address equity and ensure the integration of dynamic and innovative strategies for a more equitable and diverse transportation system. The Transportation Equity Curriculum is designed to support educators as they prepare future transportation professionals to be “work-ready” and capable of advancing equity in transportation. The curriculum can be used in one of two ways. First, one or more modules can be used for “plug-and-play” style lectures to add or enhance content on equity in transportation in existing courses. Second, all nine modules can be used together as a full course on equity in transportation.

Policy Recommendations:
Policies and guidance that address equity in planning include Title VI of the Civil Rights Act of 1964, the National Environmental Policy Act (NEPA), Americans with Disabilities Act (ADA), Executive Order 12898–Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, Executive Order 13166–Improving Access to Services for Persons with Limited English Proficiency, and more recently, Executive Order 13985–Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, and Executive Order 14008–Tackling the Climate Crisis at Home and Abroad, which created Justice 40. To successfully enforce requirements and follow guidance for equity, transportation professionals need an appropriate educational background in this complex and multifaceted aspect of transportation. The goal of the transportation equity curriculum and workbook is to provide educators with resources to train future transportation professionals. The instruction provided through this curriculum will fill a significant gap in transportation education and thereby help to ensure the advancement of equity as students enter professional practice.