

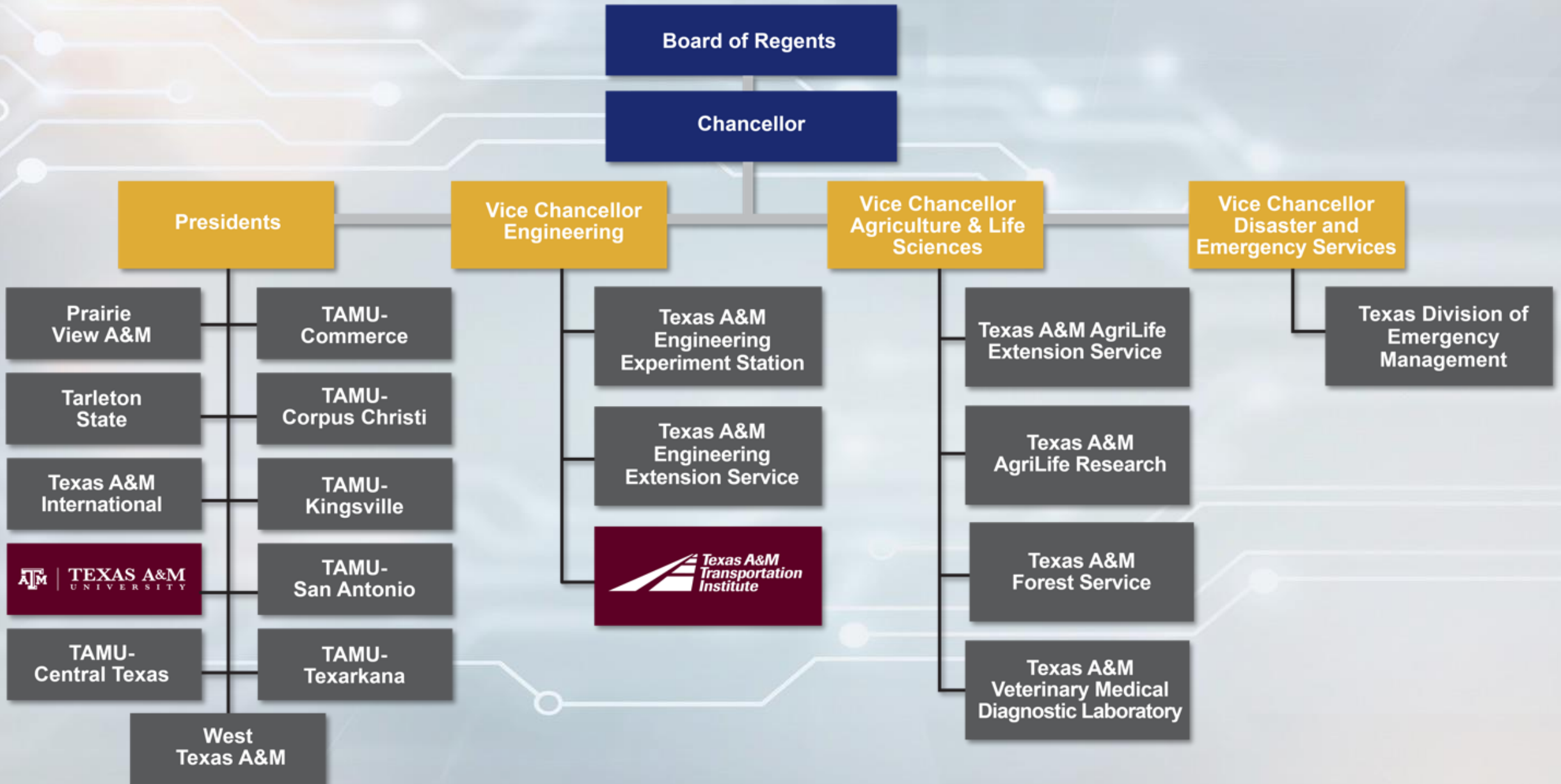
# TTI's Center for Advancing Research in Transportation, Emissions, Energy, and Health



**Joe Zietsman**

Deputy Agency Director  
and Director of CARTEEH

# THE TEXAS A&M UNIVERSITY SYSTEM



# Vision

TTI leads in the creation of knowledge that transforms transportation for the benefit of society.



# Mission

TTI delivers practical, innovative and sustainable solutions to improve the movement of people, data, and goods through research, education, and technology transfer.

# Facts & Locations

★ **Headquarters**  
College Station  
Bryan

■ **Urban Offices**  
Arlington  
Austin  
Dallas  
El Paso  
Houston  
San Antonio  
Waco

● **TTI Presence**

El Paso

Arlington Dallas

Waco

TTI-HQ

Austin

San Antonio

Houston

**Public and  
Private  
Sponsors**



**200+**

**700+**



**\$80M**

**Annual  
Research  
Expenditures**

**Professional  
Researchers**

**400+**



**200+**

**Students**



**Students**

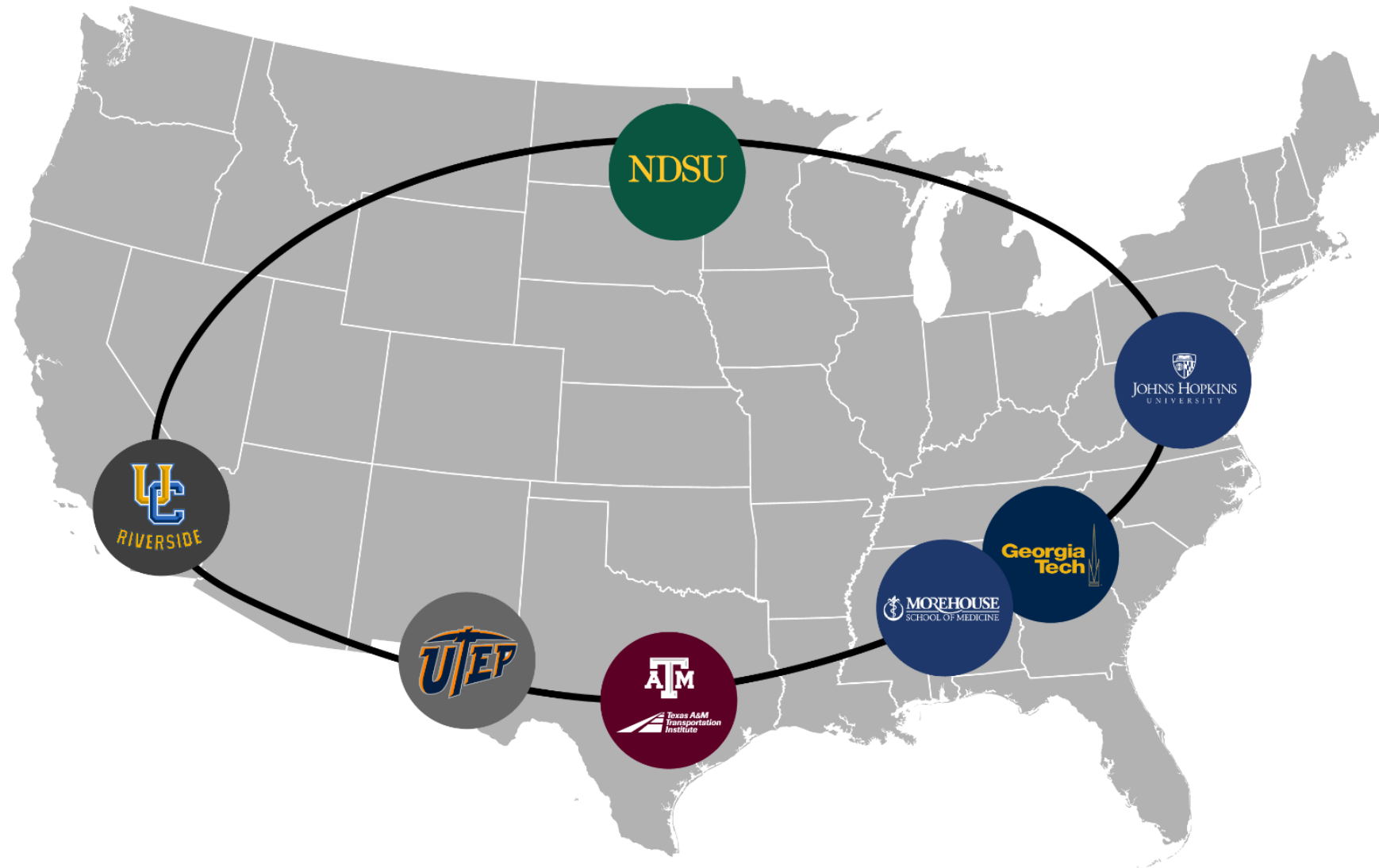
**Annual  
Projects**



# Center for Advancing Research in Transportation Emissions, Energy, and Health

A USDOT University Transportation Center

# “CARTEEH 2.0” Consortium



# CARTEEH Leadership



Joe Zietsman  
CARTEEH Center  
Director



Tara Ramani  
CARTEEH Deputy  
Director



Michael Rodgers  
Georgia Institute of Technology



Jill Hough  
Dakota State University



Wen-Whai Li  
University of Texas at El Paso



Kanok Boriboonsomsin  
University of California, Riverside



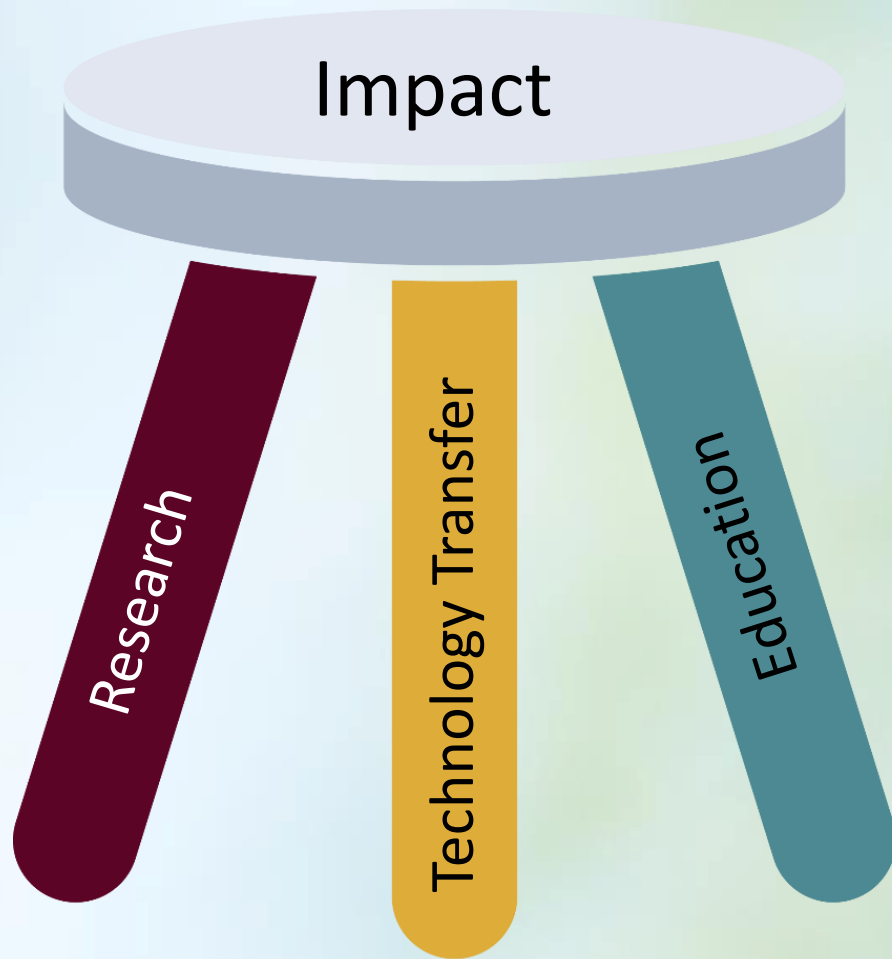
Mary A. Fox  
Johns Hopkins  
Bloomberg School  
of Public Health



Robert M. Mayberry  
Morehouse School of Medicine

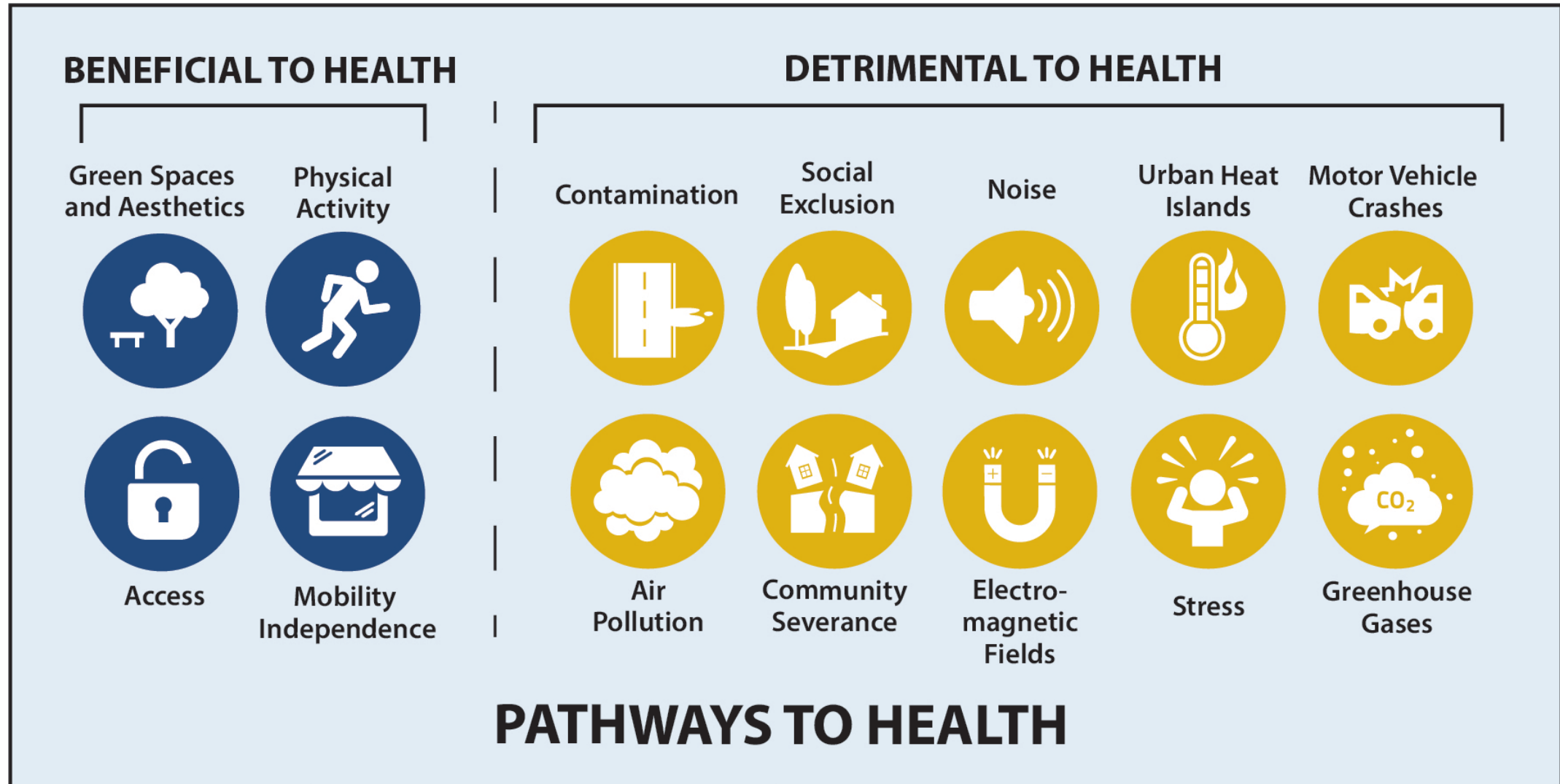


# CARTEEH Focus Areas





# Scope of Our Research



# Scope of Our Research



# Collaborative Research Projects

Project Title	Lead Institution	Collaborators
<b>Electric</b> versus Internal Combustion	TTI	GT, UTEP, NDSU
Integrated <b>Modeling Platform</b>	GT	TTI, JHU, UCR
<b>Health Risks</b> for Vulnerable Transit Users	JHU	GT, UTEP, NDSU
Transportation and <b>Health Equity</b>	MSM	UTEP, NDSU, TTI
<b>Tribal and Rural</b> Communities	NDSU	TTI, UCR, MSM
Mitigating Emissions in and around <b>Ports</b>	UCR	GT, UTEP, MSM
Air Quality <b>Monitoring</b> for Vulnerable Communities	UTEP	JHU, NDSU, MSM

# Education and Workforce Development

- Audience
  - K-12 students
  - Undergraduate and graduate students
  - Continuing education for practitioners
  - Public engagement
- Continue successful activities such as STEM camps and summer internship programs



# Technology Transfer

- Licensed a product and spun off a company
- Symposia, webinars, workshops
- Literature library and data hub
- Clean Transportation Innovation Hub (CTIH)
- Clean Transportation Collaborative (CTC)



**Health Effects of Air Pollution:  
Perspectives and Priorities**

## SEMINAR

**SPEAKER**  
**Rashid Shaikh**  
Thursday, September 27, 2018, 10:30 AM – 11:30 AM (CDT)  
Texas A&M Transportation Institute  
Gibb Gilchrist Building, Room 102  
2929 Research Parkway, College Station, Texas

*(Webcast available for remote attendees)*



## Educating the Future Workforce on Transportation Emissions, Energy and Health

### WEBINAR

<b>Dr. Joe Zietsman</b> Texas A&M Transportation Institute  Dr. Zietsman is a research scientist, electric storage solutions, and a part of the executive team at the Texas A&M Transportation Institute (TTI).	<b>Dr. Joanne Olson</b> Texas A&M University  Dr. Joanne Olson is a professor in science education and the former president of the Association for Science Teacher Education.
<b>Dr. Michael O. Rodgers</b> Georgia Tech University  Dr. Rodgers is the director of the Georgia Tech Air Quality Laboratory, leading extensive and/or research experiments in the Georgia Tech School of Civil and Environmental Engineering, Safety and Atmospheric Sciences, and Public Policy.	<b>Dr. Mary Fox</b> Johns Hopkins University  Dr. Mary A. Fox is an Assistant Professor in the Department of Health, Policy and Management and Acting Director of the Risk Sciences and Public Policy Institute (RSPI) at Johns Hopkins University.

Discover Data. Exchange Information. Understand Impact.

Browse Topics: Transportation, Energy, Emissions, Air Quality, Exposure, Health, Technology

Highlights: Developing and Analyzing a Literature Library on Traffic Emissions, Air; Traffic Related Air Pollution and the Burden of Childhood Asthma in the; A Web Based Traffic and Emissions

### Transportation Emissions, Air Pollution, Exposures, and Health Literature Library

This literature library is intended as a resource for students, researchers and practitioners interested in the area of transportation and health, especially the impact of transportation emissions and air pollution on human health. It currently contains a reference list of over 1,000 scientific studies addressing the full-chain of events between transportation pollution sources and health impacts, in addition to technologies and disruptors, shown in the figure below. The literature library tabulates several attributes for each study, including the citation details, the publication type, topic area(s), and type(s) of study. This reference list will be periodically updated to include new studies as they become available.

Download the literature library spreadsheet

Full Chain from Air Pollution Sources to Health Impacts



# Existing Environmental and Emissions Research Facility



# Clean Transportation Research Complex

## Partnership



Texas A&M Engineering  
Experiment Station

