

Port of Houston, TX

Healthy People through SMART Infrastructure Focus Group



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

A USDOT University Transportation Center



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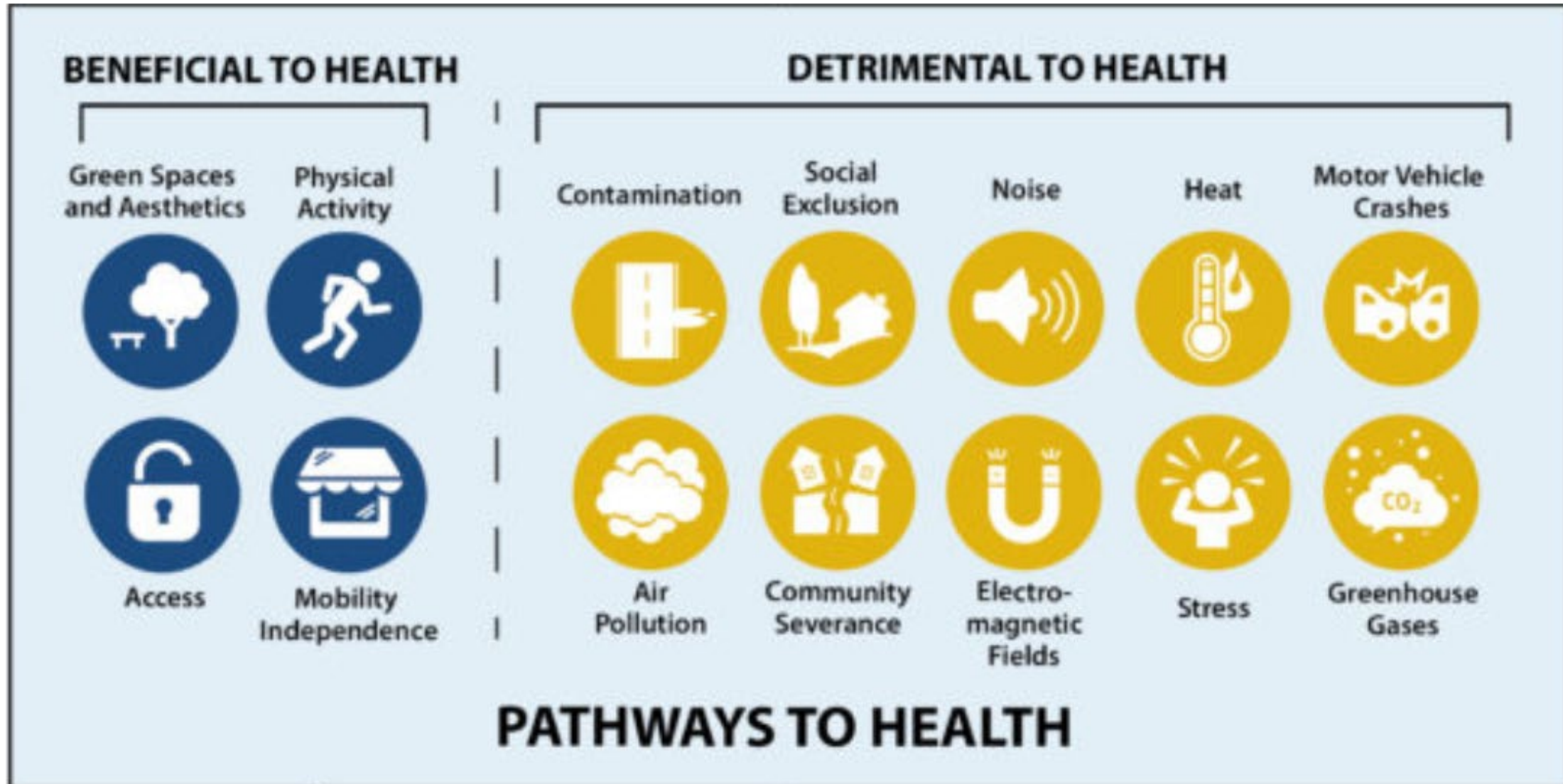
Project Focus

- Building a community health profile of the area – Focus on La Porte, TX
- Engaging with local stakeholders to understand how transportation and health issues impact the community, with a focus on CARTEEH's [14 Pathways to Health](#)
- Assessing air-quality related health impacts of port activities, and impacts/benefits of transportation electrification

SMART Infrastructure

- **Sustainable** –environmental, economic, and social triple bottom line, with an emphasis on low-carbon, environmentally sound, equitable and socially inclusive strategies.
- **Multimodal** –diversity of choice and equitable service among transportation modes, for both urban and rural areas. It also includes enhanced public transportation options, last mile deliveries, and integration of active transportation
- **Accessible** – ease of reaching destinations, activities, and people, that is affordable options and includes disadvantaged population groups
- **Resilient** – ability to quickly recover from a stressed situation, including rapidly absorb, adapt and recover from a disruptive event in a manner that is equitable
- **Technological** – emerging and proven tools, methods, and machines solve transportation problems, and embrace the benefits of disruptive technologies, predict and mitigate unintended negative consequences

14 Pathways to Health – Transportation Impacts



Modifiable Factors

(Determinants)

Spaces, Programs, and
Policies

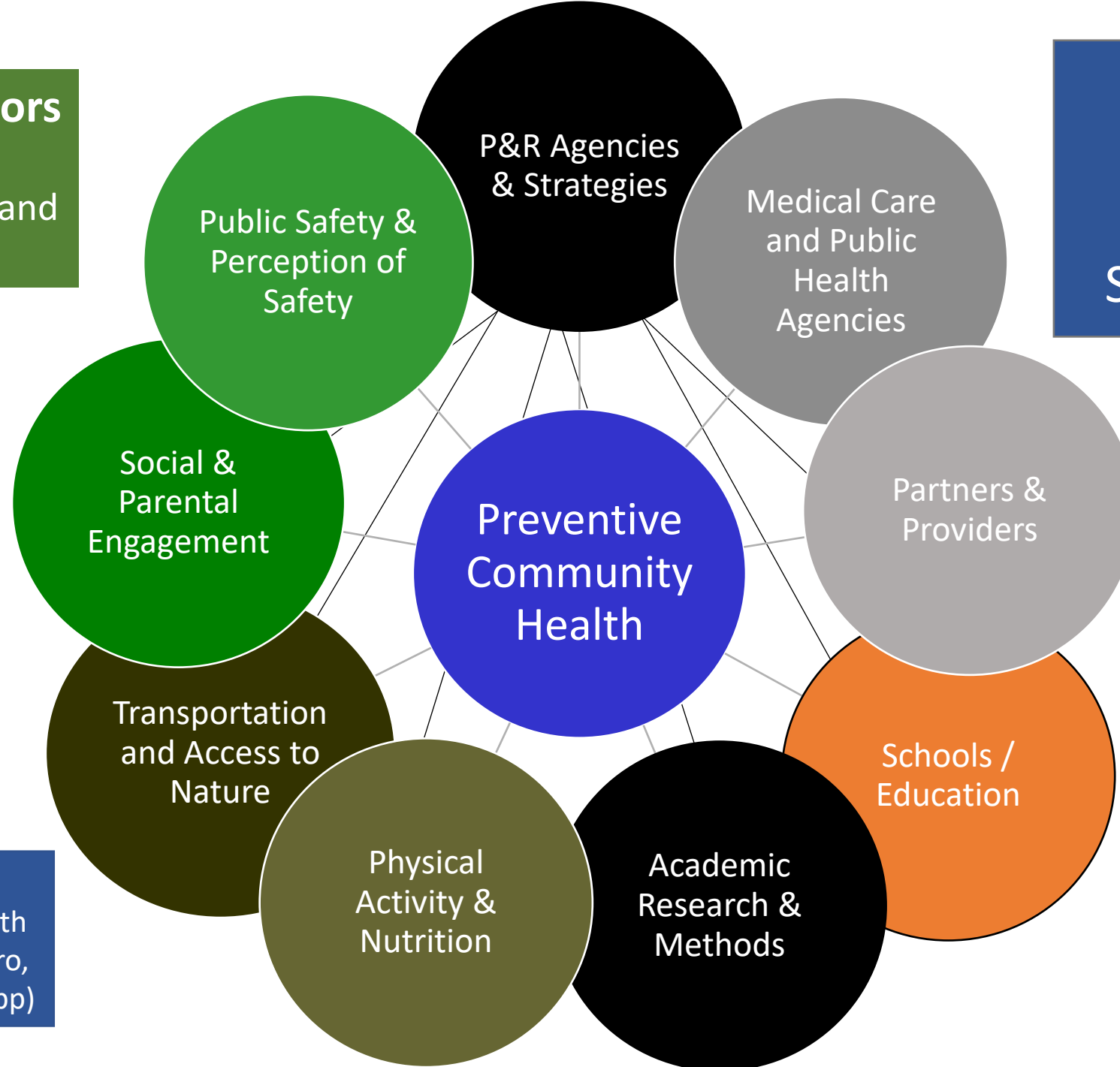
Modifying
Preventive PH
through P&R
Systems Thinking

Actors

Facilitating
Partnerships and
outcomes

Actions on all levels

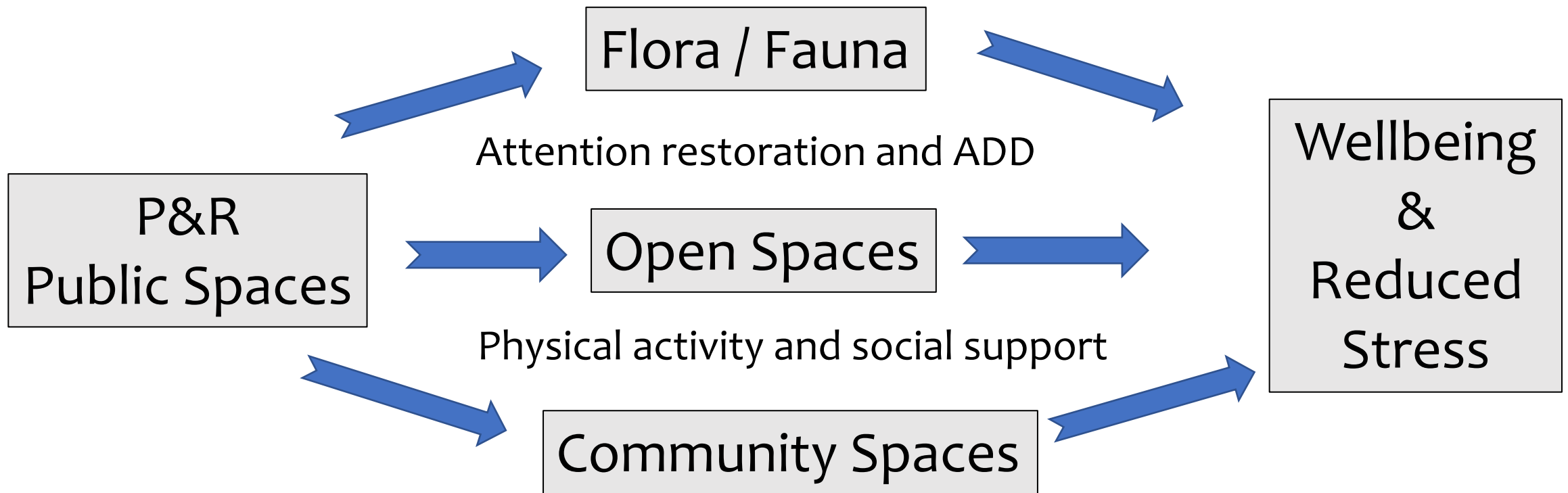
(T.L. Penbrooke, 2017, with
M.B. Edwards, J.N. Bocarro,
K.A. Henderson, & J.A. Hipp)



GPARED

NC STATE UNIVERSITY

Systems Approach to relationships between access to public spaces and wellness



Adapted from EPA, 2014; Kuo, 2015; Saw, Lim, & Carrasco, 2015; Penbrooke, 2017; Sturm & Cohen, 2014

Questions and Input from You!

- What are the current STRENGTHS of the local community system around La Porte and the surrounding Port Region relative to this topic?
- What are the negative aspects around the Port that could be addressed?
- Are you familiar with electrification? Thoughts?
- What types of changes around health opportunities do you see?
- What types of changes around transportation opportunities?
- Who else should we be talking to?

Next Steps

Please take the brief questionnaire:

https://missouri.qualtrics.com/jfe/form/SV_a9OmZmAPzRkyus6

We will be compiling data and producing a report in Spring 2022.
Happy to share with you!

Thank you!! Teresa L. Penbrooke, PhD, CPRE
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