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TRB Annual Meeting 2018

Sustainability Measurement Subcommittee (ADD40-1)

Meeting at: Independence B (M4), Marriott Marquis

Time: Monday, January 8, 1:30 PM- 3:15 PM

Presiding: *Dan Hardy*

Draft agenda (approximate timing)

1:30 – 1:40 Welcome and introductions

1:40 – 2:00 Meeting context, strategies, initiatives

- Linkage to ADD40 committee meeting (Tuesday 1:30) and Research subcommittee meeting (Wednesday 10:15) – both in same room
- Recap of past and potential initiatives
 - Review key elements of Triennial Strategic Plan (see highlighted portion of attached 2017 meeting minutes)
 - NCHRP Synthesis proposal – 2017
 - Other potential initiatives

2:00 – 3:00 Framing issues – brainstorming

- Supporting brainstorming topics at ADD40 and Research subcommittee meetings
 - Where are performance measures most important, needed, lacking, under-appreciated?
 - Where might Synthesis or Research Needs Statements related to performance measures be most valuable?
 - EV/AV
 - Shared vehicle economy
 - Asset management
 - Social equity
 - Others?

3:00 – 3:15 Wrap up – conclusions and next steps

- Research Need Statements and Syntheses
- Potential initiatives

3:15 – Adjourn

TRB Annual Meeting 2017
Sustainability Measurement Subcommittee (ADD40-1)
Meeting at: Independence B (M4), Marriott Marquis
Time: Tuesday, January 10, 3:45PM- 5:30PM
Presiding: *Henrik Gudmundsson, Dan Hardy*

Draft Minutes

1. Welcome and introductions

Dan Hardy opened the meeting with introductions, with those present giving their background.

2. Meeting context, strategies, initiatives

Dan described the context for the meeting, noting that Steve Cliff is the new chair for the parent committee.

ADD40 Triennial Strategic Plan

Dan said that a revised version of the ADD40 Triennial Strategic Plan has been mailed; it will be finalized soon

ADD40 and Measurement Subcommittee roles within the Strategic Plan include the following points:

Driving forces related to Sustainability Measurement

- Building a strong evidence base for sustainability strategies, measures, investments and associated decision support tools
- The identification and implementation of new data sources and new performance measures of sustainability
- Need for integrated comprehensive performance measurement frameworks and 'Sustainable Transportation Indices'
- Identification of transport system performance indicators and evaluation practices that reflect sustainability objectives and their data requirements

Roles for Sustainability Measurement Subcommittee

- Communication across ADD40's partner subcommittees
- Development of Research Needs Statements

Three overarching strategies related to Sustainability Measurement

- Encouraging and broadcasting definitions
- Broadcasting current state of the practice
- Reviewing and encouraging critical research for applications

Encouraging and broadcasting definitions

- Incorporating Triple Bottom Line in all references to sustainability
- Promoting "transport and sustainability" (in lieu of "sustainable transportation")
- Bridge "top down" and "bottom up" measurement approaches

Broadcasting state of the practice

- TRB website / bibliography

- Wikipedia
- Structured relationships with partner agencies such as SLoCaT, ITE, OECD, UN, AASHTO, ISI, World Bank, etc.

Reviewing and encouraging critical research

- Case studies wherein agencies use sustainability measurement to change practice (in contrast to program/project case studies)
- Comparative analyses of strong/weak points
- Reviewing proposed new standards, guidelines, best practices, with focus on:
 - Incorporating all three E's
 - Building support within TRB for research (think globally, act with state DOTs in mind...)
- Advancing accessibility to unique audiences / needs, such as:
 - Developing versus declining economies
 - First versus third world countries
 - Theory versus application (i.e., sustainability constructs within contract documents)
 - Materials for capacity-building from different starting points (from "Sustainability 101" brochures to TED talks)

Today's mission:

- Research Needs Statements
 - Wednesday morning subcommittee
 - Subsequent RNS
- Confirmation or refinement of tentative projects
 - Champions
 - Participants
 - Outputs
- NCHRP synthesis
- 2018 international conference planning

Tentative projects include:

- White paper on monetizing TBL (McVoy)
- Walk21 approach (Martinson)
- Framework for indicators (Cornet)
- University course curricula (Appleyard)
- Partner agency database (Hardy)

Two additional ideas that emerged during discussion were:

- National frameworks for sustainability
- Combining the results of NCHRP 750 and 708—synthesis of these two?

Further discussion includes these points:

- The subcommittee's role relates to measurement. Transport is not an end in itself—needs to provide service.
- Gary McVoy said he keeps seeing terms like sustainable transportation that get overshadowed by solar technology, so few people know the concepts. It's not just keeping transportation going indefinitely, although agencies see it that way, but making a lasting contribution to humanity over time. Need triple bottom line and measures to have a framework for this. Need measures that actually influence decisions; monetization seems most important because economics dominate. Gary has a short 5-page TRB paper that summarizes what he thinks is important in the March 2016 issue of TR News (<http://onlinepubs.trb.org/onlinepubs/trnews/trnews302.pdf>).

- There was the suggestion of a circular to give an overview of measures—what they are about, what’s important, and how to use them. It would be a series of articles, perhaps each article addressing a related subject of an overarching theme. It should summarize state of the practice in a series of snapshots. Dan said that it would still be case studies but would contrast and comparison with overall theme. Gary gave an example in his paper of including Green Roads as a good tool to use.
- Henrik said that it could give different perspectives on measures to fit different contexts.
- Sustainability is not all government, e.g., there are private companies who have sustainability activities within their organizations and there is the World Business Council for Sustainable Development (<http://www.wbcsd.org/>).
- Need to set friends from MyTRB onto Google Groups for wider communication with friends.

3. Framing issues – approaches and challenges panel discussion w/invited guests:

Henrik Gudmundsson, Concito: response to UN call to action

- Increasing momentum for developing and using indicators for urban sustainability and transport
- UN-HLAG—recommendations from this “high level advisory group, e.g., based decisions on triple bottom line
- UNSDGs (UN sustainable development goals) 2015 – Relevance for sustainable urban transport—items on safety, AQ, energy efficiency, provide access, accessible/green/public spaces—balancing access with impacts. Note the latter might be addressed by providing local jobs rather than transporting people to the jobs—not always a transportation issue.
- What happens when the goals are not met? The first round in 1998 had no enforcement, but Dario thinks it helped shift things in the right direction in the developing world even if the goals were not met. The new round of goals is much longer.
- UN Habitat III New Urban Agenda Oct 2016
- Difference uses for these indicators: reporting, comparing, rewarding good performance, supporting decision making, etc.
- Broad questions:
 - What to measure? Accessibility, system performance, etc.
 - Overall status or project and policy effectiveness
 - Can the same indicators be applied for different functions
 - Should a common set of indicators be developed at the global/regional level?
 - What makes up the indicators being used?

Dario Hidalgo, World Resources Institute: Sustainable Transport award considerations

- This is an effort to recognize the mayors of the cities that advanced sustainable mobility goals in last year. The award this January to Santiago, Chile, was the twelfth, with the first one in 2005 going to Bogota, Colombia. The historical list includes Yichang and San Francisco, among others (<http://staward.org/>). The process is an open invitation of what cities have done—it is very descriptive rather than numerical—project description and impact; question of whether it can be replicated elsewhere? The result is recognition rather than a cash award or progress in the right direction. A widely based committee is used to minimize bias in this very subjective effort.
- Most cities don’t have targets for indicators, e.g., mode share. Targets can be very helpful in context, i.e., just walking is not necessarily positive and could indicate a lack of other transportation. So walking is one of the simple set of indicators that WRI uses. Dario will send the draft chapter that addresses these indicators.
- Comment: rolling things up into social welfare was suggested as a very good single measure, but it does require monetizing everything.

Jacob Mason, ITDP, Urban Indicators

- ITDP recently received funding to have a conference in addition to the WRI award. They have 6 offices worldwide—see <https://www.itdp.org/>. Emphasis on indicators since want to see things on the ground. Jacob gave an example of India and lack of rapid transit building, with miles versus population compared with China and other countries.
- Another measure is the number of people within a certain district of a rapid transit station. When published in Brazil, this metric was popular and adopted as percentage of people with 1,000 km of a rapid transit station.
- Are starting to create an analytics partnership to bring together organizations that are working on indicators; it is very challenging to even get agreement on what the problem is and how to approach it. It is not clear what the result will be of this process of comparing cities, but the process is illuminating.

Mattias Goldman, Fores Sweden, fossil-free indicators in Sweden (skipped)

Bob Montgomery, World Bank, access to sustainability tools for developing countries

- There is a massive demand for transportation in the rest of the world. The WB addresses things from global to project level. Need to develop measures to tell what is happening.
- See <http://www.kpesic.com/>, (Knowledge Platform on Environmentally Sustainable Infrastructure Construction), promoted by the World Bank, with the support of the Spanish Fund for Latin America and the Caribbean. Trying to measure how a project might be more sustainable and ideas on how to do that.
- Can do ratings without the metrics, but avoid rewarding minimum compliance.
- There is a massive difference between mitigating negative impacts and sustainable development. Context of the countries matters: very different needs around the world. The benefit varies with the perspective of the person. For example, potable water might be the most important thing to the local person. The cost of doing the rating itself is a problem because most of the projects are very small.
- Another problem are the shadow costs, e.g., free water. Valuation is an issue: what's the economic value of a life when the cost to project is high in comparison to the local value placed on life? Getting true cost is very difficult.
- Sustainable project management is an important way to get sustainability into projects—not so much technical as procedural. How to transfer ideas from developed world to developing is also a problem. Sometimes getting one thing done, e.g., reducing project potable water use by 50%, could be a great success. The “how” is very important in this developing world context.
- Gary said that this was benefit maximization rather than impact minimization.

Ryan Martinson, Stantec, ITE activities and Walk21 update

- How to measure walking? As help to travel agencies, the Walk21 standard (www.walk21.com) was released—12 different areas that need to be thought about. Bias is a problem.
- The Walk21 network includes cities in 52 countries to date, including London and Zurich.
- There are minimum, standard, and elaborate levels. www.measuring-walking.org has information on this.
- An ITE resilience white paper has been released; the approach is a whole systems approach, framing it up from a values perspective. Diversity, modularity, social capital, and ecosystem services are some of the values that would promote sustainability. Working sustainability language into ITE is also ongoing.

Gary McVoy, role of monetization (skipped)

4. Wrap up – conclusions and next steps (from slides)

Tentative projects (skipped)

Research Need Statements and Syntheses

Can a circular be created out of the ideas above? Gary asked how everything relates to making a more sustainable society as opposed to just digging down deeper into the separate specialties.

Gui gave a quick overview of “after sustainability”, which is a concept as well as the title of a book by John Foster that suggests that global society has failed to address climate change quickly enough to avoid tragedy. The basic idea is to come out of the denial that is being promoted by the elastic, sliding carbon reduction goals and face what the prospect for the earth will likely be, amidst considerable uncertainty on both planetary mechanisms and impact timing. Continuing to stall on reducing climate gases is only making the situation worse. For the committee and subcommittee, in part this means looking at the barriers to change.

5. Adjourn