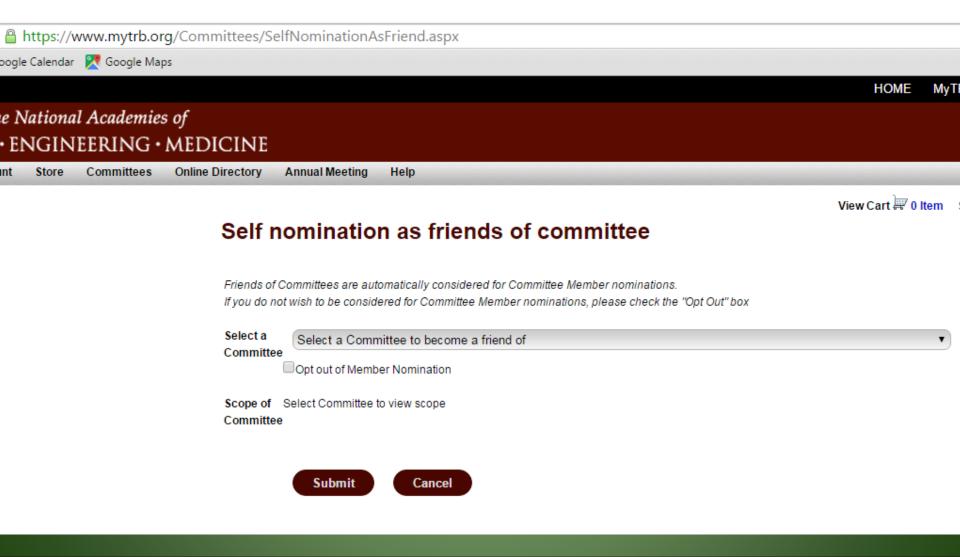
## ABJ40 – Travel Survey Methods

Welcome and Introductions

#### How to Become a Friend



Committees – Become a Friend of a Committee

- Transit Market Research Using Passive Locational Data
  - Anurag Komanduri, Cambridge Systematics
- Changes in Traveler Behavior with a "CAV" (as proxied by a Chauffeur)
  - Mustapha Harb, UC Berkeley, Jai Malik, UC Davis,
     Giovanni Circella, UC Davis, Abigail Rosenson, RSG,
     Joan Walker, UC Berkeley

- VIUS Update
  - Kenneth Steve, BTS
- NHTS Update
  - Danny Jenkins, FHWA

#### Subcommittee Reports

- HTS Jimmy Armoogum & Stacey Bricka
- Freight –Miguel Jaller
- New Technologies Elizabeth Greene
- SR Zachary Patterson & Matthew Beck
- Transit –Greg Newmark
- LD Jeffrey LaMondia
- ISCTSC –Patrick Bonnel & Catherine Morency
- Bike & Ped Data Rebekah Straub Anderson
- Data Subcommittee Cynthia Bland

#### 12<sup>th</sup> ICTSM

- https://www.isctsc2020.pt/
- https://www.isctsc2020.pt/



# 12<sup>th</sup> ICTSM

From	To	Sunday, May 31st	Monday, June 1st	Tuesdays, June 2nd	Wednesday, June 3rd	Thursday, June 4th	Friday, June 5th	From	То
07:30	08:00		Breakfast	Breakfast	Breakfast			07:30	08:00
08:00	08:30		DICANIASE	DICANIASE	DICANIASC	Breakfast		08:00	08:30
08:30	09:00					DICANIASE	Breakfast	08:30	09:00
09:00	09:30		Opening Plenary	Plenary Session	Reports			09:00	09:30
09:30	10:00		Opening Frendly	Fielially Session	Workshop A	Workshop B		09:30	10:00
10:00	10:30					Session 2	Reports	10:00	10:30
10:30	11:00		Coffee Break	Coffee Break	Coffee Break		Workshop B	10:30	11:00
11:00	11:30					Coffee Break &		11:00	11:30
11:30	12:00		Workshop A	Workshop A	Workshop B	Poster Session A	Coffee Break	11:30	12:00
12:00	12:30		Session 1	Session 3	Session 1	1 Oater Session A	Closing Plenary &	12:00	12:30
12:30	13:00					Lunch	Farwell	12:30	13:00
13:00	13:30		Lunch	Lunch	Lunch	Luncii	Lunch	13:00	13:30
13:30	14:00		Lutteri	Lunch	Luncii			13:30	14:00
14:00	14:30					Workshop B		14:00	14:30
14:30	15:00		Workshop A	Interactive Survey		Session 2		14:30	15:00
15:00	15:30		Session 2				ISCTSC Comittee	15:00	15:30
15:30	16:00						Meeting (menbers)	15:30	16:00
16:00	16:30		Coffee Break &					16:00	16:30
16:30	17:00		Poster Session A					16:30	17:00
17:00	17:30		1 Oater Session A		Visit to Mafra			17:00	17:30
17:30	18:00			On site Organized				17:30	18:00
18:00	18:30	Welcome		Activities			1	18:00	18:30
18:30	19:00	Reception						18:30	19:00
19:00	19:30	neception .						19:00	19:30
19:30	20:00					Visit to Óbidos and		19:30	20:00
20:00	20:30					Conference Dinner		20:00	20:30
20:30	21:00	Dinner	Dinner	Thematic dinner	Dinner			20:30	21:00
21:00	21:30							21:00	21:30
21:30	22:00							21:30	22:00
22:00	22:30		Social Activities					22:00	22:30
22:30	23:00							22:30	23:00
23:00	23:30							23:00	23:30
23:30	00:00							23:30	00:00

#### Full Papers for accepted abstracts due 1 April 20

- Traditional survey methods. For which kind of data do we still need travel surveys? How can we treat traditional challenges (sampling, response rate, respondent burden, data quality...) with new technologies and emerging survey techniques?
- Big data. More and more passive big data are available in transport and mobility. How can we assess their quality and representativeness, can we develop automatic processes to enrich and use them, how can we combine them with more traditional data collection?

#### Subcommittee Reports

- HTS Jimmy Armoogum & Stacey Bricka
- Freight –Miguel Jaller
- New Technologies Elizabeth Greene
- SR Zachary Patterson & Matthew Beck
- Transit –Greg Newmark
- LD Jeffrey LaMondia
- ISCTSC –Patrick Bonnel & Catherine Morency
- Bike & Ped Data Rebekah Straub Anderson
- Data Subcommittee Cynthia Bland

#### Research Needs Statements

- https://rns.trb.org/search/search.aspx?f1=&t1 =&ddlType=RNS&orgType=A&orgid=2703&txt Orgs=ABJ40%2C+Travel+Survey+Methods&sc= xx%3A%3AAll+Categories
- https://rns.trb.org/search/search\_aspx?f1=&t1
  =&ddlType=RNS&orgType=A&orgid=2703&txt
  Orgs=ABJ40%2C+Travel+Survey+Methods&sc=
  xx%3A%3AAll+Categories

### NCHRP/TCRP Proposals

- NCHRP Synthesis February 17, 2020
- TCRP Synthesis March 18, 2020
- IDEA March 1 and September 1, 2020
- TCRP Projects June 2020
  - \$200k
- NCHRP Projects November 2, 2020
  - \$200-600k
- Pooled Fund Studies
- No more Quick Response (8-36)

## NCHRP Proposals 2019 (emailed)

- New Technology Improvements for Collecting Traveler Behavior
  - Submitted for Synthesis by 3 States, 4 MPOs and 4 TRB Committees
  - Rejected
  - Syntheses are selected by an AASHTO committee, not by all the states
  - Only 7 are DOT members and most are in pavements and structures; several from universities
  - Recommend getting an AASHTO committee to say it's a "critical need" (Matt Hardy)

### Travel Survey Inventory

- 2009 David Hartgen and Elizabeth San Jose published "Costs and Trip Rates of Recent Household Travel Surveys"
- http://www.hartgengroup.net/Projects/National/ USA/household\_travel\_summary/2009-11-11\_Final\_Report\_Revised.pdf
- Was not selected for NCHRP Synthesis funding in 2018
- Does anyone want to take over the data and other materials and update this report?
  - If not, will pursue Ohio SPR Part 2 funding

### NCHRP Proposals 2018 (emailed)

- Capturing Low-Incidence/High-Impact Travel in Household Travel Surveys
  - Submitted for full study
  - \$300,000, 24 months
  - All DOTs get to vote for full studies
  - This was not selected: 12/35 planning studies were
  - Submitted by 2 DOTs, 1 MPO, 1 Committee
  - Should we resubmit this year?

#### Centennial Paper

- A Century of Travel Surveys Informing Transportation Investments
  - Jonathan Ehrlich, Metropolitan Council
  - Ed Hard, Texas A&M Transportation Institute
  - Anurag Komanduri, Cambridge Systematics
  - Rebekah Straub Anderson, Ohio Department of Transportation

#### Introduction

- Federal Road Act (1916)
  - Use of Transportation Surveys to determine needs
- HRB Bibliography No. 11
  - The early transportation surveys were based on two fundamental principles of management. The first is that the mileage and type of improved highways developed must be such as to meet the public demand and adequately serve traffic needs. The second is that the highway program must be financially sound.

#### Last 100 Years

- 1<sup>st</sup> Large-Scale Survey 1923 Tennessee
- Roadside Interview Surveys (Intercept)
  - personal interviews, postcards and license plate recording

Trip is in Direction Traveling When Card Was Received WHERE DID THIS TRIP START?	Check One (Only) In Each Group		
If in Fulton (Write- in Number and Name of Street, or Newest Intersection, or Plant,	DIRECTION OF TRIP  1. □ From Home Garage		
or Well-known Building)	2. To Home Garage		
If outside Fulton (Write in Locality and State)	1.  Passenger Car 2.  Light Truck		
Trip is in Direction Traveling When Card Was Received	3.  Heavy Truck  1.  Work 2.  Shopping 3. Other  1. Parked at Curb 2. Parking Lot 3. Storage Garage 4. Did Not Park		
WHERE DID THIS TRIP END?			
(Write in Number and Name of Street, or Nearest Intersection, or Plant, or Well-known Building)			
If outside Fulton (Frite in Locality and State)			
Routes followed			
	Parked forHrs		
(Write in Names of Major Streets, or Route Numbers, in the order traveled, in or near Fulton on this trip)	THANK YOU!		

Fulton, NY Postcard Survey, 1948

#### Late 1940s – Surveys to Capture All Travel

- Cordon Intercept Survey
- Postcards to all Vehicle Registrants within the Cordon

#### COLUMBUS-FRANKLIN CO. TRAFFIC SURVEY

Authorized by Columbus City Council, Franklin Co. Commissioners, and Participated in by Ohio Department of Highways

Please list below ALL the trips made by your vehicle "On The Day After You Receive This Card," hat DO NOT use Saturday or Sanday trips. If your vehicle makes no trips, write "NONE" across the face of the eard. As soon as you have the card filled out, DROP IT IN A MAIL BOX. No postage stamp is required.

Top No.	(Origin-Place where trip started)		(Destination place where trip anded)			
1.	frem	te				
2.	frem	te				
3.	fræn	to				
4.	from,	to				
5.	from	to				
6.	from	to				
7.	leem.	to				
8.	from	te	*****			

DO NOT SIGN YOUR NAME

#### READ INSTRUCTIONS CAREFULLY — FILL OUT CARD — TEAR OFF AND MAIL AT

- I—You and your car, and the trips you make each day, are important to the solution of our traffic problems. Columbus and Franklin County are eligible for State and Federal funds to help in street improvements. If We Meet Their Requirements. These funds are from taxes you have already paid. By returning this card you will aid masterially in getting these funds for Columbus and Franklin County. PLEASE FILL OUT THE CARD—AND MAIL.
- 2—What Shall I Consider As A Trip? Answer: Mrs. Smith takes her husband to his work—that is a trip. From there Mrs. Smith goes shopping—that is another trip. Mrs. Smith then goes home—that is another trip. In other words, anyplace that Mrs. Smith steps for some purpose, is the end of one trip and the beginning of another.
- 3—"Origins" (Place where trip stasted) and "Destinations" (Place where trip ended) may be listed as an address, such as 500 North High Street, or an intersection, such as Fifth Street and High Street, or as a place, such as the Court House, State Office Building, or any of the well known stores, banks, buildings etc. Do not asy you went from home to work: we don't know where you live or where you work.
- 4—You will have done a good job of filling this card out if, after it is finished, any other person could read it and quickly tell where the trips had started and where they ended.
- 5—If you have any difficulty filling the card out call any of the following telephone numbers for assistance: Ma. 1265, Est. 780: Ad. 7474; Ma. 2211; Ad. 4281; Ma. 1321.
- 6-11 you have more than 8 trips, list them on another sheet and mail, or bring them to the Survey Office.
- 7-DON'T FAIL TO FILL OUT THE ATTACHED CARD AND MAIL. Thank you

Director of Survey

Can then create trip tables to draw graphically on a map.

#### Home Interview Surveys

1<sup>st</sup> HIS – 1942
 Toledo, Ohio by
 Ohio Department
 of Highways

	CITY OF TOLEDO
	in conjunction with
	TOLEDO NATIONAL DEFENSE COUNCIL
	HIO DEPARTMENT OF HIGHWAYS  U. S. FEDERAL WORKS AGENCY Public Roads Administration
C0	he State, City and Civilian Defense officials who are charged with planning civilian defense and postruction of streets and roads need to know more about the driving habits of the public. With the poperation of the Joint School Defense Committee and the Superintendent of Schools the above officials reasking you to help get these facts.
R	LEASE TAKE THIS FORM HOME, HAVE EACH PERSON WORKING FILL OUT ONE FORM AND ETURN TO YOUR TEACHER, ON THURSDAY, MAY 21st. is not necessary to sign this form.
Н	ome Address Collingwood (do not use your rural mall route address)
~	Individual Workers Trip Record
1.	What is the address of your place of work?
	What method of transportation did you use to get to work today? (Wednesday, May 20th)
	☑ Drove automobile ☐ Taxi
	□ Passenger in automobile         □ Walked           □ Street car         □ Other           □ Bus
	you drove to work today please answer the following questions:
3.	What time did you leave home? 7:25 A.M.
4.	
	Collingwood - Bancroft - Elm
5.	Where did you park your car? On the Street    Off the Street   Approximate street address.
6.	What time did you arrive at your place of work? 7:45 A.M.
7.	What time did you leave your place of work? 4: 30 P. M.
~~	

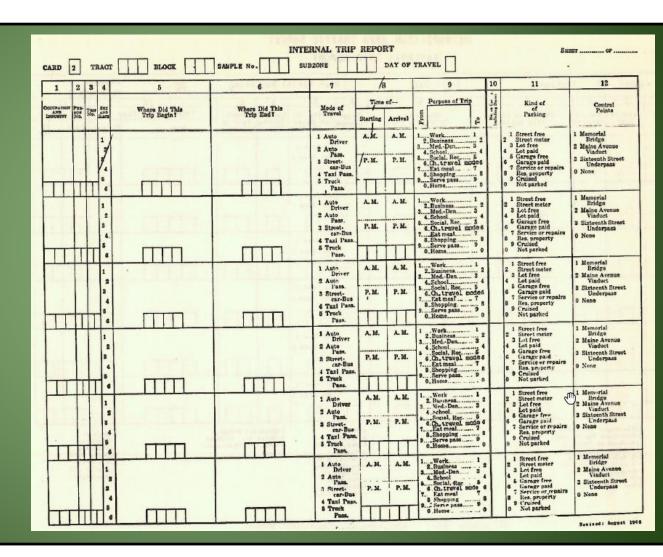
WAR EMERGENCY TRANSPORTATION STUDY

#### Recommended Sample Size

- 1943 Public Roads Administration (BPR) collaborates with Census Bureau to develop sampling methods for internal travel
  - Dwelling Units
    - 20% for <100k population</li>
    - 10% for 100-300k population
    - <10% for >300k population

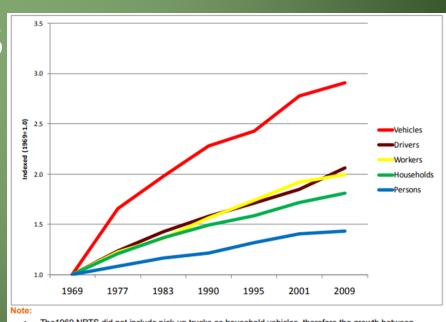
## Lynch Method

- In-person
   prior day HIS
   developed by
   I.T. Lynch, BPR
- Little Rock,
   Tulsa and
   New Orleans
   in 1944
- 1947 55 cities



## **National Personal Transportation Survey**

- 1<sup>st</sup> NPTS 1969 by Census Bureau for FHWA (previously BPR)
- 235 Sample Areas over all 50 states
- 1977, 1983, 1990, 1995
- NHTS 2001, 2001, 2009, 2017



The 1969 NPTS did not include pick-up trucks as household vehicles, therefore the growth between 1969 and 1977 is exaggerated.

#### Transit Rider Surveys

- 1<sup>st</sup> On-Board Survey 1946 Washington
  - Postcard Survey with 10% response rate
- 1946 Manual of Traffic and Transit Studies –
   American Transit Association (ATA)
- 1981 Bus Transit Monitoring Manual UMTA (now FTA) (updated in 1985)
  - 6 types of transit counts
  - 2 types of surveys (B2A, OBS)

## The Committee! There at the beginning.

- Committee Number 4 of HRB
  - To research "purpose, methods, and cost of conducting traffic surveys, the significant data to be taken, and its useful applications."
- 3<sup>rd</sup> Annual Meeting
  - "There is a differentiation made between the traffic census and the transport survey: the former gives information pertaining to the traffic using the system at the time the information is obtained; the transport survey determines the probable amount and character of the future traffic which will use a given highway during the lives of its several component parts."

#### **Travel Survey Manuals**

- 1<sup>st</sup> Travel Survey Manual "Forms for Traffic Investigations" published in the 1930 HRB Proceedings by this Committee (Committee on Highway Traffic Analysis)
- Nationally published manuals in 1944 (BPR), 1946, 1954, 1966
- Guidelines for Designing Travel Surveys for Statewide Transportation Planning – 1976 FHWA, updated 1996
- 1997 NCHRP Multimodal Transportation Planning Data: Compendium of Data Collection Practices and Sources

#### Roadside Interview Surveys – last 20 years

- Increased attention to safety
- Computer tablets replaced pen and paper
- Automatic License Plate Recognition (ALPR)

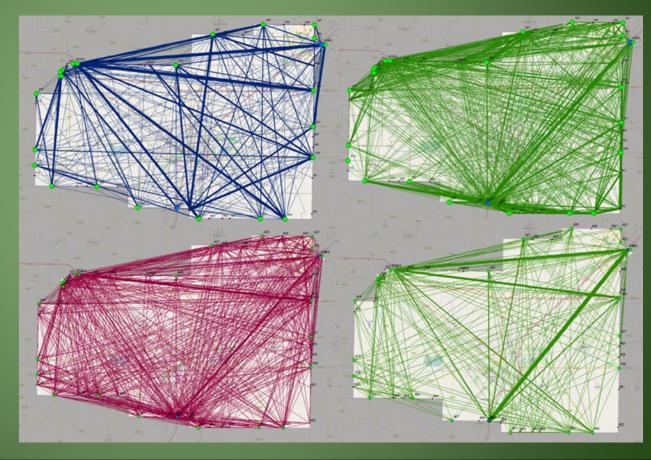






## Replacements/Augments for RIS

- Passive Data Bluetooth, GPS, Cellular, LBS Data
- Estimates of
  - Basic trip purpose
  - Residents/ visitors
- Missing
  - Mode
  - Occupancy
  - (Vehicle Type)



#### Home Interview Surveys – last 20 years

- 1<sup>st</sup> GPS Subsample 2001 Oregon in-vehicle GPS devices
- 2007-2013 Personal GPS Devices sent to HHs
   Prompted Recall
- NCHRP 775 Applying GPS Data to Understand Travel Behavior – None of the methods sufficient to replace the self-reported data
- Smartphones are now state of the practice

## Sampling Methods

- 1970 Address-Based Sample (ABS) still recommended with 4 - 12.5% sample rates
- Random Digit Dialing (RDD) subsequently replaced the address sample due to reduced costs and the ubiquity of telephones
- 2008 Reversion back to ABS due to unlisted numbers and Caller ID screening

#### Transit Rider Surveys – last 20 years

- On-Board Surveys now collected with Tablets
- B2A Surveys with bar code scanners
- New Datasets allow for data integration
  - Automatic Vehicle Location (AVL)
  - Automatic PassengerCounters (APC)
  - Automated Fare Card(AFC)

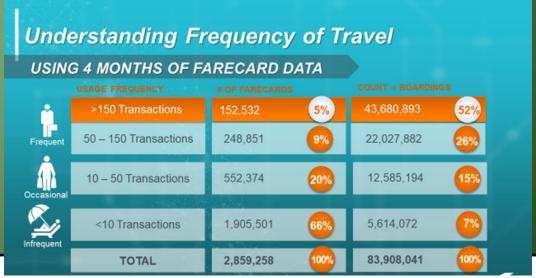


#### The Committee – last 20 years

- ~40 research papers each year
- 2008 Travel Survey Manual Peter Stopher(PI)
  - 2010 Moved TSM to Online Wiki
- Blue Ribbon Committee in 2014
- Virtual Reality for SR surveys
  - Workshops to learn how to program and use VR

#### Future – Passive Data and Smartphone Use

- Smartphones are increasingly used to arrange transportation as a service (not pre-planned!)
  - TNC, Carshare, Bikeshare, Scooter
- AFC and AVL data fusion to understand transit users
- Passive OD Data from LBS



#### Future – Survey Administration

- Rising Costs due to more data-intensive travel models and lower response rates
  - Convenience samples, rising incentives
- Data Fusion with Passive Data (NextGen NHTS)
- Shorter data collection cycles are needed due to rapid changes and new questions
  - Gentrification (relocating disadvantaged populations), new travel modes, new policies (congestion pricing, limiting parking, ...)

#### **Future Challenges**

- Appropriate Data Collection Methods
  - Random samples augmented with Convenience Samples
  - Transit Farecard Analytics for expansion
  - Passive data to replace RIS
- Sample Sizes will likely shrink
  - Need to augment with passive data to weight properly
- Use of Passive Data
  - NCHRP 868 Cell Phone Location Data for Travel Behavior Analysis
- Similar studies to explore emerging data sources

#### **Future Challenges**

- Biases in Passive Data
  - Smartphone Ownership
  - Cash Transit Fare payments
  - Older populations are slow to adopt
- Confidential Datasets
  - Few competitors selling passive datasets with proprietary methods mean the community is unsure what biases are in available products
  - Committee to encourage and support the democratization of data by:
    - Promoting research that make analytical procedures more accessible to the community
    - Developing clear dos and don'ts so new organizations looking to provide services know what the community is looking for and can tailor their services accordingly

#### Committee Membership

- 21 Main Members
- 5 International Members (we use these)
- 3 Young Members (4 allowed, we lost 1 last year)
- 2 State DOT Members (we use these)
- 1 Emeritus Member (Elaine)

32 Total

### **Committee Members**

- 3 year terms
- 9 years maximum
- 1/3 of members rotate every 3 years
  - Next in 2020

- Review papers You are committing to 3 for this committee for <u>EVERY</u> year
- Contribute to Travel Survey Wiki
- Support committee research as able

# Thank you! Thank you! Thank you!

- Cynthia Bland
- Mark Bradley
- Stacey Bricka
- Elizabeth Greene
- Ed Hard

- Soheila Khoii
- Arash Mirzaei
- Ashley Tracy
- Lei Zhang

- DOT member (1)
- Young members (2)

- Research Coordinator
- Secretary

# To Be Considered for Membership

- Give me your business card with "ABJ40 Membership" written on the back.
- Email your CV to: rebekah.anderson@dot.ohio.gov
- Note:
  - You cannot be on more than 2 committees
  - No more than 1 person per employer can be on any given committee

# 2020 Paper Reviews

- Committee Members are assigned 3 reviews each
- Thanks to Aly Tawfik, Cynthia Bland, Ravindra Gudishala for additional reviews!!
- Friends are limited to 2 each
- 5 submitted for Presentation Only

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Papers Received	40	46	47	35	42	35	34	28	31
Paper Reviews	174	184	208	146	161	144	144	100	88
Papers with 2 Reviews									11
Papers with 3 Reviews	3	12	6	5	16	7	3	16	15
Papers with 4 Reviews	20	23	15	19	17	17	20	8	4
Papers with 5 Reviews	17	11	26	11	9	11	11	4	1
Reviews/Paper	4.35	3.98	4.43	4.17	3.83	4.11	4.24	3.57	2.84

# 2020 Average Scores

		Presentation
	# Papers	Rating
All	31	3.3
Submitted for Presentation Only	6	3.0

# • 16/31 Accepted for Presentation (52%)

Presentation Rating		2013	2014	2015	2016	2017	2018	2019	2020
All	3.5	3.4	3.6	3.5	3.3	3.2	3.4	3.4	3.3
Avg Score Accepted for Presentation	3.8	3.9	4.0	3.8	3.8	3.8	4.0	3.9	3.9
Avg Score Revise for Possible Publication	4.0	4.1	4.1	3.8	4	-	-	4.1	-
Avg Score Accepted for Publication	4.2	4.5	4.4	4.1	4.4	4.2	4.3	-	-

## How to Conduct Paper Reviews

- If the paper has very poor grammar:
  - Give the paper a 1 for "Is the narrative clear and easy to understand?"
     Poor English grammar is sufficient grounds for rejection of the paper
  - Give "N/A" for the rest of the categories (assuming you did not review the paper give actual numbers if you did)
  - Write a comment in the "Comments to Author" stating "This paper needed edited for English Grammar prior to submission."

## How to Conduct Paper Reviews

- Data Valid: Are the data collected or used for the project sufficient to actually draw a conclusion?
- Comments to Author You should always put something here. Review coordinators primarily use this box to determine whether to accept or reject the paper, <u>especially</u> if it is on the cusp.

#### Comments to Author

- You do <u>not</u> need to:
  - Correct typos or grammar unless it is something a technical editor will not pick up (e.g. subscript is wrong in a formula)
  - Give a summary of the paper
- You should:
  - Say one nice thing if you can ("This is an intriguing concept."
  - Point out other research that is relevant if not included in the Lit Review/References
  - Give suggestions on how the research could be made better/more thorough/have a wider range/more practical
  - Critique the researcher's study if there are any major or minor problems

#### Comments to Editor

- These are also very helpful. You do not <u>need</u> to add comments if you commented above, but they are heavily encouraged
- Include:
  - "This paper has problems with grammar and should not be accepted." if applicable
  - Whether a poster or lectern session is more suitable
  - If you have seen this published elsewhere
    - "Generally a decent paper. Worth presenting. I wouldn't publish it, but it's not bad."
    - "This is essentially a case study and gives survey results without any validation."
    - "Premature" or "Nothing new"
    - "Generally, the best paper I've seen on this topic in a while."
    - "Complete waste of time. At least it was short."

# Rating for Presentation

- 5 Best thing you've ever seen. Definitely P/P.
- 4 Very good. Should be Presented.
- 3 Okay. Probably shouldn't be Presented.
- 2 Has problems.
- 1 Has significant problems or poor grammar.

#### **Publication**

- Generally the <u>Rating</u> is used to determine whether the paper is accepted.
- Note that <u>all</u> papers are edited by a Technical Editor before they are published in TRR.
- TRB Editors make the final decision regarding Publication.

#### Data Section and Other TRB News

Coco Briseno, ABJ00 Section Chair

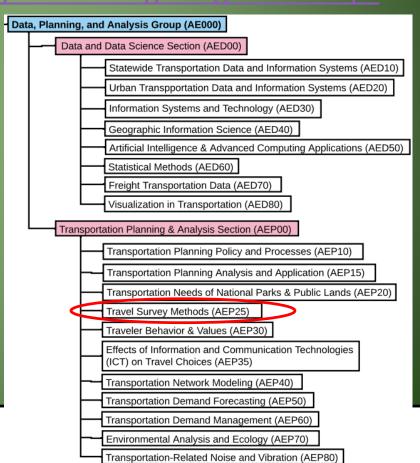
Tom Palmerlee, TRB



# TRB Committee Realignment

- http://www.trb.org/AboutTRB/TADStrategicAlignment.aspx
- http://www.trb.org/AboutTRB/TADStrategicAlignment.aspx
- Goes into effect
   April 2020

AEP25



# Committee Realignment - Subcommittees

- Subject matter subcommittees are call "subcommittees." (vs. Admin. = "Task Force")
- Currently 250 goal is 200
- Approved by TRB
- Term is 5 years and may be renewed
- Subcommittees must be addressed in the TSP
  - Scope & activities to achieve committee's goals

# Action Plan – 2020

2020 Planned Actions	Planned Actions	Dates
Meetings	<ul><li>2020 AM</li><li>Mid-year meeting by conference call</li></ul>	<ul><li>January 15, 2020</li><li>11am EDT Thursday, July 9, 2020 (3pm GMT)</li></ul>
Membership	<ul> <li>9 members need rotated off</li> <li>New committee Structure in effect April 2020</li> </ul>	<ul> <li>Recommendations due to TRB staff by February 15, 2020.</li> <li>New Committee code is AEP25.         TRB Staff member may change as Committee is moving to the Planning Section.</li> </ul>
Research Needs Statements	<ul> <li>Update TRB database to reflect current RNSs.</li> <li>Identify datasets appropriate for each RNS.</li> </ul>	<ul><li>February 2020</li><li>June 2020</li></ul>
	<ul> <li>Rank RNSs.</li> <li>Determine appropriate funding sources for each RNS.</li> </ul>	<ul><li>June 2020</li><li>June 2020 mid-year meeting</li></ul>
Wiki Migration to GitHub	<ul> <li>Give an update of the Wiki transition.</li> <li>Create framework for new GitHub Wiki</li> <li>Assign tasks with quarterly deadlines to complete pages.</li> </ul>	<ul> <li>January 15, 2020</li> <li>March 15, 2020</li> <li>April 15, 2020</li> </ul>

## Action Plan - 2020

CRP Proposals •	Potential Synthesis proposal	•	February 17, 2020
•	Potential full NCHRP Proposal	•	November 2, 2020
Conferences	Conference on Transport Survey Methods Innovations in Travel	•	May 31-June 5, 2020
	Modeling	•	June 14-17, 2020
Communications •	Maintain Committee's website	•	Ongoing
Paper Reviews •	Coordinate and conduct paper reviews for 2021 Annual Meeting	•	September 30, 2020

#### Action Plan - 2020

#### Other Collaborations include:

- ADB40 (AEP50), ADB45 and ADB50 (AEP15) regarding the use of survey data to ensure that the survey community continues to meet the needs of the user community
- ABJ30 (AED20) regarding the development of Big Data.
- ABJ10 (AED10) for Long Distance and National Surveys.
- ADA30
- ADB45 regarding the TFResource.org move of the online travel survey manual.
- Develop and maintain relations with the Planning and Environment Group to disseminate the RNSs to students in need of research topics.

Obstacles and Challenges: The biggest obstacle continues to be the lack of time on the part of committee members and friends to update the RNSs and Survey Manual Wiki. By issuing quarterly deadlines, it is hoped that these tasks will remain on volunteers' calendars and additional work will be accomplished.

## Triennial Strategic Plan 2018-2020

- Emailed to Friends/Members
- No updates from draft handed out at 2018 AM
- Emailed out with the agenda
- Email me with any comments to be made this year for the 2021-2023 TSP
- To be discussed at July 9, 2020 mid-year meeting

Focuses should include Big Data and Data Privacy

# TRB 2021 Annual Meeting

- January 24-28, 2021 100<sup>th</sup> Annual Meeting
  - Date change from Jan 31-Feb 4, 2021
- Workshop Ideas
- 2 Podium Sessions
  - One to feature papers
  - One for Best Papers from ICTSM

#### **Committee Website**

http://travelsurveymethods.org

https://www.travelsurveymethods.org/wordp
 ress/

# Travel Survey Manual Websites

- http://www.travelsurveymanual.org/
- http://tfresource.org/Category:Travel\_surveys
- http://www.travelsurveymanual.org/
- http://tfresource.org/Category:Travel\_surveys
- A sign-up sheet was passed last year. Let me know if you want to sign up for section working groups.

# **Travel Survey Manual**

- HTS 14
- External 2
- Transit 6
- Com. Veh. Anurag
- Visitor − 2
- Establishment 5
- Parking ZERO
- SR Zak

- LD − 4
- Longitudinal 3
- Emerging Tech 2
- Emerging Topics –
   Stacey
- Survey Archiving –
   Jeff Gonder

Black are NEW

Travel Survey Manual

- Working Group to revise organization of each type of survey
  - HTS
  - External
  - Transit
  - CVS
  - Workplace
  - Visitor
  - Parking
  - SR
  - Long-Distance
  - Longitudinal

•	
Chapter	Title
1	Introduction
2	The Generic Travel Survey Process
3	Options for Travel Surveys
4	Management and Quality Control
5	Precision and Accuracy in Travel Surveys
6	Household Survey Methods Design and Sampling Decisions
7	Household Survey Organization and Contracting
8	Household Survey Instrument Design
9	Household Survey Pretests
10	Household Survey Implementation
11	Household Survey Coding and Geocoding
12	Household Survey Data Expansion and Analysis
13	Household Survey Training Approaches and Priorities
14	Household Survey Procedure and Measures for Further Research
15	Vehicle Intercept and External Station Surveys
16	Transit Onboard Surveys
17	Commercial Vehicle Surveys
18	Workplace and Establishment Surveys
19	Visitor Surveys
20	Parking Surveys
21	Stated-Response Surveys/Activity Surveys
22	Longitudinal Surveys
23	GPS Surveys
24	Qualitative Methods
25	Costs and Trip Rates of Recent Household Travel Surveys
26	Using Smartphones for Travel Behavior Studies
Appendix A	Additional Resources: Example Surveys, Field Materials and RFPs

# **Travel Survey Manual**

- 1. Establish Working Groups by Survey Type
- 2. New Chapter Outline (March 2020)
  - Will note whether new section, or copy/revise section
- 3. At mid-year meeting, sign-ups for filling out the Chapter Outline.