

# Sustainability in Transportation - Making it count

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**Qu: How does your organization/agency use indicators? Do you have a story like NYSDOT's that you would like to share?**

Key questions for a case study:

- What [frameworks](#) are used?
- How are [indicators](#) used (applied) within each framework(s)? [see the [Indicator Applications](#).]
- What is the role of [organizational culture/leadership](#)?

**Table 1: Overview of Selected [Indicator Applications](#)**

Application	Leading question
Describe	What is going on?
Forecast	Where are we heading?
Review	How are we doing?
Diagnose	How did we get here?
Decide	What should we do?
Account	Who is responsible?
Learn	How do we do better?
Communicate	How do we tell others?

Indicators are driving TSMO; how to be sure that we're looking at the right things: example would be a livability indicator that reflects issues like pedestrian accessibility or elements of value to community from surveys like (sidewalks with access to bus stops or ways to safely cross the street at bus stops).

How can we give engineers better guidance on what to design for pedestrians like bus stop access?

Asset management - four states have had pilot projects to move forward; how to encourage more?

Seeking equity across all state DOTs and MPOs in terms of following the rules for funding

Project prioritization / design - how to get social values while sitting at your desk as a planner; some metrics can be put into a dashboard and let public weight the different values - crowdsourcing

USDOT should do a road show on sustainability with a charette. How best to match the areas of the country (or world) that best need the help/guidance with those that have the resources like INVEST

How to provide training and resources for those who want info on sustainability. ABH10 RTSMO working on the same sort of issues.

Should we look at old projects (the first wave of certified projects or legacy projects).

Some issues organizations face:

- Emphasize that the indicator applications are not a continuum, for example, communication occurs at many stages in the process. In WSDOT, linear thinking made it a challenge to answer the question of “where in the process does sustainability fit in” . WSDOT is doing a lot on performance measures, not yet applied as much to sustainability. Also, top-level support, and changes at political level have a huge impact. Sustainability/climate change is still a loaded term in some places.
- AZDOT - environmental policy put in place and didn't have the follow up to implement .
- Rating systems - some practitioners prefer to use as guidance instead of scoring; Some valid concerns about greenwashing and them possibly being made mandatory.
- The lack of a mandate at federal level makes it difficult.
- Also the conflicting principles or frameworks - such as resilience, health, making it difficult for sustainability as an agenda.
- There is a need for a roadmap for agencies to get to it in a way that is not politically sensitive, to allow for incremental progress.

- WSDOT - top-down approach to define sustainability made it tough for buy-in at staff level;

**Qu: How could the research/approach presented at the workshop be advanced with your involvement? What would be useful to your organization/agency?**

**Qu: What new research is needed to advance the state of practice in sustainable transportation performance management?**

Transportation Planning Research:

- Performance-based planning
- Cross-jurisdictional Planning (megaregions)
- Integration (public health, climate change, etc.)
- Integrated modal systems

Key components of performance measurement:

- Goals, Measures, Data, Targets, Monitoring, Evaluation, Reporting

notes from table of Debra Nelson, Ann Hartell, Burr Stewart, etc.:

### **Path dependence**

Debra Nelson - we are struggling with the measures that would work for climate resilience. Spain is setting up a rating system for sustainable roads. We found that no one covers all life cycle phases, and we are trying to incorporate resiliency into the budget of a project. How to cover flooding and extreme temperatures. We are not sure how to proceed.

Debra - you need vulnerability and criticality. The life cycle cost aspect is a good one. The depth of experience of being engineers, planners and emergency response is fine, but we're not good in economics, community development.

Ann - The issue in planning is the indicators are about progress towards your goals, not risk. The closer you get to operations, the more clear the risk is. In the planning phase, climate change is too remote. If we don't do this, then this will happen, and this will be the outcome.

Sandy forced us to think about it.

Debra - we already had data on flooding risk, and those were the areas that were flooded. Why didn't we look at that?

Prince Georges Planning Commission: policy, and integrating sustainability into legislation, is the need. They won't turn away development. How do we integrate a policy that puts it in the law so they have to put in sidewalks and stormwater facilities. Legislation should point to indicators.

U of Nottingham Postdoc: agencies that have a vision around sustainability are more likely to incorporate it in their work, as part of their strategic planning.

Person from Korea: the planners need the voices of the people who need things. The disadvantaged neighborhoods don't often have a voice. We need performance indicators for them. Where are they in my "score".

Burr: we put 1000 sustainability initiatives at airports up on a public website

[www.airportsustainability.org](http://www.airportsustainability.org) where people can learn how to organize and manage sustainability programs and to find initiatives to consider doing. (a recent update funded by ACRP project 02-30)

Nottingham: looking at pavement sustainability, looking at responsible sourcing, labor, noise, emissions, air quality.

Do you have funding in the US for developing a consortium of experts?

Debra - this is why we have silos - there's never enough money for broadening out scopes. When you're doing the project right it often increases costs. How do you show the tradeoffs between indicators?

Final rules for FHWA – can we look at mapping the final goals to sustainable transport indicators – Tashia Clemons FHWA

From a local perspective can there be guidance for local government to adopt more sustainable development procedures – there is not a lot of awareness.

Scale again seems to matter (Canada) – e.g. local active travel. How do we measure the success of less traditional interventions.

The funding aspect is going to become more important and so being able to justify why we are doing this.

A lot of the local doing is done by smaller organisations where there is limited capacity.

Asphalt good practice – how are the indicators formed, are all of the stakeholders engaged in that discussion. This could stifle innovation (e.g. concrete vs asphalt) – e.g. cool roads to reduce heat islands. Envision is least prescriptive.

Industrial corporate sustainability reporting – could be a useful development.

NGOs as a way of putting pressure on government to do the right things.

**APTA:** <http://www.apta.com/Pages/default.aspx>

- Public transportation agencies
- APTA Sustainability Commitment:  
<http://www.apta.com/resources/hottopics/sustainability/Pages/Commitment.aspx>
- Case study of APTA sustainability commitment program.
  - How are the data that are developed from the program used?
  - Timescale component
  - Who are the champions within the organization
  - Program vs. application of the program

#### **ISO 39001 - Traffic Safety**

- Frame the indicators that can be used. Fix the set of indicators (using “indicator preselection”), but allow flexibility in which indicators are used/selected.

#### **HUD / EPA Livability Indicators**

- Case study of how the indicators that were created are being used.
  - Explore the purpose of each indicator (indicator framework identification)
  - Who is using the in indicators
  - Can be used in new and existing communities/corridors

next table:

importance of using funding as a lever

risks to fixing on certain indicators if it stifles innovation. Don't specify too much.

Use industry and social responsibility, and NGO's

Next table:

Communications - values from communities on social dimensions.

How we're all working together between system levels. Differences between states and their approaches.

Horizontal integration from planners to operations.

Partnering with many other committees at TRB