



# Houston to Los Angeles (H2LA) Hydrogen Project Advisory Committee

Community Concerns and Priorities

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July 11, 2024

# Agenda

- Welcome and Roundtable Introductions
- Hydrogen and Alternative Fuel Corridor Information
- Brief Project Overview
- Previous Meeting Recap
- Community Concerns and Priorities Discussion
- Wrap-Up and Next Steps

# Practices for Productive Meetings

- Respect when others have the floor.
- Keep feedback relevant and concise.
- Listen to other points of view and try to understand other interests.
- Share information openly, promptly, and respectfully.
- Remain flexible and open-minded and actively participate in meetings.

# Clean Cities and Communities

- U.S Department of Energy, Vehicle Technology Office (VTO)
- More than 75 active coalitions
- Goal: Help local decision-makers and fleets understand and implement alternative fuels



# Recap: Hydrogen Basics

- **Abundant in the environment**
  - Stored in water, hydrocarbons, and organic matter
- **Produced from diverse domestic resources**
  - Steam reforming
  - Splitting water through electrolysis
- **Used for refining petroleum, treating metals, producing fertilizer, and processing foods**





# Recap: Hydrogen in Vehicles

- Used in fuel cell electric vehicles (FCEVs)
- High energy content by weight
- Stored onboard vehicles in high-pressure tanks
- Challenges are cost-efficiently extracting hydrogen for use as a fuel and developing infrastructure for distribution



# Recap: Benefits and Drawbacks

## **Benefits:**

- Energy security
- Zero tailpipe emissions
- Improve air quality in the transition from fossil fuels

## **Potential drawbacks:**

- Production costs
- Fuel storage
- Different safety protocols

# Background: Alternative Fuel Corridors

Alternative Fuel Corridors	Designation Process
<ul style="list-style-type: none"> <li>• FHWA designated</li> <li>• Support installation of EV charging, hydrogen, propane, and natural gas fueling infrastructure along national highways</li> <li>• Updated on an annual basis</li> <li>• Established under the FAST Act and expanded by the Bipartisan Infrastructure Law (BIL)</li> </ul>	<ul style="list-style-type: none"> <li>• State and local agencies can nominate corridors for alternative fuel corridor designation</li> <li>• Designation provides guidance and funding for states and local governments</li> <li>• Designations occur in rounds, and designations are classified as either “corridor ready” or “corridor pending”               <ul style="list-style-type: none"> <li>• Corridor ready: segments provide enough fueling facilities to allow for corridor travel with the applicable alternative fuel</li> <li>• Corridor pending: corridors that do not have sufficient facilities for alternative fuel travel</li> </ul> </li> </ul>





# TxDOT Designations Rounds 1-7

# Project Overview

## Objectives

- Build computer models for vehicle, fueling infrastructure, and operational data
- Establish a hydrogen fueling and heavy-duty freight truck network leveraging this fueling infrastructure in the Texas Triangle and I-10 corridor from Houston to Los Angeles

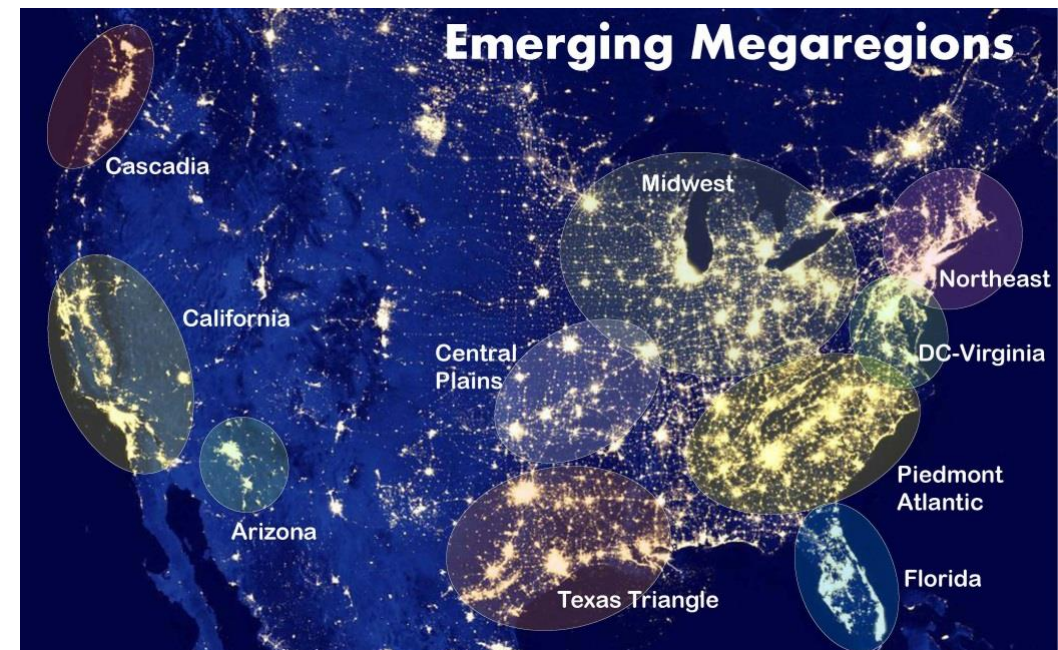


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# Project Overview

## Objectives

- Assess community needs and benefits through Diversity, Equity, Inclusion and Accessibility (DEIA), Energy Equity (EE) and Workforce Implications (WI) effort
- Engage impacted communities to gather input and conduct outreach
- Develop a replicable and catalytic blueprint for other corridors and megaregions
- Disseminate findings to relevant stakeholders
- Q3 2025 completion



# Community Benefits Plan

## GTI Energy

Community Benefits Team with expertise in community and stakeholder engagement, planning, and environmental engineering to successfully address environmental, societal and economic needs during the energy transition.

North Central Texas Council of Governments (NCTCOG)

Alamo Area Council of Governments (AACOG)

Western Riverside Council of Governments (WRCOG)

## SMART Goals

1. Local Project Advisory Group (LPAG) to identify concerns and priorities of community organizations and stakeholders
  - a. Plan community efforts, both rural and urban
  - b. Community benefits and disbenefits
2. Develop community and public safety guidelines
  - a. Identify updates to safety and health protocols
  - b. Identify needed skills training, credentialing, and educational curricula to meet workforce needs
3. Public dissemination of information about the project
  - a. Accessible information with minority serving institutions

# Kickoff Meeting Overview – April 2024

- Introductions and overview
- Context for hydrogen
- What we heard: Feedback on key topics:

Hydrogen Technology Readiness	Infrastructure Placement & Impact	Lifecycle Emissions
<ul style="list-style-type: none"><li>• Leak-prone and flammable nature of hydrogen identified as areas of concern</li><li>• Developing infrastructure and technology for hydrogen fuel</li><li>• Eagerness for commercial production</li></ul>	<ul style="list-style-type: none"><li>• Need to avoid placement of harmful infrastructure in marginalized communities</li><li>• Long-standing history of fueling infrastructure impacts on lower class and POC neighborhoods</li></ul>	<ul style="list-style-type: none"><li>• Much hydrogen fuel is produced with natural gas, which is not carbon-neutral</li><li>• Developing technologies to decarbonize hydrogen production</li></ul>



# Meeting Schedule

<b>Community Concerns and Priorities</b> July 11, 2024	<b>Public Health and Safety</b> September 24, 2024	<b>Workforce, Training, and Education</b> December 19, 2024
<ul style="list-style-type: none"> <li>• Community relationships to trucking corridors, sites, and facilities</li> <li>• Existing conditions, specific community issues, and community burden</li> <li>• Local community benefits and disbenefits from H2</li> <li>• Placement of individual sites</li> <li>• Funding, economic impacts, jobs</li> </ul>	<ul style="list-style-type: none"> <li>• Potential environmental impacts</li> <li>• Comparison between H2 and fossil fuels</li> <li>• Intersection with local chronic disease</li> <li>• Impact of local hydrogen production</li> <li>• Benefits and disbenefits</li> <li>• Ongoing research on health impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Pathways for students</li> <li>• Training for existing professionals</li> <li>• Emergency response training</li> <li>• Technical, policy, and planning perspectives – all have different needs</li> <li>• Schools and programs</li> </ul>

# Group Discussion

- Heavy focus on local considerations and impacts, not hydrogen fueling in general
- San Antonio impacts specifically but need to consider regional impacts and climate change.

## Community Concerns and Priorities

- Community relationships to trucking corridors, sites, and facilities
- Existing conditions, specific community issues, and community burden
- Local community benefits and disbenefits from H2
- Placement of individual sites
- Funding, economic impacts, jobs

# Discussion points

## Existing concerns and priorities for your community

- What are your existing relationships with trucking/freight corridors, sites, and facilities
- Think about some current, high-priority issues in your community:
  - What issues are related to local environmental impact (more local actions)?
  - What issues are related to climate change or other more broad impacts?
  - What issue are related to economic, education, and workforce?

# Discussion points

## Corridor and local impacts from trucking and fueling

- What concerns do you have about impacts from heavy-duty trucking? Air quality related and others.
- What questions or concerns do you have about hydrogen corridor and refueling sites for trucking? Is there an opportunity for these sites to address existing issues presented by petroleum fueling sites?

# Discussion points

## Opportunities to address issues

- Are there opportunities for heavy-duty trucking to play a role in improving community conditions?
  - Local benefits?
  - Regional/global benefits?
  - Could these address the impacts identified during this discussion?



# Discussion points

## Hydrogen production and transportation

- What are the perspectives on hydrogen production and transportation?
  - Method of production
  - Location of production (on-site/off-site)
  - Transportation of fuels

# Discussion points

## **Economic impacts, jobs, and workforce:**

- What kind of jobs do you have with existing refueling stations?
- Job opportunities and training for hydrogen corridor and refueling stations

# Wrap-up and Next Steps

- Next Meeting: September 24, 2:00 – 4:00pm, location TBD
- Next Meeting Topic: Public Health & Safety

Date	Topic
April 10, 2024	Introduction and Overview
July 11, 2024	Community Perspectives and Priorities
<b>September 24, 2024</b>	<b>Public Health and Safety</b>
December 19, 2024	Workforce, Training, and Education
March 25, 2025	Site-Specific Concerns
June 24, 2025	Wrap-up

# Contact Us



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