

INTERDISCIPLINARITY IN  
TRANSPORT

WHY RESEARCH BENEFITS  
FROM A DIVERSITY OF  
VIEWPOINTS



**Kelly Clifton, PhD**

**DTN Annual Forum 2025**

**September 12, 2025**





**Disciplinary**



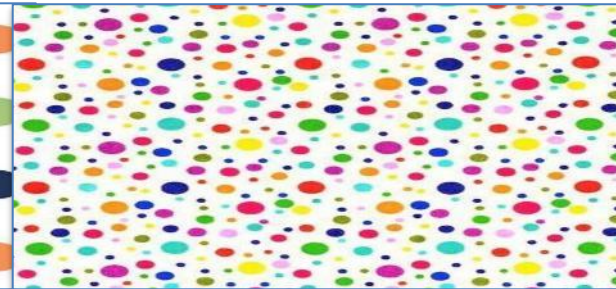
**Multidisciplinary**



**Interdisciplinary**



**Transdisciplinary**





SO BRAD, WHY SHOULD TRANSPORT  
RESEARCHERS CONSIDER OTHER DISCIPLINES?



# Transport Problems Are Complex

- Systems of systems
- People and their lived experiences are central
- Place is important – context matters
- Technology is evolving
- Environment shapes and is shaped by our interactions





# Transport Problems Are Applied



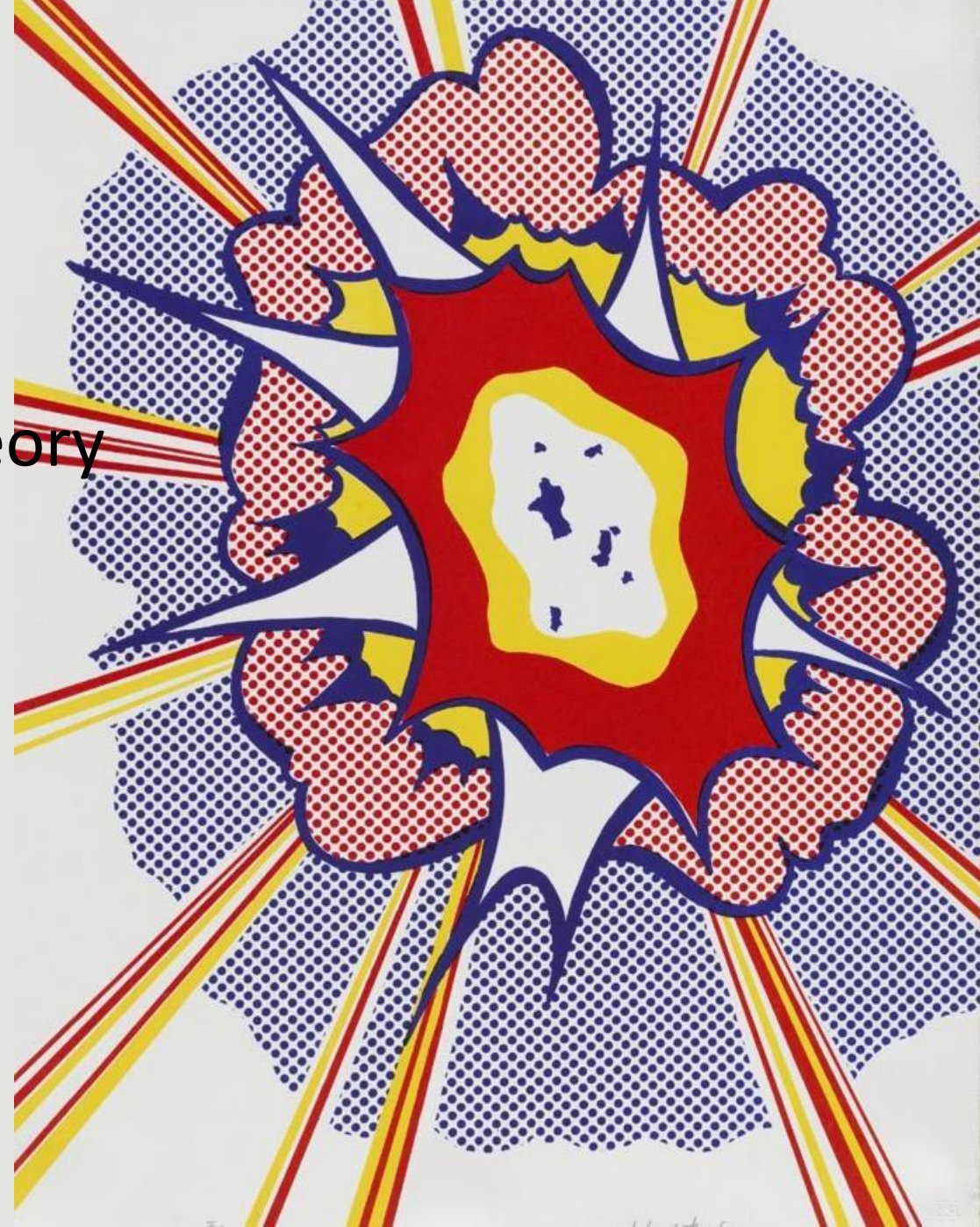
**POP!**

- Our problems persist & are intertwined
- We want to have an impact
- Knowledge transfer and mobilization are needed
- Interactions with industry, agencies, and communities
- Our solutions can create problems for others



# Transport Research Needs Theory

- More focused on application than theory
- Data are a social construct
- Need to examine our values, biases, blind spots, and approaches
- Helps us to understand the world and the connections
- Results in better research & practice



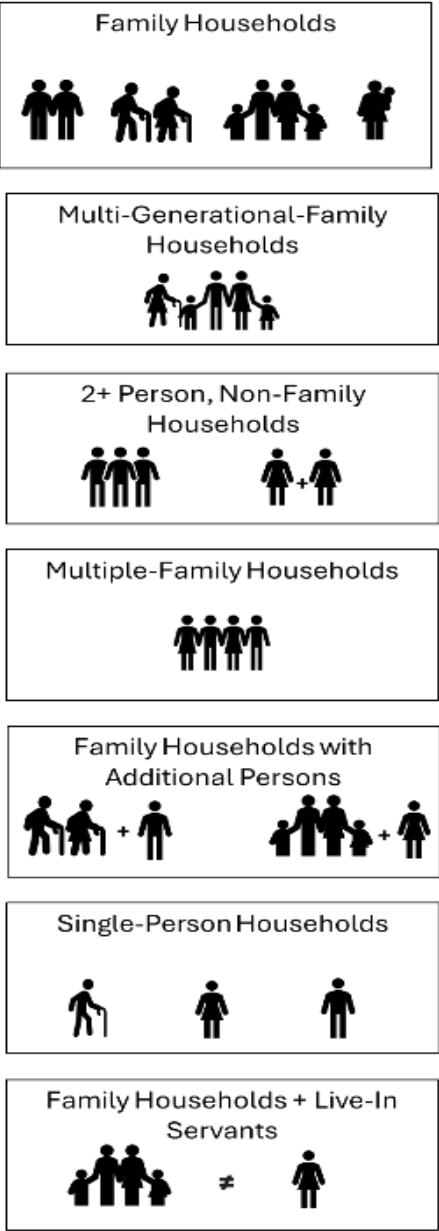
# What Can Change When You Add Disciplines?

- Problem framing expands or changes
- Theories broaden
- Assumptions are challenged
- Language changes
- Methods diversify
- Outputs integrate
- Creates new knowledge & understanding

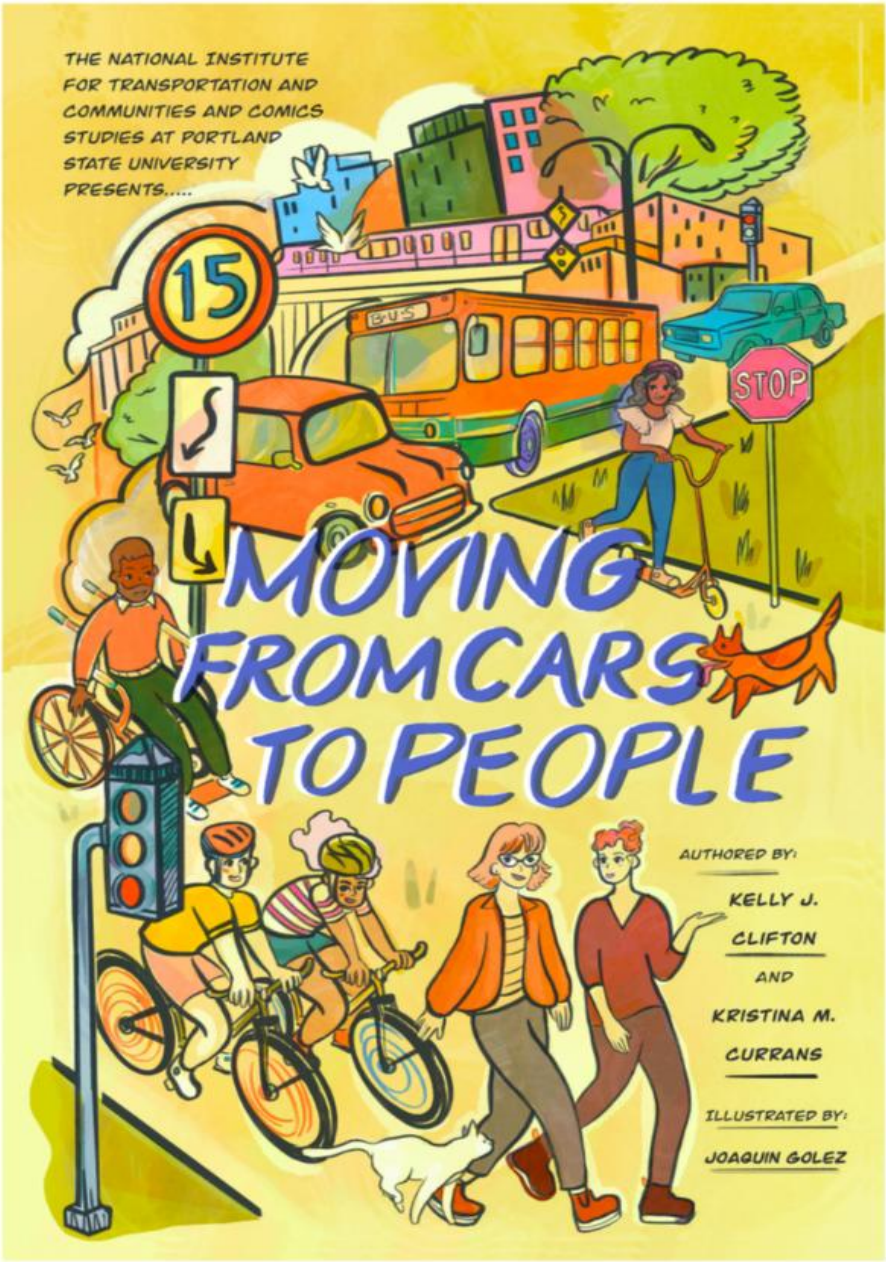




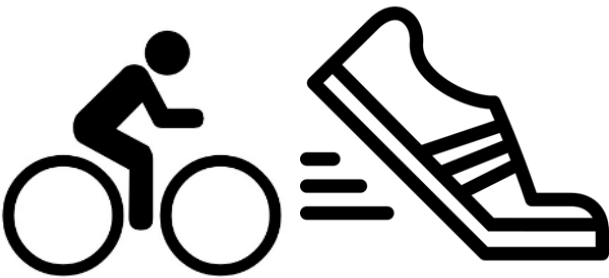
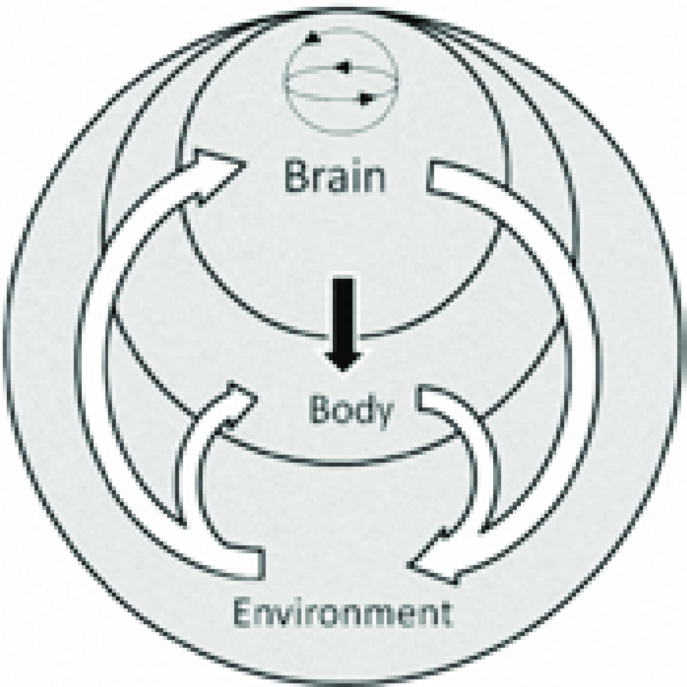
# Multidisciplinary



# Interdisciplinary



# Transdisciplinary











- Siloed education, leads to...Siloed networks
- Time
- Academic rewards system favors low risk, low reward, high volume
- Rigidity & lack of ability to communicate, leads to...
- Little common understanding

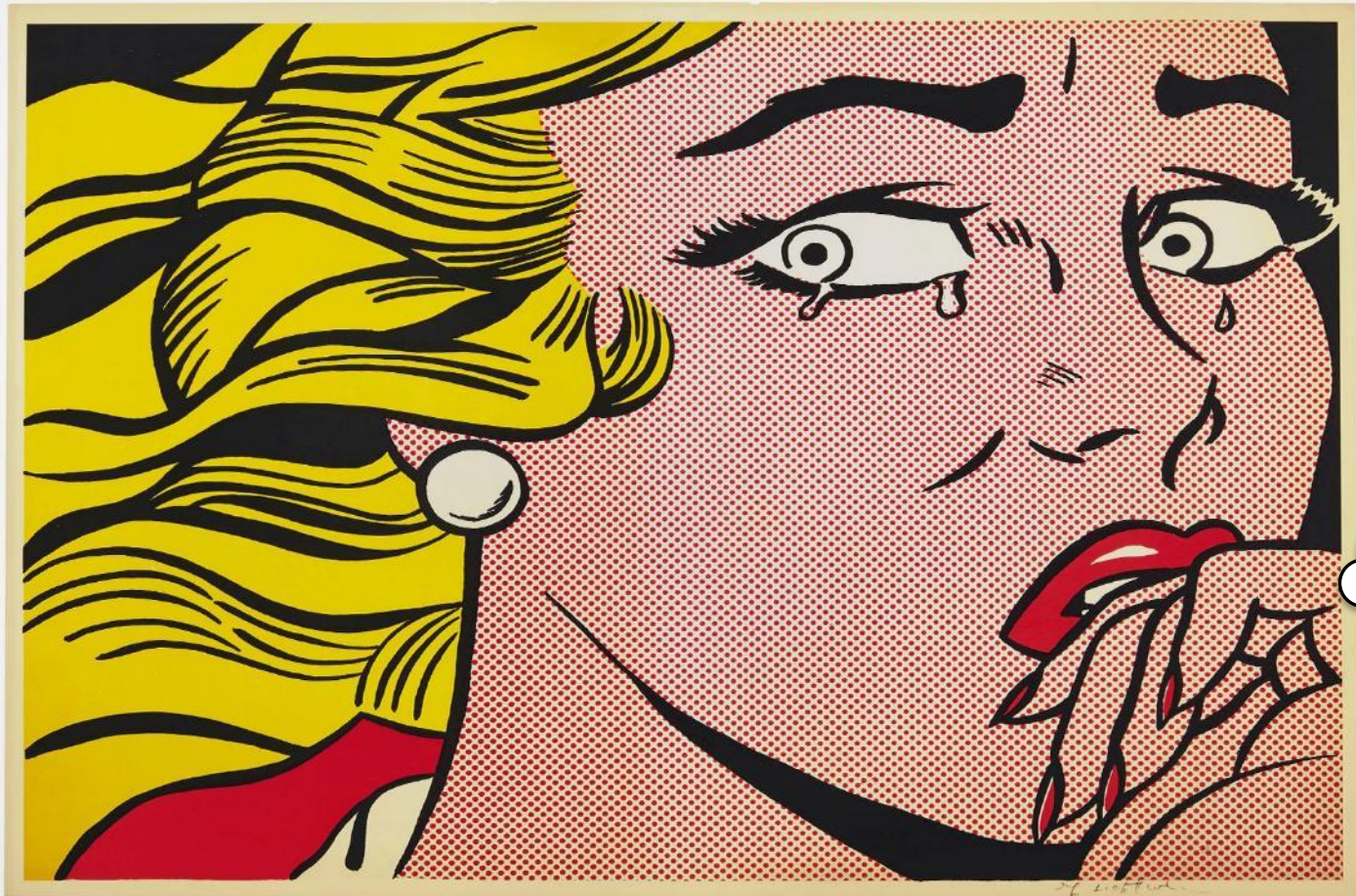


# Pitfalls

- Lack of common scientific language
- No common goal
- Being impatient/Quitting early
- Closed to new thinking
- Not contributing – thinking you have nothing to offer







BUT WHAT ABOUT  
ME? AREN'T I  
BECOMING AN  
EXPERT IN A SPECIFIC  
DISCIPLINE?



- Need for deep expertise
- Bring your training and lived experience
- Be an ambassador for your perspective
- Also, be open to learning
- Collaborations are key





# “Streets for All” in Cidade das Sete Colinas

- Reactions to the study?
- What parts of this case did you instinctively sympathize with? Which parts did you discount?
- What tensions exist in the case study?
- How could an interdisciplinary approach help?



# Where to Start?

- Sit in on a course/seminar outside of your discipline
- Attend/present your work at a conference outside of transport
- Draw on your own lived experience
- Listen and observe – how does this connect to my work?
- De-center transportation
- Collaborate with and build on your DTN Network





# Obrigada!

---

Kelly Clifton

kelly.clifton@ubc.ca

rerow.ubc.ca

---



Moving from Cars to People Comic

