



Environmental Protection Agency (EPA) | Climate Pollution Reduction Grant (CPRG)

El Paso Regional Climate Action Plan

Priority Climate Action Plan

#02F38901 | March 2024



El Paso Metropolitan Statistical Area (MSA) Priority Climate Action Plan

The City of El Paso and regional partners would like to thank the many members of the public who participated in the planning process by offering their time, concerns, suggestions, and support.

This project has been funded in part by the United States Environmental Protection Agency (EPA) under assistance agreement 02F38901 to the City of El Paso. The contents of this document do not necessarily reflect the views and policies of the EPA, nor does the EPA endorse trade names or recommend the use of commercial products mentioned in this document.

The measures contained herein should be construed as broadly available to any entity in the El Paso MSA eligible for receiving funding under the EPA's Climate Pollution Reduction Implementation Grants (CPRG) and other funding streams, as applicable.

All images are owned by the City of El Paso or do not require attribution.

Learn more at

[City of El Paso - Office of Climate & Sustainability](#)

For further information contact

Fernando Berjano, Senior Climate Program Manager, BerjanoFL@elpasotexas.gov

Dora Hernandez, Climate Program Manager, HernandezDB1@elpasotexas.gov

Nicole Ferrini, Climate and Sustainability Officer, FerriniNM@elpasotexas.gov



Table of Contents

Executive Summary v

Acronyms, Abbreviations, and Glossary viii

Introduction 11

Greenhouse Gas Emissions Inventory Overview 13

Stakeholder Engagement 18

PCAP Priority Measure Selection Methodology 23

Greenhouse Gas Reductions 26

Low-Income and Disadvantaged Community Analysis 28

Priority Measures 34

Conclusion 71

Appendix A: GHG Reduction Calculation Technical Appendix

Appendix B: Community Input



Acknowledgements

Thank you to staff members of City of El Paso Community and Human Development department who made this possible through your assistance and review.

Nicole Ferrini, Climate and Sustainability Officer
Abraham Gutierrez, Assistant Director
Fernando Berjano, Senior Climate Program Manager
Dora Hernandez, Climate Program Manager
Andrea Silva-Brown, Sustainability Specialist
Andrea Read, Civic Empowerment Coordinator
Valeria Aguirre Holguin, Neighborhood Specialist
Linda Garza, Neighborhood Specialist
Kenia G. Sawyer, Neighborhood Specialist
Jahnay Ingram, Research and Management Assistant

Report prepared by

AECOM, with the support of Barracuda Public Relations and ICLEI - Local Governments for Sustainability (ICLEI) in collaboration with the Office of Climate and Sustainability, City of El Paso.



Executive Summary

The El Paso Metropolitan Statistical Area (El Paso MSA) faces climate risks including drought, flash flooding, air pollution, extreme heat, and extreme cold. Nearly 65% of El Paso County and 100% of Hudspeth County are considered low-income and disadvantaged communities (LIDACs) facing burdens like linguistic isolation and poor health that make it harder to address climate risks.¹ In the face of these challenges, the City of El Paso worked with partners across El Paso and Hudspeth Counties to create this Priority Climate Action Plan (PCAP).

This PCAP prioritizes measures to reduce greenhouse gas (GHG) emissions in the El Paso MSA, while providing other benefits to residents, such as creating jobs, improving air quality and quality of life.

The PCAP includes an MSA-wide inventory of major GHG emissions sources within El Paso County and Hudspeth County. In 2019, the El Paso MSA generated approximately 8,500,000 metric tons of carbon dioxide equivalent (MTCO₂e). The largest emissions sources were from transportation (40% of total emissions), commercial energy use (24%), industrial energy use (17%), and residential energy use (16%). These initial results are consistent with other communities in Texas and throughout the United States where building energy use and transportation are typically the largest community emissions sources.

The PCAP was developed through a community driven process.

The PCAP team gathered feedback from community members across El Paso and Hudspeth counties to identify ways to reduce climate pollution across different sectors. To solicit input from community members, particularly residents of low-income and disadvantaged communities (LIDACs), the City of El Paso hosted a bilingual survey and an open house at a community center located in a LIDAC. In addition, the City of El Paso shared an overview of the PCAP on its website and hosted two community listening sessions to discuss the priority measures. The City of El Paso presented an overview of the PCAP in a City Council work session that was open to the public.

The core engagement strategy was to meet people where they are and the City of El Paso met with key community institutions, such as Eco El Paso, Community First Coalition, Amanecer, The El Paso Chamber of Commerce, The El Paso Hispanic Chamber of Commerce and both the El Paso Community Foundation and the Paso Del Norte Health Foundation to brief them on the CPRG program. As an immediate follow-up to the PCAP, in April, community-based leaders and organizations will convene the region's public leaders and 200 members from historically disinvested communities to discuss climate action.

Together, residents, project partners, and other stakeholders shared more than 200 unique measure and project ideas to reduce GHG emissions in the El Paso MSA. The PCAP engagement process outcomes included:

- **95+ community members** attended an open house on January 24th
- **640+ responses** were received through the **bilingual community survey** open from January 24th to February 9th
- **28 community members** attended two **listening sessions** on February 20th and February 24th

¹ Council on Environmental Quality (CEQ), "Climate and Economic Justice Screening Tool 1.0," 2022, <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>.

This community feedback shaped the plan’s priority measures. In El Paso’s PCAP, a **priority measure** is a broad strategy that addresses an emissions source or sources within the El Paso MSA, aligns with local goals, and is important to the community. Many of the priority measures, which are listed in Figure 1, come with more defined project ideas from the community. **PCAP projects** are specific, implementation-ready projects or programs that support a PCAP measure.

In addition to high-level GHG reduction estimates and evaluation of the authority to implement, each priority measure also presents an assessment of LIDAC impacts. Benefits and disbenefits are described, with mitigation strategies included for each disbenefit identified. The order in which priority measures are presented in the PCAP is based on benefits the community prioritized through the engagement process.

Community members provided 200+ unique ideas.

Inter-Governmental project partners shared 35+ implementation-ready projects.

From this input, 10 regional priority measures were identified.



Figure 1. PCAP Measures by Emissions Area



Tables

Table 1. Emissions Sectors and Activities	13
Table 2. Emissions Inventory Data Sources	14
Table 3. 2019 GHG Emissions Inventory by Sector	15
Table 4. 2019 GHG Emissions Inventory by Sector and Subsector	17
Table 5. Intergovernmental and Interagency Coordination Meetings	19
Table 6. PCAP Measures and Community Benefits	25
Table 7. Cumulative GHG Reductions by Measure	26
Table 8. CEJST Indicators and Affected Census Tracts in El Paso and Hudspeth Counties	31
Table 9. El Paso MSA Low Income and Disadvantaged Communities Census Tract IDs	33
Table 10. PCAP Priority Measures and Project Ideas	35
Table 11. Example Projects for Priority Measure: Increase Native Trees and Natural Spaces	37
Table 12. Benefits to Priority Measure: Increase Native Trees and Natural Spaces.....	40
Table 13. Example Projects for Priority Measure: Expand Improve Active Transportation Infrastructure..	41
Table 14. Benefits to Priority Measure: Expand and Improve Active Transportation Infrastructure.....	45
Table 15. Benefits to Priority Measure: Utilize Sustainable Land Use Planning	47
Table 16. Example Projects for Priority Measure: Expand and Improve Transit Service	49
Table 17. Benefits to Priority Measure: Expand and Improve Transit Service	51
Table 18. Example Projects for Priority Measure: Increase Energy Efficiency Decarbonize Buildings.....	52
Table 19. Benefits to Priority Measure: Increase Energy Efficiency and Decarbonize Buildings.....	54
Table 20. Example Projects for Priority Measure: Install Renewable Energy Systems.....	56
Table 21. Benefits to Priority Measure: Install Renewable Energy Systems.....	60
Table 22. Benefits to Priority Measure: Evaluate Sustainable Waste Management Practices	62
Table 23. Example Projects for Priority Measure: Support the Electric Vehicles Transition	63
Table 24. Benefits to Priority Measure: Support the Electric Vehicles Transition.....	65
Table 25. Example Projects for Priority Measure: Optimize Freight Transportation.....	67
Table 26. Benefits to Priority Measure: Optimize Freight Transportation.....	68
Table 27. Example Projects for Priority Measure: Promote Sustainable Food Production Distribution	69
Table 28. Benefits to Priority Measure: Promote Sustainable Food Production and Distribution	71

Figures

Figure 1. PCAP Measures by Emissions Area	vii
Figure 2. Study Area	12
Figure 3. 2019 GHG Emissions by Sector	16
Figure 4. Community Ranking of Priority Measures	21
Figure 5. Community Ranking of Project Benefits	21
Figure 6. CEJST Census Tracts in El Paso MSA	32

Acronyms, Abbreviations, and Glossary

Acronym, Abbreviation, or Key Term	Definition
Adaptation strategies	Adaptation strategies help communities, organizations, and regions adapt to climate change impacts, like extreme heat, flooding, drought, and worsened air quality. El Paso’s Regional Climate Action Plan will also evaluate climate adaptation strategies.
Air quality	Air quality is the level of cleanliness and suitability of air for humans, animals, and plants. Good air quality means that the air is free of harmful substances.
Carbon removal	Carbon removal is the process of capturing carbon dioxide (CO ₂) from the atmosphere and storing it for decades or centuries. This can be through natural processes such as trees sequestering carbon as they grow or through mechanical means.
CCAP	The Comprehensive Climate Action Plan (CCAP) is the second deliverable for the CPRG. The CCAP will include actions to reduce greenhouse gas emissions from multiple sources, such as building energy use, transportation, solid waste, and industry. The CCAP will also include near-term and long-term greenhouse gas reduction goals and concrete strategies, actions, and implementation pathways
CPRG	The Climate Pollution Reduction Grant (CPRG) program was established by the 2022 Inflation Reduction Act (IRA). For the CPRG Phase 1 Planning Grants, the El Paso MSA was awarded \$1 million to develop a regional climate action plan.
CO₂	Carbon dioxide (CO₂) is a greenhouse gas (GHG) that is produced by many common activities, including operating vehicles and heating buildings using fossil fuels.
El Paso Metropolitan Statistical Area	The El Paso Metropolitan Statistical Area (MSA) refers to the geographic area that includes the communities of El Paso County and Hudspeth County.
EPA	The U.S. Environmental Protection Agency (EPA) seeks to protect human health and the environment by developing and enforcing regulations, providing grants, studying environmental issues, sponsoring partnerships, teaching people about the environment, and publishing information.
EV	Electric vehicles (EVs) are powered by electricity instead of gasoline, diesel, or another fuel.
Fugitive Emissions	Fugitive emissions are unintentional or intentional releases of greenhouse gases to the atmosphere. Releases can be accidental from equipment leaks, defective seals or joints, etc., or they can be the intentional venting, flaring, or discharging of greenhouse gases.
GHG	Greenhouse gases (GHGs) are gases in the earth’s atmosphere that trap heat. During the day, the sun shines through the atmosphere, warming the earth’s surface. At night the earth’s surface cools, releasing heat back into the air. Some heat is trapped by the greenhouse gases in the atmosphere, causing changes to the earth’s climate.

kW	Kilowatt is a unit of energy representing one thousand watts.
LIDAC	Low-income and disadvantaged communities (LIDACs) are areas that suffer from a combination of economic, health, and environmental burdens. The EPA's Climate and Economic Justice Screening Tool (CEJST) is a geospatial mapping tool that identifies areas across the nation where communities face significant burdens.
LSC	Leadership Steering Committee is an advisory body for the El Paso region CPRG project and includes representatives from each municipality in the El Paso MSA region, the El Paso Metropolitan Planning Organization, and the Rio Grande Council of Governments.
CH₄	Methane (CH₄) is a greenhouse gas.
Implementation tracking metric	An implementation tracking metric is quantifiable value used to track, compare, and assess performance or processes.
MW	Megawatt is a unit of power representing one million watts.
MWh	Megawatt-hour is a unit of energy in which electricity use is primarily measured.
N₂O	Nitrous oxide (N₂O) is a greenhouse gas.
PCAP	The Priority Climate Action Plan (PCAP) is the first deliverable for the CPRG. The PCAP will include implementation-ready projects that reduce greenhouse gas emissions and provide other community benefits. Projects will benefit low-income and disadvantaged communities.
PDN C3	The Paso Del Norte Community Climate Collaborative (PDN C3) is an institutional and interagency stakeholder framework to maintain transparency, collaboration, and accountability in the delivery of outcomes, and consists of the Leadership Steering Committee and other partners.
PHEV	A plug-in hybrid electric vehicle is powered by both electricity and another fuel source, such as gasoline or diesel.
Priority Measure	A PCAP priority measure is a broad strategy that addresses an emissions source or sources within the El Paso MSA, aligns with local goals, and is important to the community.
Projects	PCAP projects are specific, implementation-ready projects that support a PCAP measure.
Status Report	The Status Report is the third deliverable for the CPRG. The Status Report will evaluate implementation progress on PCAP and CCAP measures, update measure analysis, and outline next steps on measure implementation.
VMT	Vehicle miles traveled (VMT) is a measurement of total vehicular travel based on the number and distance of trips.

Introduction

The El Paso Metropolitan Statistical Area (El Paso MSA) of Texas faces economic, environmental, and public health challenges due to the changing climate. Record heat, flash floods, drought, and fire pose risks for residents of the Metropolitan Statistical Area (MSA). Working together to reduce climate pollution is necessary to protect residents from these risks, now and in the future. The MSA comprises of El Paso County and Hudspeth County.

This Priority Climate Action Plan (PCAP) prioritizes measures to reduce greenhouse gas (GHG) emissions in the El Paso MSA. The PCAP will support investment in policies, practices, and technologies that reduce emissions, create high-quality jobs, spur economic growth, and enhance residents' quality of life. In creating this PCAP, the City of El Paso collaborated with the Towns of Anthony and Clint, Horizon City, the Cities of San Elizario and Socorro, the Village of Vinton, El Paso and Hudspeth Counties, the El Paso Metropolitan Planning Organization, the Rio Grande Council of Governments, and Ysleta del Sur Pueblo.

The El Paso MSA is a complex network of communities, with 10 municipalities and 15 census-designated places and unincorporated communities spanning two counties and more than 5,500 square miles (see Figure 2). Home to five international ports of entry, the El Paso MSA is a crucial channel for freight traffic and international trade and commerce with Mexico. In 2021, the El Paso-Juárez-Las Cruces Borderplex was the fifth-largest manufacturing employment center in North America.

Despite these economic strengths, the El Paso MSA faces a confluence of social and environmental challenges. Triple-digit temperatures have become more frequent in the last 100 years, leading to summer blackouts as the regional electric utilities struggles to meet energy demands. The region is suffering a 20-year megadrought and water supply from the Rio Grande is declining. Meanwhile, intense rainfall caused flash flood events in 2006 and 2021.

Recovering from events like these is more difficult for people facing other stressors. Nearly 65% of El Paso County and 100% of Hudspeth County are considered Justice40 disadvantaged communities, facing burdens of poverty, lack of educational attainment, and poor health.² The counties score 0.98 and 0.99, respectively, on the CDC Social Vulnerability Index, where 1 is the highest vulnerability.³ El Paso residents facing these interconnected challenges are less able to adapt to environmental change.

In addition to reducing GHG emissions, the priority measures identified in this PCAP offer other benefits to residents of the El Paso MSA. Implementing these priority measures can reduce energy costs, improve air quality, create high-quality jobs, and improve community health. This PCAP represents an opportunity for the El Paso MSA to meet current and future challenges and bring benefits to all residents.

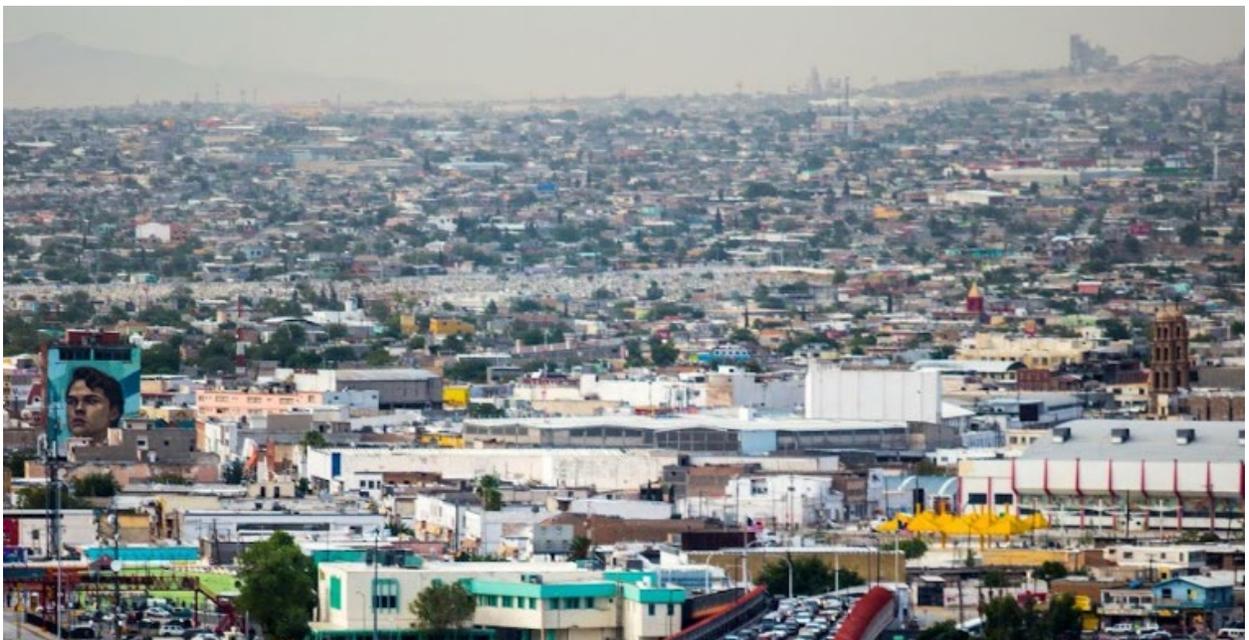
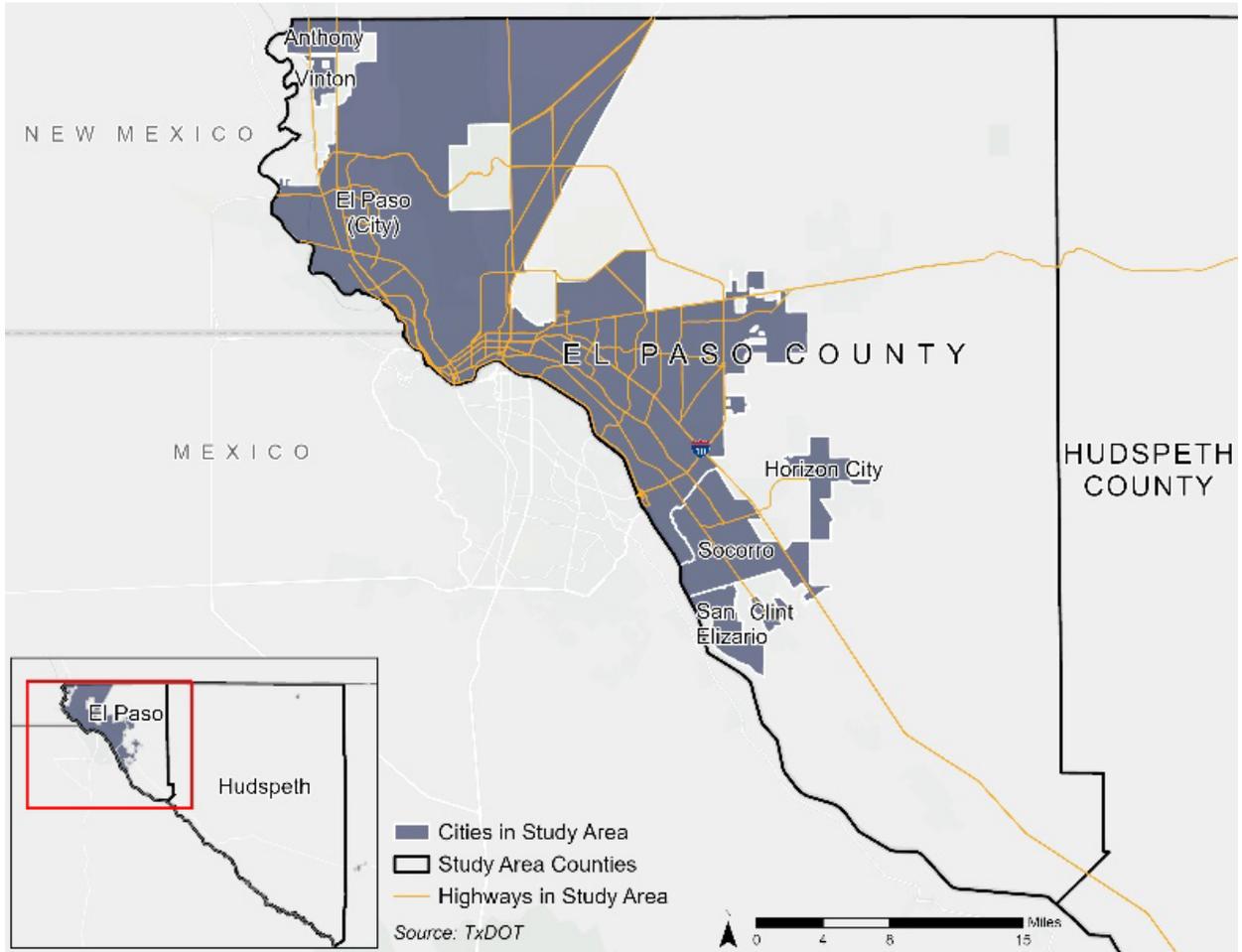
This PCAP is organized into the following sections:

- Introduction
- Greenhouse Gas Emissions Overview
- Stakeholder Engagement
- Low-Income/Disadvantaged Community Benefits Analysis
- Priority Measures
- Conclusion

² Council on Environmental Quality (CEQ), "Climate and Economic Justice Screening Tool 1.0," 2022, <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>.

³ Agency for Toxic Substances and Disease Registry (ATSDR), "CDC/ATSDR Social Vulnerability Index (SVI)," February 7, 2024, <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

Figure 2. Study Area



Greenhouse Gas Emissions Inventory Overview

Takeaways

- **Evaluation of major greenhouse gas emissions sources** within El Paso County and Hudspeth County.
- Nearly **40%** of emissions from **transportation sector**.
- **58% of emissions from stationary energy use** – commercial, industrial, and residential.

The PCAP includes an MSA-wide inventory of major GHG emissions sources within El Paso County and Hudspeth County. Per EPA CPRG guidance, a simplified GHG inventory is acceptable for the PCAP, with a comprehensive GHG inventory to be developed as part of the subsequent Comprehensive Climate Action Plan (CCAP) in 2025. The PCAP GHG inventory was developed using a combination of empirical data and modeled data for calendar year 2019 following the US Community Protocol inventory guidance, and includes the emissions sources presented in Table 1.⁴

Table 1. Emissions Sectors and Activities

Emissions Sector	Activities Included
Transportation	On-road vehicle gasoline and diesel use and off-road equipment gasoline, diesel, liquified petroleum gas, and compressed natural gas use
Residential Energy	Stationary energy use, including electricity, natural gas, propane, and wood fuels
Commercial Energy	Stationary energy use, including electricity, natural gas, fuel oil, propane, gasoline, and wood fuels
Industrial Energy	Stationary energy use, including electricity, natural gas, fuel oil, propane, liquified petroleum gas, and gasoline fuels
Solid Waste	Fugitive methane emissions from solid waste landfills
Water and Wastewater	Process nitrous oxide from wastewater treatment and effluent discharge
Process and Fugitive Emissions	Process emissions from industry and fugitive emissions from natural gas use

⁴ICLEI, "U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions," 2024, <https://iclei.usa.org/us-community-protocol/>.

The activities included in the inventory produce the following GHGs:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)

Activity data and emissions factors were collected for the activities listed in Table 1. The activity data (such as kilowatt-hours used per year or miles traveled per year) was then multiplied by activity-specific emissions factors for a particular GHG (such as pounds of carbon dioxide produced per kilowatt-hour used) to calculate total GHG emissions produced by that activity. In developing the inventory, the Intergovernmental Panel on Climate Change (IPCC) Annual Report 5 (AR5) 100-year global warming potential (GWP) values were used to convert the amount of GHGs to metric tons of carbon dioxide equivalents (MTCO_{2e}). In general, calculating GHG emissions follows this simplified formula:

$$\text{Activity Data} \times \text{Emissions Factor} \times \text{100-year GWP} = \text{Total Emissions in MTCO}_2\text{e}$$

The inventory was developed using ICLEI's ClearPath tool with the data resources shown in Table 2.

Table 2. Emissions Inventory Data Sources

Emissions Source	Emissions Data Obtained	Emissions Data Source	Emissions Factor Source
On-road Transportation	Vehicle Miles Traveled (VMT)	Google Environmental Insights Explorer (EIE) 2019 (VMT for counties without data was estimated using region-wide VMT per capita multiplied by county populations)	US EPA
	Fuel economy and vehicle/fuel types	Bureau of Transportation Statistics Average Fuel Efficiency of U.S. Light Duty Vehicles 2019, Energy Information Administration (EIA)	
Off-road Transportation	GHG emissions	EPA National Emissions Inventory (NEI) 2020	EPA NEI 2020
Electricity	Megawatt-hours (MWh)	Utility Data 2019	EPA eGRID 2019
Residential And Commercial Natural Gas, Propane, Wood, Distillate Fuel Oil, Gasoline	Million British Thermal Units (MMBtu)	EIA 2019 Data (downscaled from state data)	EPA

Industrial Natural Gas, Liquefied Petroleum Gas (LPG), Distillate Fuel Oil, Propane, Gasoline	GHG emissions	EPA Facility Level Information on GreenHouse gases Tool (FLIGHT) 2019	EPA FLIGHT 2019
Landfilled Waste	Short tons	Texas Commission on Environmental Quality 2019	ICLEI ClearPath/EPA WARM model
Water and Wastewater	GHG emissions	EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007, Chapter 8, 8-7 (2009)	EPA
Process Emissions from Iron and Steel Production	GHG emissions	EPA FLIGHT 2019	EPA FLIGHT 2019

In calendar year 2019, the El Paso region generated approximately **8,500,000 MTCO₂e** as shown in Table 3 and Figure 3.

Table 3. 2019 GHG Emissions Inventory by Sector

Sector	2019 GHG Emissions (MTCO₂e)	% of total Emissions
Transportation	3,386,545	40%
Commercial Energy*	2,075,201	24%
Industrial Energy	1,485,660	17%
Residential Energy	1,355,228	16%
Solid Waste	173,915	2%
Process and Fugitive Emissions	51,902	<1%
Water & Wastewater	7,113	<1%
TOTAL	8,535,564	100%

**Commercial and Industrial electricity use could not be disaggregated – the associated emissions are included in the Commercial Energy sector*

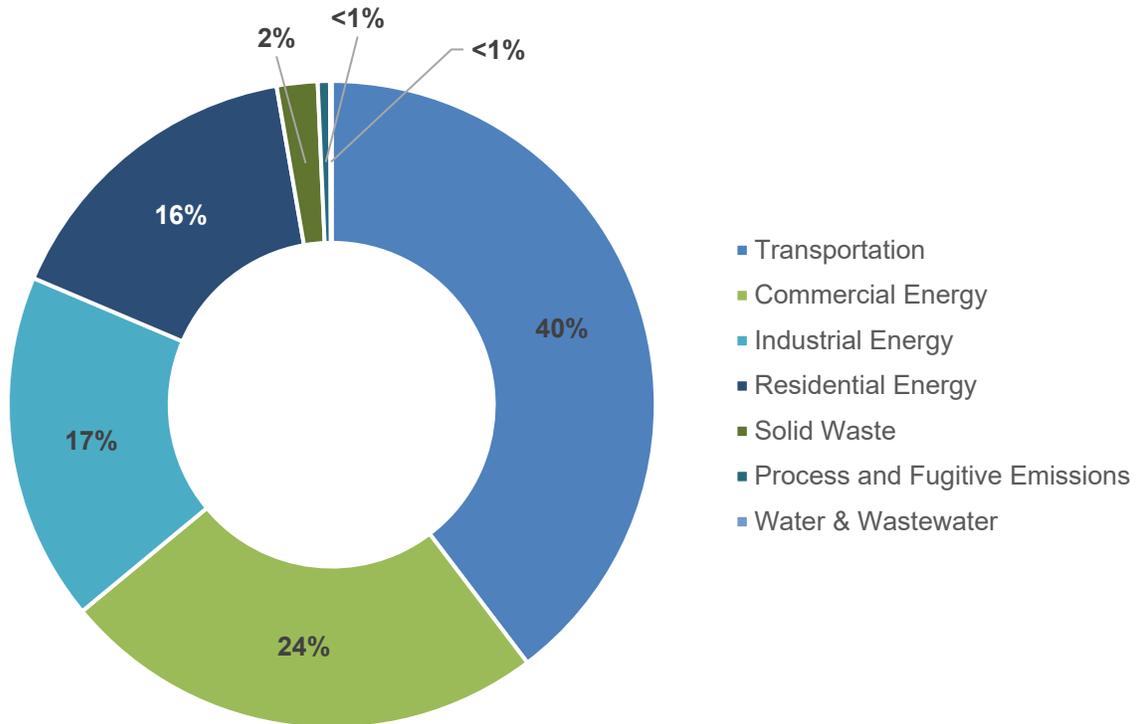


Figure 3. 2019 GHG Emissions by Sector



Transportation and stationary energy use (including Commercial, Industrial, and Residential) are the two primary GHG emissions sources in the El Paso MSA region. Combined, these sectors generate 97% of total emissions. As industrial electricity use from the provided utility data and associated emissions are aggregated under the Commercial Energy sector, it is currently difficult to determine exactly which sector produces more emissions. Table 4 shows GHG emissions by specific activity type.

Table 4. 2019 GHG Emissions Inventory by Sector and Subsector

Sector and Activity Type	2019 GHG Emissions (MTCO _{2e})*	% of Total Emissions
Transportation	3,386,545	40%
On-Road Gasoline	2,437,552	29%
On-Road Diesel	896,504	11%
Off-Road Gasoline	2,647	<1%
Off-Road Diesel	8,168	<1%
Off-Road Compressed Natural Gas (CNG) or LPG	686	<1%
Rail Diesel	40,988	<1%
Commercial Energy	2,075,201	24%
Electricity**	1,748,302	20%
Natural Gas	283,931	3%
Distillate Fuel Oil No.2	27,022	<1%
Propane	15,816	<1%
Wood	130	<1%
Industrial Energy	1,485,660	17%
Natural Gas	946,729	11%
LPG	536,313	6%
Distillate Fuel Oil No.2	1,713	<1%
Propane	869	<1%
Gasoline	36	<1%
Residential Energy	1,355,228	16%
Electricity	984,120	12%
Natural Gas	334,398	4%
Propane	36,004	<1%
Wood	706	<1%
Solid Waste	173,915	2%
Landfilled Waste	173,915	2%
Process and Fugitive Emissions	51,902	<1%
Iron and Steel Production	31,731	<1%
Natural Gas Distribution	20,171	<1%
Water and Wastewater	7,113	<1%
Water Treatment	7,113	<1%
TOTAL	8,535,564	100%
<i>*Totals may not sum due to rounding</i>		
<i>** Commercial and Industrial electricity use could not be disaggregated – the associated emissions are reflected in the Commercial Energy sector</i>		

Most of the region’s emissions (40%) are from on-road transportation fuel use. Electricity use accounts for 32% of total emissions, primarily due to the use of fossil fuels to generate electricity for the regional grid. Natural gas generates 18% of total emissions, and is primarily used for space and water heating, cooking, and other industrial processes. These sectors and activities generate most of the region’s emissions and represent an important opportunity to reduce GHGs through PCAP measure implementation.

Stakeholder Engagement

Takeaways

- **35+** implementation-ready projects were identified by project partners through the project intake form.
- **95+** community members attended the open house.
- **640+** responses were received through the bilingual community survey.
- **28** community members attended two listening sessions.

Intergovernmental and Interagency Coordination

Creating the PCAP required significant coordination and input from all regional stakeholders to integrate PCAP development with other planning efforts and to build an effective coalition for implementation.

Over the course of the planning process, a Leadership Steering Committee (LSC) was established to align outcome of the PCAP and subsequent CCAP with regional goals. The LSC is a senior-level advisory group with representatives from multiple public entities including:

- City of El Paso
- City of San Elizario
- City of Socorro
- El Paso County
- El Paso Metropolitan Planning Organization
- Horizon City
- Hudspeth County
- Rio Grande Council of Governments
- Town of Anthony
- Town of Clint
- Village of Vinton
- Ysleta del Sur Pueblo

The LSC met during PCAP development to establish the Interlocal Agreement for Assistance and Cooperation in the Leadership Steering Committee for the Regional Climate Initiative for project coordination and to discuss the project components and schedule, share information on implementation-ready projects and programs for inclusion in the PCAP, and discuss which priority measures should be pursued for a Phase 2 implementation grant. A project intake form (PIF) was circulated to LSC members and other stakeholders representing entities with a significant effect and interest in the management of regional emissions, including public, private, and not for profit groups. The PIF was distributed to collect ideas for and information on implementation-ready projects, including information on the project's topic, geography served, lead implementing agency, and implementation schedules and milestones. More than 35 responses were received describing implementation-ready projects.

The project team also conducted one-on-one meetings with the City of El Paso City Councilors to brief them on priority measures to be included in the PCAP. Similarly, the City of El Paso briefed other regional partners on the PCAP measures, including utility companies, regional transportation planning organizations and county seats. The core engagement strategy was to meet people where they are, and the City of El Paso met with key community institution such as Eco El Paso, Community First Coalition, Amanecer, the El Paso Chamber of Commerce, the El Paso Hispanic Chamber of Commerce and both the El Paso Community Foundation and the Paso Del Norte Health Foundation to brief them on the CPRG program.

Table 5 summarizes the meetings facilitated for intergovernmental and interagency coordination (IIC).

Table 5. Intergovernmental and Interagency Coordination Meetings

Date	Topics Discussed	Organizations Involved	Outcome(s) and Next Steps
12/5/23	IIC for CPRG. Leadership Steering Committee creation	MPO and Rio Grande Council of Governments	Shared LSC agreement draft
12/5/23	IIC for CPRG. Leadership Steering Committee creation	City of Vinton and Rio Grande Council of Governments	Shared LSC agreement draft
12/5/23	IIC for CPRG. Leadership Steering Committee creation	City of Socorro, Ysleta del Sur Pueblo, and Rio Grande Council of Governments	Shared LSC agreement draft
12/6/23	IIC for CPRG. Leadership Steering Committee creation	Hudspeth County and Rio Grande Council of Governments	Shared LSC agreement draft
12/7/23	IIC for CPRG. Leadership Steering Committee creation	Horizon City and Rio Grande Council of Governments	Shared LSC agreement draft
12/7/23	IIC for CPRG. Leadership Steering Committee creation	San Elizario and Rio Grande Council of Governments	Shared LSC agreement draft
12/19/23	IIC for CPRG. Leadership Steering Committee creation	Vinton City Council presentation	City council approved signing the LSC agreement
12/19/23	IIC for CPRG. Leadership Steering Committee creation	San Elizario City Council presentation	City council approved signing the LSC agreement
12/11/23-12/15/23	1-on-1 Meeting with City Council Representatives	City of El Paso	City Council awareness on CPRG
1/22/24	LSC Meeting to discuss implementation ready projects and review the project intake form	All LSC partners	LSC partners submit projects through the PIF
2/14/24	LSC Meeting to discuss priority measures and next steps of CPRG Phase 2 Implementation grants	All LSC partners	Top priority measures for Phase 2 Implementation grants identified
2/26/24	IIC for CPRG. PCAP and CPRG Phase 2 implementation grants update	City of El Paso	City Council update

Community Engagement

Outreach

The PCAP's community engagement approach was developed to provide opportunities for strong representation from LIDACs and individuals with lived experience of injustice. The City of El Paso took several steps to reduce LIDAC residents' barriers to participation:

- In-person meetings were hosted in LIDACs in public places such as community centers, parks, and libraries.
- Meetings were facilitated after work hours, served refreshments, and provided activities for children.
- All outreach material was bilingual and bilingual staff were present at meetings to reduce the language barrier.
- A project listserv was developed to include neighborhood groups and CBOs. The listserv promoted engagement efforts within their communities.

The PCAP team assembled a list of over 250 stakeholders made up of inter-governmental groups within the El Paso MSA, neighborhood associations, environmental education and outreach organizations, school districts, public health experts, faith-based organizations, utility companies, and the PCAP Leadership Steering Committee. These stakeholders helped the PCAP team raise awareness of upcoming public meetings, surveys, and other outreach activities.

Community Roundtables and Survey

The City of El Paso hosted two community roundtable discussions on April 3rd and 18th, 2023, just after being selected as one of the CPRG program awardees. The first discussion was in person while the second meeting was virtual. These preliminary meetings gathered input on climate and sustainability topics. Residents shared what they wanted to see in the PCAP. The accompanying survey gathered input on climate concerns and priorities.

Community Open House and Survey

The PCAP team collected feedback from the community during a community open house held on January 24, 2024. The open house took place at the Chamizal Community Center and Library, located in one of the region's LIDACs. The PCAP team provided a children's area with custom coloring sheets, refreshments, and bilingual staff. Approximately 95 community members attended this come-and-go style gathering. Through this open house, the public helped the PCAP team determine focus areas and expressed preferences about which community benefits to prioritize.

For residents unable to attend the open house, bilingual meeting materials and videos were uploaded to the City of El Paso's website along with links to surveys to collect feedback on the same topics discussed at the open house: project focus areas and preferred community benefits. The online survey was also distributed via the City of El Paso's social media channels and received, in less than three weeks, more than 640 responses with 595 responding to the English survey and 47 responding to the Spanish survey. Responses from the survey have been summarized in this [dashboard for the public](#).

In addition to sharing project ideas, community members indicated their preferences among different project categories, such as public transportation or waste management projects, through dot voting exercises. This community input is illustrated in Figure 4, showing that the top three project categories were:

- Waste, Water, and Materials Management,
- Removing Carbon from the Air by Planting Trees, and
- Renewable Energy

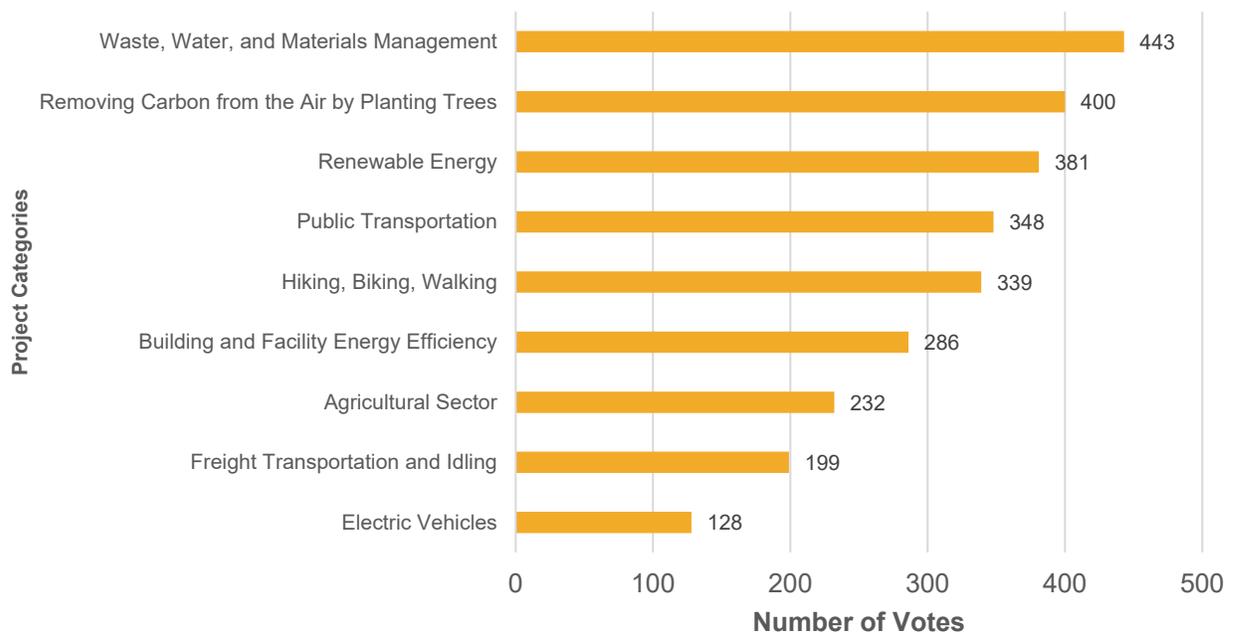


Figure 4. Community Ranking of Priority Measures

The open house and survey also allowed residents to prioritize community benefits. As shown in Figure 5, the community benefits receiving the most votes were:

- Being Better Prepared to Climate Change Impacts such as Extreme Heat, Drought, Floods, etc.,
- Improved Air Quality / A More Healthy Community, and
- Create High-Quality Jobs.

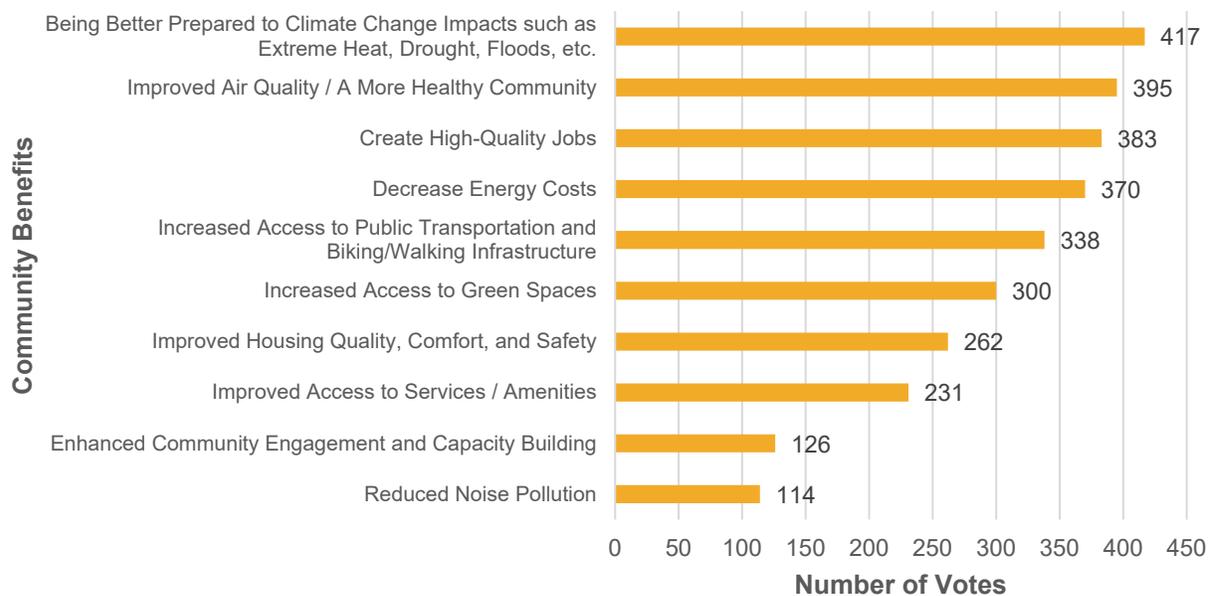


Figure 5. Community Ranking of Project Benefits

Listening Sessions

The PCAP team held two in-person listening sessions, including one with a hybrid option, to discuss the PCAP content. The City of El Paso also shared a status update on its website to inform residents who could not attend the listening sessions. 28 members from the community attended these sessions.

In these sessions, the community voiced concerns and suggestions across various environmental and sustainability issues. Key points included incentivizing recycling and promoting education on proper recycling practices, addressing air quality concerns stemming from polluting industries, and promoting affordable renewable energy options for the region. Suggestions ranged from implementing city policies to regulate idling vehicles near schools to preventing the sale of open spaces for concrete development. Other recommendations involved offering free public transportation as a recycling incentive, promoting community solar microgrids, and exploring alternative materials to reduce heat absorption. Participants raised concerns about the economic sustainability of climate projects for LIDACs, with suggestions for economic incentives to engage the private sector. Additionally, there was interest in collaboration with Ciudad Juárez on emission reduction efforts, the connection of environmental work with academic research, and identifying solutions for addressing air quality and health concerns.

See Appendix B: Community Input for public feedback received and the instruments used to collect it.

Paso Del Norte Climate Fellowship

Created by the City of El Paso, the fellowship will consist of 27 volunteers from across the region organized into 9 teams of 3 people. Scheduled to launch during the Comprehensive Climate Action Plan (CCAP), the fellowship will expand outreach to connect with more people and will empower local community members. Paso Del Norte Climate Fellows will co-lead the CCAP stakeholder and community engagement effort.

Recruitment for the fellowship is currently underway. Climate Fellows will be recruited from local high schools, undergraduate, and graduate programs and will work in their own communities. This approach to recruitment will help bridge information gaps as Fellows will be familiar with local challenges, know how to best address their audience, and lead with existing community trust. Community leadership of these conversations will empower the Fellows and the community.

Continued LIDAC Engagement

The next phases of the project will continue to engage residents, particularly LIDAC residents, in collecting valuable input on community priorities. This engagement will continue to take place in the form of public meetings and workshops, surveys, social media postings, one-on-one discussions and website updates. As an immediate follow-up to the PCAP, in April, community-based leaders and organizations will convene the region's public leaders and 200 members from historically disinvested communities to discuss climate action.

Paso Del Norte Climate Fellows will receive training on local challenges and will engage members of their communities. Their findings will be incorporated into the data collection and analysis for the CCAP and Status Report.

El Paso's promotoras de salud, or community health workers, will also be engaged to connect with vulnerable families. The promotoras will work with residents who have traditionally been more disconnected, including households that lack internet access and for whom Spanish is the main language. Along with the project team, Climate Fellows will help facilitate bilingual climate empowerment meetings in these areas.



PCAP Priority Measure Selection Approach

Takeaways

- **Over 200 unique** measure and project ideas were collected through the stakeholder engagement process.
- From this feedback, **10 PCAP priority measures** were developed, each with corresponding PCAP projects.

Approach

This PCAP organizes the community’s climate action ideas into ten broad **PCAP priority measures** and corresponding **PCAP projects** within each measure. A PCAP priority measure is a broad strategy that addresses an emissions source or sources within the El Paso MSA, aligns with local goals, and is important to the community. PCAP projects are specific, implementation-ready projects that support a PCAP measure. PCAP projects meet the following criteria:

- The project is implementation ready, meaning that the design work for the policy, program, or project is complete enough that a full scope of work and budget can be included in a CPRG implementation grant application.
- The project can be completed in the near term, meaning that all funds will be expended, and the project completed, within the five-year performance period for the CPRG implementation grants.
- The project advances regional goals.

PCAP measure and project ideas were generated through three different instruments:

1. Public surveys
2. Public meetings
3. Project intake forms

Over 200 unique measure and project ideas were collected from community members, project implementers, and other stakeholders (see Appendix B: Community Input). These ideas were sorted by emissions sector and measure type, and each was then further organized into one of ten measure categories:

1. Increase Native Trees and Natural Spaces
2. Expand and Improve Active Transportation Infrastructure
3. Utilize Sustainable Land Use Planning
4. Expand and Improve Transit Service
5. Increase Energy Efficiency and Decarbonize Buildings
6. Install Renewable Energy Systems
7. Evaluate Sustainable Waste Management Practices
8. Support the Electric Vehicles Transition
9. Optimize Freight Transportation
10. Promote Sustainable Food Production and Distribution

These ten measure categories became the **PCAP priority measures** highlighted in this plan, and the unique project ideas collected from residents, project implementers, and other stakeholders are presented in their corresponding priority measure sections. Community project ideas collected at the open house and through the bilingual surveys are included as summarized lists indicating the types of projects the community supports under each measure category, while the implementation-ready projects

collected through the project intake form are shown in tables and include additional implementation details (e.g., lead implementing agency, geographic location, implementation schedule and milestones). Each priority measure was evaluated to understand:

- its ability to reduce GHG emissions and provide benefits to LIDACs,
- potential implementation tracking metrics, and
- the authority of local entities to implement projects within each measure.

In addition to GHG reductions and LIDAC benefits, the priority measures also provide additional community benefits that were prioritized by the community during PCAP engagement (see Table 6).

Table 6. PCAP Measures and Community Benefits

Measure	Community Benefits Provided*
Increase Native Trees and Natural Spaces	<ul style="list-style-type: none"> – Prepare for climate change impacts – Decrease energy costs – Increase access to natural space
Expand and Improve Active Transportation Infrastructure	<ul style="list-style-type: none"> – Improve air quality and community health – Increase access to public transportation and walking/biking infrastructure – Improve access to services/amenities – Reduce noise pollution
Utilize Sustainable Land Use Planning	<ul style="list-style-type: none"> – Improve air quality and community health – Decrease energy costs – Increase access to public transportation and walking/biking infrastructure – Improve housing quality, comfort, and safety – Improve access to services/amenities
Expand and Improve Transit Service	<ul style="list-style-type: none"> – Improve air quality and community health – Create high-quality jobs – Increase access to public transportation and walking/biking infrastructure – Improve access to services/amenities
Increase Energy Efficiency and Decarbonize Buildings	<ul style="list-style-type: none"> – Improve air quality and community health – Decrease energy costs – Improve housing quality, comfort, and safety
Install Renewable Energy Systems	<ul style="list-style-type: none"> – Create high-quality jobs – Decrease energy costs
Evaluate Sustainable Waste Management Practices	<ul style="list-style-type: none"> – Create high-quality jobs – Improve access to services/amenities
Support the Electric Vehicles Transition	<ul style="list-style-type: none"> – Improve air quality and community health – Reduce noise pollution
Optimize Freight Transportation	<ul style="list-style-type: none"> – Improve air quality and community health – Reduce noise pollution
Promote Sustainable Food Production and Distribution	<ul style="list-style-type: none"> – Create high-quality jobs – Improve access to services/amenities
<p><i>*Though these measures provide additional community benefits beyond those listed here, these specific benefits were identified as priorities by the community.</i></p>	

Greenhouse Gas Reductions

Each PCAP priority measure encompasses many different PCAP project types. For example, the *Expand and Improve Active Transportation* measure includes projects on trail and greenway expansions, complete streets conversions, micromobility programs, and bike corridor construction. As most of these projects will be implemented by different entities and will have varying implementation assumptions, exact GHG reductions for each project could not be calculated as part of the PCAP. Instead, broad implementation assumptions were made for each measure based on research describing existing regional goals and/or studies of similar measures to define the relative contribution that each measure could make toward reducing the region’s GHG emissions. These assumptions were used to quantify each measure’s potential GHG emissions reductions from 2025-2030 and 2025-2050 (see Table 7). The example PCAP projects identified and presented with each priority measure will contribute toward the GHG reductions estimated within their corresponding measure. See Appendix A: GHG Reduction Calculation Technical Appendix for more information.

Table 7. Cumulative GHG Reductions by Measure

PCAP Priority Measure	Cumulative GHG Reductions (MTCO _{2e}) 2025-2030	Cumulative GHG Reductions (MTCO _{2e}) 2025-2050	Assumptions and Sources
Increase Native Trees and Natural Spaces	50,951	196,525	– 50% canopy growth by 2030 and 93% canopy growth by 2050 (El Paso Street Tree 2030 goal and LEARN data) ^{5,6}
Expand and Improve Active Transportation Infrastructure	64,414	194,101	– Up to 8% community VMT can be reduced through active transportation projects by 2050 (CAPCOA Handbook) ⁷
Utilize Sustainable Land Use Planning	Included elsewhere	Included elsewhere	– Reductions from this measure are embedded within the Transit, Active Transport, and Buildings measures
Expand and Improve Transit Service	120,774	363,938	– Up to 15% community VMT can be reduced through transit projects by 2050 (California Air Pollution Control Officers Association [CAPCOA] Handbook) ⁸

⁵ City of El Paso, “El Paso Downtown Tree Master Plan,” ELEV8EP, March 8, 2023, <https://www.elev8ep.com/street-tree-plan-1>.

⁶ ICLEI, “Land Emissions And Removals Navigator (LEARN),” February 2021, <https://iclei.usa.org/LEARN/>.

⁷ Sacramento Metropolitan Air Quality Management District, “Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity,” August 2021, https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf.

⁸ Sacramento Metropolitan Air Quality Management District, “Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity,” August 2021, https://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf.

PCAP Priority Measure	Cumulative GHG Reductions (MTCO _{2e}) 2025-2030	Cumulative GHG Reductions (MTCO _{2e}) 2025-2050	Assumptions and Sources
Increase Energy Efficiency and Decarbonize Buildings	42,677	281,614	– 3% of existing buildings retrofitted per year, 10% energy reduction per building retrofit, 37% energy reduction in new buildings compared to baseline levels (JLL, American Council for Energy-Efficient Economy [ACEEE], Pacific Northwest National Laboratory [PNNL], and EIA) ^{9, 10, 11, 12}
Install Renewable Energy Systems	142,421	287,166	– 15% of total rooftop solar capacity installed by 2030 and 65% by 2050 (Google EIE rooftop solar capacity data) ¹³
Evaluate Sustainable Waste Management Practices	35,061	151,932	– 90% diversion from landfills by 2050 (regional diversion goals) ¹⁴
Support the Electric Vehicles Transition	522,718	753,553	– 70% of gasoline VMT and 76% of diesel VMT is electric by 2050 (BloombergNEF, IEA) ^{15, 16}
Optimize Freight Transportation	14,524	43,768	– Up to 8% of freight emissions can be reduced due to trip optimization by 2050 (UC Davis study) ¹⁷
Promote Sustainable Food Production and Distribution	Included elsewhere	Included elsewhere	– Reductions from this measure are embedded within the Waste, Freight, and Buildings measures

⁹ JLL, “Retrofitting Buildings to Be Future-Fit: The Journey to Decarbonization,” November 2022,

<https://www.us.jll.com/content/dam/jll-com/documents/pdf/research/jll-retrofitting-buildings-to-be-future-fit.pdf>.

¹⁰ Steven Nadel, “For Existing Homes, Energy Efficiency Often Has a Better Return on Investment Than Solar,” ACEEE, May 21, 2019, <https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency>.

¹¹ J Zhang et al., “Energy and Energy Cost Savings Analysis of the 2018 IECC for Commercial Buildings” (Pacific Northwest National Laboratory, December 2018), https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-28125.pdf.

¹² U.S. Energy Information Administration, “Table E2. Major Fuel Consumption Intensities (Btu) by End Use, 2012,” 2012, <https://www.eia.gov/consumption/commercial/data/2012/c&e/pdf/e2.pdf>.

¹³ Google, “Google Environmental Insights Explorer - Make Informed Decisions,” accessed February 19, 2024, <https://insights.sustainability.google/>.

¹⁴ Maria Rachal, Cole Rosengren, and Julia Himmel, “Mapping Zero Waste Cities: Where Local Governments Are Pursuing Waste Prevention and Diversion,” WasteDive, December 22, 2022, <https://www.wastedive.com/news/zero-waste-cities-us-goal-tracker/635401/?epa-regions=region-6>.

¹⁵ BloombergNEF, “Electric Vehicle Outlook 2023,” 2023, https://assets.bhub.io/professional/sites/24/2431510_BNEFElectricVehicleOutlook2023_ExecSummary.pdf.

¹⁶ IEA, “Trends and Developments in Electric Vehicle Markets – Global EV Outlook 2021 – Analysis,” IEA, 2021, <https://www.iea.org/reports/global-ev-outlook-2021/trends-and-developments-in-electric-vehicle-markets>.

¹⁷ Filipe Vital and Petros Ioannou, “Optimizing Fuel Consumption and Pollutant Emissions in Truck Routing with Parking Availability Prediction and Working Hours Constraints,” March 1, 2022, <https://doi.org/10.7922/G2S75DPP>.

Low-Income and Disadvantaged Community Analysis

Takeaways

- According to the Climate and Economic Justice Screening tool (CEJST), nearly **65% of El Paso County** and **100% of Hudspeth County** are considered **Justice40 disadvantaged communities**.
- As an urban desert environment, El Paso is affected by flash flooding, drought, air pollution, extreme heat, and extreme cold. Disadvantaged communities in the region are especially vulnerable and have historically been disproportionately affected by extreme weather events.

Overview

Low-income and disadvantaged communities (LIDACs) are, and will continue to be, disproportionately impacted by climate change. The El Paso MSA is a binational border region with a large proportion of low-income, socially vulnerable, and non-English-speaking residents. According to the 2022 American Community Survey 5-year Estimates, 44% of El Paso County residents and 90% of Hudspeth County residents are not U.S. citizens. Vulnerable residents are not only more likely to face greater impacts from climate change, but also have fewer resources to help them respond and recover from these impacts. In addition, it will also be important to consider the impact of climate change on the Ysleta del Sur Pueblo Tribal Nation and their climate-related challenges and priorities.

According to the Climate and Economic Justice Screening tool (CEJST), nearly 65% of El Paso County and 100% of Hudspeth County are considered Justice40 disadvantaged communities.¹⁸ El Paso County and Hudspeth County have social vulnerability scores of 0.98 and 0.99, respectively, on the CDC Social Vulnerability Index, where 1 is the highest vulnerability.¹⁹ These high social vulnerability scores indicate that residents in the El Paso MSA region are likely to face greater challenges in accessing resources, preparing for climate impacts, and recovering from disasters than the rest of the U.S. Many residents spend a large portion of their income on housing, transportation, and electricity alone, leaving little leftover for food, emergencies, or leisure. The percentage of income spent on these three necessities is even higher for those living below the federal poverty line.

The implementation of measures included in this PCAP are anticipated to provide significant benefits to LIDACs. This section identifies climate impacts and risks to LIDACs, identifies each LIDAC within the jurisdiction covered by this PCAP, how LIDACs were meaningfully engaged in the development of this PCAP, and how LIDACs will continue to be engaged in the future.

Climate Impacts and Risks

The measures outlined in this PCAP aim to reduce climate pollution and mitigate GHG emission sources. The increase of GHG emissions in our atmosphere causes changes to the climate that increase the severity, frequency, and intensity of climate impacts. By reducing emissions, the PCAP measures can help to reduce the severity, frequency, and intensity of the climate impacts facing the region's vulnerable disadvantaged communities. As an urban desert environment, El Paso is affected by flash flooding,

¹⁸ Council on Environmental Quality (CEQ), "Climate and Economic Justice Screening Tool 1.0," 2022, <https://screeningtool.geoplatform.gov/en/#3/33.471-97.5>.

¹⁹ Agency for Toxic Substances and Disease Registry (ATSDR), "CDC/ATSDR Social Vulnerability Index (SVI)," February 7, 2024, <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

persistent drought, air pollution, extreme heat, and extreme cold.²⁰ Disadvantaged communities in the region are especially vulnerable and have historically been disproportionately affected by extreme weather events.²¹

Flash Flooding

In 2006, a major storm caused city-wide flooding, resulting in over \$700 million in property damages.²² One of the most affected neighborhoods was Lincoln Park, which has a median household income about 40% lower than the rest of El Paso County. Due to storm damage, the city spent \$3 million to raze 59 lots in Saipan Park and \$2 million on relocation costs. Although the city redesigned its stormwater infrastructure after the 2006 storm, the stormwater system continues to be stressed beyond capacity regularly, and the risk of flash flooding is growing. In 2021, El Paso adopted a comprehensive update to the original county Stormwater Master Plan that identifies 69 future projects to address flooding, totaling approximately \$259 million.²³

Drought

Drought and water availability is a major concern for the region. Residential and commercial water demand is growing with regional development. At the same time, water supply availability is at risk due to desertification and ongoing disputes related to the management of the Rio Grande. Water availability is especially critical for the livelihood of the local agricultural community who rely on water to irrigate land.²⁴ El Paso Water is working to diversify regional water sources to improve resiliency.²⁵

Air Pollution

In 2020, El Paso had a total of 126 days with elevated air pollution, the second highest in Texas. High ozone levels are of particular concern in the region and can negatively affect residents' health and quality of life. Both regional air pollution sources and local transportation and industry contribute to the high ozone levels. Air pollution from the U.S.-Mexico border and oil and gas production in the Permian Basin can travel to the region and impact residents. Therefore, addressing air pollution in El Paso requires cross-jurisdictional collaboration.²⁶

Extreme Heat

Extreme heat risks are becoming more severe in the region. Triple digit temperatures are occurring more frequently and earlier in the year. In 2023, El Paso set a record of 64 overall and 44 consecutive days of triple digit temperatures. Extreme heat causes heat-related health emergencies and increases electricity demand. Seniors, homeless people, children, and other vulnerable populations are more sensitive to extreme heat. Extreme heat may also be dangerous for low-income residents without access to air conditioning. Between 2014 and 2019, 19 residents died in El Paso due to heat exposure. To address this risk, El Paso's Extreme Weather Task Force distributes fans to vulnerable residents.²⁷

²⁰ City of El Paso, "City of El Paso Resilience Strategy," 2018, <https://www.elpasotexas.gov/assets/Documents/CoEP/Community-Development/Community-Development-Block-Grant/City-of-El-Paso-Resilience-Strategy.pdf>.

²¹ Veronica Escobar, "Climate Crisis Advisory Committee Framework," 2023, https://escobar.house.gov/uploadedfiles/ccac_framework.pdf.

²² City of El Paso, "City of El Paso Resilience Strategy."

²³ Escobar, "Climate Crisis Advisory Committee Framework."

²⁴ Ibid.

²⁵ City of El Paso, "City of El Paso Resilience Strategy."

²⁶ Escobar, "Climate Crisis Advisory Committee Framework."

²⁷ Ibid.

Extreme Cold

In 2011, El Paso experienced a severe freeze that caused infrastructure to fail. Residents were left without power or water for several days. While less common than extreme heat, El Paso faces risks associated with extreme cold and sudden freezing conditions that occur in desert environments.

Residents facing chronic stressors, such as poverty and lack of healthcare, are less able to respond and adapt to these climate risks. Thus, it is crucial to address both social vulnerability and climate vulnerability to improve resilience.²⁸

Methodology for Identifying LIDACs

The Climate and Economic Justice Screening Tool (CEJST) was used to identify disadvantaged areas in the region. CEJST identifies census tracts that are disadvantaged using **burden** indicators in eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. Additionally, the CEJST identification approach uses two indicators of **socioeconomic burden**: income and education.

A community is considered disadvantaged if it is at or above the threshold for one or more burdens and at or above the threshold for an associated socioeconomic burden. Communities within the boundaries of Federally Recognized Tribes are also considered disadvantaged.²⁹

Identification of LIDACs

CEJST was used to identify low-income and disadvantaged communities in El Paso and Hudspeth counties. Table 8 describes the eight CEJST indicators of burden, along with the affected population and the number of census tracts in the project area that are disadvantaged according to that indicator. LIDAC census tracts are mapped in Figure 6. Of the 162 census tracts within the El Paso MSA, 112 individual tracts (69%) are identified as LIDACs. These tracts meet or exceed the qualifications for one or more of the CEJST burden thresholds and meet the associated socioeconomic thresholds. Overall, more than 542,000 residents of the El Paso region reside in LIDACs, or 65% of the total population.

²⁸ City of El Paso, "City of El Paso Resilience Strategy."

²⁹ Council on Environmental Quality, "Climate and Economic Justice Screening Tool 1.0."

Table 8. CEJST Indicators and Affected Census Tracts in El Paso and Hudspeth Counties

CEJST Indicators	Description	Population Affected	Number of Census Tracts
Climate Change	Census tracts are disadvantaged if they are: <ul style="list-style-type: none"> - at or above the 90th percentile for expected agriculture loss rate OR expected building loss rate OR expected population loss rate OR projected flood risk OR projected wildfire risk; - AND are at or above the 65th percentile for low income. 	156,420	36
Energy	Census tracts are disadvantaged if they are: <ul style="list-style-type: none"> - at or above the 90th percentile for energy cost OR particulate matter (PM)2.5 in the air; - AND are at or above the 65th percentile for low income. 	11,477	5
Health	Census tracts are disadvantaged if they are: <ul style="list-style-type: none"> - at or above the 90th percentile for asthma OR diabetes OR heart disease OR low life expectancy; - AND are at or above the 65th percentile for low income. 	286,842	72
Housing	Census tracts are disadvantaged if they: <ul style="list-style-type: none"> - Experienced historic underinvestment OR are at or above the 90th percentile for housing cost OR lack of green space OR lack of indoor plumbing OR lead paint; - AND are at or above the 65th percentile for low income. 	68,211	21
Legacy Pollution	Census tracts are disadvantaged if they: <ul style="list-style-type: none"> - Have at least one abandoned mine land OR Formerly Used Defense Sites OR are at or above the 90th percentile for proximity to hazardous waste facilities OR proximity to Superfund sites (National Priorities List [NPL]) OR proximity to Risk Management Plan (RMP) facilities; - AND are at or above the 65th percentile for low income. 	88,469	22
Transportation	Census tracts are disadvantaged if they are: <ul style="list-style-type: none"> - at or above the 90th percentile for diesel particulate matter exposure OR transportation barriers OR traffic proximity and volume; - AND are at or above the 65th percentile for low income. 	83,020	24
Water and Wastewater	Census tracts are disadvantaged if they are: <ul style="list-style-type: none"> - at or above the 90th percentile for underground storage tanks and releases OR wastewater discharge; - AND are at or above the 65th percentile for low income. 	154,351	40
Workforce Development	Census tracts are disadvantaged if they are: <ul style="list-style-type: none"> - at or above the 90th percentile for linguistic isolation OR low median income OR poverty OR unemployment; - AND more than 10% of people ages 25 years or older whose high school education is less than a high school diploma. 	509,390	107

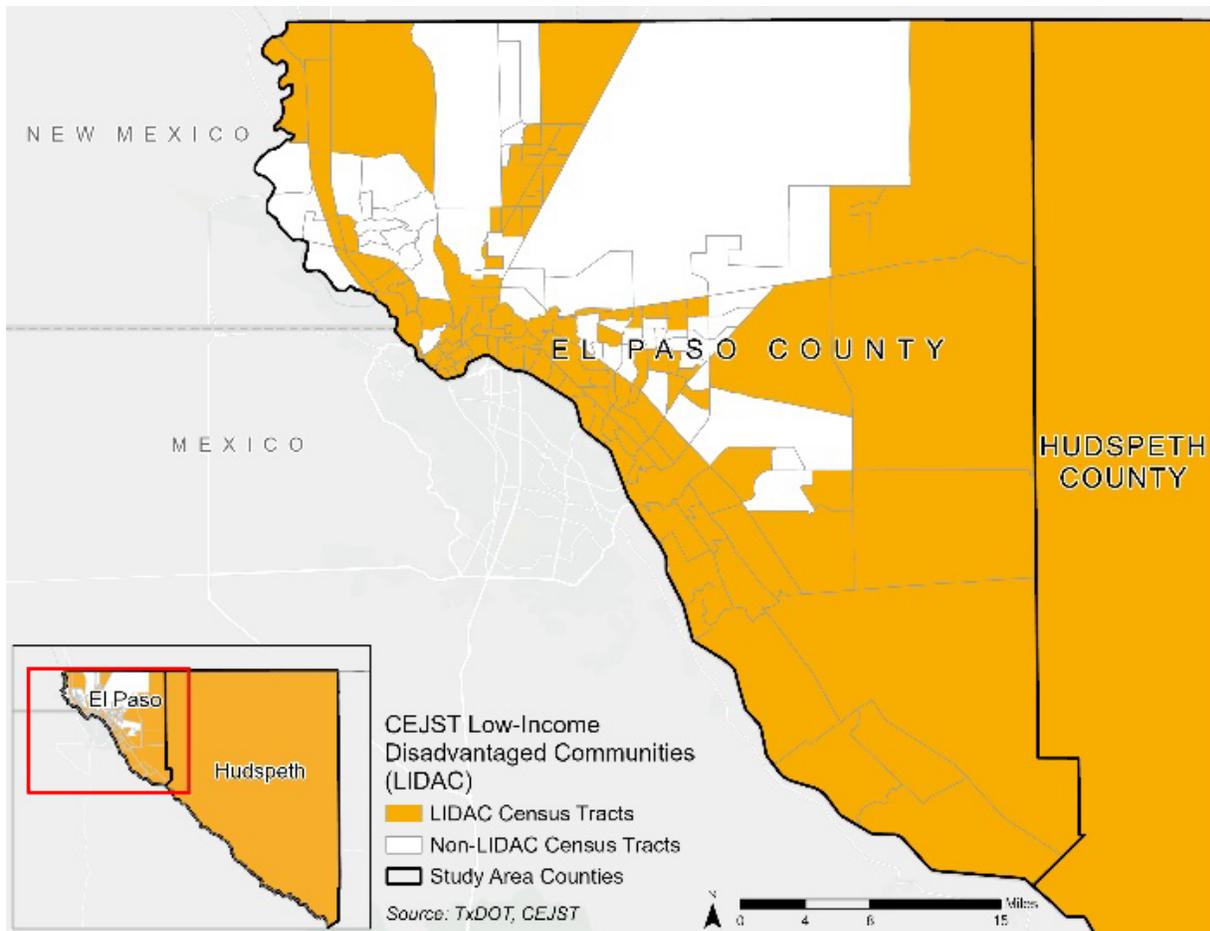


Figure 6. CEJST Census Tracts in El Paso MSA

All of Hudspeth County is designated as a singular census tract and is identified as a LIDAC. According to the 2020 Census, 77% of the population are Hispanic or Latino, 17% of the population are White, and 2% are Black or African American.³⁰ Hudspeth County faces a high rate of linguistic isolation and a large population without a high school diploma, as well as high rates of diabetes, heart disease, and lack of adequate indoor plumbing. Many low-income households in the county face a high energy cost burden.³¹

In El Paso County, 111 out of 161 total census tracts are identified as LIDAC. According to the 2020 Census, 83% of the population are Hispanic or Latino, 36% are White, and 3% are Black or African American.³² In addition to drought, flooding, and extreme weather, El Paso County communities also face air pollution due to traffic and to facilities that use extremely hazardous substances, or Risk Management Plan (RMP) facilities. The county also faces toxic concentrations of wastewater discharge in streams and high rates of diabetes and heart disease. Communities face barriers to transit access, historic underinvestment, and a lack of access to natural spaces. Like Hudspeth County, communities in El Paso County face linguistic isolation and low high school diploma attainment.³³

³⁰ U.S. Census Bureau, "Hudspeth County, Texas Census Bureau Profile," 2024, https://data.census.gov/profile/Hudspeth_County,_Texas?g=050XX00US48229.

³¹ Council on Environmental Quality, "Climate and Economic Justice Screening Tool 1.0."

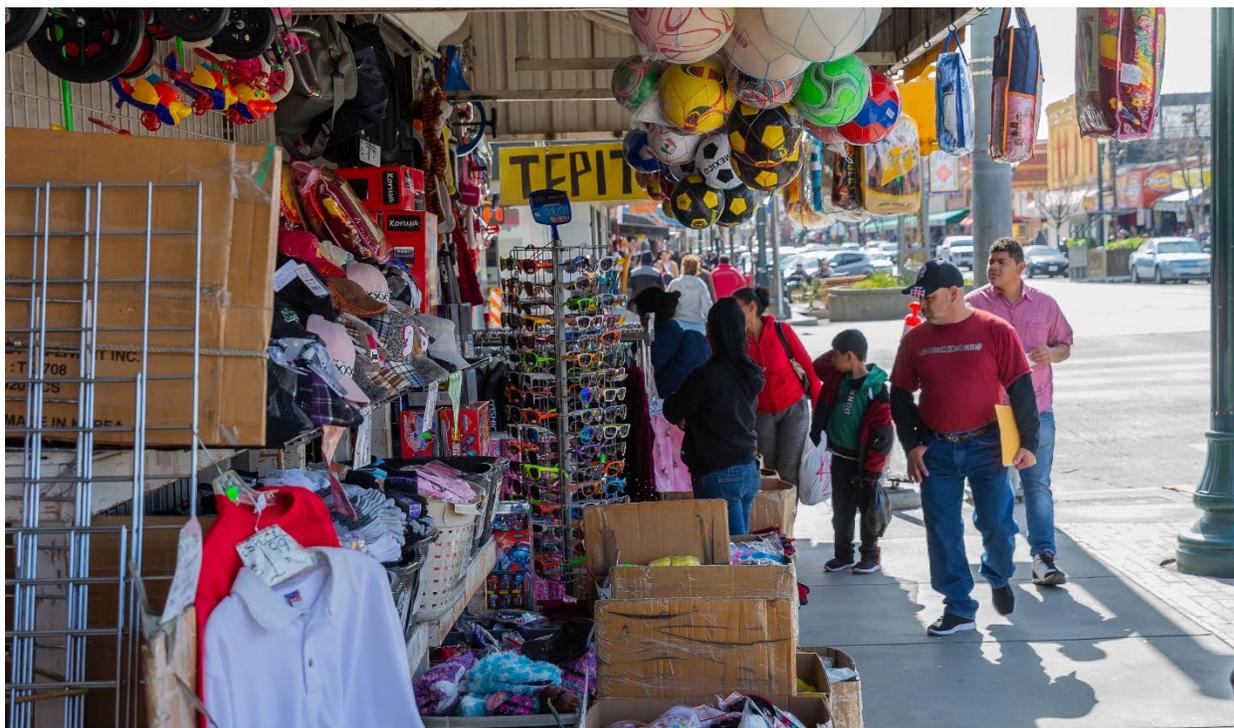
³² U.S. Census Bureau, "El Paso County, Texas - Census Bureau Profile," 2024, https://data.census.gov/profile/El_Paso_County,_Texas?g=050XX00US48141.

³³ Council on Environmental Quality, "Climate and Economic Justice Screening Tool 1.0."

Of the 112 census tracts identified as LIDACs within the El Paso MSA, 111 are in El Paso County and one represents Hudspeth County. Table 9 lists these LIDAC census tracts per EPA CPRG program requirements, and benefits and disbenefits to these LIDACs are discussed for each priority measure described later in this PCAP.

Table 9. El Paso MSA Low Income and Disadvantaged Communities Census Tract IDs

El Paso MSA – LIDAC 2010 Census Tract IDs						
48229950300	48141000101	48141000107	48141000108	48141000109	48141000110	48141000112
48141000204	48141000205	48141000206	48141000207	48141000208	48141000301	48141000302
48141000403	48141000404	48141000600	48141000800	48141000900	48141001001	48141001002
48141001104	48141001114	48141001115	48141001201	48141001202	48141001203	48141001400
48141001501	48141001600	48141001700	48141001800	48141001900	48141002000	48141002100
48141002201	48141002202	48141002300	48141002400	48141002500	48141002600	48141002800
48141002900	48141003000	48141003100	48141003200	48141003300	48141003402	48141003403
48141003501	48141003502	48141003601	48141003602	48141003701	48141003702	48141003801
48141003803	48141003804	48141003901	48141003902	48141003903	48141004002	48141004003
48141004004	48141004103	48141004104	48141004105	48141004106	48141004107	48141004201
48141004202	48141004303	48141004307	48141004310	48141004313	48141004314	48141004316
48141004320	48141010203	48141010207	48141010216	48141010220	48141010221	48141010222
48141010303	48141010311	48141010319	48141010322	48141010323	48141010325	48141010333
48141010334	48141010335	48141010337	48141010340	48141010341	48141010344	48141010345
48141010346	48141010347	48141010401	48141010404	48141010405	48141010406	48141010407
48141010408	48141010409	48141010501	48141010502	48141010504	48141010505	48141010506



Priority Measures

Takeaways

- Based on a community driven process, **10 priority measures** were identified that address GHG emission sources.
- All priority measures and corresponding project ideas listed in this section respond directly to stakeholder input from community and LSC partners; these ideas have not yet been fully evaluated for feasibility.
- These measures will undergo thorough evaluation as part of the CCAP development process.

Approach

This PCAP organizes the community’s climate action ideas into ten broad **PCAP priority measures** and corresponding **PCAP projects** within each measure. A PCAP priority measure is a broad strategy that addresses an emissions source or sources within the El Paso MSA, aligns with local goals, and is important to the community. PCAP projects are specific, implementation-ready projects that support a PCAP measure.

The measures in this section have been identified as priority measures for the purposes of pursuing funding through CPRG Phase 2 implementation grants. However, **these measures do not represent an exhaustive list of the El Paso region’s climate priorities, which will be further discussed and evaluated in subsequent phases of the CPRG project.**

All priority measures and the corresponding project ideas listed in this section respond directly to stakeholder input received from the community and LSC partners. These ideas have not yet been fully evaluated for feasibility and will undergo thorough evaluation as part of the CCAP development process.

Each priority measure described in the following section presents similar information, including:

- Initial project ideas identified by the community that support the overarching measure,
- Identification of the GHG reduction strategy to which the measure contributes,
- A review of existing statutory and regulatory authority for implementation,
- Assessment of impacts on low-income and disadvantaged communities, and
- Suggested implementation tracking metrics (i.e., quantifiable values used to track, compare, and assess performance or processes).

Specific example projects identified by municipal government and agency staff are listed for certain priority measures. These example projects include additional information on:

- Lead implementing agency or agencies
- Geographic scope, and
- Implementation schedule and milestones.

Table 10 summarizes the El Paso region’s ten PCAP priority measures and community-generated initial project ideas.

Table 10. PCAP Priority Measures and Project Ideas

Priority Measure	Initial Project Ideas
Increase Native Trees and Natural Spaces	<ul style="list-style-type: none"> - Promote planting native trees and vegetation - Develop community gardens - Develop greenways and parks - Improve irrigation systems
Expand and Improve Active Transportation Infrastructure	<ul style="list-style-type: none"> - Expand sidewalks, bike lanes, trails, and greenways - Provide bicycle and pedestrian facilities - Develop dedicated bike lanes or off-street bike lanes - Create safer streets for bicyclists - Focus on pedestrian-oriented building and community design - Use Complete Streets design principles - Promote bike share programs - Promote active transportation
Utilize Sustainable Land Use Planning	<ul style="list-style-type: none"> - Create walkable, high density, mixed-use developments - Reduce road widening - Close streets to vehicle traffic - Remove parking minimums - Pursue trip reduction programs
Expand and Improve Transit Service	<ul style="list-style-type: none"> - Increase bus rapid transit, dedicated bus lanes, and transit priority projects - Provide free public transit - Expand transit service areas and frequency - Develop transit centers or plazas - Build park-and-ride systems - Promote transit commuting - Transition from larger buses to smaller buses
Increase Energy Efficiency and Decarbonize Buildings	<ul style="list-style-type: none"> - Increase building energy efficiency and improve building envelopes - Promote sustainable new construction - Promote light colored pavements or roofs - Upgrade water and sewer infrastructure - Enhance wastewater treatment processes - Promote efficient water use and water conservation
Install Renewable Energy Systems	<ul style="list-style-type: none"> - Install solar as shade structures (e.g., over parking lots, canals, etc.) - Install solar on public buildings or public land - Incentivize private solar installations, especially for LIDACs - Promote solar batteries - Encourage new developments to be solar-ready or to install solar - Capture and upgrade biogas to use as an energy source
Evaluate Sustainable Waste Management Practices	<ul style="list-style-type: none"> - Implement community-wide composting - Improve recycling systems to accept more waste types - Improve frequency and quality of recycling services - Enhance community waste clean-ups - Discourage food waste and other commercial waste

Priority Measure	Initial Project Ideas
Support the Electric Vehicles Transition	<ul style="list-style-type: none"> - Transition municipal fleets to EVs, hybrids, or alternative fuel vehicles - Install more public fast charging stations - Provide electric or zero-emission transit vehicles - Incentivize purchasing electric vehicles - Incentive at-home charging stations
Optimize Freight Transportation	<ul style="list-style-type: none"> - Optimize truck routes or road infrastructure to reduce truck travel and idling - Invest in freight rail to reduce truck traffic
Promote Sustainable Food Production and Distribution	<ul style="list-style-type: none"> - Support sustainable agricultural practices - Utilize hydroponics and aquaponics agriculture - Expand local food production and distribution systems - Construct local food hubs



PRIORITY MEASURE

Increase Native Trees and Natural Spaces

Trees and other plants can capture, or sequester, CO₂ through the natural process of photosynthesis. Increasing the number of trees and natural spaces, such as community gardens and parks, can sequester CO₂ and reduce the urban heat island effect, lower energy costs, improve air quality, enhance ecosystems, increase resiliency to flooding and heat waves, and improve the mental health and wellbeing of residents. Wetland restoration and conservation along the Rio Grande can also act as carbon sequestration and mitigation sites.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Promote planting native trees and vegetation while reducing invasive plants
- Develop community gardens
- Develop greenways and parks
- Improve irrigation systems

Project lead implementers identified the implementation-ready project examples presented in Table 11, which support this measure.

Table 11. Example Projects for Priority Measure: Increase Native Trees and Natural Spaces

Project Names		Project Details
Implement Utility-wide Carbon Sequestration Project	Description	Implement a utility-wide carbon sequestration project spanning all land of El Paso Water's land holdings. This initiative aims to expand native plant-life, including trees, shrubs, and indigenous flora, to effectively capture and store carbon. By implementing this holistic approach, El Paso Water seeks to significantly reduce its overall carbon footprint, fostering environmental sustainability and biodiversity across its properties.
	LSC Project Lead	City of El Paso
	Lead Implementer Location	El Paso Water
		El Paso Water Service Area
Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Feasibility, land assessment and planning - Year 2-4: Implementation of native plant-life expansion, outreach, and evaluation of carbon capture. Engage with community members and stakeholders to solicit feedback and project support. - Year 5: Complete implementation, final evaluation, and assessment 	
Expand From Branches to Roots Community Initiative in El Paso County	Description	Expand the "From Branches to Roots" initiative - a community-driven interdisciplinary initiative aiming to revitalize El Paso through regreening and urban heat island mitigation. This project seeks to engage citizens in participatory research and tree stewardship, fostering a sustainable environment and collective climate action.
	LSC Project Lead	City of El Paso
	Lead Implementer	Eco El Paso

Project Names		Project Details
	Location	El Paso County
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning and design - Year 2: Implementation - Year 3: Evaluation and close out
Implement the City of El Paso Downtown Street Tree Master Plan	Description	<ul style="list-style-type: none"> - Implement the 2023 City of El Paso Downtown Street Tree Master Plan, which identifies locations and appropriate tree species options for new street trees to be planted in public rights-of-way and on private property in the downtown. The goal of the plan is to create comfortable, shaded pedestrian environments, implement green infrastructure strategies, and provide strategies necessary to increase the number of trees by a minimum of 50% by 2030.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning and Design - Year 2: Construction - Year 3: Construction closeout
Construct a Park with Stormwater Pond in Horizon City	Description	Transition an existing stormwater pond into a neighborhood park while maintaining its main purpose as a ponding area. This will provide a growing community with access to green space and will help to relieve stormwater runoff from entering other areas of the region.
	LSC Project Lead	Town of Horizon City
	Lead Implementer	El Paso Water
	Location	Town of Horizon City
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning and design - Year 2: Construction - Year 3: Construction closeout
Construct a Regional Park in El Paso County	Description	Construct a regional park that will serve Horizon City and the surrounding communities. The park will provide space for tournament style sporting events along with other open space amenities.
	LSC Project Lead	Town of Horizon City
	Lead Implementer	Town of Horizon City
	Location	El Paso County
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning and design - Year 2: Construction - Year 3: Construction closeout

Project Names		Project Details
Improve the Dell City Irrigation System	Description	Repair, improve, and upgrade the Dell City irrigation system through which residents and the City are able to keep trees alive. This system is currently unable to fully function due to the loss of one of the pumps that provides irrigation water.
	LSC Project Lead	Hudspeth County
	Lead Implementer	Dell City
	Location	Dell City
Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Identify necessary resources, plan, and design - Year 2: Implement plan - install irrigation, plant trees, reseed city parks - Year 3: Close out 	

Suggested Implementation Tracking Metrics

- Number of trees planted (by species)
- Acres of natural space developed/enhanced
- Percent tree canopy coverage

GHG Reduction Potential

Assuming measure implementation results in 50% canopy growth by 2030 and 93% growth by 2050, this measure could reduce cumulative GHGs by 50,951 MTCO₂e from 2025-2030 and 196,525 MTCO₂e from 2025-2050. This measure’s implementation assumption was developed based on the El Paso Street Tree 2030 goal. See Table 7 for details.

Authority to Implement

Public agencies, utilities, residents, and other stakeholders each have existing authority to implement tree planting and natural space projects on land that they own.

LIDAC Impacts

Increasing native trees and natural spaces has the potential to benefit LIDACs in the region as outlined in Table 12. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region’s LIDAC census tract IDs.

Table 12. Benefits to Priority Measure: Increase Native Trees and Natural Spaces

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Climate Change	<ul style="list-style-type: none"> – Increased rainwater infiltration through trees and vegetation can reduce flood risk. – Increased vegetation reduces the urban heat island effect and creates cool, shady areas that provide relief during extreme heat. 	
Health	<ul style="list-style-type: none"> – Through carbon sequestration, the increased trees and vegetation in natural spaces can absorb air pollution and improve air quality and resident health. – Natural spaces promote outdoor physical activities and exercise, which can improve cardiovascular health, as well as mental health. 	<ul style="list-style-type: none"> – Natural spaces with poor water drainage can lead to water stagnation. Stagnant water serves as an ideal breeding ground for mosquitoes, flies, and other disease-carrying vectors. – <i>The region should encourage mosquito control measures, implementing proper drainage systems, and adopting an integrated pest management strategy.</i>
Housing	<ul style="list-style-type: none"> – Expanding natural space and trees planting in neighborhoods, especially those without adequate access, can beautify neighborhoods, reduce cooling costs (due to shade), and potentially improve home values. 	<ul style="list-style-type: none"> – Addition of natural spaces and trees may add value to the impacted neighborhoods that can lead to gentrification and community displacement. – <i>The region should ensure the value of adding natural spaces and trees to a community does not attract investment in a way that is not beneficial to the established community.</i>
Transportation	<ul style="list-style-type: none"> – Native trees along walkways and at transit stops provide shade and coverage that can increase the use of alternative transportation modes, such as walking, biking, and riding public transit. 	
Water and Wastewater	<ul style="list-style-type: none"> – Water quality can be improved from vegetation naturally removing some pollutants. 	
Workforce Development	<ul style="list-style-type: none"> – Ongoing jobs and workforce training opportunities can be generated to plant and maintain the new trees and natural spaces. 	<ul style="list-style-type: none"> – New trees require a lot of maintenance, particularly in the first two years of planting. There may be significant local budget impacts for maintenance of the trees planted and natural spaces developed by government agencies. – <i>Governments in the region should consider and plan for budget impacts before implementing this measure and consider existing volunteer and non-profit environmental groups that could aid in maintenance.</i>

PRIORITY MEASURE

Expand and Improve Active Transportation Infrastructure

Active transportation includes any human-powered mobility, such as walking, biking, or rolling. Active transportation systems include sidewalks and bike lanes, traffic signals, facilities, road treatments, and active transport vehicles. Switching from cars to active transportation modes reduces GHG emissions, air and noise pollution, and travel costs, and improves public health and well-being and enhances economic connectivity.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Expand sidewalks, bike lanes, trails, and greenways
- Provide bicycle and pedestrian facilities
- Develop dedicated bike lanes or off-street bike lanes
- Create safer streets for bicyclists
- Focus on pedestrian-oriented building and community design
- Use Complete Streets design principles
- Promote bike share programs
- Promote active transportation

Project lead implementers identified the implementation-ready project examples presented in Table 13, which support this measure.

Table 13. Example Projects for Priority Measure: Expand and Improve Active Transportation Infrastructure

Project Names		Project Details
Develop Vinton Micromobility Plan	Description	The Vinton Micromobility Plan would evaluate transportation alternatives beyond traditional motor vehicles and encourage strategically placed electric vehicle chargers in the municipality for various micromobility options.
	LSC Project Lead	Village of Vinton
	Lead Implementer	Village of Vinton
	Location	Village of Vinton
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> – Year 1: Submit funding application – Year 2: Hire consultant – Year 3: Complete plan development
Build Paso del Norte Trail Segments in City of Socorro	Description	The "Paso del Norte (PDN) Trail - Engineering and Construction" project involves the planning, design and construction of two PDN Trail segments located in Socorro; 1) PDN Trail segment 4.1 Franklin Canal connecting the City of El Paso to the City of Socorro along Alameda Ave., and 2) the 4-C Socorro to San Elizario Connector segment that would connect Socorro to San Elizario. The proposed project will lead to additional trail connections.
	LSC Project Lead	City of Socorro

Project Names		Project Details
	Lead Implementer	City of Socorro
	Location	City of Socorro
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning and design - Year 2: Construction - Year 3: Construction closeout
Build Paso del Norte Trail Segments in El Paso County and expand	Description	Implementation of the Paso del Norte Trail, including transportation infrastructure, green infrastructure amenities, stormwater infrastructure acting as carbon sinks, native vegetation, solar lights, distributed energy resources, and air quality monitors at designated areas along the trail, among other things. The primary goal of the project is to act as GHG mitigation and a carbon sink while addressing community health and air quality.
	LSC Project Lead	City of El Paso
	Lead Implementer	Paso del Norte Community Foundation
	Location	El Paso and Hudspeth County
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Design, stakeholder engagement, community feedback - Year 2: Land purchases and construction - Year 3: Construction closeout
	Implement the Complete Streets Conversion of Moon Road in City of Socorro	Description
LSC Project Lead		City of Socorro
Lead Implementer		City of Socorro
Location		City of Socorro
Implementation Schedule and Milestones		<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout

Project Names		Project Details
Implement the South Stanton Complete Streets Reconstruction in City of El Paso	Description	The South Stanton Complete Streets Reconstruction project will include 0.4 miles of enhanced bike and pedestrian facilities.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout
Construct Key Bike Corridors in City of El Paso	Description	Implement the City of El Paso Bike Plan to create key corridors of raised bicycle track.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout
Implement the Complete Streets Conversion of Rio Vista Road in City of El Paso	Description	The Rio Vista Road Complete Streets Conversion project will result in the conversion of Rio Vista Road, an underdeveloped minor collector, into a complete street with hike/bike facilities for users of all abilities, incorporating principles of universal design. Outcomes include increased mobility and connectivity, removal of ADA barriers, increased safety for pedestrians, bicyclists, and wheelchair users, and environmental sustainability through a reduction in reliance on motorized vehicles for short trips to destinations of daily living, such as public schools, commercial centers, and community centers.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout
Complete the Mesa SH-20 Greenway	Description	The Mesa SH-20 Greenway project will include a road diet and enhanced pedestrian facilities.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning and design - Year 2: Construction - Year 3: Construction closeout

Project Names		Project Details
Implement the Mission Trail Bike Share Program in City of Socorro	Description	The Mission Trail Bike Share Program involves the implementation of a bike share program along the Paso del Norte (PDN) Trail Mission Trail segment on Socorro Road. The project involves the construction of rental kiosks, bike stations, bike fleet purchases, POS technology, and administration. The bike share program will supplement existing investments and connect heritage tourism visitors and residents to key destinations, including historic sites and heritage tourism industry clusters in the City of Socorro, the City of San Elizario, and the City of El Paso.
	LSC Project Lead	City of Socorro
	Lead Implementer	City of Socorro
	Location	City of Socorro
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout

Suggested Implementation Tracking Metrics

- Number of miles of trails/bike routes installed
- Number of projects implemented
- Percent active mode share before and after projects
- Number of automobile-pedestrian crashes
- Annual average daily traffic (AADT) before and after project implementation

GHG Reduction Potential

Assuming measure implementation results in up to 8% community VMT reduction by 2050, this measure could reduce cumulative GHGs by 64,414 MTCO_{2e} from 2025-2030 and 194,101 MTCO_{2e} from 2025-2050. This measure’s implementation assumption was based on research of potential maximum VMT reductions from active transportation projects. See Table 7 for details.

Authority to Implement

The lead implementers have authority to implement their respective implementation-ready projects identified. Additionally, each local government within the MSA has existing authority to implement similar active transportation projects within its jurisdiction.

LIDAC Impacts

Expanding and improving active transportation infrastructure has the potential to benefit the region’s low income and disadvantaged communities as outlined in Table 14. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region’s LIDAC census tract IDs.

Table 14. Benefits to Priority Measure: Expand and Improve Active Transportation Infrastructure

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Health	<ul style="list-style-type: none"> – Walking and biking can promote healthy cardiovascular health, as well as good mental health. – Replacing personal vehicle trips with active transportation modes can reduce noise and air pollution from gasoline vehicles. 	
Housing	<ul style="list-style-type: none"> – Adding active transportation infrastructure such as trails, shared-use paths, and sidewalks adds enhancements to the neighborhoods currently lacking adequate infrastructure. 	<ul style="list-style-type: none"> – The active transportation infrastructure may add value to the neighborhoods that can lead to gentrification and community displacement. – <i>The region should ensure the value of adding active transportation infrastructure to a community does not attract investment in a way that is not beneficial to the established community.</i>
Transportation	<ul style="list-style-type: none"> – Encouraging more biking and walking as alternative modes of transportation can reduce personal vehicle traffic. – Expanding and improving active transportation infrastructure can reduce travel barriers and improve connectivity by offering low-cost modes of transportation and last mile access to public transit service. 	<ul style="list-style-type: none"> – To realize the benefits from bike infrastructure, a significant portion of the community needs to have bike access and feel comfortable and safe riding a bike. – <i>The region should investigate the feasibility of a bike resale/donation program to increase access to bicycles in LIDACs, as well as a community education program to promote bike safety and comfort.</i>
Workforce Development	<ul style="list-style-type: none"> – Expanding and improving active transportation infrastructure can increase access to jobs, increasing labor force participation and opportunities available to LIDACs. 	



PRIORITY MEASURE

Utilize Sustainable Land Use Planning

Sustainable land use planning promotes urban developments that concentrate jobs, housing, services, and amenities around efficient transportation systems. These compact, mixed-use, pedestrian- and bicycle-friendly developments are typically located close to transit options. Planning communities in this way can reduce the need for vehicles, promote the use of alternative transportation modes, reduce energy costs, expand economic connectivity, and enhance livability. As a result, sustainable land use planning can reduce emissions from vehicles and building energy use.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Create walkable, high density, mixed-use developments
- Reduce road widening
- Close streets to vehicle traffic
- Remove parking minimums
- Pursue trip reduction programs

No specific implementation-ready project examples were identified for this measure.

Suggested Implementation Tracking Metrics

- Percent active transportation and transit mode share
- Percent of residents within a 10-minute walk (0.5 mile) of a high frequency transit station
- Number of jobs per acre (job density)
- Average residential density (housing units per acre)
- Intersection Annual Average Daily Traffic (AADT)
- Walk Score rating

GHG Reduction Potential

This measure contributes to the GHG reductions quantified and listed under the *Expand and Improve Transit Service*, *Expand and Improve Active Transportation Infrastructure*, and *Increase Energy Efficiency and Decarbonize Buildings* priority measures.

Authority to Implement

Local governments within the MSA have existing authority to conduct land use planning in their jurisdictions.

LIDAC Impacts

Utilizing sustainable land use planning has the potential to benefit the region's low income and disadvantaged communities as outlined in Table 15. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region's LIDAC census tract IDs.

Table 15. Benefits to Priority Measure: Utilize Sustainable Land Use Planning

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Climate Change	<ul style="list-style-type: none"> Using low-impact development (LID) and green infrastructure strategies to manage stormwater runoff can reduce flood risk and mitigate the urban heat island effect. 	
Energy	<ul style="list-style-type: none"> Using sustainable land use planning to develop higher density communities around public transit systems and active transportation networks can create more efficient buildings and transportation systems and lower utility and travel costs. Increased density and efficiency of sustainable land use developments can encourage opportunities for community solar. 	
Health	<ul style="list-style-type: none"> Sustainable land use development promotes walking and biking for shorter commutes, which can increase cardiovascular health and mental well-being. 	
Housing	<ul style="list-style-type: none"> Mixed use development provides a range of housing options in walking distance of amenities and necessities that can increase quality of life for residents. 	<ul style="list-style-type: none"> Mixed use housing developments may add value to the neighborhoods that can lead to gentrification and community displacement. New housing units also may not be affordable, and therefore may not be available to LIDAC community members. <i>The region should ensure the value of adding mixed use development to a community does not attract investment in a way that is not beneficial to the established community, and that housing units developed include affordable options to a range of residents where the development is located.</i>
Transportation	<ul style="list-style-type: none"> Sustainable land use planning promotes Transit-Oriented Development (TOD) that can overcome transportation barriers and reduce the need for vehicles by building housing near public transit systems. 	<ul style="list-style-type: none"> This kind of urban development may not be suitable or preferred in all communities. <i>The region should ensure community input is received before approving developments, and analysis should be done to ensure appropriate siting and project design.</i>

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Water and Wastewater	<ul style="list-style-type: none"> Using sustainable land use planning to develop higher density communities can lead to more efficient water and wastewater systems with lower utility costs for residents. 	
Workforce Development	<ul style="list-style-type: none"> Housing near public transit systems can increase access to jobs, reducing barriers to access jobs and workforce training opportunities available to LIDACs. 	



PRIORITY MEASURE

Expand and Improve Transit Service

Public transit typically includes options like buses, shuttles, trolleys, and rail. Using public transit instead of personal vehicles can help reduce transportation emissions, air and noise pollution, and vehicle fuel and maintenance costs, as well as improve economic connectivity. Improvements to public transit service and infrastructure, like more frequent service, expanded route options, or improved transit stops, can help make regional public transit options more beneficial to residents and improve its viability as a replacement to personal vehicles.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Increase bus rapid transit, dedicated bus lanes, and transit priority projects
- Provide free public transit
- Expand transit service areas and frequency
- Develop transit centers or plazas
- Build park-and-ride systems
- Promote transit commuting
- Transition from larger buses to smaller buses

Project lead implementers identified the implementation-ready project examples presented in Table 16, which support this measure.

Table 16. Example Projects for Priority Measure: Expand and Improve Transit Service

Project Names		Project Details
Provide Free Transit in City of El Paso	Description	Implement system-wide free transit fares to promote transit ridership and reduce single occupancy vehicle emissions.
	LSC Project Lead	City of El Paso
	Lead Implementer	Sun Metro
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Seek board approval - Year 2: Begin 2-year pilot project - Year 3: Evaluate pilot project - Year 4: Make free fares permanent
Construct I-10 Deck Plaza Transit Center in City of El Paso	Description	Construct the I-10 Deck Plaza Transit Center in El Paso to provide enhanced transit connectivity and new natural space for underserved communities in the surrounding area.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout

Project Names		Project Details
Install Transit Priority Routes and Road Diets in City of El Paso	Description	Implement the Onward Alameda Corridor Masterplan. This includes transit priority along entire corridor and a Road Diet along Texas Avenue.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout
Construct Horizon City Transit Plaza	Description	Site a transit plaza within the identified Transit Oriented Development (TOD) that will serve as a transit hub for Horizon City and the surrounding areas.
	LSC Project Lead	Town of Horizon City
	Lead Implementer	Town of Horizon City
	Location	El Paso County
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout
Implement Socorro Electric MicroTransit Project	Description	The Socorro MicroTransit project involves the procurement of five electric micro-transit vehicles, charging infrastructure, and technology equipment and software to implement an on-demand microtransit, last mile transit service. This project seeks to address gaps in last-mile transit services for seniors, people with disabilities or mobility issues, and ADA transit users living in LIDAC neighborhoods. The micro transit service will also be available to the general public. This project is an extension of the existing Rio Vista ADA Transportation Program (Section 5310 Program), currently providing on-demand transit services in Socorro, Texas.
	LSC Project Lead	City of Socorro
	Lead Implementer	City of Socorro
	Location	City of Socorro
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout

Suggested Implementation Tracking Metrics

- Number of communities, including LIDACs, served by transit
- Transit ridership by service (e.g., bus)
- Number of new transit riders
- Change in number of passenger trips per capita
- Bus travel time versus bus idling time

GHG Reduction Potential

Assuming measure implementation results in up to 15% community VMT reduction by 2050, this measure could reduce cumulative GHGs by 120,774 MTCO_{2e} from 2025-2030 and 363,938 MTCO_{2e} from 2025-

2050. This measure’s implementation assumption was based on research on the potential maximum VMT reductions from transit projects. See Table 7 for details.

Authority to Implement

Public agencies and transit authorities have existing authority to implement changes to transit service within their service area.

LIDAC Impacts

Expanding and improving transit service has the potential to benefit the region’s low income and disadvantaged communities as outlined in Table 17. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region’s LIDAC census tract IDs.

Table 17. Benefits to Priority Measure: Expand and Improve Transit Service

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Health	<ul style="list-style-type: none"> Increasing ridership on transit service reduces personal vehicle use, which can decrease air and noise pollution in communities near major roadways. 	
Housing	<ul style="list-style-type: none"> Improvements to transit service can expand access to transit service in neighborhoods that are currently inadequately served. 	
Transportation	<ul style="list-style-type: none"> Improved access to transit increases mobility, especially for vulnerable populations who may be transit-dependent and for households without a vehicle. 	<ul style="list-style-type: none"> In rural areas with disperse stops expanding transit service may not be feasible for transit agencies to implement, but these residents might be vulnerable or not have access to a vehicle. <i>The region should investigate non-fixed route options and other alternate solutions for rural areas.</i>
Workforce Development	<ul style="list-style-type: none"> Expanding and improving transit service can increase access to jobs, increasing labor force participation and opportunities available to LIDACs. 	

PRIORITY MEASURE

Increase Energy Efficiency and Decarbonize Buildings

Increasing energy efficiency in buildings, facilities, and infrastructure while also transitioning fossil fuel equipment to electric options can help reduce GHG emissions from the built environment. This measure can also reduce utility costs and indoor air pollution, increase resilience to extreme temperatures and weather, and create more comfortable indoor environments to live and work. As this measure supports electrifying fossil fuel-powered equipment, its GHG reduction potential is related to how much renewable energy is used in providing the region’s electricity, which is addressed in part through priority measure *Install Renewable Energy Systems*.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Increase building energy efficiency and improve building envelopes
- Promote sustainable new construction
- Promote light colored pavements or roofs
- Upgrade water and sewer infrastructure
- Enhance wastewater treatment processes
- Promote efficient water use and water conservation

Project lead implementers identified the implementation-ready project examples presented in Table 18, which support this measure.

Table 18. Example Projects for Priority Measure: Increase Energy Efficiency and Decarbonize Buildings

Project Names	Project Details	
Implement a Regional Energy Efficiency Project for Public Buildings	Description	Implement a regional envelope retrofit and energy efficiency project for public buildings. Retrofit any parts of public buildings that are part of the envelope (windows, external walls, doors, floors, skylights). High-efficient envelope components prevent air leaks and keep indoor temperatures at design set up points, preventing energy leakage and waste of resources.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	El Paso and Hudspeth Counties
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> – Year 1: Design and contracting – Year 2: Project selection and application – Year 3: Implementation

Project Names		Project Details
Repair City Hall and Medical Clinic in City of Dell City	Description	Repair and maintain City Hall and the Medical Clinic.
	LSC Project Lead	Hudspeth County
	Lead Implementer	City of Dell City
	Location	City of Dell City
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Identify contractor to repair and upgrade city buildings and budget for removal of dilapidated buildings - Year 2: Begin code enforcement related to dilapidated buildings; Repairs and upgrades on city buildings begin - Year 4: Project 50% complete - Year 5: Project completion and evaluation
Construct Sustainable City Building in Town of Horizon	Description	Construct a new Horizon City Hall facility within the identified Transit Oriented Development (TOD). This new building will be built using sustainable strategies.
	LSC Project Lead	Town of Horizon
	Lead Implementer	Town of Horizon
	Location	Town of Horizon
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Construction - Year 3: Construction closeout
Improve Water and Wastewater Systems	Description	Improve, repair, and maintain the City of Dell City's drinking water and wastewater system by replacing the water tank, repairing the water tower, and replacing the damaged back-up pump in the water plant. Replace 200 water meters with modern meters to better identify and reduce water leaks and more accurately track water pumping, usage, and billing.
	LSC Project Lead	Hudspeth County
	Lead Implementer	City of Dell
	Location	City of Dell
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Identify contractor and engineering support - Year 2: Planning and design complete; Repairs and upgrades begin. - Year 3: 50% of project complete - Year 4: Project completion and evaluation

Suggested Implementation Tracking Metrics

- Number of buildings or households audited or retrofitted
- Average energy and cost savings per retrofit
- Energy use intensity reduction (e.g., electricity use per square foot of buildings, natural gas use per dwelling unit, etc.)
- Number of fossil fuel equipment types transitioned to electric
- Number of LEDs (or similar upgrades) installed

GHG Reduction Potential

Assuming measure implementation results in 3% of existing buildings being retrofitted per year, a 10% energy reduction per building retrofit, and a 37% energy reduction in new construction compared to baseline levels, this measure could reduce cumulative GHGs by 42,677 MTCO_{2e} from 2025-2030 and

281,614 MTCO_{2e} from 2025-2050. This measure’s implementation assumptions were developed based on energy efficiency program efficacy research. See Table 7 for details.

Authority to Implement

The lead implementers have authority to implement their respective implementation-ready projects identified. Additionally, multiple municipal government agencies within the MSA have existing authority to address building energy efficiency and decarbonization. Resident homeowners and other property owners have similar authority to pursue individual on-site building energy efficiency and decarbonization projects.

LIDAC Impacts

Increasing energy efficiency and decarbonizing buildings has the potential to benefit the region’s low income and disadvantaged communities as outlined in Table 19.

All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region’s LIDAC census tract IDs.

Table 19. Benefits to Priority Measure: Increase Energy Efficiency and Decarbonize Buildings

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Climate Change	– More energy efficient buildings mean spaces can be cooled/heated to healthy temperatures more easily, which increases resilience to extreme heat and extreme cold.	
Energy	– Increasing energy efficiency in buildings can lower energy costs and reduce the financial burden for low-income tenants.	
Health	– Transitioning from fossil fuel equipment to electric alternatives can improve indoor air quality for homes and businesses.	
Housing	– Increasing the building energy efficiency of multi-unit apartment buildings can improve the quality of life and lower energy costs for residents.	

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Water and Wastewater	<ul style="list-style-type: none"> – Upgrading water and wastewater infrastructure can create more efficient systems and lower utility costs for residents in the long term. 	<ul style="list-style-type: none"> – Expanding infrastructure can impact affordability in the short term. <i>The region can evaluate providing subsidies on water bills for LIDACs.</i>
Workforce Development	<ul style="list-style-type: none"> – Decarbonizing buildings will create opportunities for new ongoing jobs to install electric alternatives in public buildings, such as the installation and maintenance of heat pumps. These jobs will mostly be electricians and HVAC system technicians, which tend to be good, stable, well-paying jobs. 	<ul style="list-style-type: none"> – As electric alternatives become more available, the transition away from fossil fuel powered appliances may lead to a decline in jobs for technicians skilled in the installation and maintenance of these appliances. – <i>The region can investigate training programs and partnerships with local organizations, training centers, high schools, and colleges.</i>



PRIORITY MEASURE

Install Renewable Energy Systems

Renewable energy is generated from sources that are naturally replenished, such as solar, wind, geothermal, and hydropower. When used to generate electricity instead of fossil fuels, renewable energy can greatly decrease the emissions associated with electricity use. The El Paso MSA can support decarbonizing the electric grid by installing local solar, wind, or other renewable energy generation and storage systems. Expanding renewable energy systems can also increase energy resilience, lower electricity costs, create jobs, and improve air quality by reducing air pollutants associated with electricity production. Additionally, other priority measures, such as *Support the Electric Vehicle Transition* and *Increase Energy Efficiency and Decarbonize Buildings*, promote equipment electrification as a primary method for reducing emissions. Switching to renewable energy is important to help maximize emissions reductions in these other measures.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Install solar as shade structures (e.g., over parking lots, canals, etc.)
- Install solar on public buildings or public land
- Incentivize private solar installations, especially for LIDACs
- Promote solar batteries
- Encourage new developments to be solar-ready or to install solar
- Capture and upgrade biogas to use as an energy source

Project lead implementers identified the implementation-ready project examples presented in Table 20, which support this measure.

Table 20. Example Projects for Priority Measure: Install Renewable Energy Systems

Project Names		Project Details
Add Solar to the Fred Hervey Water Reclamation Plant	Description	El Paso Water (EP Water) assessed the viability of achieving renewable energy goals set in a proposed City Charter. Focused on decarbonizing operations, EP Water identified the Fred Hervey Water Reclamation Plant (FHWRP) as a site for distributed renewable electricity generation, particularly through photovoltaics (PV). The assessment provides a detailed analysis of the technical and financial feasibility of deploying PV at FHWRP.
	LSC Project Lead	City of El Paso
	Lead Implementer	El Paso Water
	Location	Fred Hervey WRP, Big Sandy
Implementation Schedule and Milestones		<ul style="list-style-type: none"> – Year 1-2: Assessment, design, and regulatory filings. Initiate construction activities. – Year 3-4: Construction and training of staff. Monitoring program. – Year 5: Closeout out

Project Names		Project Details
Install Solar-powered Lights on Trails	Description	Implement a regional lighting retrofit and energy efficiency project for public walking trails. Existing trail lighting would be replaced with solar powered overhead lights that will provide increased illumination for improved safety and help make the trails off-grid.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Design and procurement - Year 2: Construction - Year 3: Construction closeout
Install Solar on Public Parking Lots in City of El Paso	Description	Implement a regional project to install solar panels over parking lots serving public facilities. Parking lot users will also see a benefit from access to covered parking spaces.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Design and procurement - Year 2: Construction - Year 3: Construction closeout
Establish Gas Capture and Reuse Facilities at Wastewater Treatment Plants	Description	El Paso Water proposes to establish gas capture facilities at its four wastewater treatment plants. This initiative involves upgrading biogas generated during wastewater treatment to use as an energy source, contributing to sustainable energy production. The project supports circular economy principles, reducing GHG emissions, and fostering environmental stewardship by transforming waste into a valuable renewable resource.
	LSC Project Lead	City of El Paso
	Lead Implementer	El Paso Water
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Conduct comprehensive feasibility studies and site assessments. Begin stakeholder engagement and public outreach. - Year 2: Obtain necessary permits, approvals, and regulatory clearances for the gas capture project from relevant local, state, and federal agencies. Detailed engineering and design work. - Year 3-4: Construction - Year 5: Monitor and evaluation. Close out.

Project Names		Project Details
Distributed Battery Pilot Program	Description	El Paso Electric's (EPE) Distributed Battery Pilot program is an innovative voluntary demand response program to enable customers with existing rooftop solar systems to install qualifying energy storage systems or batteries in their homes. Customers will receive an incentive to purchase and enroll batteries in EPE's program or may choose to have EPE-owned batteries installed at their home, where EPE will dispatch and control the batteries 24/7 to help manage peak demand. Participating customers will benefit from having an onsite battery that may serve as back-up power during outages.
	LSC Project Lead	City of El Paso
	Lead Implementer	El Paso Electric
	Location	El Paso Electric's Texas service territory
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Program design and regulatory filing. - Year 2: Program implementation. - Year 3: Data collection and evaluation of program.



Suggested Implementation Tracking Metrics

- kW or MW solar installed
- MWh of electricity generated by renewable sources
- Percentage of total electricity use generated by renewable sources
- Percentage of solar-viable public buildings with solar systems
- Number of residential units with solar installations
- Number of solar permits granted per year, cumulatively

GHG Reduction Potential

Assuming measure implementation results in 15% of total rooftop solar capacity installed by 2030 and 50% by 2050, this measure could reduce cumulative GHGs by 142,421 MTCO_{2e} from 2025-2030 and 287,166 MTCO_{2e} from 2025-2050. This measure's implementation assumptions were developed based on data estimating maximum rooftop solar capacity in the region. See Table 7 for details.

Authority to Implement

Multiple entities have existing authority to implement projects related to renewable energy system installation. EP Water has the authority to undertake solar and gas capital improvements at sites owned by the agency, including the Fred Hervey Water Reclamation Plant and the utility's four wastewater treatment plants. The City of El Paso has authority to implement solar lighting improvements on City-owned sites, including trails and parking lots, and to work with community groups and property owners to pursue additional solar lighting installations at other sites.

The lead implementers have authority to implement their respective implementation-ready projects identified. Additionally, each local government within the MSA has existing authority to implement renewable energy projects on their property and facilities. Resident homeowners and other property owners have similar authority to pursue individual on-site renewable projects.

LIDAC Impacts

Installing renewable energy systems has the potential to benefit the region's low income and disadvantaged communities as outlined in Table 21. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region's LIDAC census tract IDs.



Table 21. Benefits to Priority Measure: Install Renewable Energy Systems

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Energy	<ul style="list-style-type: none"> - Installing renewable energy systems at homes and businesses can reduce energy costs. This can help alleviate financial burdens on low-income residents. 	<ul style="list-style-type: none"> - Renewable energy, such as solar, has a high up-front cost that may not be feasible for residents in low-income areas. - <i>The region can investigate grants and funding opportunities that could make solar more feasible in LIDACs.</i> - <i>The region can invest in renewable energy projects that would directly benefit the community.</i>
Health	<ul style="list-style-type: none"> - Lower energy costs mean homes, workplaces, and community spaces can be cooled/heated to healthy temperatures. This reduces health risks, particularly for vulnerable populations. - Replacing existing sources of energy that generate particulate matter emissions will improve the region’s air quality and public health. 	
Transportation	<ul style="list-style-type: none"> - An increase in renewable energy generation will allow more residents and transportation fleet operators to charge electric vehicles with emissions-free electricity. 	
Workforce Development	<ul style="list-style-type: none"> - New ongoing jobs can be created for renewable energy system installation and maintenance. In the longer-term, manufacturing of renewable energy system components may also be an economic and workforce opportunity for the region. 	<ul style="list-style-type: none"> - As renewable energy becomes more available, the transition away from fossil fuels may lead to a decline in fossil fuel-related jobs. - <i>The region can investigate job training programs and partnerships with local organizations, training centers, high schools, and colleges.</i>

PRIORITY MEASURE

Evaluate Sustainable Waste Management Practices

Landfills produce emissions through the decomposition of organic matter. Landfill emissions can be decreased by reducing the total amount of waste thrown away or diverting waste from landfills to compost or recycling facilities. In addition to reducing landfill-related GHG emissions, these actions can also reduce waste disposal costs, landfill odors, and emissions from transporting waste. These strategies can also aid in the creation of compost.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Implement community-wide composting
- Improve recycling systems to accept more waste types
- Improve frequency and quality of recycling services
- Enhance community waste clean-ups
- Discourage food waste and other commercial waste

No specific implementation-ready project examples were identified for this measure.

Suggested Implementation Tracking Metrics

- Amount of food waste diverted (pounds, tons)
- Amount of recyclable waste diverted (pounds, tons)
- Number of customers served by composting program
- Number of recyclable waste streams accepted by recycling facility

GHG Reduction Potential

Assuming measure implementation results in 90% landfill waste diversion by 2050, this measure could reduce cumulative GHGs by 35,061 MTCO_{2e} from 2025-2030 and 151,932 MTCO_{2e} from 2025-2050. This measure's implementation assumption was developed based on a review of local government waste diversion goals within Texas. See Table 7 for details.

Authority to Implement

Local governments within the MSA have existing authority to implement waste management projects within their respective jurisdictions.

LIDAC Impacts

Improving waste reduction, recycling, and composting could potentially benefit LIDACs in the region as outlined in Table 22. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region's LIDAC census tract IDs.

Table 22. Benefits to Priority Measure: Evaluate Sustainable Waste Management Practices

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Health	<ul style="list-style-type: none"> - Diverting odor-causing decomposing organic matter from landfills can improve air quality. - Reducing food waste can reduce household food costs and increase local food security. 	<ul style="list-style-type: none"> - Starting a compost collection service could increase transportation emissions from diesel collection vehicles. - <i>The region should investigate sharing vehicles across jurisdictions and low-emissions vehicles where available and feasible.</i>
Workforce Development	<ul style="list-style-type: none"> - New ongoing jobs can be created in the operations and maintenance of composting and recycling facilities and collection services. - Local volunteers and students can support education and communication efforts within the community. 	



PRIORITY MEASURE

Support the Electric Vehicles Transition

Most vehicles in the El Paso MSA have fossil fuel engines that use gasoline or diesel. Additionally, many types of trips cannot feasibly switch to active transportation, like walking and biking, or public transit options. Helping to switch these vehicles when they are retired with zero- or low-emissions options will reduce GHG emissions, air and noise pollution, and vehicle fuel and maintenance costs. In the near-term, implementation of this measure will focus on larger public and private fleets. As this measure supports vehicle electrification, its GHG reduction potential is related to how much renewable energy is used in providing the region’s electricity, which is addressed in part through priority measure *Install Renewable Energy Systems*.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Transition municipal fleets to EVs, hybrids, or alternative fuel vehicles
- Install more public fast charging stations
- Provide electric or zero-emission transit vehicles
- Incentivize purchasing electric vehicles
- Incentive at-home charging stations

Project lead implementers identified the implementation-ready project examples presented in Table 23, which support this measure.

Table 23. Example Projects for Priority Measure: Support the Electric Vehicles Transition

Project Names		Project Details
Upgrade Municipal Fleet in Dell City	Description	Repair or replace City vehicles and heavy equipment to better support the City’s needs.
	LSC Project Lead	Hudspeth County
	Lead Implementer	City of Dell
	Location	City of Dell
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> – Year 1: Identify City needs; replace vehicles and equipment past their useful lives, make repairs to those vehicles and equipment with remaining useful life. Release RFPs for identified needs and select providers. – Year 2: Process purchase of replacements and repairs. Project complete.
Transition El Paso Water’s Fleet to Electric or Low-Emissions Fleet	Description	Implement a fleet transition initiative to enhance sustainability. Shift some or all utility vehicles to electric or hybrid models, along with considering the conversion of heavy-duty or diesel vehicles to natural gas.
	LSC Project Lead	City of El Paso
	Lead Implementer	El Paso Water
	Location	El Paso Water Service Area
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> – Year 1: Assessment, design, and engagement – Year 2: Procurement – Year 3-5: Deployment and monitoring

Install Public EV Chargers in City of Socorro	Description	The Socorro EV Charging Infrastructure project involves the design, procurement, and installation of 14 public Level 2 EV charging stations at strategic locations throughout the City of Socorro, including at two community centers, three regional parks, four publicly-owned properties near retail hubs, three heritage tourism cluster sites along the historic Mission Trail, and at the Ysleta del Sur Pueblo.
	LSC Project Lead	City of Socorro
	Lead Implementer	City of Socorro
	Location	City of Socorro
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning - Year 2: Procurement, optimization, and training - Year 3: Construction closeout
Install Public EV Chargers in Hudspeth County	Description	Install 10 public Level 2 EV charging stations throughout Hudspeth County to be used primarily for County vehicles; purchase 10 electric pickup trucks to reduce vehicle emissions.
	LSC Project Lead	Hudspeth County
	Lead Implementer	Hudspeth County
	Location	Two EV charging stations in Fort Hancock, 10 EV charging stations in Sierra Blanca, and two EV charging stations in Dell City
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Design and procurement - Year 2: Permitting and construction - Year 3: Construction closeout
Electrification of Airport Shuttle Buses	Description	Electrify airport shuttle buses.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	El Paso International Airport
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Design and procurement - Year 2: Permitting and construction - Year 3: Construction closeout

Suggested Implementation Tracking Metrics

- Percent of public fleets electrified or transitioned to alternative fuels
- Percent increase in EV and plug-in hybrid electric vehicle (PHEV) registrations in the region
- Percent of total VMT from EVs
- Number of EVs purchased per year
- Number and type of maintenance equipment converted
- Number of public EV chargers installed
- Number of public EV charger users or number of unique visits
- Charger uptime (e.g., % of days charger is operational)
- Output of charging infrastructure and estimated vehicle miles traveled
- Number of communities, including LIDACs, served by electric/hybrid buses

GHG Reduction Potential

Assuming measure implementation results in 70% of gasoline VMT and 76% of diesel VMT transitioning to electricity by 2050, this measure could reduce cumulative GHGs by 522,718 MTCO_{2e} from 2025-2030 and 753,553 MTCO_{2e} from 2025-2050. This measure’s implementation assumptions were developed based on international market projections of electric vehicles. See Table 7 for details.

Authority to Implement

The lead implementers have authority to implement their respective implementation-ready projects identified. Additionally, each local government within the MSA has the authority to implement electric vehicle infrastructure installations and incentive projects within its jurisdiction. Public and private entities within the MSA have existing authority to implement fleet conversion projects for their owned vehicle fleets.

LIDAC Impacts

Supporting the transition to electric vehicles has the potential to benefit the region’s low income and disadvantaged communities as outlined in Table 24. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region’s LIDAC census tract IDs.

Table 24. Benefits to Priority Measure: Support the Electric Vehicles Transition

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Energy	<ul style="list-style-type: none"> Installing more EV charging infrastructure will aid in the transition of the region’s municipal fleets and can encourage residents to purchase an electric vehicle by reducing range anxiety. 	<ul style="list-style-type: none"> EVs and at-home charging stations have high up-front costs and dedicated at-home charging options are typically available to homeowners (as opposed to renters). The availability of charging infrastructure may also be disproportionate across the region. <i>The region should balance the provision of public charging infrastructure within LIDACs with the near-term challenges associated with EV ownership costs in general. The region should also investigate incentives and grant programs for at-home charging stations and multi-unit residential charging opportunities.</i>
Health	<ul style="list-style-type: none"> Reducing or removing the combustion of gasoline and diesel in vehicles improves noise and air pollution, particularly for communities near busy roadways. 	

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Transportation	<ul style="list-style-type: none"> Switching from diesel transit vehicles to electric transit vehicles can improve air quality in communities, particularly those located directly along bus transit routes. 	
Workforce Development	<ul style="list-style-type: none"> Ongoing job opportunities can be generated for the maintenance of electric vehicles and the installation and maintenance of charging stations. 	<ul style="list-style-type: none"> As electric vehicles and charging infrastructure becomes more available, the transition away from gasoline and diesel vehicles may lead to a decline in jobs for technicians skilled in these vehicles. <i>The region can investigate job training programs and partnerships with local organizations, training centers, high schools, and colleges.</i>



Optimize Freight Transportation

As El Paso serves as a main port of entry, the use of freight trucks is necessary to bring goods into the El Paso region and the rest of the country. Freight trucks have lower fuel efficiency than passenger vehicles and primarily use diesel fuel, without many zero-emissions alternatives on the market currently. Optimizing freight transportation routes, driver practices, and trucking regulations can result in reduced idling, travel times, vehicle fuel use, and total miles driven. These improvements would also reduce GHG emissions, air and noise pollution, and fuel and maintenance costs, and can improve overall traffic flow.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Optimize truck routes or road infrastructure to reduce truck travel and idling
- Invest in freight rail to reduce truck traffic

Project lead implementers identified the implementation-ready project examples presented in Table 25, which support this measure.

Table 25. Example Projects for Priority Measure: Optimize Freight Transportation

Project Names		Project Details
Optimize Freight Transportation at Ysleta Port of Entry	Description	Complete the planning, design, and construction of an expansion to the Ysleta Port of Entry to reduce idling emissions and co-pollutants associated with commercial and private vehicles traffic. This project will need to address mitigation measures for adjacent neighborhoods, staffing needs for federal and non-federal agencies, technology capabilities associated with international operations, and transportation analysis.
	LSC Project Lead	City of El Paso
	Lead Implementer	City of El Paso
	Location	City of El Paso
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> – Year 1-2: Planning phase to be completed by June 2026. This includes permitting, conceptual design, preliminary cost estimate, public outreach, and outreach with Mexico. – Year 3: 5-30% design phase, June 2027 – Year 4: 30-100% design phase, June 2028 – Year 5: Construction begins, January 2029 – Year 6 to 8: 3-year construction

Suggested Implementation Tracking Metrics

- Reduction in freight idling time
- Freight VMT

GHG Reduction Potential

Assuming measure implementation results in up to 8% freight VMT reduction by 2050, this measure could reduce cumulative GHGs by 14,524 MTCO_{2e} from 2025-2030 and 43,768 MTCO_{2e} from 2025-2050. This

measure’s implementation assumption was developed based on research of freight fuel use optimization. See Table 7 for details.

Authority to Implement

In general, the City of El Paso has authority to implement modifications to facilities on City-owned land that can support freight movement optimization. Improvements to international ports of entry within the city, as with the implementation-ready project identified in Table 25, will require coordination with Federal agencies and with the government of Mexico as well. The City of El Paso may also choose to work with other stakeholders who have authority to implement other types of freight optimization projects. As examples, the City of El Paso could choose to coordinate with shipping companies regarding ecodriving and other fuel optimization strategies or with the U.S. Department of Transportation (USDOT) and/or the Texas Department of Transportation (TxDOT) regarding regulations controlling freight truck weight and size limitations.

LIDAC Impacts

Optimizing freight transportation has the potential to benefit the region’s low income and disadvantaged communities as outlined in Table 26. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region’s LIDAC census tract IDs.

Table 26. Benefits to Priority Measure: Optimize Freight Transportation

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Health	<ul style="list-style-type: none"> – Optimizing truck routes can minimize air and noise pollution in communities near highways and ports of entry by reducing truck travel. – Optimizing ports of entry wait times can reduce truck idling, which can improve air quality on both sides of the border. 	
Transportation	<ul style="list-style-type: none"> – Developing efficient truck routes or investing in freight rail can reduce traffic in areas congested by freight movement. 	<ul style="list-style-type: none"> – Additional infrastructure will likely need to be constructed to develop freight corridors and rail networks. Historically, highways have disconnected disadvantaged communities and communities in the region are at risk of being negatively impacted by transportation infrastructure development. – <i>The region should ensure new infrastructure is developed in a way that does not disconnect or create disproportional negative impacts to LIDACs.</i>

PRIORITY MEASURE

Promote Sustainable Food Production and Distribution

Local, sustainable, and self-sufficient food production and distribution systems can reduce emissions from agricultural practices and food transportation. Sustainable food production, also known as sustainable agriculture, uses techniques that aim to protect the environment, aid and expand natural resources, and make the best use of nonrenewable resources. Efficient food distribution can reduce food waste and reduce transportation distances. Certain agricultural techniques can also aid in overall carbon sequestration. Sustainable food production practices can also create local high-quality jobs.

Project Ideas

Community members identified the following initial project ideas that support this measure:

- Support sustainable agricultural practices.
- Utilize hydroponics and aquaponics agriculture.
- Expand local food production and distribution systems.
- Construct local food hubs.

Project lead implementers identified the implementation-ready project examples presented in Table 27, which support this measure.

Table 27. Example Projects for Priority Measure: Promote Sustainable Food Production and Distribution

Project Names		Project Details
Construct the Socorro Food Hub	Description	The "Socorro Food Hub" project involves the construction of a civic plaza/food hub centered around local food production and the local food circular economy. This project integrates an aquaponics facility powered by on-site solar generation with a local food-centered mixed-use civic plaza. Dedicated retail space for local food restaurants, value-added agricultural products, and farmers' market areas will allow LIDACs to gain access to fresh and local foods while increasing regional capacity for climate resiliency.
	LSC Project Lead	City of Socorro
	Lead Implementer	City of Socorro
	Location	City of Socorro
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning, community and stakeholder engagement - Year 2: Construction - Year 3: Construction closeout

Project Names		Project Details
Transition to Aquaponics Agriculture in Ysleta del Sur Pueblo	Description	Pilot aquaponics projects in Ysleta del Sur Pueblo. Aquaponics is a closed loop greenhouse growing system where fish fertilize the water used for plant growth and plants clean the water used to raise fish. Aquaponics can grow up to 30 times the amount per acre versus traditional farming and uses approximately 90% less water than traditional farming.
	LSC Project Lead	Ysleta del Sur Pueblo
	Lead Implementer	Ysleta del Sur Pueblo
	Location	Ysleta del Sur Pueblo
	Implementation Schedule and Milestones	<ul style="list-style-type: none"> - Year 1: Planning and construction - Year 2: Construction, optimization, and training - Year 3: Construction closeout

Suggested Implementation Tracking Metrics

- Number of food hubs developed
- Number of businesses participating
- Number of new jobs/new businesses related to sustainable food production
- Pounds/tons of local food produced/sold

GHG Reduction Potential

Agriculture emissions and upstream emissions related to food production outside of the MSA were not evaluated in the PCAP high-level GHG inventory. However, this measure could potentially result in reduced transportation emissions from shorter food transport distances, reduced stationary energy emissions from more efficient food production processes, and reduced waste emissions from lower amounts of food waste – each of which are included in the PCAP GHG inventory estimates. Therefore, this measure contributes to GHG reductions quantified under the *Evaluate Sustainable Waste Management Practices*, *Optimize Freight Transportation*, and *Increase Energy Efficiency and Decarbonize Buildings* priority measures.

Authority to Implement

Public agencies, utilities, residents, and other stakeholders have existing authority to pursue sustainable agriculture projects on land they own. The lead implementers have authority to implement their respective implementation-ready projects identified. Additionally, each local government within the MSA has the authority to implement sustainable agriculture projects on their property, while resident homeowners and other property owners have similar authority to pursue individual projects on land they own.

LIDAC Impacts

Promoting sustainable food production and distribution has the potential to benefit the region’s low income and disadvantaged communities as outlined in Table 28. All LIDAC census tracts in the El Paso MSA can benefit from this measure, with census tracts in geographic proximity to implementation-ready projects receiving more direct benefits. Refer to Table 9 in the *Low Income and Disadvantaged Communities Analysis* section for a complete list of the region’s LIDAC census tract IDs.

Table 28. Benefits to Priority Measure: Promote Sustainable Food Production and Distribution

CEJST Indicator	Benefits	Disbenefits (and Mitigation Strategies)
Climate Change	<ul style="list-style-type: none"> - Sustainable agriculture practices can build greater resilience against agriculture loss and improve soil health. - Sustainable production and distribution can reduce food waste. 	<ul style="list-style-type: none"> - Shifting agriculture practices may have a high upfront cost for farmers and distributors. - <i>The region should investigate incentives and subsidies to make the transition viable for local agriculture partners.</i>
Health	<ul style="list-style-type: none"> - Local food production and distribution can improve access to fresher, more nutritious food. 	
Transportation	<ul style="list-style-type: none"> - Freight truck emissions can be reduced from local food production and distribution, lowering the total distance to travel. 	
Workforce Development	<ul style="list-style-type: none"> - Projects that promote sustainable food production and distribution can generate ongoing operations and maintenance job opportunities for LIDACs. 	



Conclusion and Next Steps

The PCAP was developed through a collaborative effort involving community members and stakeholders across El Paso and Hudspeth Counties. This plan prioritizes measures aimed at reducing greenhouse gas emissions while simultaneously offering community benefits, such as preparing for the impact of climate change, creating local jobs, improving air quality, and enhancing quality of life for residents in the El Paso region. The PCAP was shaped by extensive community engagement, including a bilingual survey, a community open house, listening sessions, and collaboration with key community institutions. Over 200 unique project ideas were shared, from which 10 priority measures were identified and assessed for their impacts on the region's LIDACs. The plan reflects a commitment to meeting the needs of the community, addressing climate change, and fostering resilience in the face of environmental challenges.

This PCAP is the first deliverable under the CPRG planning grant awarded to the El Paso MSA region. In compliance with the CPRG planning grant, the City of El Paso and its partners will publish the following deliverables during the project timeline:

- In 2025, the City of El Paso will publish a **comprehensive climate action plan (CCAP)**. The CCAP will address all GHG emissions sectors, establish GHG projections and reduction goals, and describe and evaluate strategies to achieve those goals.
- In 2027, the City of El Paso will publish a **status report** that describes progress on implementing the measures from the CCAP. The status report will also include any relevant updates to CCAP analyses, as well as next steps and future budget and staffing needs to continue CCAP implementation.

This PCAP represents an important milestone to prepare for climate change in the El Paso region. The City of El Paso and its partners will continue planning for the measures described in this PCAP while preparing for future phases of the CPRG project. As part of this process, the City and its partners will continue to engage community members and stakeholders collaboratively to identify the community's climate-related needs and opportunities. Through this ongoing conversation, the region's climate action plan can best reflect the community's knowledge, values, and concerns to strengthen the El Paso MSA.



