



Cornell University

# Leveraging High-Resolution Transportation Data for Healthier Cities

*EDF emerging issues workshop*

Cornell NYC Conference Center, ILR School  
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Thursday, Nov. 21; 8 AM-5 PM  
Friday, Nov. 22; 8 AM-12 PM

## Overview and objectives:

Bringing together major stakeholders in urban transportation planning, this workshop will evaluate how high-resolution modeling of transportation impacts on air pollution and health can facilitate city and regional policymaking. Our goal is to open up new opportunities for transportation planning, with an aim to embed air quality and health benefits in shaping real-world policy decisions by:

1. *Identifying best practices for how policymakers can leverage high-resolution transportation data to design policies that maximize health benefits from reductions in traffic-related emissions and associated air pollution exposures.*
2. *Identifying opportunities where new collaborations across sectors (public and private) and academic disciplines can facilitate scientific innovation that supports implementation and adoption of these best practices.*

After the workshop, participants will develop a white paper summarizing workshop findings, including an initial evaluation of the enablers and barriers for full-chain health impact analysis implementation in policy and decision making. We will also explore opportunities to facilitate high-impact projects or new areas of collaboration identified at the workshop, including finding potential funding sources and project partners. Collaboration on these topics may be continued through a working group.

Thursday, Nov. 21, 2019

<b>8:00 – 8:30 AM</b>	<b>Breakfast (provided)</b>
<b>8:30 – 8:45</b>	<b>Introduction and workshop overview (EDF / TTI / Cornell)</b>
<b>8:45 – 9:15</b>	<b>Roundtable introductions</b>
<b>9:15 – 10:00</b>	<b>Keynote: Michael Replogle, New York City Department of Transportation (30 min + 15 minutes Q&amp;A)</b>

**10:15 – 11:15**

**Panel #1 – Practitioner Perspective**

This panel will examine how cities and regional transportation planners across the nation are currently integrating transportation impacts on health in policy decisions. Panelists will explore applications and gaps in data, technology and analysis, discuss emerging opportunities in this space, and enablers/barriers to implementation. (10-15 minutes each + 15 minutes Q&A)

- Nancy Pfeffer, Gateway Cities Council of Governments
- James McGuire, City of Dallas
- Sam Pournazeri, California Air Resources Board
- Michael Replogle, New York City Department of Transportation

**Moderator: Maia Draper, EDF**

**11:15 – 12:00 PM**

**Breakout Session #1 – Critical Information for Policymakers**

Working in small groups with representation across disciplines and sectors, participants will build on topics addressed in the previous panel to explore the strengths and weaknesses of different policy approaches in terms of assessing air quality and/or health impacts and facilitating improvements. Some questions might include:

- *Strengths:*
  - o What are the strengths or advantages of current approaches to integrate data and analysis of traffic-related air pollution and health impacts into these policies? What is working well, and why?
- *Weaknesses/ Gaps:*
  - o What critical needs do policy practitioners see for analysis of traffic-related health impacts within a given policy domain? What other priorities or objectives need to be met that might compromise the ability to do this?
  - o What gaps exist in current frameworks that prevent integration of air quality and health impacts into policy and planning processes?
  - o Where is there a mismatch between the focus of scientific research as compared to policymakers' needs in decision making? What could help overcome this mismatch?

**12:00 – 12:30**

**Lunch (provided)**

**12:30 – 2:00**

**Panel #2 – State of the Science: High-resolution data, transportation emissions and health impact assessments**

In this panel, researchers in different fields will present the results of modeling approaches that address different components of the “full-chain” of health impact analysis and use different types of data to model connections between transportation activity, emissions, air pollution and health impacts. Panelists will also address how their research can inform policies that impact the transportation sector. (10-15 minutes each + 15 minutes Q&A)

- Josh Miller, International Council on Clean Transportation (ICCT)
- Susan Anenberg, George Washington University
- Ann Xu, Texas Transportation Institute
- Sarav Arunachalam, University of North Carolina
- Rob McConnell, University of Southern California

**Moderator: Ananya Roy, EDF**

**2:00 – 2:30**

**Discussion**

**2:30 – 2:45**

**Coffee break (provided)**

**2:45 – 4:00**

***Breakout Session 2 – How can the latest science address critical information gaps to promote health-protective transportation policy decisions?***

- Working in small groups with representation across disciplines and sectors, participants will explore the following questions, focusing in this session on opportunities and threats related to applying new modeling approaches in a policy context. Discussion should build on the panel presentations, as well as outputs from Breakout Session 1. Questions addressed might include:
  - o *Opportunities:*
    - Based on the critical gaps/ needs from policymakers identified in the morning sessions, where do you see an opportunity for a particular modeling approach to help meet some of these needs?
    - Are there new technological/scientific breakthroughs that will help advance the space? What existing approaches should be adopted more broadly?
    - Where can public-private-academic synergies occur?
  - o *Threats:*
    - What technical or data gaps exist that make application of this type of analysis to the policy process challenging?
    - What non-technical barriers (funding, resource gaps, political challenges etc.) exist that impede translation of existing science into policy? How might we overcome these barriers?

**4:00 – 4:30**

**Discussion**

**4:30 – 5:00**

**Day 1 wrap-up and next steps**

Friday, Nov. 22, 2019

- 8:00 – 8:30 AM**      **Breakfast (provided)**
- 8:30 – 8:45**      **Recap of Day 1 and introduction to Day 2**
- 8:45 – 10:00**      **Panel #3 – State of the Science Part 2: Using full-chain assessment to connect the dots**  
(10-15 minutes each + 15 minutes Q&A)
- Haneen Khreis, TTI / CARTEEH
  - Tammy Thompson, EDF
  - Grace Lewis, EDF
  - Oliver Gao, Cornell University
- Moderator: Haneen Khreis, TTI/CARTEEH**
- 10:00 – 10:30**      **Breakout Session #3 – Expand on Day 1 outputs**
- In small groups, participants will use Day 1 outputs to outline (1) core issues that need to be addressed in scientific work in this space, as well as (2) high-impact changes in government process or policy that would facilitate integration of research about transportation impacts on health in planning decisions.
- 10:30 – 11:30**      **Structured Group Discussion – White paper development and working group formation / Project and collaboration identification / Brainstorming**
- Using outputs from small group discussions, participants will outline next steps for a white paper, working group formation, and opportunities for collaboration on high-leverage projects.
- 11:30 – 12:00 PM**      **Day 2 wrap-up and next steps**
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