ABE30 Committee Meeting  
2018 Annual Meeting

**Attendees:**

Steve Buckley, WSP - Chair

Linda Bailey, NACTO

Raymond Chan, Chicago Transit Authority

Andrea d'Amato, MassDOT

Stephanie Dock, DDOT

Fred Dock, City of Pasadena

Danielle Elkins, Civic Ideation/Advance ATL

Scott Fraser, City of Toronto

Luann Hamilton, Chicago DOT

Sylvain Haon, UITP

Phil Lasley, TTI

Wes Marshall, University of Colorado Denver

Andy Nash, Crowdsourced-transport.com

Julia Salinas, LA Metro

Karen Vancluysen, Polis

Bill Anderson, TRB

Benjamie Anyacho, TXDOT

Billieh (Beezy) Bentzen, Accessible Design for the Blind

Lee Biernbaum, Masabi

Mark Alisesky, McMahon Associates

Marta Brolinson, Vinnova, Swedish Innovation Agency

Tamiko Burnell, FHWA Freight Office

Emily Burns, Seattle DOT

Peter Cafiero, NYC Transit

Alejandro Chock, Mott MacDonald

Matthew Ciborowski, Arup

Alexa Delbosc, Monash University

Ray Derr, TRB

Mike Flynn, Sam Schwartz

Laura Gilmore, Massachusetts Port Authority

Todd Goldman, PANYNJ

Andrew Hengel, HDR

Melika Jahangiri, Ford Smart Mobility

Peter Kauffmann, Barge Design Solutions

Anurag Komanduri, Cambridge Systematics

Jeremiah LaRose, Fehr & Peers

Edward Mark, NYSDOT

Peter Martin, CDM Smith

Ryan McClain, Fehr & Peers

Frank T Mongioi, Jr., ICF

Jason Mumford, AECOM

Debra Nelson, NY Metro Transporatation Council (NYMTC)

Bill Orleans, Hack

Matt Papirnik, Burns + McDonnell

Alex Pazuchanics, City of Pittsburgh

Benito Perez, DDOT

Joseph Poirier, Nelson\Nygaard

Alek Pochowski, Kittelson & Associates, Inc.

Ed Reiskin, SFMTA

Jonathan Reweis, SFMTA

Melissa Ruhl, Arup

Francie Stefan, City of Santa Monica

Brad Strader, MKSK Studios Detroit

Ivana Tasic, Chalmers University

Knowles Tivendale, Phillip Boyle & Assoc.

Prachi V, Steer Dawes Gleave

Ryan Westrom, Greenfield Labs

Douglas Wiersig, City of Fort Worth

Michael Wilmore, Baltimore DOT

Erich Zimmerman, NARC

# Welcome and Introductions

Steve went over the National Academy of Sciences commitment to a harassment-free environment

Attendees introduced themselves, including their current greatest area of interest (latecomers had to name their go-to karaoke song)

Lowell Porter, the new section chair for the transportation policy (ABE--) committees gave a quick update. They are trying to collaborate with committees with intersecting interests. He reminded the committee to consider nominations for the Wooten award for the best section paper.

# Update on TRB Initiatives

Bill reported there was 3% increase in registration from last year, as of Friday

Changing Blue Ribbon Committee awards:

1. Research: challenged to liaise with committees with similar interests, has begun with paper review. Looking for the creative ways this now relates to research – cross-cutting, decrease time to develop statements (e.g. reduce from 18-24 months to 6 months), especially for technology projects; also will work with CRPs to look at opportunities
2. Renewal: engaging and continuing dialogues with non-traditional partners
3. Implementation: moving research into practice, comparing implementation and feeding back into research – currently mostly use webinars; what else can we do?
4. Leadership: leadership often moves between the same level. How do we get more people taking leadership roles in the committee, to move through to next level (subcommittee chair to committee chair to section chair)

Membership roster up for rotation: Speak up at committee meetings to show interest!

Triennial Strategic Plan – a lot of committees outside this one are interested in cities and want to work with us, keep that in mind

RISE conference on resilience – bringing together state, federal, and local/community since all 3 don’t work well together. People are comparing resilience to what NEPA did to agencies in terms of what skills are needed to respond. Inviting and paying for 100 state DOT staff to attend. Expect all state CEOs to hopefully come. Deb Nelson is working on this (NYSDOT).

Women’s Issues in Transportation coming up in 2019. Planning committee is huge and has great ideas

Factsheet on new partnerships with international organizations – “blue banana” cities want to work with this committee.

# Sub-Committee Updates

## Communications

Stephanie pointed everyone to the committee’s new-ish Twitter account: @TRBCities, run by Matt Kroneberger. Our followers topped 100 during the meeting.

There are still ideas for a blog, though Steve noted we may want to consider alternative ways to continue the committee conversations. Either way, we hope to get that started this year.

## Paper Reviews

Julia went over the statistics on papers this year. 27 paper submissions, up from 23 last year. We had 97 reviewers, similar to last year – able to get 3 reviews on every papers, even up to 6 on some papers. A thank you to all who submitted their reviews in time.

* 7 papers for posters, a bit more selective than last year
* 6 papers for presentation
* 3 papers for publications still in re-review

Request: Julia needs a co-coordinator for paper review. Bulk of the activity of the coordinator is August 15-October 1.

Steve noted that the call for papers will come out earlier than this year – by early May

## Webinars

Ivana covered our upcoming webinars

Webinar 1: Next Generation Cycling Solutions

Webinar 2: Urban Freight in Multimodal Conditions with speakers from Europe, Asia, and North America

Other webinar ideas welcome – due date is in March for TRB-sponsored webinars.

## Annual Meeting Organization

Fred went over the sessions that the committee sponsored sessions (see website or meeting slides)

There has been a lot of collaboration with other committees this year, and a wide range of topics. Committees reach out to us often when they want to put an urban spin on their work.

Sessions: come together after the papers are in, usually around late October

Workshop ideas: usually due earlier in June, so reach out with you have ideas. We did not lead one this year but would like to.

Billie Louise Bentzen (Accessible Design for the Blind) raised a workshop that is in development for 2019 about accessible multimodal transit facilities

## Research

Wes went over the critical issues for the strategic plan update

1. New urban metrics – gets into performance measures and such
2. Reallocation of public ROW (curbs)
3. Emerging mobility services & technologies – can include TNCs, AVs
4. Harnessing big data – can include
5. Revenue Replacement Strategies, includes congestion tolling
6. Mitigating societal consequences of transportation disruption, which encompasses resiliency, preparing before they happen and responding faster when they do
7. Addressing historical inequities, which goes beyond providing equal access and mobility for all users.

Will update the RNS database with needs statements based on these.

Steve clarified the NACTO-ABE30 roles: NACTO can focus on the nearer-term items because they are nimbler in some ways; the committee will focus on issues coming down the line further out

Linda said NACTO has been talking to AASHTO and others about pushing scopes for NCHRP and TCRP. Stephanie noted that DDOT (as a “state” DOT) is open to supporting ideas as they come in.

Ideas of other committees to partner with: Urban Big Data Subcommittee, Transformative Trends in Transit Subcommittee

NCHRP Big Data Research push

## 2018 Initiatives

Steve wants to put out a calendar for the year, including quarterly call-in meetings – March, June, October (at NACTO)

# Update on NACTO Initiatives

The National Association of City Transportation Officials (NACTO) has 68 members, including transit agencies now.

Linda highlighted publications from 2017, particularly *Designing for all Ages and Abilities* with guidance on when to use what types of bicycle facilities. Others were: *Urban Street Stormwater Guide, Blueprint for Autonomous,Urbanism*, and *Bringing Equitable Bikeshare to Bed-Stuy*.

Working more with their cities on the ground – Transit Program Accelerators (Cambridge, Indianapolis, Oakland, Denver); Leadership NACTO for staff at member agencies to train them for the next level in leadership; Green Light for Great Streets to identify what makes projects really effective and what holds projects up.

Setting a vision for emerging challenges;

* Equity in Bikeshare – working especially with Philadelphia; looking also at dockless
* Technology & Transportation – looking at data sharing and data standards particularly
* Better Buses – improving the transit you already have on your streets

Global Designing Cities Initiatives – intensive partnership with 5 cities; partnered with Bloomberg Initiative for Road Safety; launching “safe streets for kids”

NACTO 2017 was in Chicago; 2018 conference will be in Los Angeles Oct 1-4. Register early!

News impact has expanded this year, especially on some of the technology projects

Blueprint for Autonomous Urbanism

Envisioning great cities with AV technology. Bring what NACTO has learned about how transportation works well, bringing that to the tech side

AVs have a lot of promise (safety, carbon footprint, public space, costs, ownership, congestion), but we don’t know what the path will look like to get to those goods. Moreover, these benefits are not always what the AV makers think about. Many AV simulations show driverless cars and people-less cities

Proposed federal policy. NACTO has raised issues with federal policy as proposed:

1. Federal preemption of state and local authority – particularly tied to “performance,” which is undefined in the legislation
2. AV compliance with local rules of the road
3. Data sharing
4. Vehicle safety exemptions

NACTO supports AV policies and regulations designed to keep cities for people.

Big ideas:

A street today – 10 lanes of traffic, reasonably wide sidewalks.   
Tomorrow – Need to rebalance ROW; reduce vehicular space, increase people space

The typical demo shows a lot of cars moving freely, but not the people getting in and out, moving around

1. Improving Safety – look at the street from the perspective of a wheelchair user. Smooth surfaces instead of curbs; not having to cross at an intersection
2. Sharing Data: Manage Streets in Real Time; the more we know about how streets are operating, the better we can manage the streets for all users
3. Move More People with Fewer Vehicles – graphic shows that when a sidewalk is wide enough, it can carry many more people per hour than typical travel lane; high capacity transit carries even more
   1. Interesting factoid Linda heard this year – the rates of growth of cities; 1-2%/year in cities with big base already; challenge for congestion

Expanding Transit – tech can help transit, but also feeding some transit competitors. Idea of a flexible system that is more hub-to-hub (not door to door); provide efficient, competitive service

1. Coding the Curb – how do we make it so the curb is flexible in use but works for the competing uses (freight, bus, bike, drop off/pick up in more locations). Think about how technology can help control and vary uses throughout the day
   1. Going to be working with cities on this this year.

Q&A

* A few states have preempted. Is NACTO seeing ways to challenge this? Or areas that cities need to focus on keeping control of (e.g. curbside, taxi/limo are things they normally serve)?
  + An evolving area, safety is a major concern – approach for now seems to be trust the carmakers until proven otherwise. But the automakers see their occupants as their customers and want to protect them first; cities want to protect all users. Hold vehicles t the same standards we hold cars
  + TNCs and for-hire vehicles – this is commercial activity
  + Curbside management – cities can and should still be active; does not have to be punitive – can lay out how they’d like things to operate and work with the tech folks who are excited about their tools
  + The AV legislation is written for big, established companies who would be unlikely to put unsafe vehicles out there; does not really consider the smaller actors who may be more likely to go out with a less-safe technology because of a different mindset
* Efficient movement of people through the city – there is talk of AVs enabling latent demand, is NACTO looking at pricing?
  + NACTO is planning to put something out on this this year. Cordon pricing already happens for TNCs at nearly every airport in the fee they charge
* Pricing to bring value and transparency back to the cities to support transit and streetscape
  + Chicago is doing this with a TNC fee for CTA, who is planning to put it into rail
  + Linda reminded that cities are the market – the operators want to be in cities, and cities should use that knowledge with confidence. There’s a reason NYC gets the most data – requires of all operators (level playing field), but also their size.
* Regulation and data – TNCs and eventually AVs have it, but cities and transit agencies do not. Transit agencies only have half the story because they don’t know what TNCs are doing.

# GUEST PRESENTERS

# Federal Updates

Infrastructure Plan – releasing next week (halfway between TRB and State of the Union – Wed?)

* 50% for incentive grants with 20% federal cost share
* 25% for formula-based grants to rural areas – recognizing they have less ability to generate revenue

P3 or not P3? There is still cognitive dissonance on whether to do this – the President is still questioning whether P3s work, but his national economics staff bleed PPPs.

Unclear if they will put out detailed 70-page plan or 10 page with bullet points and let Congress fill in

Closing Out FY18 – still no agreement on overall top-line spending totals for defense and non-defense appropriations; if want to go above current caps, need 60 votes in the Senate.

Non-defense discretionary – Transportation/HUD normally gets 10-11% of that. The range of numbers put out is the widest spread Jeff has seen.

Challenge: USDOT was told a year ago to cut $3B for FY18 ask – essentially had to come from Amtrak/rail, FTA new starts, TIGER, and FAA procurement (but mostly not air traffic). Those could come back if the extra funds come back in higher funding, so somewhat a wash but not entirely.

Increasing odds that there is a government shutdown later this month.

I-Plan in the Big Picture

Deficits – may not have the appetite for an infrastructure bill after all the additional deficit additions have come up lately

Highway Trust Fund (HTF) – new funding is nice, but really do need a HTF fix. HTF needs $20B every year after 2020 to fill funding gap. The tax reform was the ideal place to do that, but because of how the tax reform was passed, could not touch it. Transportation legislators are trying to figure this out, but does not look like President’s budget will include this.

Comity – why would there be cooperation with Trump administration with anything leading into the 2018 elections.

Q&A

* What might this mean for cities and transit agencies?
  + New Starts in the queue could benefit with funds + Speaker Ryan has asked rules person to revisit earmarks – has really affected New Starts
  + Trying to get localities excited about new programs that have 20% cost share instead of traditional programs with 80% cost share – but that’s not going to sell
* Regulatory reform as part of Infrastructure bill?
  + Yes. But we are still figuring out the regulatory reform from MAP-21 and FAST Act (Title 41), so hard to figure out how much further to go statutorily right now.
* Shut down impact on spending?
  + Lapse in budget appropriations/budget authority. HTF has budget authority through 2020 and FHWA employees can work since they are paid from HTF, but FTA employees cannot work, so cannot send funds, and half of NHTSA cannot work.

# Bicycle Lanes & Business Success: A SF Examination

Effects of bicycle infrastructure implementation on local businesses – based on his work at UC-Berkeley.

There is often pushback from local businesses to bike lanes because of the loss of parking and perceived impacts from that.

Existing research is limited – most primarily survey-based; only three reports using sales data; only one with defensible methodology. 2 municipal DOT reports (Oakland “Telegraph” and NYC “Measuring the Street”) give you a perspective with their political agenda; 1 academic report from Seattle is most defensible.

Data source: NETS – National Establishment Time-Series – proprietary, relatively accurate, good detail; also Google Earth Pro for time series of aerial photos. Includes employment, sales, location data, etc.

Methodology – 2 years before + 2 years after; only compare those businesses that were there the whole period. 800-1400 establishments per studied street. Segmented to abutting and non-abutting to the bike facility; local-serving vs. all establishments to capture those that can be visited by bike (e.g. would not furniture shop with a bike – can’t get the furniture home in many cases); Sales per establishment and sales per employee. Can use Google Earth to go back to historical pictures to compare improvements.

Compared citywide, abutting, non-abutting. Generally track one another, suggesting no effect from bike lanes; except in the case of local-serving businesses on bike lane where there was substantial improvement (+38% on Valencia Street); did see one large decrease on Columbus Ave for all establishments, but not local-serving.

Bike lanes are likely not “good for all business” – better for some than others.

Implications: understand the mix of businesses in an area; focus bike routes to corridors with local-serving businesses? Could use as an economic development tool for those corridors; be more honest in advocacy

Shortcomings: self-selection (don’t put bike lanes in without consideration of context, who is asking for lanes might affect), cyclists won’t only visit the corridor businesses – don’t really account for those nearby businesses as fully; sales tax data usage would be cheaper for city.

Q&A

* Toronto has done similar analysis for bike lane and transit lanes; using point of sale data (instead of sales tax, which cannot get in Canada cities)
* Compare businesses that did well vs those that did not?
  + No, but good idea
* SF Controller’s office did similar analysis on these corridors – challenge of the linking of projects with PUC – doing utility, striping, bike lane, etc. all in concert; learned after 11 months of a project, the businesses really fall off. 12-18 month construction duration means 2-3 year recovery period.
* Any data on temporary events (e.g. Cyclovia)? He knows of more about tourism cycling (e.g. rail to trails), not aware of temporary events. Those studies have been more survey based.
* How quickly are the impacts realized? Depends on the type of interventions probably and what was impacted. Would expect to see impacts within a year though, as people change their patterns.
* Seattle did something similar – did they just look at bike lanes? Yes. Just bike lanes
* People for Bikes is working on a multi-city analysis using sales tax

# Curbside Pilots for TNCs

DC’s pilot for nightlife area – removed parking for TNC and taxi drop-off/pick-up during late night along Connecticut Ave, near Dupont Circle.

Encourage folks to look at the Curb Your Enthusiasm webinar presented in December through NACTO: <https://nacto.org/event/curb-your-enthusiasm-managing-high-demand-curbside-passenger-loading-zones/>

# Green Book Update for Multimodal, Performance-Based Design

For several years, the AASHTO and TRB Committees on Geometric Design have been looking at alternative approaches to the design standards in the Green Book. NCHRP Report 839, A Performance-Based Highway Geometric Design Process (<http://www.trb.org/NCHRP/Blurbs/175375.aspx>) presents a process that is better aligned with current expectations of transportation agencies and focuses on the multimodal performance of the facility. The recommendations have been influenced by NACTO efforts to change the design process.

In a related effort, Fred Dock was involved in the project on expanded context-based functional classification system that better matches reality on our streets and is less auto-centric (NCHRP Report 855, <http://www.trb.org/Publications/Blurbs/176004.aspx>). Adds to urban/rural split with other types (rural town, urban core, suburban) and adds bicyclist and pedestrian elements. A webinar is scheduled for Feb 5: <https://webinar.mytrb.org/Webinars/Details/1143>

In the first step towards implementing the recommendations from NCHRP 839, the 7th Edition of the Green Book (expected later this year) will include the expanded functional classification system, an emphasis on designing for all modes, and an approach towards performance-based rather than standards-based design, particularly for reconstruction projects.

Work has begun on framing the 8th Edition of the Green Book that could be totally restructured. Workshops will be held with a variety of stakeholders to vet the recommendations in NCHRP Report 839 and determine how best to move forward.

# Impacts of CVs/AVs on State and Local Transportation Agencies

NCHRP started investing in CV-AV issues a few years ago - $6 million invested so far. A summary of the work is available at <http://bit.ly/2y8gEm4>

NCHRP Report 845, Advancing Automated and Connected Vehicles: Policy and Planning Strategies for State and Local Transportation Agencies, has a companion Briefing Document that is written in plain language to help talk about the potential impacts of CV/AV on societal goals (i.e., safety, congestion, emissions, land use, and mobility for the underserved) and 18 potential policies that can help shape CAV to be more beneficial than not.

NCHRP Web-Only Documents 231 and 239 explore how CV and AV technologies could be used in the freight and transit industries, respectively.

The Phase I report on Road Markings for Machine Vision will be available this Spring. It will provide contrast and retroreflectivity values for machine vision systems to recognize markings. Phase 2 will start then looking at contrast markings.

Other work is underway on incorporating CAV into planning and modeling tools, data management, impacts of transformational technologies on land use, and public-sector assessment of mobility-on-demand and ADS. Stephanie is on the panel for the last project.

If we identify research needs for CV-AV, get them to Ray by April so he can present to panel when they meet after the AV symposium

The effort has been partially guided by a research roadmap developed in 2014 that is now out of date. A new approach will be the TRB Forum on Preparing for Automated Vehicles and Shared Mobility Services. It’s a collaboration of public-sector, private-sector, and academia to identify research needs for deploying these technologies while meeting societal goals. It will meet every 6 months to talk about what has happened and where to go next – more iterative approach to setting research agenda. NYC and Maricopa County have signed on to the forum – do have to pay to participate.

# Presentation by Waymo

After years of secrecy, more firms are reaching out on their work. Waymo has established an outreach group that is trying to engage with cities as part of their Local Partnerships Program.

Waymo is one of the older companies working on AVs – originally the Google Self-driving car project (as of 201\_), spun off as Waymo in the last year. Have driven over 4 million miles on the road. Would take about 400 human-years to get to their level of driving; well beyond what all the other companies have done.

How do we work in cities and what is the role of AV technologies in cities? Waymo is not a car company, they are an AV technology firm that can adapt its program to a variety of vehicles. Currently partnered with Fiat-Chrystler

Not rushing to market – won’t go until they know it is ready and done properly

Use LIDAR, radar, computer vision, then code to answer the same questions we do innately: where am I, what’s around, what is everyone doing, where do I go next? Their system is meant to run on the environment as it is; self-contained technology that does not need outside inputs, or investment from municipality.

Most of the team are cyclists, take transit – so think about those as part of system design. Have learned how to read hand signals, understand how cyclists move.

Started tested in 5 states and 24 municipalities; biggest test in Phoenix, also in Seattle to learn about rain, Denver to learn about snow

Took first fully driverless trip in October. Only employees testing at this point. Cars do talk to each other. Choose routes for safety, traffic conditions…

Waymo’s driverless services and how they envision that integrating with multimodal systems. Launching a ridehailing app, want to have it integrate with other modes – sync timing, fares. Not interested in starting in dense urban core in current form because there is strong transit there; will go to those, but in other forms.

Want to be part of the solutions for cities.

Q&A

* What is the so-what of this? What do you want from cities to understand their needs and foster the dialogue?
  + Openness to working with Waymo. They are more inclined to work with cities that are excited to work with them – it’s part of why they are in AZ.
  + Sharing of basic info like construction locations, since they are going based off a map with human drivers first.
* How does the car interact with public safety?
  + Working with state dept of public safety and local police on this issue now.
  + Cars are programmed to obey traffic rules, so fewer stops expected. Issue is perception vs. data – some nuances working with safety. Car can perceive sirens and responds
  + One of the questions is who does the officer speak to?
  + What to do when the cop says you did something wrong, but the data shows you didn’t.
* Stop button in vehicles – it would pull car safely over to the side. But what if you want to force it to stop to get off where you want?
  + Waymo wants to work with cities to identify where preferred drop off location on curbs. Shouldn’t be able to abuse the button to do that, but not entirely clear how it can know there is an emergency.
* Aggressive driving – how does the car deal with tailgating, other cars not following the usual rules?
  + For the most part, just drives as it should, can pull over if situation becomes danger
* What is the best way for this committee or others to engage with Waymo?
  + Email for now – will share more information after meeting.
* What research could we think about asking for to benefit both sides?
  + Ask committee about top 5 research question Waymo could help answer.
* How much does vehicle rely on pre-mapping?
  + Prefer to get advance notice, but know they cannot rely on it. First car that encounters learns and shares information
* Google was very involved in creating the GTFS, is Google/Waymo looking at creating a streetscape general feed?
  + Discussions underway
  + Have a start with Waze on partnerships
  + IPI has started to trying to address with a new effort on a curbside spec
  + SAE has been thinking about some of this too
* For cities/states to partner effectively on data, do need a common map accuracy/linear referencing
  + Will discuss this further with questioner.

# Open Floor

4 new TRB Blue Ribbon award categories – TRB trying to speed up their research process to match how fast tech is changing.

Several upcoming conferences, sessions, and webinars were mentioned:

* Railvolution in Pittsburgh in the Fall
* NACTO in LA in October 1-4
* The TRB for Europe in Vienna in April
* WTS is in San Diego in May 16-18
* Wednesday side event in room 306 – EU-US Cities session
* 12th Annual TAM Meeting
* Look for Transportation Camp – Atlanta Feb 24, Philly April 14, Boston April 21
* ACT International Conference in July in Anaheim
* Urban freight webinar series – attend, get ideas submitted
* Upcoming webinar from NACTO on bikeshare-transit integration

Impact of Transformational Technologies on Land Use and Transportation, NCHRP 08-117, RFP posted, due end of the month. This should be a topic of interest to the committee.

Urban Freight Twinning projects – FHWA and EU. Peer Exchange in June 2018.

Freight capacity building program – looking for more city examples

ITE updating traffic impact study handbook – changing to transportation impact, looking for measures - send ideas!