MIT Mobility Forum (Spring 2023): Joan Walker - "Moving from Citations to Collective Wisdom in Travel Behavior Research"

Ao Qu

#### Part I: Literature (for further reading on industrial policy and innovation)

Chu JSG, Evans JA. Slowed canonical progress in large fields of science. Proc Natl Acad Sci U S A. 2021 Oct 12;118(41):e2021636118. <a href="https://doi.org/10.1073/pnas.2021636118Links">https://doi.org/10.1073/pnas.2021636118Links</a> to an external site.

Mustapha Harb, Amanda Stathopoulos, Yoram Shiftan, Joan L. Walker, What do we (Not) know about our future with automated vehicles?, Transportation Research Part C: Emerging Technologies, Volume 123, 2021, <a href="https://doi.org/10.1016/j.trc.2020.102948Links">https://doi.org/10.1016/j.trc.2020.102948Links</a> to an external site..

Giancarlos Parady, David Ory, Joan Walker, The overreliance on statistical goodness-of-fit and under-reliance on model validation in discrete choice models: A review of validation practices in the transportation academic literature, Journal of Choice Modelling, Volume 38, 2021, https://doi.org/10.1016/j.jocm.2020.100257Links to an external site..

Mark Wardman, V. Phani K. Chintakayala, Gerard de Jong, Values of travel time in Europe: Review and meta-analysis, Transportation Research Part A: Policy and Practice, Volume 94, 2016, <a href="https://doi.org/10.1016/j.tra.2016.08.019Links">https://doi.org/10.1016/j.tra.2016.08.019Links</a> to an external site..

Sander van Cranenburgh, Shenhao Wang, Akshay Vij, Francisco Pereira, Joan Walker, Choice modelling in the age of machine learning - Discussion paper, Journal of Choice Modelling, 2021, <a href="https://doi.org/10.1016/j.jocm.2021.100340Links">https://doi.org/10.1016/j.jocm.2021.100340Links</a> to an external site.

Muhammad Abdullah, Charitha Dias, Deepti Muley, Md. Shahin, Exploring the impacts of COVID-19 on travel behavior and mode preferences, Transportation Research Interdisciplinary Perspectives, 2020, <a href="https://doi.org/10.1016/j.trip.2020.100255Links">https://doi.org/10.1016/j.trip.2020.100255Links</a> to an external site.

**Part II: Recent News** 

Dr. Nandita Quaderi (2022, July 1). Journal citation reports 2022: Covid-19 research continues to drive increased Citation Impact. Clarivate. Retrieved April 26, 2023, from <a href="https://clarivate.com/blog/journal-citation-reports-2022-covid-19-research-continues-to-drive-increased-citation-impact/">https://clarivate.com/blog/journal-citation-reports-2022-covid-19-research-continues-to-drive-increased-citation-impact/</a> Links to an external site.

Abeer Elshater, Hisham Abusaada (2023, March 27). Citing blogs in academic publications: Lessons from urban planning in Covid. The Conversation. Retrieved April 26, 2023, from <a href="https://theconversation.com/citing-blogs-in-academic-publications-lessons-from-urban-planning-in-covid-186251">https://theconversation.com/citing-blogs-in-academic-publications-lessons-from-urban-planning-in-covid-186251</a> Links to an external site.

#### **Part III: Question and Answer Session**

Hani Mahmassani: I didn't think I would have much to say because I usually agree with Joan. However, I think one issue we need to address is the problem we are trying to solve, which you alluded to earlier. In the past, concerted efforts in travel behavior and demand modeling occurred when there were specific questions to answer. I believe that our disconnection from practical applications and use of research results contributes to a proliferation of papers that lack a fundamental body of knowledge. Instead, we have scattered results without a coherent framework for understanding them. To address this, we need to re-engage with the motivating questions that drive research.

Another issue we need to address is the creation of a fundamental body of knowledge. We seem to be focusing more on finding exceptions rather than identifying rules. While it's essential to examine outliers and differences, we also need to focus on building a collective understanding of the rules that govern travel behavior. We need to strive for the same level of rigor and systematic investigation found in fields like physics.

Regarding data sharing, I see it as a double-edged sword. While it's desirable to have data available for others to analyze and build upon, I'm wary of potential negative consequences. In other areas, making data available has led to a glut of research that lacks value. Moreover, when researchers download and crunch data without a meaningful analysis, it can lead to inconsistencies and confusion. Instead, the added value will come from someone who can analyze and synthesize the data in a meaningful way. Therefore, we need to be deliberate and intentional in our approach to data sharing.

Jinhua Zhao: Thank you Hani. Then, I will invite Horng.

**Der-Horng Lee:** Thank you very much for the interesting talk. I was attracted to the topic, which is why I stayed up, even though it's midnight in China. In my opinion, there's a significant disconnect between research and policy implementation, especially in travel behavior or behavior modeling. The ultimate goal of behavior studies is to drive positive change that can be adopted by government agencies or transportation operators, making our research useful to society. However, based on my experience in transportation projects and planning in Singapore, China, and Southeast Asia, I believe that the disconnect is growing wider. The government agencies or policy implementers often don't see the value in our work, while as researchers, we may have our own agendas, making it difficult to reconcile. Someone in the chat mentioned that government agencies may already have their own ideas before implementation, and I agree with that.

As a research community, we need to focus on impactful research that can lead to real change, even if it's a small change. We need to carefully consider whether our research is generating citations or actually making a difference. There are many examples of both, but I don't want to waste anyone's time going into them.

Thank you again for the talk."

**Kara Kockelman**: expresses disappointment in not finding appropriate imaging technology for speed enforcement in computer science. She suggests waiting 2 years before sharing data but encourages pre-print sharing on personal websites.

**Kay Axhausen:** emphasizes the importance of sharing data and code and enforcing a benchmark model to produce comparable results. He also suggests publishing fewer long papers and presenting results in a concise form to build common knowledge and turn towards new policy intentions.

**Jinhua Zhao**: asks Joan if she has any reactions to what they've heard

**Joan Walker**: No, no, I think they are fabulous comments. I love the discussion. I will start building on the comment submitted by Chris Cherry.

**John Moavenzadeh:** interested in papers that ask the "so what" question and focuses on their impact. He raises the issue of academic papers that emphasize the methodology rather than the

findings. He then asks Joan if she has any thoughts on incentivizing greater relevancy and impact in papers?

**Joan Walker:** supports the idea of sharing data and code, but acknowledges the potential problem of more papers being produced. She believes that science fundamentally requires sharing and suggests additional policies and procedures to deal with proliferation. In terms of incentivizing greater relevancy, she proposes the idea of an oath or standards for papers, including benchmarking and clear impact statements. She also supports the idea of industry and government playing a stronger role in defining research questions and partnering with academics.

**John Moavenzadeh**: There's been a lot of discussion about data sharing in the chat. Some are hesitant due to the time and cost invested in data collection, while others suggest waiting a couple of years after publication before sharing the data. There's also a suggestion to value quality data collection as a culture. What are your thoughts on this?

**Joan Walker**: Quality data collection is as important as turning out papers. Kai's journal recognizes collecting great data as a contribution in itself. Embargoing data for a few years after publication makes sense to avoid being scooped. Sharing the whole data is important, including mistakes found in the process. The researcher should be able to milk the data as much as possible without being scooped. We need to embrace the mistakes that we may find in the data and code, as it is part of the process.

**John Moavenzadeh**: What does Federal policy require for data availability for federally supported research problems?

**Joan Walker**: discusses the issue of confidentiality in sharing data and notes that the devil is in the details of how confidentiality is handled. She mentions that most people are making statements about data sharing and notes that there is always a clause regarding confidentiality in federal contracts. However, she is not sure about the details of how the clause works.

**Kay Axhausen**: My comment on data sharing is that nobody can do all the possible analyses with a rich data set. So it's better to share it early while it's still interesting, even if there's a risk of being scooped. The data collected before Covid may be irrelevant now because it doesn't include working from home. So sharing data fully and early is important, and if someone else writes a paper with it, that's okay because there are likely many other papers that can be written with a rich data set.

**John Moavenzadeh**: Two questions related to Chat Gpt. Claude Marelli asked about the potential for AI models like Gpt to reduce the burden of synthesizing knowledge. Mackenzie Human asked if Gpt could play a role in evaluating the reproducibility of research when code and data are provided. Reproducibility is a key driver for releasing code and data in fields like economics. So, any thoughts on the role of AI in this?

**Joan Walker**: The role of AI in reducing the burden of synthesizing knowledge and evaluating reproducibility of research are interesting topics. Chat Gpt could be relevant in summarizing academic literature, which could potentially be a solution to the craziness. However, it may not be suitable for conducting research.

**John Moavenzadeh:** Yes, many of us are exploring the potential of ChatGPT for literature summarization and editing. It could be useful in reducing the workload in these areas.

**Jinhua Zhao**: concludes the conversation and thanks everyone for joining.

#### **Part IV: Summary of Reflection Memos**

In reflections,

James mentioned the need for public-facing reviews that help individuals navigate complexity of fields without confirming their own biases. Also, difficulty in direct comparisons may lead to more advocacy and confirmation bias, resulting in less science.

Nineveh was surprised by the resistance of some academics to share their data and code, citing concerns about the effort put into compiling and cleaning data and the fear of being called out for errors. He questioned the validity of these concerns.

Jay also mentioned that it might be helpful to ensure the public access to transportation research.

Spencer echoed with Joan on the importance of interdisciplinary collaboration in addressing complex transportation problems.

Yunhan raised that a good policy brief is only as effective as the research that informs it. Therefore, collaboration between researchers, policymakers, and practitioners is critical in identifying policy-relevant research questions and delivering high-quality policy briefs.

Sam and Yan-chu also mentioned that sharing data might not be that easy, especially when they are confidential or when others can simply take the data and produce more papers.

Michael talked about the standard required for academic publications. He thought additional groundbreaking insight should be required for local surveys to be accepted as publication material. This would reduce the number of papers while maintaining quality.

#### My reflection:

I fully agree with Prof. Walker's insights on the six pillars she proposed because I've actually encountered the need for many of them in my daily research. A couple of days ago, I had a conversation with Prof. Henry Liu from UMich. He mentioned that as a field, transportation is sometimes seen as a purely empirical study where researchers only borrow methodology from other subjects. However, we are in fact trying to address some of the most pressing challenges faced by humanity and innovations on both empirical studies and methodologies are required. I think Prof. Walker really pointed out some directions that transportation researchers should be aware of and put some collective efforts.

#### Part V: Other Resources

Prof. Joan Walker used this website to find the trend in research topics: Dimensions AI: The Most Advanced Scientific Research Database. Dimensions. Retrieved April 26, 2023, from <a href="https://www.dimensions.ai/Links">https://www.dimensions.ai/Links</a> to an external site.

A collective effort in the environmental engineering community for forecasting hurricanes: News and events: HFIP: Hurricane forecast improvement program. HFIP. (n.d.). Retrieved April 26, 2023, from https://hfip.org/Links to an external site.

# Moving from Citations to Collective Wisdom in Travel Behavior Research

Joan Walker

MIT Mobility Forum April 7 2023



What words come to mind when you think about the Travel Behavior Research in regards to Future Mobility, Automation, and Transit?

#### **Results**

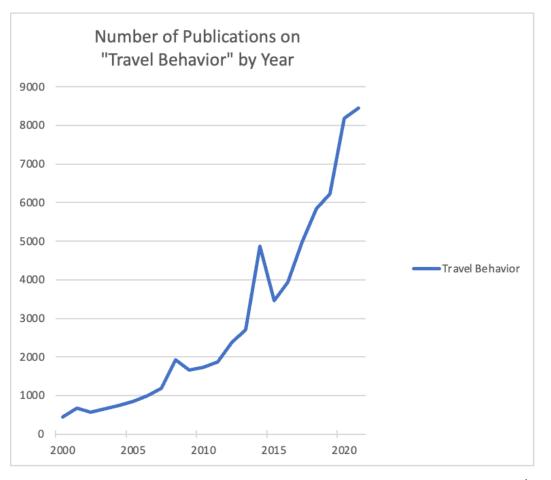




## **Word association results (73 participants)**



on "Travel behavior" as a whole →



## **EXAMPLE** of the literature

40 published papers by November 2022 addressing the impact of the Pandemic on behavioral aspects related to Electrification, Automation, and Shared Mobility.

## **Electric Vehicles (15 papers)**

### **Key takeaways**

- Rise in global EV sales despite decrease in overall vehicle sales and travel restrictions (Ajanovic, 2022; Augurio et al., 2022; Lieven & Hügler, 2021; Sun et al., 2022)
- In US, EV sales increased ~200% from 2020 to 2021 (Fischer et al., 2021)
- Fiscal incentives and supportive regulatory environment key factors in continued growth of EVs through pandemic (Ajanovic, 2022; Fischer et al., 2021; Lieven & Hügler, 2021)

### **Key questions**

- Impact of the pandemic on consumer habits
- Changes in charging demand and implications for charging infrastructure
  - Posilionary of EV supply chain

## **Autonomous Vehicles (15 papers)**

## **Key takeaways**

- Pandemic halted many AV pilot studies
- Overall positive influence on the acceptance of AVs, particularly in growing awareness and interest in the use of AVs in contactless delivery (Chen et al., 2021; Mantouka et al., 2022; Othman, 2021; Said et al., 2022)
- One study showed that the pandemic did little to push potential autonomous vehicle users to support adoption (Horowitz et al., 2022)

## **Key questions**

- Factors influencing AV adoption
- Development of AV technology, and deployment in new applications

## **Shared Mobility (17 papers)**

## **Key takeaways**

- Demand for taxis and ride-sharing have decreased by as much as 80% (Andersson et al., 2020; Said et al., 2021; Zhang et al., 2022)
- However, the pandemic had a positive influence on carsharing and bike-sharing (Hu & Creutzig, 2022; Zhang et al., 2022)
- Demand is unlikely to return to pre-pandemic levels (Kiriazes & Edison Watkins, 2022; Loa et al., 2022)

## **Key questions**

- Impact of COVID on mode choice and intention to use shared mobility modes in post-pandemic future
- Speculation about the future of shared mobility: challenges and opportunities

## Literature added in the last 4 months

- 20 additional papers published (40 originally)
- A few broad review papers on travel behavior and the pandemic, with short sections on the trends in automation, sharing, electrification.

## Reflection... Are the results satisfying?

As a BODY OF WORK, lack of coordination

- 1. Too many papers, difficult to synthesize
- 2. Lack of clear, compelling set of research questions
- 3. Lack of convergence on findings
- 4. Lack of guidance about implications for the future, such as optimal/desirable policies

## Academic Impact

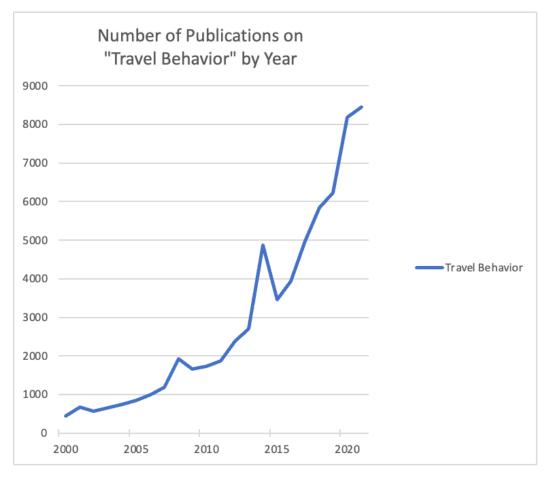
# Papers
each makes a unique
contribution to
knowledge

# Citations

## Societal Impact

Doing good for the world

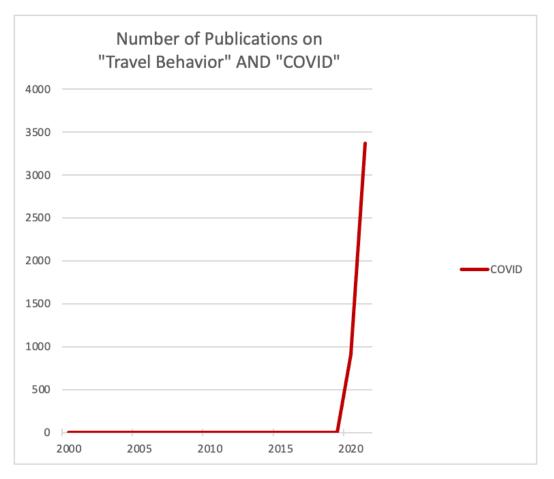
on "Travel behavior" as a whole →





on "Travel behavior" as a whole

on "Travel behavior" AND "COVID" →



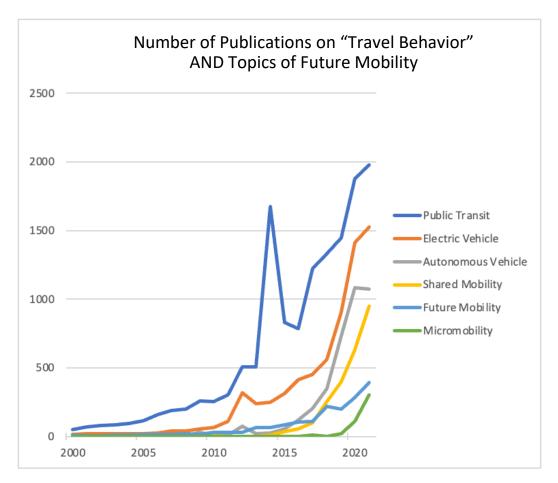
Dimensions https://www.dimensions.ai/

on "Travel behavior" as a whole

on "Travel behavior" AND "COVID"

on "Travel behavior" AND topics of future mobility. →

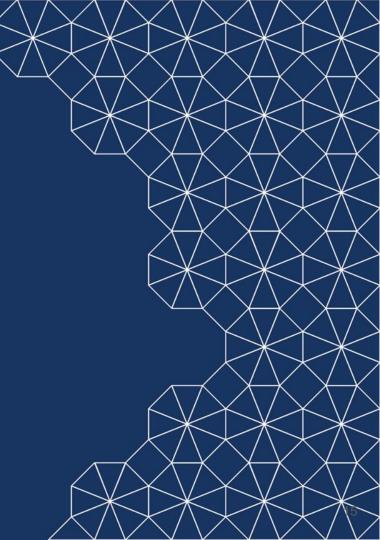
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## **Objective**

Overwhelming amount of amazing research.

Can we increase the amount of collective wisdom?



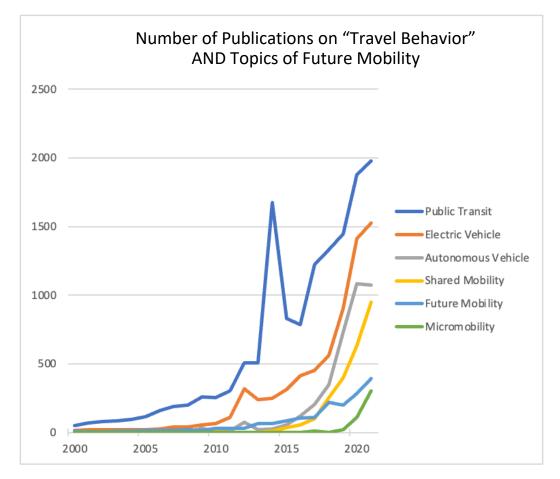
## **NOTE ON SCOPE**

Great directions, but **outside the scope**:

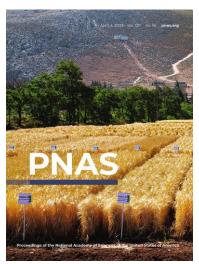
- Dissemination via conferences and workshops.
- Leadership by public agencies to solicit and support research in the public interest.
- Translation of academic work via Policy Briefs and other mainstream outlets.
- Change academic merit case process

### **IN SCOPE**

## How to harness this to produce more collective wisdom?



## Not just us



Slowed canonical progress in large fields of science

Johan S. G. Chu<sup>a,1</sup> and James A. Evans<sup>b,c,d</sup>

<sup>a</sup>Kellogg School of Management, Northwestern University, Evanston, IL, 60208; <sup>b</sup>Department of Sociology, University of Chicago, Chicago, IL, 60637; <sup>c</sup>Knowledge Lab, University of Chicago, Chicago, IL, 60637; and <sup>d</sup>Santa Fe Institute, Santa Fe, NM, 87501

"If too many papers are published in short order, new ideas cannot be carefully considered against old, and processes of cumulative advantage cannot work to select valuable innovations. The more-is-better, quantity metric-driven nature of today's scientific enterprise may ironically retard fundamental progress in the largest scientific fields."

(2021)

## Pillar 1:

More review papers in academic journals



## **Review Papers**

"The aim of this paper is to summarize and analyze literature that focuses on travel-related behavior impacts of AVs, namely levels 4 and 5, as well as highlight important directions of research."

78 papers reviewed.



Contents lists available at ScienceDirect

#### Transportation Research Part C







## What do we (Not) know about our future with automated vehicles?

Mustapha Harb<sup>a,\*</sup>, Amanda Stathopoulos<sup>b</sup>, Yoram Shiftan<sup>c</sup>, Joan L. Walker<sup>d</sup>

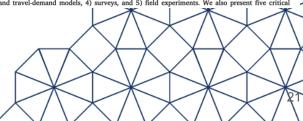
- a Department of Civil and Environmental Engineering, University of California at Berkeley, 116 McLaughlin Hall, Berkeley, CA 94720-1720, United
- b Department of Civil and Environmental Engineering, Northwestern University, 2145 Sheridan Road, Evanston, IL 60208-3109, United States
- <sup>c</sup> Department of Civil and Environmental Engineering, Technion Israel Institute of Technology, Haifa 32000, Israel
- d Department of Civil and Environmental Engineering, University of California at Berkeley, 111 McLaughlin Hall, Berkeley, CA 94720-1720, United States

#### ARTICLE INFO

Keywords: Automated vehicles Travel behavior Literature review Simulation models Stated preference surveys Fields experiments

#### ABSTRACT

While research on developing and testing automated vehicle (AVs) technologies is well underway, research on their implications on travel-related behavior is in its infancy. The aim of this paper is to summarize and analyze literature that focuses on travel-related behavior impacts of AVs, namely levels 4 and 5, as well as highlight important directions of research. We review five methods used to quantitatively investigate these implications and how each method contributes to this literature: 1) controlled testbeds, 2) driving simulators and virtual reality, 3) agent-based and travel-demand models, 4) surveys, and 5) field experiments. We also present five critical



## Academic Impact

# Papers
each makes a unique
contribution to
knowledge

# Citations

## Societal Impact

Doing good for the world

"Uniqueness" Paramount makes comparison difficult.

Need to do something to facilitate comparison.

## Pillar 2:

Better benchmarking infrastructure & process

# Short-term Transit Ridership Prediction from SmartCard Data

100+ papers on new models.

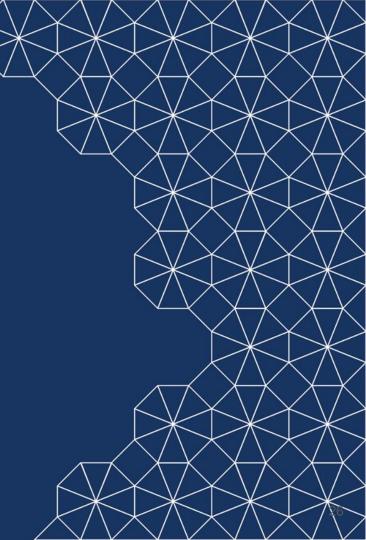
Wide variability of benchmark and performance metrics.

Most papers limited to one geography and a handful of stations.

Data and code are rarely shared.

"Even if I spend time carefully reading these 100+ papers, I wouldn't know what is the best model."

- Juan Caicedo



## **Infrastructure for Benchmarking Transit Prediction Models**

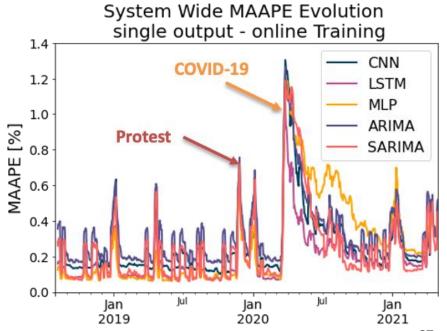
GitHub open-source software

Five state-of-the-art models

Performance metrics

Bogotá Colombia Processed SmartCard data

Caicedo, Gonzalez, Walker (2023)



## Calls for Proper and Comprehensive Assessment of Models



Contents lists available at ScienceDirect

Journal of Choice Modelling

journal homepage: http://www.elsevier.com/locate/jocm





The overreliance on statistical goodness-of-fit and under-reliance on model validation in discrete choice models: A review of validation practices in the transportation academic literature

Giancarlos Parady a,\*, David Ory b, Joan Walker c

[Submitted on 13 Aug 2022]

Size Matters: The Use and Misuse of Statistical Significance in Discrete Choice Models in the Transportation Academic Literature

Giancarlos Parady, Kay W. Axhausen



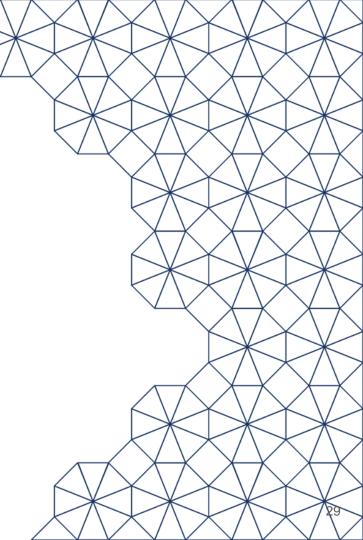
a Department of Urban Engineering, The University of Tokyo, Japan

b WSP, USA

<sup>&</sup>lt;sup>c</sup> Department of Civil and Environmental Engineering, University of California, Berkeley, USA

**One-off efforts.** 

How to normalize and make a part of our DNA?



## Pillar 3:

Develop best practice and align (and enforce) it in publication process.

"An inherent principle of publication is that others should be able to replicate and build upon the authors' published claims." - *Nature* 

"Otherwise, it's journalism." - Joan

**VA/- III----**







authors are required to make materials, data, code, ... promptly available to readers without undue qualifications. generally require all data underlying the results in published papers to be publicly and immediately available. authors are expected to make available a complete set of the data used as well as any specialised computer programs.

## Data Sharing Policies from the top 13 Transportation Journals

#### **# JOURNALS**

- 1 no data sharing policy
- 7 encourage, enable
- 1 encourage, enable, require data availability statement
- 4 require (and enable) where appropriate

# ONE DATA POINT Recent issue of transport journal that requires (and enables) where appropriate

- # Papers
- 1 no data used
- 1 data linked to article
- 12 available on request
- 6 can't share/confidential
- 4 no statement

# ONE DATA POINT Recent issue of transport journal that requires (and enables) where appropriate

- # Papers
- 1 no data used
- 1 data linked to article
- 12 available on request
- 6 can't share/confidential
- 4 no statement

**Email request led to:** 

- 1 can't share/confidential
- 4 provided data
- 7 no response after 6 days

#### Do as I say, not as I do

As much as I believe, the incentives aren't there to carry through to make data and software available and to follow best practice.

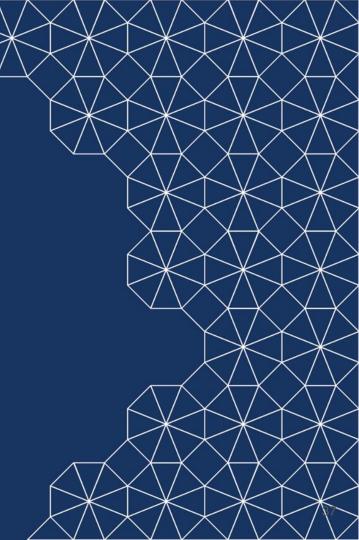
Community needs to step up with clear best practice.

Journals need to participate and enforce.

#### An OATH for the field?

With clear guidelines that journals enforce.



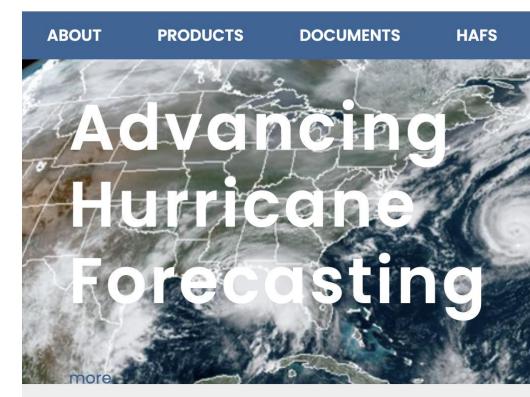


#### Pillar 4:

Develop a Moonshot...
or at least North Star(s)

**HFIP** "successfully attained its initial goal of reducing the error in track and intensity forecast guidance by 20% within the program's first five years, on its way toward meeting its even more challenging goal of a 50% reduction of error within 10 years."







Contents lists available at ScienceDirect

#### Transportation Research Part A

journal homepage: www.elsevier.com/locate/tra

Values of travel time in Europe: Review and meta-analysis Mark Wardman a,b,\*, V. Phani K. Chintakayala c, Gerard de Jong b,d

"The value of travel time is one of the most important parameters of transport planning"

389 European studies (1963 - 2011); National studies from Denmark, Germany, Netherlands, Norway, Sweden, Switzerland, and the United Kingdom.

What could be our Moonshot or North Star in travel behavior research?

results



#### **Moonshots/North Stars (55 participants)**

Create standardized datasets to share **Sharing** Finding FEASIBLE paths to net zero transportation Community ownership Establish common definitions for operationalized measures and require reference to these in published data Policy and infrastructure alignment to Net negative Carbon emissions Zero deaths in transportation. Reducing people's travel time What incentives are most impactful for mode shift to public transit? We should be working toward carbonization. Teamwork will be key Better incentives at the grad or young scholar level for publishing review papers Focus in customer, pollution and business model **Energy efficiency** Whoa. Tough question. Need time to think. Data sharing, nd standart results, e.g. vot Refined NHTS that incorporates big data and new modes Integrate practitioners in research process Social welfare and policy implications Accessibility What are actually effective incentives/disincentives for decreasing individual vehicle use? Understanding key trends to improve safety, mobility and equitable outcomes. Make more realistic models that account for true behavior Awarding papers that have an impact — implemented by government or industry Lower GHG emissions Improve vkt forecasting for a 5-year time horizon Constrain the number of papers that are published annually to some reasonable number to enhance the quality of work. Improve public transit ridership To have a common platform to understand the developments around Require data and script to be shared \*and findings to be reproduced (by gpt?)\* before publishing

How much investment per person is required for successful public transit at different levels of density?

Non motorized travel That we're looking at humans Define metrics, such as travel time, energy consumption, and optimize towards those. eliminating the irrelevant data as we drive along Public good A model to do everything. Location and land development, household formation and vehicle ownership, mode and destination and day of year and time of day, etc. Transit Improving well-being of individuals focus on fundamental results, collective effects, transferable principles Reproducibility Library of functions as well as papers — so we can search code with citations to leverage processes just as easily as searching papers to leverage insights Central processing of new research in a big data / Al tool that is managed by a quorum-defined set of principles & rules from an elected panel of experts Real time IA based research on behavior. Improving human life Easy application in policy development

**Evolution of TDM to better intake behavioral economics principles** 

Clear methodology which can be replicated

We should focus less on uniqueness of paper and more on the social contributions especially for each local community

Studies that contribute to broad themes instead of individual purposes, data and methods can be shared on broad themes. Studies can expand things like sample size/geographies.

Relevance

Quality paper, good review paper

Open data and analysis along with best practice and documentation of representative data collection. Establish norm for multi-site collaboration to verify

Optimization of individual behavior with effective policy

Ghg, at least for now

**Decarbonize transportation** 

How do we measure equity in transport ion policy impact?

Predicting behaviors with 80% accuracy

Why collective forms of transport are almost always an inferior good compared to 42 personal forms of transport

Good papers and good open source data initiatives.

# Pillar 5: **Lean in to Existing Literature**

Instead of pivoting away from ideas that have already been done, LEAN IN to strengthen knowledge.

Reach out to collaborate/build directly on existing work (and accept those who reach out).

Reproduce and verify existing work.

Crowdsource North Stars: Flag key results in papers and call explicitly for additional estimates.

## 60%

## **Increase in VMT from Fully Autonomous Vehicles**

Method: Chauffeur field experiment.

Harb et al. (2021)

## 1.0

## Induced trip for each telecommute day

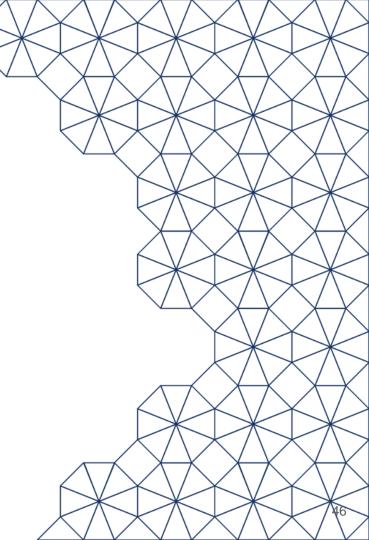
Method: Causal model using longitudinal smartphone data throughout pandemic.

Obeid et al. (2022)

When direct comparisons are difficult,

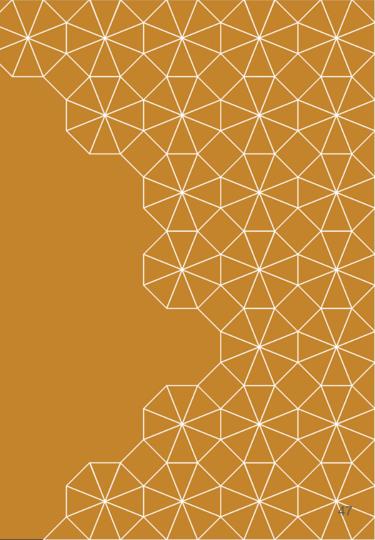
more room for advocacy and confirmation bias,

less science.



#### Pillar 6:

Lean on both methods and findings



#### **A Cautionary Tale of Taking Causality for Granted**

- Does a shift to telework result in induced non-commute trips?
- Hook et al. (2020) found only 5 of 15 studies found YES

   → evidence suggests that telework does NOT result in induced
   non-commute trips.
- BUT, most studies relied on cross-sectional data and regression adjustments to compare telecommuters' and non-telecommuters' travel behavior, which is prone to selection bias and unobserved confounding.
- Obeid et al. (2022) using longitudinal data and explicit causal approaches, points strongly to 1 induced trip for every 2 reduced commute trips.
- Critical to focus on methods, not just emphasize findings.

¥8

Time to vote, add, and commit.

How best to increase collective wisdom of our academic publications???

#### **VOTE**

What pillars would be most impactful?



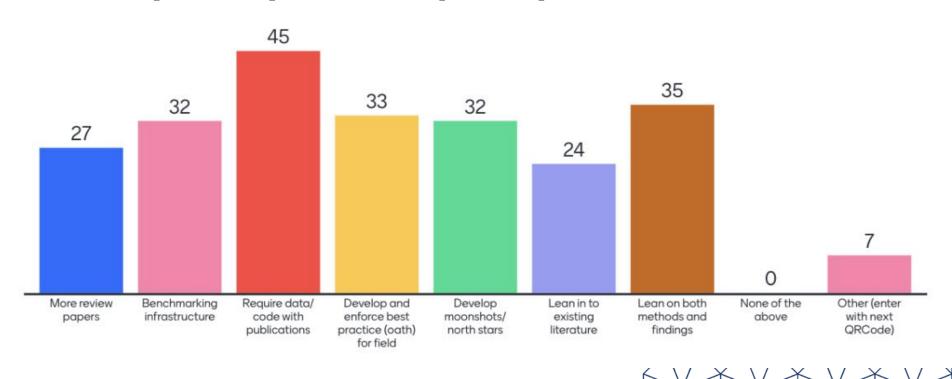
#### **SUGGEST**

What other pillars do you suggest?





#### **Most impactful pillars? (96 participants)**



#### Other pillars? (29 participants)

Require meaningful engagement with practitioners and civic partners. Summarize findings to be widely understood by the public.

More split papers: standard and new models

Focus on causality, but not dogmatically.

Clear methodology which can be replicated

Collaboration

Cross discipline sharing data and methods.

Focus on critical applications

Move editorial agencies to universities

Integration of practitioners in r research process

Increasing public awareness and knowledge about what is most important and needed to improve the field

People get credit for any papers published from their data ENGAGE WITH PRACTICE

Make key findings of reviewers public to show from an independent source what weaknesses the papers may have.

Reform the academic review process which influences the publication ecosystem

Encourage less strict paper formatting

Streamline IRB review processes to facilitate data sharing. Make data sharing an explicit expectation in the IRB review process.

Reward collaboration by separate research teams

Encourage collaboration

Change the reward system for authors away from increasing paper bean-counts. Change the reward system for editors away from increasing impact factors.

Connect with researchers with practitioners

1-Not base academic merit on the number of citations

2- More rigorous plagiarism checks.

Focus on practical research that can be implemented by with non-academic transportation practitioners reduce subjectivity

Develop model problems and data representing them

Getting rid of peer review or at least not the way it's done now

Diffusion

reduce noise

Higher standards for publications to encourage more collaboration and larger studies, and less papers

Make direct connections with practice

Stronger editors and more guidance to reviewers.

Comparison

Reform of the academic personnel review system which bears heavily on publication behavior (no pun)

Fix peer review



#### **COMMIT**

Collective wisdom takes collective action.

What are you going to DO?



#### What are you going to do? (22 participants)

Continue sharing code and data

As an editor, I am trying to use reviewers as advisors rather than vetoes.

Promote tools that ease publishing well-described data

Share and dissemination of data

Publish survey data after submitting first results to a conference.

Sharing data

Definitely collaboration

Conduct statewide survey and update models to deal with current and expected critical applications like ghg modeling

Discuss it with my colleagues. Set incentives in my area of influence

Focus on practical implications of the results I find in my research

Stay informed and contribute ideas whenever possible

Talk about it on social media

Publish books

Review more literature to create benchmarks

Lean into research studies

I have decided to publish my work outside of journals. Just a webpage.

Share data, code, and conclusions. Focus on conducting research that leads to practical interventions. Keep research basic and ask simple questions. It doesn't have to be complicated to be important.

Help develop benchmarks, share data and tools, and write about issues

objective analysis

Working on projects that have a clear implementation plan.

Finish

In my MSc dissertation, lean more into the available literature

Share data and code



# Academic Impact

# Papers
each makes a unique
contribution to
knowledge

# Citations

### Societal Impact

Doing good for the world

# Sociademic Impact

Rigorous papers developed with a collective focus to do good for the world

#### **Acknowledgements**

UC Davis 3 Revolutions Future Mobility Program, NYU Abu Dhabi, and MIT Mobility Forum organizers and participants.

All my students, and especially Juan Caicedo, Phoebe Ho, and Hassan Obeid for assistance with this presentation.

NSF and the participants of the 2017 workshop "Advancing the Science of Travel Demand Forecasting."

The <u>Zephyr Foundation</u> whose mission is to Advance Travel Analysis to Improve Society.

# Moving from Citations to Collective Wisdom in Travel Behavior Research

Joan Walker joanwalker@berkeley.edu



#### Chat log from the talk

12:03:18 From Bhuvan Atluri to Everyone: Thank you all for joining us today. All previous forum video recordings and slides can be accessed at https://www.mmi.mit.edu/forum . Please subscribe to our YouTube channel (https://www.voutube.com/@mitmobilitvinitiative6999 ) and LinkedIn page (https://www.linkedin.com/company/mit-mobility-initiative/) in order to be kept informed of all updates & upcoming events. 12:03:19 From Kara Kockelman to Everyone: Greetings from Austin, everyone! It's 11 am here. Hope you're headed into an excellent weekend. 12:03:35 From Melissa Rossi to Everyone: Fifty years ago I did a study on interdisciplinary research in universities. The main concern was that such research runs up against the reward system and is discouraged. Has anything changed since? 12:04:00 From Sigi Feng to Everyone: Reacted to "Greetings from Austi..." with USC 12:04:19 From Kelley Coyner to Everyone: Hi. I'm an AI assistant helping Kelley Coyner take notes for this meeting. Follow along the transcript here: https://otter.ai/u/vil8114muAlLfNqQyJY1BZUb-FE?utm source=va chat link 1 You'll also be able to see screenshots of key moments, add highlights, comments, or action items to anything being said, and get an automatic summary after the 12:05:14 From Gabriel Oye-Igbemo to Everyone Jack: UT Austin puts its own money behind multidisciplinary research (e.g., the Good Systems research program, for ethical AI use). And NSF actively requests & expects it on many RFPs. I've never sensed discouragement of inter- or multi-disc research. It's necessary, to answer most realistic, complex/systems questions. 12:12:32 From Ellen Partridge to Everyone: The federal government is encouraging EVs, rather than AVs or shared mobility. It has a large influence. 12:13:46 From Erik Sabina to Everyone: tooting Colorado's horn, one of the ways to do what Joan is suggesting is to may more attention to the direction of leading-edge application contexts. 12:13:55 From Claude Morelli to Everyone 8500 papers per year is ridiculous. 12:15:03 From Partha Mishra to Everyone: Classic principal agent problem! 12:15:16 From Ryan Westrom to Everyone: Love this .Adbody of work.Ad reflection. Is another word for this phenomenon .Addroup think.Ad? I.Adm wondering if Dr. Walker believes that transportation research is too narrow in its focus (subject areas) or rather too narrow in its approach (methods) or both? Hi, I'm an AI assistant helping Kelley Coyner take notes for this meeting. Follow along the transcript here: https://otter.ai/u/vil8114muAlLfNqQyJY1BZUb-FE?utm source=va chat link 2 You'll also be able to see screenshots of key moments, add highlights, comments, or action items to anything being said, and get an automatic summary after the meeting. 12:16:03 From Kara Kockelman to Everyone With 7.9 Billion people on the planet, fust 8500 people (1 per paper on average?) publishing in this important topic area seems alright to me. Reading, doing, & writing is how our graduate students learn and advance, so the topics & ideas regularly overlap. Of course, it's a tremendous demand on the existing journals' editors, and no one can keep up with everything. Thank goodness for the WWWeb helping us find the most relevant 12:16:45 From Ellen Partridge to Everyone Reacted to "With 7.9 Billion peo..." with Gec 12:17:35 From Mitch Erickson to Everyone: She simply edited her student, Aos count from 300 to 100 based on her qut??? The data and code not being shared is an issue. I am less likely to adopt conclusions of a study of it does not provide enough information for me to follow the methodology. I usually won't even take the time to check the math, but having that option gives me confidence. 12:18:45 From Claude Morelli to Everyone: Is there are role for GPT or other AI models to reduce the burden of synthesizing knowledge 12:19:00 From Samuel Chin to Everyone: In Computer Science, papers from NeurIPS, ICML, ICLR etc. in general release code and benchmark datasets. These are highly regarded conferences. Is this a difference between journals and conferences, or it, Aos a problem of the field? 12:19:35 From Spencer McDonald to Everyone: Considering the current emphasis on publication and citation counts in academic research, what do you believe are the root causes that have led to this disconnect between academic incentives and the production of collective wisdom for transportation planning and policy? 12:19:48 From Bart Treece to Everyone Replying to "She simply edited he..." I would tend to trust my qut, and if the number doesn't make sense, why put it out? I don't see the issue with playing it safe with 100+ rather than 300. 12:19:53 From Jacques Gordon to Everyone: Can't a good comparative or synthesis paper contribute unique insights? Is this truly an either/or situation? 12:20:27 From Danil Prokhorov to Everyone: Reacted to "Can't a good compara..." with Dec 12:20:52 From Slick Stranger to Eugruphe: 12:21:02 From Ellen Partridge to Everyone: What does federal policy require for data availability for federally supported research 12:21:10 From Korawich Kavee to Everyone: Do we have fournal editor in this seminar?

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12:21:37 From Kara Kockelman to Everyone
                                        Knyawich: we have lote of editors in the audience at least 5 lead editors. I helieve
12:21:50 From Korawich Kavee to Everyone
                                        Reacted to "Korawich: we have lo..." with Dec
12:22:06 From Junyi Ji to Everyone
                                        Reacted to "Korawich: we have lo..." with Dec
12:22:25 From Kara Kockelman to Everyone
                                       Journal enforcement is key. No research was ever hired or promoted because they shared data.
                                       Similar to Claude Morelli, Aos question: could there be a role in using GPT in evaluating reproducibility of research
(if code and data are provided)? I understand that reproducibility is a main driver of pushing for release of code and data in other academic areas, namely
economics.
12:24:06 From Jav Maddox to Everyone:
                                       Could you talk a hit more about what a .XNNorth Star. XN would look like in the IR transportation research space?
12:24:23 From Jason Hawkins to Everyone:
                                       We've been having conversations through the Zephyr Open Science team (incidentally led by one of Joan's former
students) regarding what constitutes open science across transport topics: travel behavior is often constrained by survey IRB and we're seeing more proprietary
data use. One vendor told me they were open to sharing a form of data, but it's largely a case-by-case basis, which takes time for the researcher to negotiate
12:24:33 From Jeff Lidicker to Everyone
                                       I'm not sold on data sharing in all situations. Sometimes data comes from multiple years of work and at great costs. I
may want to publish from a good dataset for years and don't need to be scooped by other's doing research with my data. Thoughts?
12:24:42 From Chris Cherry (UTK) to Everyone:
                                        IRB/Ethics is really tough. To overcome the burden of survey-related research, we (in our IRB applications) almost
always say that we will lock down/encrypt etc all data and don, Aot take the extra effort to manage sharable data (then pray for approval).
12:24:55 From Rick Macchi to Everyone:
                                        To there any industry that RENEFITS from less concensus on Hurricanes? I don't think so. So unlikely to be much-back
on improving hurricane forecasting.
12:26:13 From Elizabeth Deakin to Everyone
                                        IRB makes it hard to share data, agencies don't want to pay to anonymize it, university doesn't cover the cost either
nor do journals. Strong policies would have to be backed by funding!
12:26:37 From Claude Morelli to Everyone
                                        Reacted to "IRB makes it hard to..." with Gec
12:26:46 From Jason Hawkins to Everyone:
                                        Reacted to "IRB makes it hard to..." with Dec
12:27:11 From Kara Kockelman to Everyone
12:27:35 From Suryakant Buchunde to Everyone:
                                        Replying to "I'm not sold on data..."
                                        Will not researchers come up with new idea and use your data to prove their ideas
                                        instead of spending their years on collecting the same data
12:27:37 From Rob Fellows to Everyone
                                       I, Add suggest the research would be better focused if the academic world was not so disconnected from practitioners. As
a transportation professional I have less and less access to academic research, and it also seems less and less relevant to me. Better integration of
practitioners would help focus research statements on answering real practical questions, and provide research when results are counter to observation.
12:27:38 From Leah Kaplan to Everyone
                                        Leaning in is especially difficult for doctorate students who have to make one or more unique contributions in order to
12:28:02 From Brian Lee to Everyone:
                                        Reacted to "I, Aod suggest the rese..." with , u9076
12:28:08 From Chris Cherry (UTK) to Everyone:
12:28:12 From Matthew Gibbs to Everyone:
                                        Reacted to "I.Aod suggest the r..." with Dec
12:28:19 From Simon Hu to Everyone:
                                        Reacted to "I.Aod suggest the rese..." with Gec
12:28:25 From Rhugan Atluri to Eugruone:
                                        Reacted to "I.Aod suggest the rese..." with Gec
12:28:36 From Nineveh O'Connell to Everyone:
                                        What responsibility should fall on universities/research institutions to set up best practices to normalize code
sharing in the publication process?
12:28:59 From Kara Kockelman to Everyone
                                        I've done 12+ surveys across the US (n=1000+ adults, typically), and I've never been asked by UT Austin to not share
the data. (There's nothing sensitive in the data. We're not allowed to collect addresses, for example, and we can always remove email addresses etc easily.
Those don't affect results.) At the same time, it takes about 2000 person-hours to create the data set, so I generally don't want to share the data immediately
After 2 years (from day of final collection, about 1 year after publication) may be a great target. What do you all think?
12:29:09 From Bart Treece to Everyone:
                                        Replying to "I, Add suggest the rese..."
17:79:14 From Luk Knapen to Everyone
                                        research directions in pillar 5 are interesting but who can find funding for such topics ?
12:29:19 From Luba Guzei to Everyone
                                        Reacted to "I, Aod suggest the rese..." with , 05076
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Reacted to "I,Äöd suggest the rese..." with ,û9Ö∏ê

Replying to "I'm not sold on data..."

12:29:37 From Chris Cherry (UTK) to Everyone:

#### Chat log from the talk

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12:29:37 From Kara Kockelman to Everyone
                                        Reacted to "Leaning in is especi..." with Uec
                                       Reacted to "I'm not sold on data " with Nac
12:31:16 From Lynn Hulse to Everyone
12:31:51 From Chris Cherry (UTK) to Everyone:
12:31:59 From Scott Moura to Everyone:
                                       Jeff is NOT wrong. I agree, and that, AGs the problem. Academia is an individualistic culture. Sometimes releasing the
data would accelerate a field, at the cost of individual advancement.
12:32:05 From Luk Knapen to Everyone
                                        problem may be that results are often purchchased by governmental organisations who know the preferred outcome in
12:32:10 From Anson Stewart to Everyone
                                        Reacted to "Jeff is NOT wrong. I..." with Dec
12:32:15 From Anson Stewart to Everyone
                                       Reacted to "If we large already ove " with No
12:32:16 From Jeff Lidicker to Everyone:
12:32:17 From Sean Swat to Everyone:
                                       Reacted to "If we large already ove " with No
12:32:21 From Jeff Lidicker to Everyone:
                                        Reacted to "Totally agree with t..." with UEC
12:33:12 From Aviiit Maii to Everyone
                                       Reacted to "I'm not sold on data..." with Dec
12:33:26 From Kang Ping LEE to Everyone:
12:33:36 From Avijit Maji to Everyon
                                       Reacted to "Will not researchers..." with Geo
things that they would have done differently. Editors enable this by abdicating their judgment and deferring unquestioningly to these reviewers.
                                        Reacted to "I've done 12+ survey. A9" with Uec
12:34:40 From Claude Morelli to Everyone:
                                       Reacted to "If we, Aore already ove..." with Dec
12:34:42 From Danil Prokhorov to Everyone:
                                        Reacted to "I see the peer revie..." with Dec
12:34:43 From Span Suat to Euprunne:
                                       Replying to "I'm not sold on data "
                                        What if we built a culture where quality data collection was as highly valued and credited in and of itself as churning
12:35:01 From Chris Cherry (UTK) to Everyone:
                                       Reacted to "What if we built a c..." with Uec
12:35:09 From Erik Sabina to Everyone:
                                       Reported to Wilhor if we built a c. " with the
12:35:36 From Dr. Sandeepan Roy to Everyone:
                                       Reacted to "What if we built a c..." with Dec
                                        Replying to "I see the peer revie..."
                                       And good luck finding competent and guick reviewers when you really need them!
12:35:45 From Alex Bettinardi to Everyone:
                                        There's people in the chat complaining that they are spending money on collecting data. I imagine that's not correct
Typically it's the government paying for the data right.
12:35:56 From Jason Hawkins to Everyone:
                                       Replying to "I see the peer revie..."
                                       An interesting discussion on this topic: https://experimentalhistory.substack.com/p/the-rise-and-fall-of-peer-review
12:36:05 From Kang Ping LEE to Everyone
                                       Reacted to "What if we built a c " with Nov
12:36:07 From Scott Moura to Eugruone:
                                       Reacted to "What if we built a c..." with Dec
                                       I'm in a mtg with a grad student right now, so I can't really listen in properly. So sorry!
12:36:43 From Lynn Hulse to Everyone:
                                       I suppose there could be an embargo period to allow researchers to "exhaust" their own datasets. However, that would
fly in the face of the open access move with fournal papers (going from embargos/green open access to immediate availability/gold open access)
12:38:38 From Survakant Buchunde to Everyone:
                                       Any thought on data sharing and privacy policy
12:39:16 From Jacques Gordon to Everyone:
12:39:32 From Erik Sabina to Everyone:
                                       there is a ton of reflexive conservatism on data sharing. I am working on a survey project right now, and am trying to
be proactive in the planning stage at getting agreement on data sharing, rather than trying to get agreement from partners after the survey is done.
12:41:41 From Arati Shah- Yukich to Everyone:
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Maybe government funded work should require / ensure via contract/IGA that all data collected with government funds is

posted publicly as a contract requirement...

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12:42:33 From Alex to Everyone:
                                        ok, and what can be done to narrow the gap?
12:42:48 From Chris Cherry (UTK) to Everyone:
                                        Error structure papers Hani,Afgood point. Putting data out there could breed more papers by people with hammers (fancy
models) looking for nails (datasets) that don, Aöt really add much for policy/practice/research (since the primary purpose of data collection should already be
published). Seems a huge growth in papers titled: .AUNew XYZ model with ABC error: an application of travel behavior.Au
12:42:52 From Matthew Gibbs to Everyone:
                                        I.Adm hoping one of the positive effects of AI will be in making the array of research results on a topic more
available to practitioners. I know there are huge risks in how this is done
12:43:10 From Paul Kishimoto to Everyone:
12:43:14 From Chris Cherry (UTK) to Everyone
                                        Reacted to "I,Āōm hoping one of th..." with üēç
                                        Reacted to "I, Aom hoping one of th..." with Gog
12:43:41 From Alex Bettinardi to Everyone:
                                        Reacted to "I, Aom hoping one of th..." with Gec
12:44:43 From Luk Knapen to Everyone
                                        Replying to "there is a ton of re...
                                        even more for code sharing although open source may be "profitable in some way". The problem may be caused by
inappropriate funding mechanisms for research institutes.
12:46:07 From Matthew Gibbs to Everyone:
                                        Reacted to "even more for code..." with Gec
12:46:58 From Kara Kockelman to Everyone
                                        Kay Axhausen: Good data is shared data. Good code is shared code. (!) Uec
12:47:02 From Jeff Lidicker to Everyone
                                        Replying to "I suppose there coul..."
                                        Maybe need to increase value of references/use of data over having # of publications?
                                        Very interesting idea from Kay Axhausen about only shared code/data are goo
12:47:22 From Dr. Sandeepan Roy to Everyone
                                        Reacted to "Maybe need to increa..." with Ge-
12:47:35 From Suryakant Buchunde to Everyone:
                                        Thanks for the great talk! Sharing data may not be the most effective approach, as it can lead to several issues such
as data inconsistency, incorrect data and outputs, and hesitation to share data or code. To mitigate these problems, a central investigation group should be
established (e.g., among high impact journals) to receive and validate the data and codes, ensuring consistency and defining confidential benchmarks. This
approach minimizes risks and ensures comparison to the best methods, preventing publication of unimproved outcomes. Challenges may arise, but the benefits are
12:47:42 From Don MacKenzie to Everyone
12:47:49 From Korawich Kavee to Everyone:
                                        To the comment on embarrassment with sharing data.
                                        I've always hoped that publication require that a "fail" section be required. How did the research fail before it
succeeded. Understanding how the project failed in the process can be just as valuable as the success. You don't want people behind you to trip on the same
curbs that you did.
                                        David Levinson's Transport Findings (1000 words max + 3 tables + 3 figures) is a great place for smaller projects.
12:48:28 From Kara Kockelman to Everyone
                                        Reacted to "To the comment on em. " with no
                                       It's helpful to recall Kuhn's "The Structure of Scientific Revolutions" in this context.
In other disciplines (psychology, weather & climate, etc.), revolutions have been precipitated by crises of validity and legitimacy, and then norms of
reproducibility, openness, community validation etc. have emerged in the wake.
I hope it doesn't take an acute crisis for the same norms to emerge in transport research.
12:48:30 From Chris Cherry (UTK) to Everyone:
12:48:30 From Matthew Gibbs to Everyone:
                                        Reacted to "To the comment on ..." with Dec
                                        So many papers are chock a block with pointless filler. In most cases, we can say what we need to say in 1000 words.
12:48:33 From Lynn Hulse to Everyone
                                        Reacted to "To the comment on em..." with Geo
12:48:35 From Katy Ervilmaz to Everyone:
                                        Reserved to "To the comment on on " with GA-
12:48:54 From Chris Cherry (UTK) to Everyone:
                                        Replying to "Yes on Findings!"
                                        But the critics say to me, how can you replicate those findings with so little info?
12:48:54 From Rabi Mishalani to Everyone:
                                       What are your thoughts on the fundamental problem of the reward systems. Both the reward system that drives authors to
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increase their paper bean-counts and the reward system that drives editors to increase their journal, Aos impact factors. You alluded to this problem, but I, Aod

#### Chat log from the talk

12:49:06 From John Niles to Everyone My suggested north star -- Three Es sustainability measurement and forecasting as determined by the combination of how much people travel (# of trips combined with travel distance) then combined with choice of modes. Societal question is how much and by what means should human travel be constrained for the good of and the survival of civilization. 12:49:16 From Denis O'Connell to Everyone: Is Academy much different than TIKTOK where # of citations equal # of followers and, for good or bad, # citations and # follower translates into behavior. Therefore, those that want a specific behavior practiced should make sure the desired behavior is cited the same research as 12:49:42 From Hong Nguyen to Everyone: Reacted to "David Levinson's Tra. 25" with Nac Findings has broadened to include Urban Findings, Resilience Findings, and Energy Findings, for those of us who work 12:50:14 From Kara Kockelman to Everyone: I always make my students put read findings (& numbers) in their abstracts, b/c I don't get much out of other abstracts w/n such results. No motivation needed, tunically, in the abstract 12:50:26 From Kara Kockelman to Everyone: 12:50:57 From Der-Horng Lee to Everyone: 12:51:12 From Jeff Lidicker to Everyone: Reacted to "I always make my stu..." with uec 12:51:17 From Bhuvan Atluri to Everyone: Reacted to "I always make my stu..." with Dec 12:51:33 From Don MacKenzie to Everyone: Replying to "I always make my stu..." Abstracts should have the essential info in a nutshell - data, methods, results. No motivation, Someone scanning the literature does not need the motivation, AT they get the issue already. 12:51:45 From Don MacKenzie to Everyone 12:51:56 From Erik Sabina to Everyone: relevance is found by working with people who are operating in the space of applied policy!!! 12:52:24 From Hong Nguyen to Everyone Reacted to "I always make my stu, Aq" with uec Reacted to "Kay Axhausen: Good d, Aq" with Uec 12:53:03 From Matthew Gibbs to Everyone: 12:53:04 From Jacques Gordon to Everyone: Reacted to "It's helpful to reca..." with üĕçüê" 12:53:12 From Rob Fellows to Everyone: Reacted to "relevance is found b..." with Uec 12:53:17 From Bart Treece to Everyone: 12:53:34 From Michael Leong to Everyone: (As someone without as much experience), I wonder what people think about increasing the standard of the studies themselves required for publications, which would encourage more collaborative large studies? For example maybe n=1000 surveys won, Act cut it anymore, n=10,000 may be the new normal. Or n=100,000 eventually, as data collection and computing power improve. So theoretically, what would have been 10 separate studies could combine into 1 to meet a higher publication bar. Of course there are many more things than number of respondents, but just an illustrative example, Mg 12:53:56 From Kelley Coyner to Everyone: Add last minute items before the meeting ends: https://otter.ai/u/viL8114muAlLfNqQyJY1B2Ub-FE?utm source=va chat link 3 12:54:19 From Eric Paul Dennis to Everyone: My job is largely to bring academic literature into the public policy realm. The proliferation of papers using novel methods makes this difficult. I spend a lot of time trying to identify the most authoritative and applicable sources 12:55:07 From Steve Polzin to Everyone: share and then hand holding for future users can be a lot of work 12:55:11 From Alex to Everyone: property rights for collected data 12:55:12 From Kay Axhausen to Everyone: Joan referred to the category of ,Aúdata paper,Aú at ,AúTransportation,Aú. 12:55:23 From Rob Fellows to Everyone: 12:55:28 From Nicholas Caros to Everyone: A related approach in academic publishing: Environment and Planning B has a new article type called "Urban Data/Code for sharing new datasets and open-source code. 12:55:30 From Nigel Waters to Everyone: There is a huge and recent literature on replication and reproduction issues (including data) in many closely cognate 12:55:30 From Ronald Anknor to Everyone: Available to anyone but they need to pay for it? 12:55:48 From Nicholas Caros to Eupryone Replying to "A related approach i..." https://journals.sagepub.com/doi/full/10.1177/23998083211059670 12:55:52 From Rob Fellows to Everyone:

I think relevance is related to whether the research affects a decision, and whether the outcomes from those decisions

were positive. Bad research can also affect policy, so there, Ads judgment needed. Engagement with practitioners will increase the likelihood that research will

Reacted to "Abstracts should hav..." with Uec

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12:57:02 From Chris Cherry (UTK) to Everyone
                                       Reacted to "Realistically, I thi..." with Gec
                                       Reacted to "Realistically, I thi..." with üĕç
                                       all going well in this ideal world, THEY share their data with you too!
                                       Michael Leong: n=5k or 10k will cost me 5 to 10 times as much as 1k, and 1k gets me highly statistically significant
parameters on most X's of interest, so it's a waste of $20k+ to require a bigger sample (of humans, with about 50 to 70 questions, in this example). I'd rather
spend that on charity (or students, if charity is not an option with sponsor money ;-) )
12:58:03 From Kay Axhausen to Everyone:
                                        Yes, one invests a lot of effort in a data collection, but nobody is able to do all the analyses possible with a rich
12:58:10 From Don MacKenzie to Everyone:
                                       You don. Abr necessarily have to share the WHOLE data set, just the variables relevant to the published analysis.
12:58:45 From Denis O'Connell to Everyone
                                        Does this have a cooling effect on the drive for diversity and inclusion?
12:58:46 From Chris Cherry (UTK) to Everyone
                                        Replying to "Michael Leong: n=5k ..."
                                       Sometimes grad students are charity
12:58:50 From Jon Vuvlsteke to Everyone:
                                       Have "pay to publish used data" data-sharing models been tried?
12:58:53 From Dr. Sandeepan Roy to Everyone
                                       Reacted to "Sometimes grad stude..." with GOC
12:59:01 From Dr. Sandeepan Roy to Everyone:
                                       Replying to "Michael Leong: n=5k ..."
12:59:03 From John Niles to Everyone:
                                       Heaful would be evaluations of societal improvement efforts -- such as futurism initiatives like California 100, and
the MPO planning work in big urban areas like Seattle and San Diego -- on how well they are absorbing and reflecting travel behavior analysis at the present
state of the art.
12:59:04 From Michael Leong to Everyone:
                                       Replying to "Michael Leong: n=5k ..."
                                       I know the sample size is a bad example - just to give a sense of numbers, e.g. maybe studies should span multiple
12:59:15 From Dr. Sandeepan Roy to Everyone:
                                       Reacted to "I know the sample of " with Nor
12:59:19 From Juan Caicedo to Everyone:
                                       GPT DOES A TERRIBLE JOB TO SUMMARIZE ACADEMIC WORK
12:59:34 From Ronald Ankner to Everyone:
12:59:35 From Jessica Lazarus to Everyone:
                                       Reacted to "GPT DOES A TERRIBLE ..." with Gec
12:59:39 From Bhuvan Atluri to Everyone:
                                       Thank you all for joining us today. All previous forum video recordings and slides can be accessed at
https://www.mmi.mit.edu/forum . Please subscribe to our YouTube channel (https://www.youtube.com/@mitmobilityinitiative6999 ) and LinkedIn page
(https://www.linkedin.com/company/mit-mobility-initiative/) in order to be kept informed of all updates & upcoming events.
                                       If you are a good researcher why do you care about others uusing your data. If you are not as Good as the data that you
have obtained, the public good is that this data is used by the best
12:59:45 From Rob Fellows to Everyone:
                                       Use AI to make research accessible beyond the research community
12:59:46 From John Niles to Everyone:
                                       Chat GPT gave me made up fictional citations by real world people.
12:59:49 From Suryakant Buchunde to Everyone:
                                       Replying to "GPT DOES A TERRIBLE ..."
12:59:50 From Ronald Ankner to Everyone:
12:59:51 From Kara Kockelman to Everyone
                                        We hope you all will submit papers on these & other topics to BTR#5, via https://bridgingtransport.org/
                                       Reacted to "We hope you all will..." with Dec
13:00:01 From Don MacKenzie to Everyone:
                                       Reacted to "We hope you all will..." with Gec
13:00:04 From Alex Bettinardi to Everyone:
                                       Reacted to "We home you all will " with .06000
13:00:05 From Kara Kockelman to Everyone:
                                         ^ Due date is April 30 (& presentations on Aug 9 & 10).
13:00:07 From Survakant Buchunde to Everyone
                                       Reacted to "Chat GPT gave me mad..." with Gec
13:00:07 From John Niles to Everyone
                                       Three dots at the bottom to save chat
13:00:09 From Bart Treece to Everyone
                                       Thanks for the presentation and great discussion!
13:00:14 From Luk Knapen to Everyone:
                                       very interesting talk : thanks
```