Get on the OERTransport Bus:
Advancing DEI through OER in Transportation Planning
The contents of this presentation were developed under an Open Textbooks Pilot grant from the Fund for the Improvement of Postsecondary Education (FIPSE), U.S. Department of Education.

However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.
Growing Need for a Diverse Transportation Planner Workforce

The estimated total **occupational employment** reported in 2020 was greater than **2,000** for each of the three highlighted states, 3 of the top 4 states for job demand.

TP careers in high demand: CA alone counted nearly **8,000** jobs.

High-wage jobs with median salaries **$70,000** to **$95,000** at the post-bac certificate level.
High Cost of Transportation Planning Textbooks:

According to the Student Textbook and Course Materials Survey (2019), the high cost of textbooks creates barriers for student success.

These barriers limit the Diversity, Equity, and Inclusion in our classrooms in addition to the professional field!

- 64.2% not purchasing the required textbook
- 40.5% not registering for a specific course
- 35.6% earning a poor grade in courses
- 22.9% dropping a course
OERTransport: 3 types of justice in Transportation Planning and in OER (Lambert, 2018)

**Redistributive justice**
Allocation of material or human resources towards those who by circumstance have less.

**Recognitive justice**
Recognition and respect for cultural, gender, & ability differences (among others).

**Representational justice**
Equitable representation and political voice of women's & other underprivileged social groups
The cost of **TP textbooks** is typically **high**, as illustrated by a sample of popular textbooks within the field:

- **John Wiley & Sons**
  - $127.84

- **McGraw-Hill**
  - $241.13

- **Routledge**
  - $190.00
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Representational Justice

GREEN CITIES AND TRANSPORTATION

Focus on educating planning students on sustainable transportation, transportation equity, and climate change mitigation in:

- US cities and other cities in the Global North and Global South that have implemented leading edge policies designed to advance sustainable mobility.

Main sections:

1) Sustainability, Transportation Equity, and Planning.
2) Case Studies and Lessons from the North and South.

This eleven-chapter textbook also assists students to develop a case study research paper throughout the semester. **Students as knowledge producers**

At the completion of the textbook and/or course, students will be able to:

- Apply research skills drawn from transportation case study projects.
- Explain and demonstrate the significance of transportation for climate change mitigation and sustainable development.
- Illustrate sustainable mobility strategies that help reduce greenhouse gas emissions and support transportation equity for low-income commuters.
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"A visually impaired Black person uses a safety rail to guide themself onto a bus. They are wearing a work uniform, head wrap, and prescription glasses. The scene is set at a sheltered bus stop next to a streetlight with a push button and a posted schedule for the bus line. Skyscrapers and evergreen trees fill the background, with the overall illustration set in tones of pink, purple, and teal, while warm, yellow lighting highlights the bus interior."

--ALT TEXT

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Get on the OERTransport Bus:
Advancing DEI through OER in Transportation Planning

- Open Educational Resources
- Field Examples: Transportation Planning
- DEI through 3 RJ: (Redistributive, Representational & Recognitive)
Special Thanks to the entire OERTransport Team
<table>
<thead>
<tr>
<th>Social Justice Principle</th>
<th>Open Education Example</th>
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<tbody>
<tr>
<td>Redistributive Justice</td>
<td>Free educational resources, textbooks, or courses to learners who by circumstance of socio-cultural position cannot afford them, particularly learners who could be excluded from education or be more likely to fail due to lack of access to learning materials.</td>
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<tr>
<td>Representational Justice</td>
<td>Self-determination of marginalized people and groups to speak for themselves and not have their stories told by others. Co-construction of OER texts and resources about learners of color by learners of color, about women’s experiences by women, about LGBTIQA+ experiences by LGBTIQA+ identifying people. Facilitation to ensure quiet and minority views have equal airtime in open online discussions.</td>
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<tr>
<td>Recognitive Justice</td>
<td>Socio-cultural diversity in the open curriculum. Inclusion of images, case studies, and knowledge of women, first nations people, and whomever is marginalized in any particular national, regional, or learning context. Recognition of diverse views and experiences as legitimate within open assignments and feedback.</td>
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Adapted from “Changing our (Dis)Course: A Distinctive Social Justice Aligned Definition of Open Education” by Sarah Roslyn Lambert under a Creative Commons Attribution-ShareAlike 4.0 International License (CC-BY-SA 4.0).
The OERTransport R&D model of textbooks
licensed under a Creative Commons Attribution, Non-Commercial, Share-Alike 4.0.

**Phase 1: Creation**
- Inventory of available OER TP materials & OER content evaluation
- Training: in instructional design & OER authoring using PressBooks’ platform
- OER content customized to the courses’ needs & industry-relevant competencies
- OER TP textbook design: organized as PlugNPlay modules; LMS integrated; Accessibility vetted; Industry validated

**Phase 2: Implementation**
- OER TP textbook Beta test implementation & learning outcomes assessment
- OER TP textbook industry & student user review
- Mavs Open Press virtual collection of curated OER TP textbooks with enabled user analytics
- OER TP textbooks and course assessment of student cost savings, learning & success

**Phase 3: Dissemination**
- OERTransport model dissemination: Survey of adoption/diffusion of OER among U.S. planning schools with transportation planning programs & housed at UTCs;
- Presentations at major transportation, planning and OER conferences and publications in transportation, planning education, and OER journals
Nationally, the projected growth (BLS 2019-2029) in employment for:

- Transportation Planning Positions: 4% to 6%
- City and Regional Planning Positions: 7% to 10%
- Urban and Regional Planning Positions: 11%+
Textbook Creation

1. Inventory of available transportation planning OER
   Searching OER repositories for relevant content, selecting OER, remixing OER, and creating OER

2. Training
   Equips instructors and graduate assistants with techniques and strategies for effective teaching

3. Transportation stakeholders' input
   A matrix of knowledge, skills, and technology related to the occupational activities performed by transportation planners

4. OER Textbook modular design for personalized learning
   Design consists of building five to 14 chapters organized as PlugNPlay, stand-alone modules
Textbook Implementation

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Textbook Dissemination

OERTransport’s UTC basis: Unique Opportunity for Nationwide Adoption/Diffusion

The model could be replicated by the 24 accredited planning programs with TP curricula housed at similar university transportation centers across the country.

76 U.S. master’s planning programs accredited by planning accreditation board (PAB), 42 offer transportation concentrations all of whom would be potential OER adopters.

The project will conduct a national survey of all U.S. accredited urban planning programs offering TP curricula to establish the state of adoption of TP OER.

Presentations at major transportation, planning and OER conferences and publications in transportation, planning education, and OER journals.