



Upcoming Webinar

Community Exposures to Air Emissions and Noise from Oil and Gas Development, Part 1



WEDNESDAY, JAN. 29, 2025

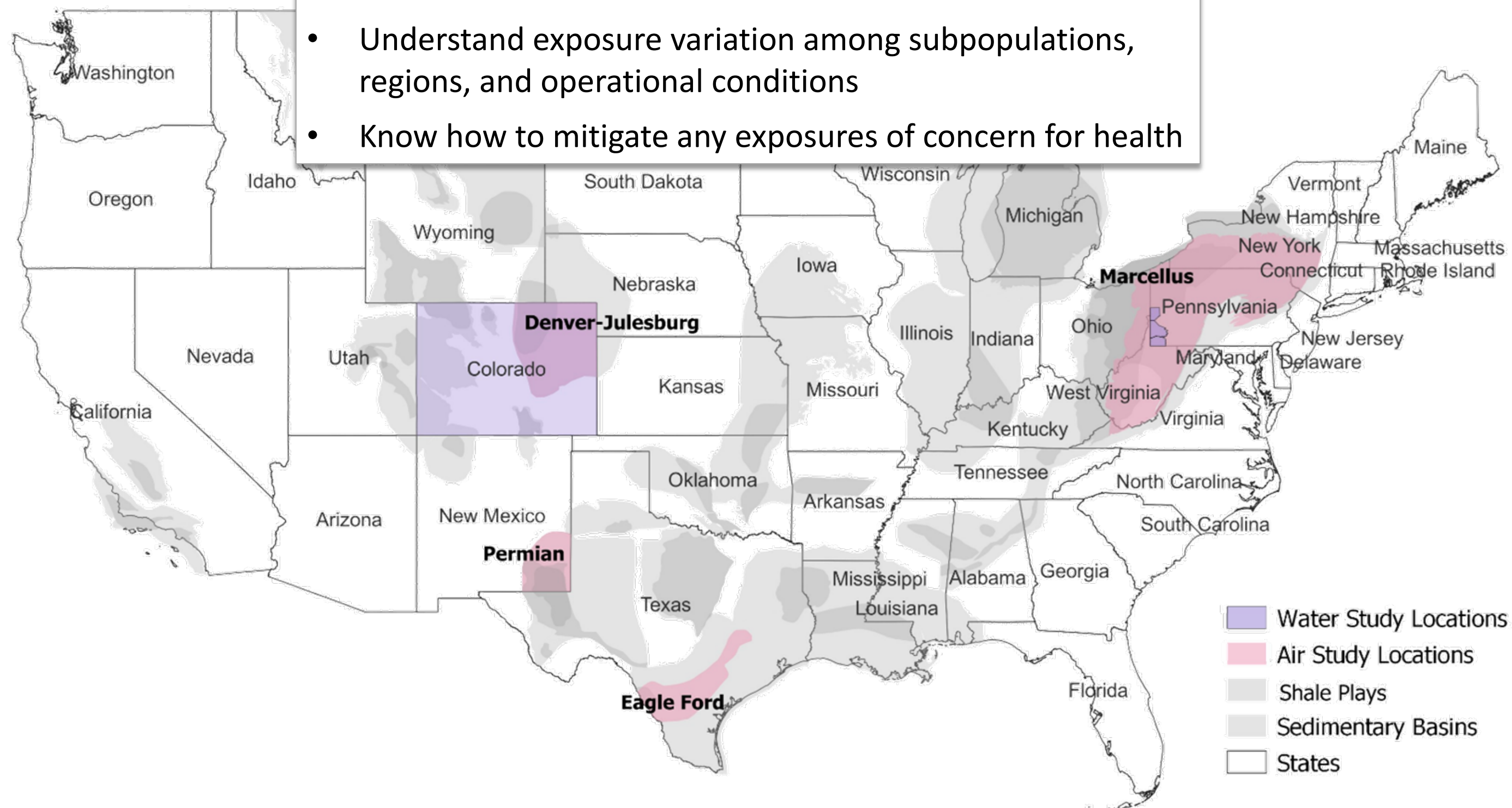


3:00PM-4:30PM (EST)

HEI Energy Initial Program of Exposure Research

Overall Study Objectives

- Understand exposure variation among subpopulations, regions, and operational conditions
- Know how to mitigate any exposures of concern for health



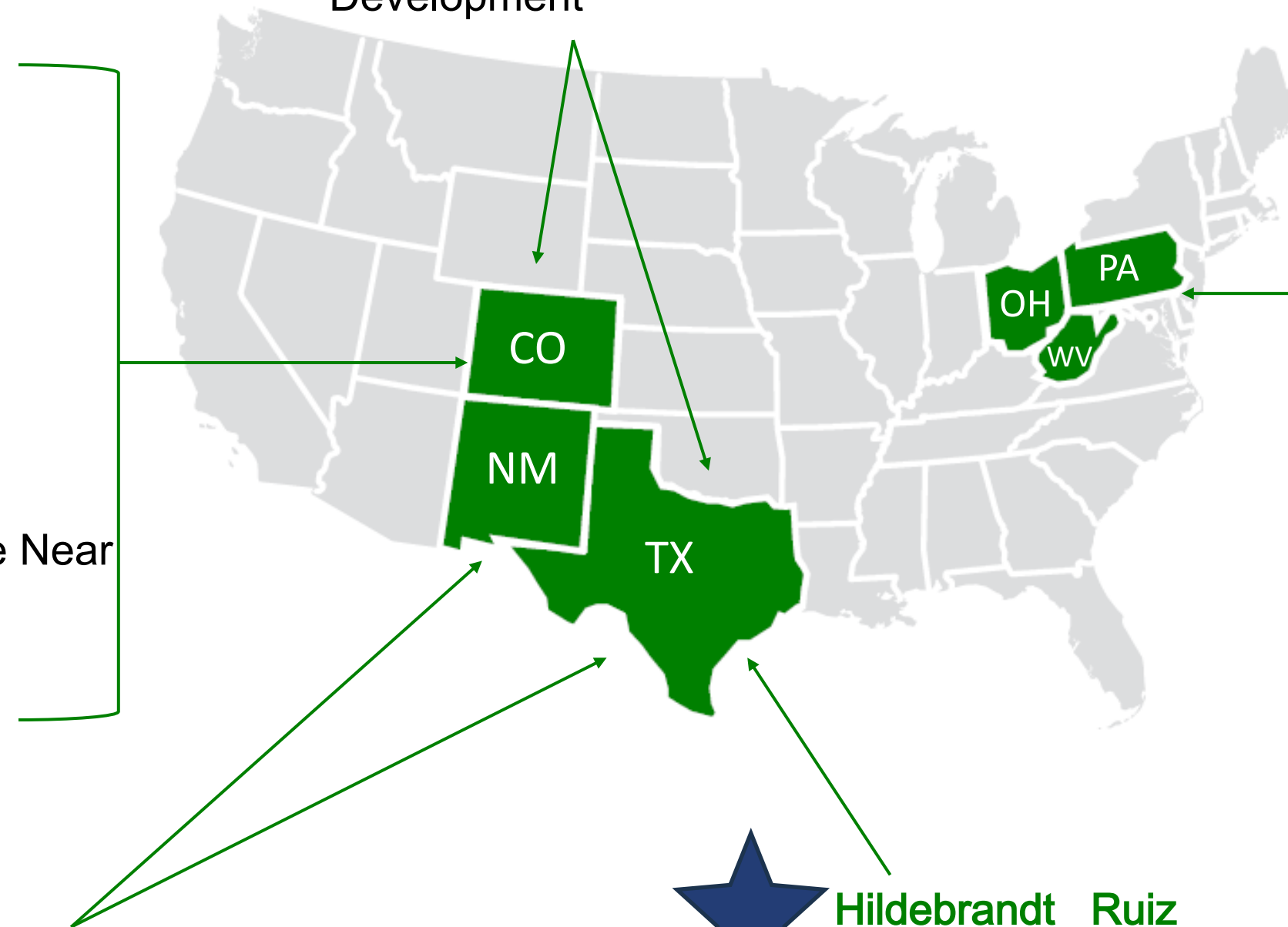
HEI Energy-Funded Research about Population Exposures to Oil and Gas Development

Ryan
Assessing the Effects
Unconventional Oil and Gas
Development on Community
Water Sources

Collett
Measuring and Modelling Air
Pollution and Noise Exposure Near
Unconventional Oil and Gas
Development in Colorado

Franklin
Assessing Source Contributions to Air
Quality and Noise in Unconventional
Oil Shale Plays

Schade
Air Quality Trends in Texas and Colorado
Associated with Unconventional Oil and Gas
Development



Saiers
A Groundwater Modeling Framework for
Elucidating Community Exposures Across
the Marcellus Region to Contamination
Associated with Oil and Gas Development

Baek
Long-term criteria and toxic pollutants
trends and community exposures over the
Marcellus Shale in the U.S.

Gernand
Trends in Marcellus-Utica Shale Regional
Air Quality due to Unconventional Oil and
Gas Development (TriMAQs)

Baka
Using Geoscientific Analysis and
Community Engagement to Analyze
Exposures to Potential Groundwater
Contamination

Hildebrandt Ruiz
Predictive, Source Oriented Modeling and
Measurements to Evaluate Community
Exposures to Air Pollutants and Noise from
Unconventional Oil and Gas Development

The TRACER Collaboration

Genesis of the collaboration

- HEI's Energy Research Committee reviewed the literature on potential population exposures to oil and gas development and requested applications for research that provides tools and measurements for better quantifying exposures.
- The Committee chose three applications and concluded that a collaboration among them was the best way forward to meet overall research needs.

TRACER Model a central focus

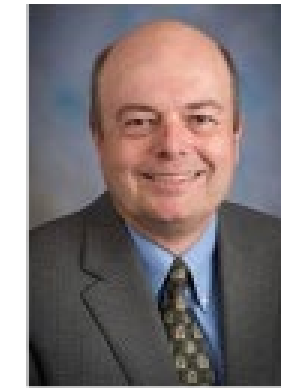
- Can be adapted for use anywhere in the U.S. to track changes in emissions and exposure over time.

Air quality and noise monitoring over the life cycle of oil and gas wells to understand potential exposures at different distances from well sites and to evaluate the TRACER model.

NASA HAQAST project complements the TRACER collaboration by analyzing and modeling satellite-observation data that overlap TRACER study locations.

Air Quality and Noise

Tracking Community Exposures and Releases (TRACER) Collaboration



Jeffrey Collett
Colorado State

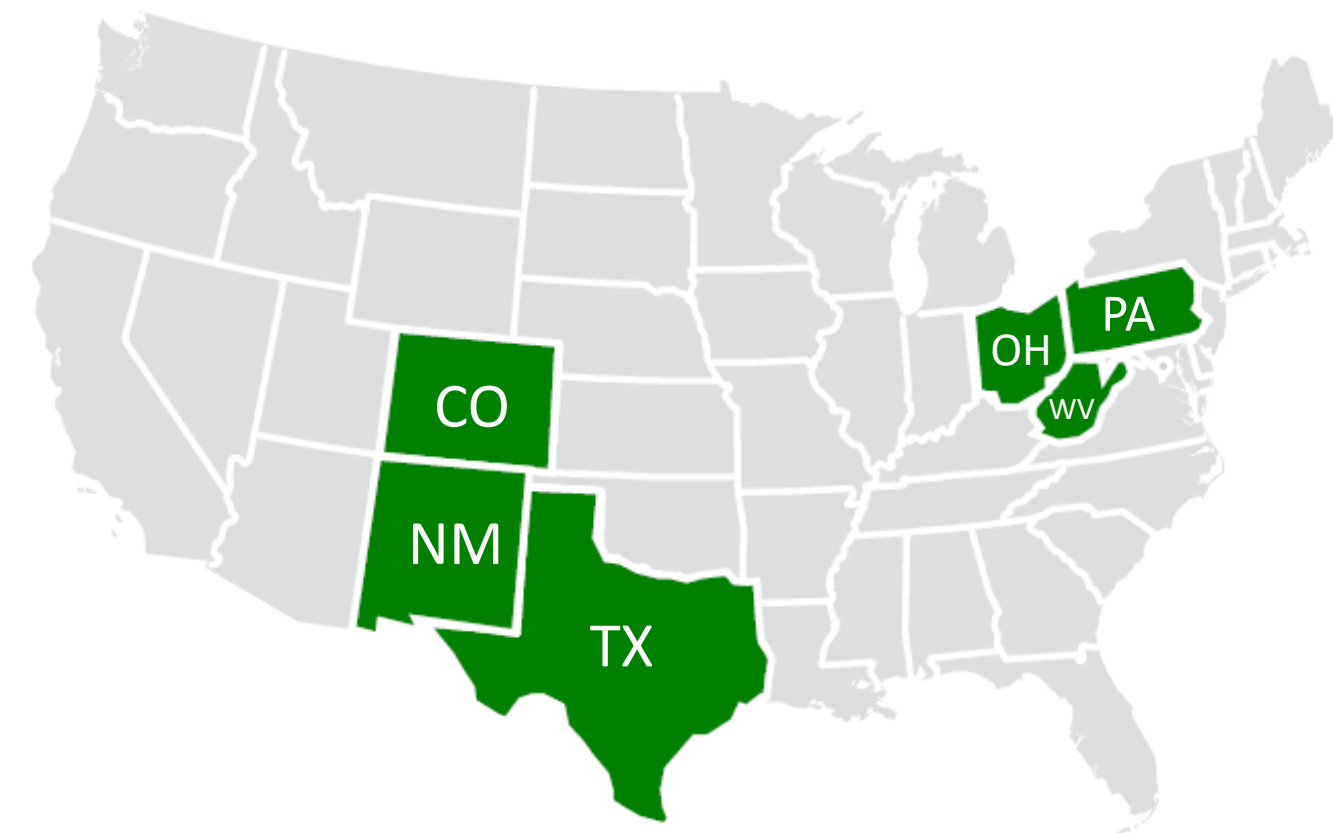


Lea Hildebrandt Ruiz
Univ of TX-Austin



Meredith Franklin
Univ of Toronto

Study Duration: 2022-2024



What's Next?

- HEI will make the webinar available on our website in the coming weeks:
<https://HEIenergy.org/events>
- Stay tuned for future announcements related to these projects and registration for Part 2 of this webinar series on [February 13th at 11am ET](#)
- [Community Open Houses](#) on March 13, March 25, and April 7, 2025
- [TRACER Website](#) in May 2025
- HEI [2025 Annual Conference](#) in Austin May 4-6, 2025
 - A full session dedicated to the TRACER collaboration and a poster session with all HEI Energy-funded research
- Final reports for each of these studies coming in 2025
- In the meantime, stay up to date with this work!
 - HEI Energy: <https://www.heienergy.org/research>



Thank you!

For more information:

- Hildebrandt Ruiz: <https://sites.utexas.edu/hr-group/>
- Franklin: <https://meredithfranklin.github.io/>
- Collett: <https://collett.atmos.colostate.edu/research-projects/>
- HAQAST: <https://haqast.org/> and <https://haqast.org/tiger-teams/>

We will send a follow-up email with the webinar recording and other materials including a quick feedback survey.