Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Public Comment on Southeast Supply Enhancement (SSE4) and Mississippi Crossing (MSX) Pipeline Projects

Docket Nos.: CP25-514-000 and CP25-517-000

Date: October 6, 2025

To Whom It May Concern:

We respectfully submit these comments in response to the proposed construction and infrastructure upgrades associated with the **Southeast Supply Enhancement (SSE4)** and **Mississippi Crossing (MSX)** pipeline projects, which collectively affect people, ecosystems, and properties in **33 counties across Alabama, Georgia, and Mississippi**.

Given the geographic scale, environmental complexity, and public health implications of these projects, we urge the Federal Energy Regulatory Commission (FERC) to ensure a thorough, data-driven, and community-informed review before making any decisions about the development or expansion of these proposed pipeline projects. These comments focus specifically on public **health, environmental justice, and cumulative risk** impacts of pipeline infrastructure, with a strong emphasis on frontline and historically overburdened communities.

Overview and Purpose

The proposed expansions represent significant modifications to the region's fossil fuel infrastructure. Based on publicly available data, including the Climate and Economic Justice Screening Tool (CEJST), our analysis shows that communities located near both **existing (SSE4)** and **proposed (MSX)** pipeline infrastructure already experience **compounded environmental, health, and economic vulnerabilities**. See Figures 1 and 2.

This letter outlines:

- Our **methodological approach** using spatial and statistical tools.
- **Key findings** indicating elevated health and environmental burdens.
- **Implications for public health and environmental justice**.
- **Policy and procedural recommendations** for FERC and project developers.

Methodology

To evaluate cumulative exposure risks in pipeline-adjacent communities, we used the following publicly available datasets:

- **CEJST** (Climate and Economic Justice Screening Tool);
- **Kinder Morgan FERC filings** (pipeline and proposed compressor station data);
- **Homeland Infrastructure Foundation-Level Data** (existing compressor station data);
- **U.S. Census Bureau TIGER shapefiles**.

Using GIS tools, we created 6-mile buffers around:

- Existing pipelines;
- Proposed pipeline expansion routes;
- Existing compressor stations;
- New compressor stations identified in Kinder Morgan filings.

We grouped intersecting census tracts into **exposure categories** and compared them to a **reference group** (tracts not intersecting any infrastructure buffer). We extracted 34 percentile-based indicators. Our analysis revealed consistent and significant disparities in pipeline-adjacent communities. Figure 3 – SSE4 Pipeline Maps.

Key Findings: Elevated Health and Environmental Risks

Spatial analysis of CEJST indicators reveals consistent and statistically significant disparities in communities adjacent to both the Southeast Supply Enhancement (SSE4) and MSX pipeline corridors. These disparities span health, economic, and environmental domains and reflect cumulative exposure and systemic disadvantage.

A. Shared Burdens in SSE4 and MSX Corridors

Both the SSE4 and MSX pipeline-adjacent areas exhibit significant and troubling disparities across health, economic, and environmental indicators. These findings point to a pattern of cumulative exposure and compounded vulnerability in communities near pipeline infrastructure—whether the infrastructure is already built or still in the planning stages.

- **Chronic Disease:** Both pipeline corridors show elevated rates of asthma, diabetes, and coronary heart disease, suggesting chronic exposure to environmental stressors and limited access to preventive care. These conditions are markers of systemic inflammation and toxic stress, often linked to air pollution, socioeconomic hardship, and other stressors.
- **Economic Stress:** Communities near both pipelines experience higher energy burdens, poverty rates, and unemployment, indicating constrained household resources and reduced capacity to respond to environmental or health-related disruptions.
- **Environmental Risk:** Pipeline-adjacent areas show increased proximity to hazardous waste sites, wastewater discharge points, and elevated risk of agricultural loss, wildfire,

and flooding. These risks compound existing vulnerabilities and threaten long-term community resilience.

B. Distinct Pipeline Vulnerabilities

SSE4 – Existing Infrastructure Impacts

Communities located along the existing SSE4 pipeline are already experiencing a range of compounded health, economic, and environmental burdens. Compared to reference tracts in the region, SSE4-adjacent areas show statistically significant disparities across multiple indicators, revealing the long-term consequences of fossil fuel infrastructure.

Health and Economic Stressors

Residents near the SSE4 pipeline experience higher rates of diagnosed diabetes, asthma and coronary heart disease, placing them at increased risk for chronic illness – which can be worsened due to the challenges of accessing care in under-resourced areas. These health burdens are accompanied by greater energy costs relative to household income, with households in SSE4 tracts ranking in the 74th percentile nationally for energy burden. This suggests that families are spending a disproportionate share of their income on utilities, which can limit access to other essentials like food, medicine, and transportation.

Although poverty indicators were not statistically significant in this analysis, the elevated energy burden and chronic disease rates point to economic distress that may not be fully captured by income alone.

Environmental Hazards and Infrastructure Gaps

SSE4 communities also face environmental stressors that reflect the legacy of pipeline and other industrial development. Census tracks near the pipeline rank in the:

- 64th percentile for PM2.5 air pollution, indicating elevated exposure to fine particulate matter linked to respiratory and cardiovascular disease,
- 46th percentile for wastewater discharge, which may signal aging infrastructure or proximity to facilities that release untreated or partially treated waste, and
- 65th percentile for transportation barriers, reflecting limited access to transportation options (including personal vehicles and mass transit options) —factors that can delay treatment and reduce resilience during crises.

Additionally, SSE4 tracts show elevated fire risk and agricultural loss potential, pointing to climate-related vulnerabilities that intersect with existing environmental burdens.

Implications

These findings demonstrate that SSE4 pipeline-adjacent communities are already living with the consequences of fossil fuel infrastructure, including chronic health conditions, environmental

degradation, and systemic barriers to care and recovery. The presence of these disparities in areas with existing infrastructure highlights the need for ongoing mitigation, including:

- Air quality monitoring
- Healthcare investment
- Environmental remediation
- Transportation and infrastructure improvements

The SSE4 case underscores the importance of community-centered planning and accountability in energy development. These communities deserve not only recognition of the harms they've endured, but also meaningful investment in their health, safety, and long-term resilience.

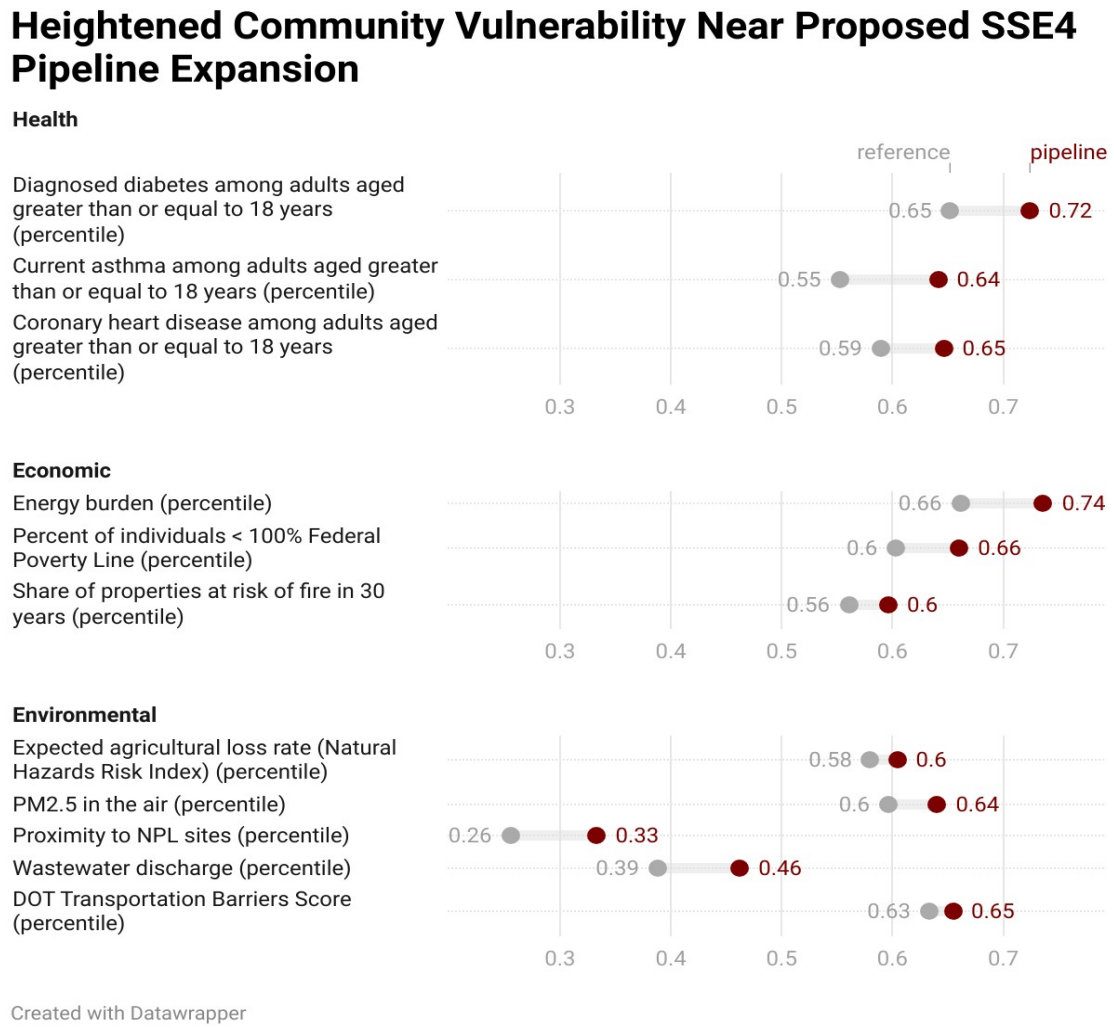

Figure 1: **Health, Economic, and Environmental Vulnerabilities of People Living in Communities Near the Proposed SSE4 Expansion.**

MSX – Proposed Infrastructure Risks

The proposed MSX pipeline would run through communities already facing deep and overlapping vulnerabilities. Compared to reference tracts in Mississippi and Choctaw County, Alabama, MSX-adjacent census tracts show statistically significant disparities across a wide range of health, economic, and environmental indicators. These disparities are not isolated — they reflect a pattern of structural disadvantage that pipeline development threatens to intensify.

Health and Economic Vulnerability

MSX-adjacent communities rank in the:

- 88th percentile nationally for diagnosed diabetes
- 79th percentile for current asthma
- 82nd percentile for coronary heart disease

These elevated rates of chronic illness suggest that residents are already burdened by health conditions that can be worsened by environmental exposures and limited access to care. At the same time, these communities face economic stressors that compound health risks:

- 87th percentile for energy burden, indicating high utility costs relative to income
- 80th percentile for poverty (<100% of the Federal Poverty Line)
- 81st percentile for poverty (<200% of the Federal Poverty Line)
- 75th percentile for unemployment
- 68th percentile for low median household income

Together, these indicators paint a picture of significant social and economic disadvantage, where households may struggle to afford healthcare, maintain safe housing, or recover from environmental disruptions.

Environmental and Infrastructure Risks

The MSX pipeline route also intersects areas with significant environmental vulnerabilities:

- 76th percentile for expected agricultural loss due to natural hazards
- 89th percentile for expected population loss risk, reflecting broader instability and climate vulnerability

- 45th percentile for pre-1960s housing, a proxy for potential lead exposure
- 38th percentile for impervious surface coverage, which increases flood and heat risks

These environmental stressors are layered on top of existing economic and health burdens, creating a cumulative impact that threatens the long-term resilience of these communities.

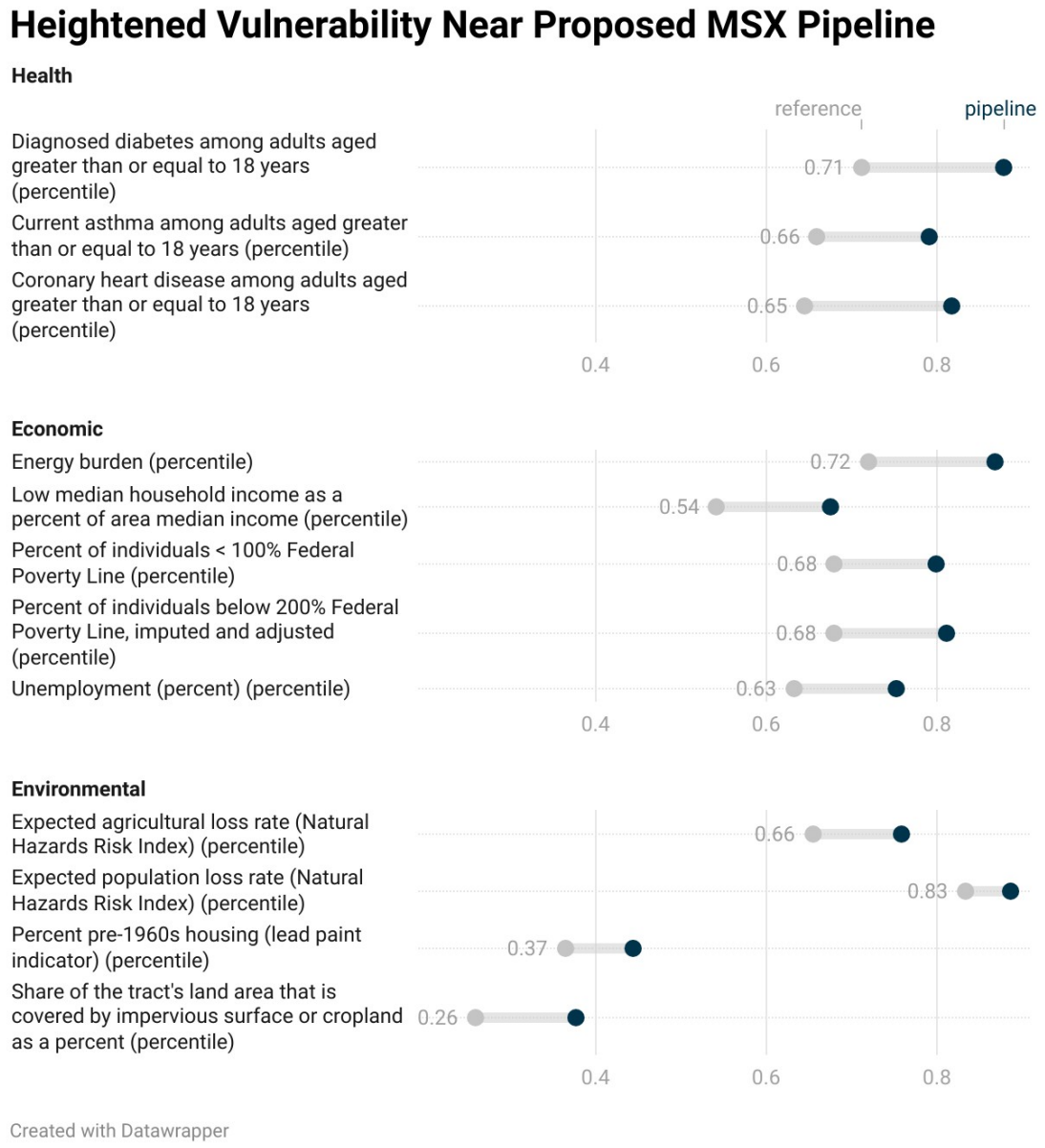

Figure 2: **Health, Economic, and Environmental Vulnerabilities of People Living in Communities Near the Proposed MSX Development.**

Implications

Unlike SSE4, the MSX pipeline has not yet been constructed, which means there is still time to prevent further harm. The data show that the proposed route cuts through some of the most vulnerable areas in Mississippi, with many tracts ranking in the 90th percentile nationally for multiple CEJST indicators (Figure 3). These are not just numbers — they represent real communities already facing systemic challenges.

Building new fossil fuel infrastructure in these areas risks deepening existing inequities, increasing exposure to pollution, and undermining public health and economic stability. The MSX project exemplifies how energy development can reinforce patterns of environmental injustice unless communities are actively engaged and protected through policy and planning.

The findings call for:

- Immediate reconsideration of the MSX pipeline route
- Robust community consultation
- Environmental and health impact assessments
- Investment in resilience and equity, not extraction

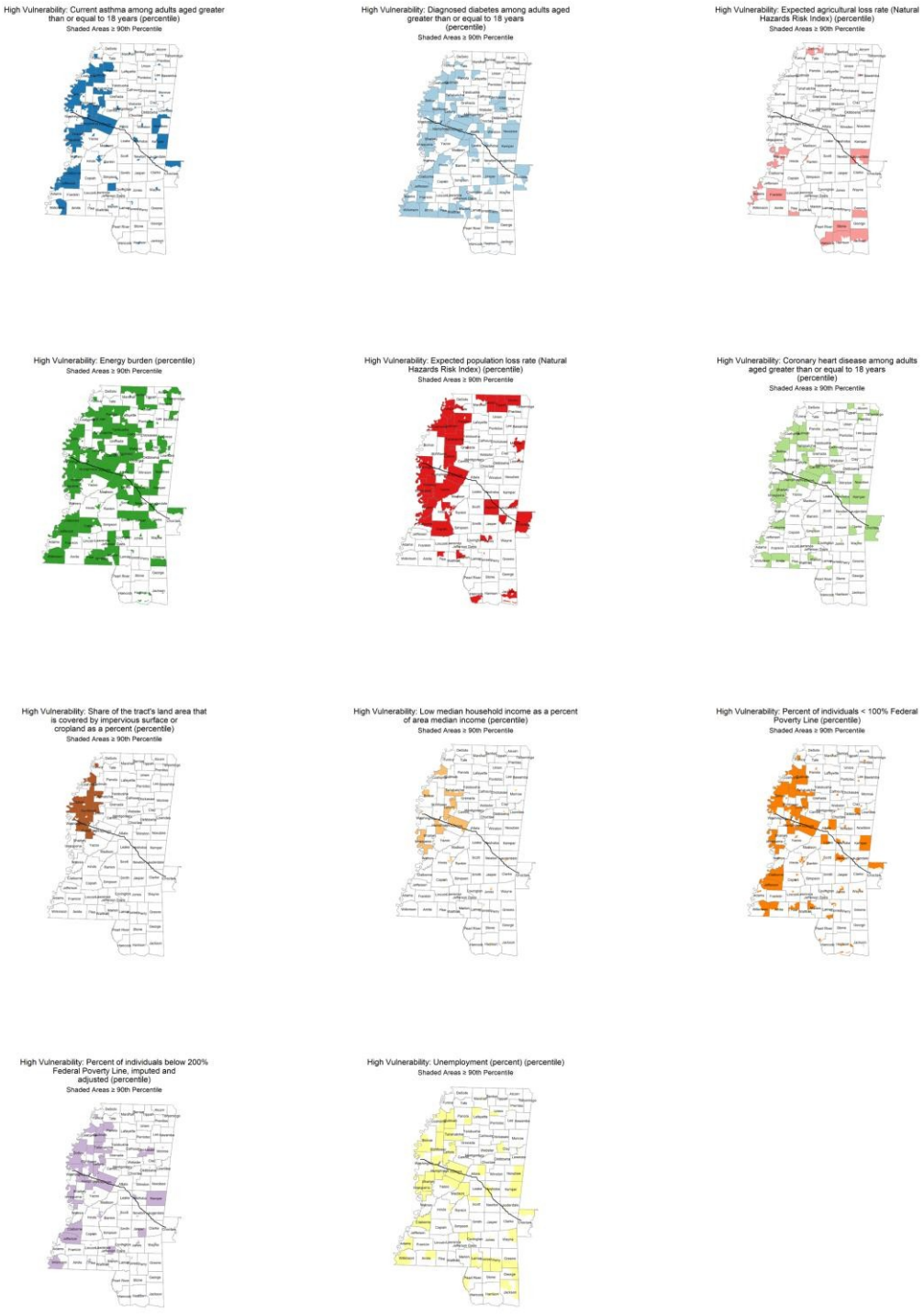

Figure 3: **Vulnerable Populations (90th percentile of CEJST indicators) by Census Tract in Mississippi.** *MSX pipeline depicted in solid black line through the middle of the state.*

Environmental Justice and Procedural Equity

These findings reinforce a clear pattern: **pipeline infrastructure is disproportionately located near vulnerable communities**, further entrenching health and economic disparities. FERC must apply the principles of **environmental justice** and **meaningful public participation**.

We also note the **lack of in-person scoping meetings** as a procedural failure. To comply with environmental justice obligations, FERC should:

- Host **accessible, in-person scoping meetings**, especially in rural areas.
- Provide **translated materials** and outreach in communities with limited broadband or health literacy.
- Allow **additional time** for public input from impacted residents.

Recommendations to FERC and Project Proponents

We respectfully urge FERC to adopt the following recommendations before advancing these projects:

1. **Conduct a Health Impact Assessment (HIA)** for both SSE4 and MSX projects.
2. **Require cumulative impact assessments**, not just project-by-project evaluations.
3. **Evaluate non-pipeline energy alternatives** that support climate resilience and community health.
4. **Mitigate existing harms in SSE4 areas**, including:
    - Air quality and soil monitoring
    - Emergency response resources
    - Healthcare infrastructure investment
    - Environmental remediation.
5. **Ensure transparent, inclusive community engagement** throughout the permitting process.
6. **Document and disclose**:
    - Full route maps and compressor station locations;
    - Tribal and local community consultations to date;
    - Impacts to waterways, wetlands, and species habitat;
    - Emergency plans for leaks, spills, or fires.

Pipeline infrastructure, whether existing or proposed, must be evaluated not only for technical and economic feasibility but for its direct and cumulative impact on community health. Both the SSE4 and MSX projects risk deepening systemic inequities unless public health and environmental justice are placed at the center of planning, permitting, and enforcement.
The undersigned urges the Commission to carefully review these findings and to consider the long-term consequences for the health and wellbeing of the people living near this infrastructure. Communities in Alabama, Georgia, and Mississippi deserve energy policy decisions that protect—not compromise—their right to a healthy and sustainable environment.

Thank you for the opportunity to provide comments.

Sincerely,

Adrienne L. Hollis, PhD, JD
President, Ubuntu Power Project
Jacksonville, Florida 32226
Adrienne116@gmail.com

Kristi Pullen Fedinick, PhD
Consultant
kristi@scienceserves.org

Appendix A. ANOVA results comparing CEJST indicators between pipeline-adjacent and reference census tracts.

Table 1. CEJST Indicators with Statistically Significant Higher Percentile Values in SSE4 Pipeline-Adjacent Areas

CEJST Indicator	Indicator Definition	SSE4 Pipeline	Reference Tracts	p_value
DF_PFS	Diagnosed diabetes among adults aged greater than or equal to 18 years (percentile)	0.72	0.65	<0.001
AF_PFS	Current asthma among adults aged greater than or equal to 18 years (percentile)	0.64	0.55	<0.001
HDF_PFS	Coronary heart disease among adults aged greater than or equal to 18 years (percentile)	0.65	0.59	<0.05
EBF_PFS	Energy burden (percentile)	0.74	0.66	<0.001
EALR_PFS	Expected agricultural loss rate (Natural Hazards Risk Index) (percentile)	0.60	0.58	<0.001
PM25F_PFS	PM2.5 in the air (percentile)	0.64	0.60	<0.001
P100_PFS	Percent of individuals < 100% Federal Poverty Line (percentile)	0.66	0.60	<0.05
NPL_PFS	Proximity to NPL sites (percentile)	0.33	0.26	<0.001
WF_PFS	Wastewater discharge (percentile)	0.46	0.39	<0.001
TD_PFS	DOT Travel Barriers Score (percentile)	0.65	0.63	<0.001
WFR_PFS	Share of properties at risk of fire in 30 years (percentile)	0.60	0.56	<0.001

Table 2. CEJST Indicators with Statistically Significant Higher Percentile Values in MSX Pipeline-Adjacent Areas

CJEST Indicator	Indicator Definition	Pipeline	Reference Tracts	p-value
DF_PFS	Diagnosed diabetes among adults aged greater than or equal to 18 years (percentile)	0.88	0.71	<0.001
AF_PFS	Current asthma among adults aged greater than or equal to 18 years (percentile)	0.79	0.66	<0.001
HDF_PFS	Coronary heart disease among adults aged greater than or equal to 18 years (percentile)	0.82	0.65	<0.001
EBF_PFS	Energy burden (percentile)	0.87	0.72	<0.001
EALR_PFS	Expected agricultural loss rate (Natural Hazards Risk Index) (percentile)	0.76	0.65	0.017
EPLR_PFS	Expected population loss rate (Natural Hazards Risk Index) (percentile)	0.89	0.83	<0.001
LMI_PFS	Low median household income as a percent of area median income (percentile)	0.68	0.54	<0.001
P100_PFS	Percent of individuals < 100% Federal Poverty Line (percentile)	0.80	0.68	0.001
P200_I_PFS	Percent of individuals below 200% Federal Poverty Line, imputed and adjusted (percentile)	0.81	0.68	<0.001
LPF_PFS	Percent pre-1960s housing (lead paint indicator) (percentile)	0.45	0.37	0.001
UF_PFS	Unemployment (percent) (percentile)	0.75	0.63	0.001
IS_PFS	Share of the tract's land area that is covered by impervious surface or cropland as a percent (percentile)	0.38	0.26	0.001

Reference tracts are all census tracts in MS and Choctaw County, AL that are not within 6 miles of the MSX pipeline.