# NOTICE OF FUNDING AVAILABILITY (NOFA)

**Overview:**
The City of El Paso has issued a NOFA to invite applications from eligible applicants for a critical program. Our goal is to enhance the resilience and adaptability of Low-Income and Disadvantaged Communities (LIDACs) in the face of climate change. Specifically, we seek proposals for assessments and audits that promote equitable and inclusive service delivery, with a focus on LIDACs. These assessments will play a pivotal role in informing the development of our comprehensive Climate Action Plan. Tasked with assisting the Department of Community and Human Development's Office of Climate and Sustainability their responsibilities include:

- Equitable Resource Allocation: Overseeing the distribution of resources to communities most affected by the pandemic.
- Advocacy for Vulnerable Communities: Amplifying the voices of marginalized groups and advocating for policies that prioritize their needs.
- Promotion of Inclusivity and Social Justice: Collaborating with local organizations to address systemic inequities and dismantle barriers to access.
- Enhancing Departmental Effectiveness: Providing guidance on equity-related issues and integrating equity considerations into departmental strategies.
- Ensuring improvement of the efficacy of public health through tools like program evaluation, data, and outreach as well as to address community vulnerability, including but not limited to diversity and equity, housing, homelessness, family stability, and household stability as a response to the COVID-19 public health crisis and as allowed by the American Rescue Plan Act and federal guidelines in the Final Rule administrative needs cause or exacerbated by the pandemic.

The most important aspect of their role is to provide the city with actionable recommendations to address the challenges faced by vulnerable communities. Under this NOFA, the selected applicant is not expected to design and/or implement an outreach plan but rather collaborate with the technical (AECOM) and outreach (Barracuda) consultants as defined in this document.

The timeline for this scope of work is from August/September 2024 through the completion of the Climate Action Plan in the fall of 2025.

**Supporting Information:**

- CRPG Workplan: scope submitted to the EPA regarding the development of the Climate Action Plan (Attachment A)
- Technical consultants' proposal: defines the coordination between the technical and outreach consultants and the selected applicant under this NOFA (Attachment B)

**Closing Date for Applications: July 28th, 2024 at 5:00 pm MDT**

**NOFA Q+ A session**

For applicants with questions, a virtual meeting is scheduled for **Thursday June 20th, 2024 at 11:00 am** MDT via Webex. If you're unable to join the meeting, you may submit your questions in writing to DCHDServices@elpasotexas.gov. The meeting details can be found below:

**When it's time, join your Webex meeting here.**

Join meeting

**More ways to join:**

**Join from the meeting link**

https://elpasotexas.webex.com/elpasotexas/j.php?MTID=medf96d12a834fcf7d6a053da258c27ea

**Join by meeting number**

Meeting number (access code): 2493 869 7201

Meeting password: Gt9SFtbPe75

**Tap to join from a mobile device (attendees only)**

1-844-992-4726,,24938697201## United States Toll Free

+1-408-418-9388,,24938697201## United States Toll

**Join by phone**

+1-408-418-9388 United States Toll

1-844-992-4726 United States Toll Free

Global call-in numbers | Toll-free calling restrictions

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**Funding Opportunities:**

| Program | Projected Funding Availability |
|---|---|
| **LIDAC Climate Action Plan Assessment - ARPA** | **$50,000** |

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By releasing this NOFA, the City of El Paso is announcing the availability of funds through the American Rescue Plan Act (ARPA) program. Additional information related to ARPA funding requirements are available through the following link: State and Local Fiscal Recovery Funds | U.S. Department of the Treasury

The City will reimburse the subrecipient on a monthly basis for the Sub-grant amount. Before the City issues any disbursements, the Subrecipient must submit proof of incurred and paid expenses monthly.

The selected agency will comply with all Program Fund requirements listed under Section 31 CFR Part 35 The American Rescue Plan Act (ARPA), 2021, Public Law 117-2 ("Program Funding Requirements").

**Duties and Responsibilities:**

**Data Collection**

1. Collaborate extensively with stakeholders and relevant departments to conduct a comprehensive assessment of the specific equity needs arising from the aftermath of the COVID-19 Pandemic and the development of the Climate Action Plan. This involves engaging with community leaders, advocacy groups, and representatives of vulnerable populations to gather diverse perspectives and insights.

2. Implement robust data collection methodologies to collect and analyze various metrics related to engagement with vulnerable populations. This includes gathering demographic data, assessing service utilization rates, and identifying areas of unmet need within the community.
3. Utilize advanced analytical tools and techniques to identify patterns, trends, and disparities in the data collected, enabling informed decision-making on resource allocation strategies. This involves identifying priority areas where targeted interventions can have the most significant impact on addressing equity issues exacerbated by the pandemic.

**Eligibility and Experience Requirements:**

- Applicants must be a registered 501(c)(3) non-profit organization
- Applicants must demonstrate experience working directly with Low-Income Disadvantaged Communities (LIDACs) with evidence of impact (e.g., reports, evaluations, testimonials).
- Experience navigating and implementing new and innovative programs within local government systems.
- Demonstrated experience working with climate programs and environmental justice initiatives.
- Demonstration of organizational capacity to manage and execute the proposed project including key staff and their qualifications.
- Experience in public administration operations through several planning cycles or projects with a small team, gathering data and demonstrating research and analytic skills, and assessing outputs and outcomes against performance measures.
- Experience using a variety of research methodologies and working in program analysis, evaluation and/or measurement and developing reports

**Evaluation and Performance:**

- Conduct thorough reviews of all new items related to Climate Pollution Reduction Grants (CPRG) and Climate Action Plan (CAP), evaluating their efficacy in addressing equity concerns and meeting the needs of vulnerable communities. This includes analyzing program effectiveness, efficiency, and alignment with equity goals.
- Proactively establish and maintain credibility and transparency with stakeholders by providing regular updates on evaluation processes, soliciting feedback, and addressing concerns in a timely manner. This fosters trust and ensures buy-in from stakeholders, enhancing the effectiveness of equity initiatives.
- Apply an equity lens to funding decisions and recommendations, considering factors such as historical inequities, marginalized communities' needs, and the potential impact of proposed interventions on reducing disparities. This ensures that resources are allocated in a manner that maximizes positive outcomes and promotes social justice.
- Continuously monitor the effectiveness, value for money, and efficiency of government reporting entities' programs and initiatives, identifying areas for improvement and making recommendations for optimization. This involves conducting cost-benefit analyses, performance evaluations, and outcome assessments to inform decision-making.
- Ensure strict compliance with relevant legislation, policy guidelines, and best practices in equity auditing and evaluation processes. This includes adhering to ethical standards, data privacy regulations, and industry-specific protocols to maintain integrity and uphold public trust.
- Actively participate in addressing findings identified during audits, working collaboratively with stakeholders to develop and implement corrective actions that promote equity and fairness. This may involve revising policies, reallocating resources, or implementing training programs to address identified gaps and shortcomings.

- Conduct thorough verification checks on data accuracy and reliability, employing robust validation procedures to ensure the integrity of information used in decision-making processes. This includes conducting data audits, cross-referencing sources, and resolving discrepancies promptly to maintain data quality standards.

**Program Review + Scoring Process**
Applicants are required to submit a full application, including all required supplementary documentation/questions indicated in this NOFA.

An eligibility review panel composed of City staff will screen applications for basic eligibility requirements as indicated in this document.

**Applicant Eligibility Review:**
The Review Panel will determine the eligibility of each application based on the minimum requirements defined in this NOFA. The review will include:

- Confirmation of a complete application.
- Submittal of required financial and administrative documentation.
- Confirmation of application compliance with basic local, state and federal regulations.
- Confirmation that application specifically addresses requirements established in this NOFA.
- Non-profit applicants must verify non-profit status.
- Confirmation of applicants' demonstrated experience and capacity in developing similar projects.

**Application Process:**

1. Please start by reading the Overview, Duties/Responsibilities, and Evaluation and Performance sections.
2. To be considered, applicants must submit the application via digital Seamlessdoc [City of El Paso] NOFA Request Application (seamlessdocs.com), including the required attachments as outlined in the 'Attachment List' section of this document. Failure to submit any of the required attachments will render your application incomplete and ineligible for consideration. Seamlessdoc Application can be found on DCHD Website. If you would like to ensure the completeness of your application, you may email the applicable 'Attachment List' documents to DCHDservices@elpasotexas.gov.
3. The application **must** be submitted by the person who is legally authorized to sign documents on behalf of the organization (e.g. Executive Director). If the legally authorized representative chooses to authorize an additional staff member to submit the application on his/her behalf, an "Authorized Signatory Form" must be sent with the attachments package.
4. One application and narrative must be submitted per proposed applicant. The online application system does not allow saving and tracking the completion progress; therefore, it is essential to complete and finalize your application in a single session. If any problems arise, you may email your application to DCHDservices@elpasotexas.gov.

**Attachment List:**

- Application Narrative- *Detailed narrative as a response to this NOFA. Include organizational capacity*
- Program Budget - *Utilize appropriate template found below*
- SAM Record Status – *Submit documentation certifying that applicant is registered and has an active record status on the System for Award Management (SAM).*
- Certified Audit
- List of Current Board of Directors – *This list must include the End of Service Term Date for each board member. This list must also be Certified by Board President or Secretary*
- Board Letter - *Written minute action and/or Board approval documentation signed by the Board President (or other authorized representative), authorizing submittal of an online application*
- Signatory Designation Letter – *Approved documentation certifying whom from the applicant's organization is the authorized signatory who can sign contracts and legal documentation on behalf of the*

*agency*

- Proof of legal status of 501(c)(3)

**All applications must include the items listed above, unless otherwise indicated. All required forms/assurances/certifications are due Friday, June 28th, 2023, at 5:00 p.m. (MDT).**

**Application Link:** [City of El Paso] NOFA Request Application (seamlessdocs.com)

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**Budget**:

| **Individual/agency Name:** | **Project Name LIDAC Climate Action Plan Assessment** |
|---|---|

| | Current Year 2024-2025 | | | Budget Year 2025-2026 | | |
|---|---|---|---|---|---|---|
| **Line-Item Expense Category** | **Total** | **Budget** | **ARPA Allocation** | **Total** | **Budget** | **ARPA Request** |
| Salaries | | | | $- | | $- |
| Fringe benefits | | | | $- | | $- |
| Contract services | | | | $- | | $- |
| Rent | | | | | | |
| Communications | | | | | | |
| Utilities & occupancy expenses | | | | $- | | $- |
| Equipment rental & maintenance | | | | $- | | $- |
| Equipment purchases | | | | $- | | $- |
| Mileage reimbursements | | | | $- | | |
| Postage & shipping | | | | $- | | |
| Printing & publications | | | | $- | | |
| Other Expenses | | | | $- | | $- |
| | | | | $- | | $- |
| | | | | $- | | $- |
| | | | | $- | | $- |
| | | | | $- | | $- |
| **Total Project Expenses** | **$-** | | **$-** | **$-** | | **$-** |

Attachment A

**CLIMATE POLLUTION REDUCTION GRANTS – PLANNING GRANT**

**EL PASO MSA WORKPLAN**

**WORKPLAN SUMMARY:**

The geographic area included in the scope of work for the Priority Climate Action Plan (PCAP) and Comprehensive Climate Action Plan (CCAP) spans an area covering 10 municipalities, 2 counties, 15 census-designated places and unincorporated communities, and 5,587 square miles of territory. Within that territory are a number of both urban and rural areas, cities, towns and villages as well as a large number of unincorporated areas from east to west. Aside from the geographic breadth of the MSA, the work will also be defined by geographic factors not considered within this scope of work. The western most portion of the MSA makes up a part of the largest binational metroplex in the western hemisphere. The urban environment defined most often as the Paso Del Norte lies at the crossroads of three states and two countries. The City of El Paso, alongside several of our surrounding sister cities share the entirety of their southern borders with Ciudad Juarez, Chihuahua, Mexico. There are also 5 international ports of entry that have a significant impact on emissions across the region. This circumstance in addition to our status as a predominantly underserved and disadvantaged community makes the El Paso MSA a standout among all other MSAs participating in this work with the EPA, presenting both unique challenges and groundbreaking opportunities. Critical to this work is the recognition that while the scope of CPRG covers territory only in the United States and within boundaries of the state of Texas, the reality of the El Paso MSA is that Ciudad Juarez, Chihuahua, Mexico and the communities of southern New Mexico are significant contributors and potential collaborators for this work.

The expectation based on observed precedent is that the transportation and energy sectors represent the largest contribution to regional emissions. Therefore, there will be much opportunity to address transit, trade and building efficiency as a tool to reduce emissions. However, the goal of this work is not simply to reduce emissions, but also to explore how the implementation of GHG reduction measures impact the people of the region in terms of affordability, human health and quality of life. Assumptions regarding the definition of impactful results are untenable and require intensive communication with, listening to and empowering the people of our region. Having a metropolitan configuration represented by a range of large urban communities to small cities and rural towns punctuated by the expansive west Texas open space environment exacerbates that challenge in terms of community outreach and civic empowerment. Many communities within the MSA lack trust in public institutions due to years of underinvestment and sporadic engagement. This challenge presents an opportunity for the El Paso MSA to establish a climate based civic empowerment framework built to exemplify environmental justice as defined by Justice 40.

**RESPONSIBLE ENTITIES:**

**Lead Organization:**

The El Paso MSA work will be led by the City of El Paso's Office of Climate and Sustainability.

- Point of Contact: Fernando Liano Berjano; berjanofl@elpasotexas.gov; 915-212-1655
- Alternative point of contact: Nicole Alderete-Ferrini; ferrininm@elpasotexas.gov; 915-474-2202

As lead entity, the city will act as the grantee for the CPRG, accountable for fiscal stewardship of planning dollars, coordination of entities and contracting with necessary consultants as indicated within this workplan.

**Coordinating Entities (*as of the publication of this workplan*):**

- City of Socorro,
- Village of Vinton,
- Town of Horizon City,
- Town of Anthony,

- City of San Elizario,
- El Paso County,
- Hudspeth County,
- The Rio Grande Council of Governments
- El Paso Metropolitan Planning Organization

The City of El Paso will lead this collaborative group of entities toward the goal of developing the first Regional Climate Action Plan in service of communities across the expansive El Paso MSA. The coordinating entities are inclusive of regional partners who have stepped forward first, but is only a starting point for what will make up the comprehensive network of communities and stakeholder groups. As the work moves forward, other surrounding municipal governments, tribal entities and public organizations will be invited to engage. (*See Interagency and Intergovernmental Coordination Section*)

It is our intention to approach the planning phase of the CPRG in three key lines of effort: 1) developing technical deliverables (GHG emissions inventory and projections, benefit analysis) 2) engaging with community to gather feedback about priorities, concerns and desired outcomes in their neighborhoods related to climate pollution and 3) follow up on measuring impact and benefit as well as follow through with a consistent presence within affected communities. In order to achieve this the El Paso MSA intends to sub-award and/or contract out specific deliverables. (*See Budget Section for a breakdown*).

**DELIVERABLES DEVELOPMENT PROCESS:**

As a reflection of each of the key lines of effort and their respective deliverables the City of El Paso proposes the following as the basis for coordinated priority planning, comprehensive outreach and public accountability. The overall approach will be incorporated throughout the 4-year term of the grant varying slightly in terms of specific tasks, roles and results for each key deliverable.

**OVERALL INTERAGENCY AND INTERGOVERNMENTAL COORDINATION (IIC):**

The El Paso MSA will establish an institutional/interagency stakeholder framework capable of maintaining transparency, collaboration and accountability in the delivery of outcomes required by CPRG. Consistent communication, clear leadership and ground up accountability make up the basis of our proposed model. The structure is a three-level model driven directly by the community to be defined as follows:

- **Level 1 Community Stakeholders:** This group of stakeholders is representative of the community itself. Level 1 stakeholders are the people of the El Paso MSA whom we serve. Active engagement and on the ground, information gathering in the form of desired outcomes and policy will inform the direction of the work and ultimately guide targeted impact for projects, initiatives and policy measures. Examples of key groups to be included here are Community Based Organizations, Neighborhood Associations, promotoras and individual citizens. Promotoras have been established as an inclusive of a network of organizations whose mission is to provide reliable, timely and accurate information to vulnerable families who have traditionally been more disconnected and have less access to basic needs, including internet access and where Spanish is the predominate language. Level 1 stakeholders will be a key component to the engagement process. It is also an accountability measure for the work.
- **Level 2 Stakeholders:** This group of stakeholders represents entities with a significant effect and interest in management of regional emissions and is inclusive of both public, private and not for profit groups. An initial scan of potential Level 2 stakeholders is inclusive of the electric utility, water utility, TCEQ, regional community foundations, conservation groups and health agencies. In addition to providing access to key data necessary for the development of the GHG inventory and projections, these entities will also assist in defining metrics and co-benefits beyond emissions reduction. Less formalized than the LSC, level 2 stakeholders will be asked to enter into a Memorandum of Understanding in order to codify partnership and responsibility, assuring accountability to our community.

- **Leadership Steering Committee (LSC):** The committee will function as a senior level advisory group charged with guiding the scope of work led by the City of El Paso. The LSC will be comprised of multiple public entities committed through a mutual cooperation agreement. Each entity will assign a point of accountability as an official representative. This Committee will participate in (i) the selection process for consultants procured to support the scope of work, (ii) data collection representative of each entity by region (iii) stewardship of engagement and outreach activities within their region, and (iv) review and comment regarding CPRG deliverables.

**OVERALL PUBLIC AND STAKEHOLDER ENGAGEMENT (PSE):**

The El Paso MSA proposes to establish the ***Paso Del Norte Community Climate Collaborative (PDN C3)***. The collaborative begins with stakeholders, partners and agencies embedded across the geography of the MSA. As described above in the IIC, the City of El Paso will convene multiple entities, organizations, individual subject matter experts and community members for a variety of in-person and virtual engagements. To some extent, traditional outreach tools such as polling, regular emails, phone calls and texts will be utilized to confirm benchmark meeting dates that work for stakeholders so that collectively, key deadlines are met within a timely fashion. However, the El Paso team will also be leveraging a variety of non-traditional tools and methods to reach our community.

The purpose of building a collaborative such as this is to accelerate the work of the El Paso MSA addressing environmental justice and empowering community-driven solutions in overburdened and underserved areas across the region. Utilizing this approach brings about significant opportunity for innovation in addition to building much needed community trust, resulting in equitable and resilient communities.

Identified collaborator groups will be consulted to address any knowledge and data gaps with information specific to each group and to gain access to early information. Feedback provide insight into unidentified community need beyond the goal of emissions reduction. All feedback will be captured and interpreted through a Community Needs Assessment tool established by the City of El Paso in 2015 as a result of the City Resilience Strategy. The tool has subsequently been utilized since then so as to track trending data. The CAN is an excel-based tool used to translate the feedback received during community meetings into a semi-quantitative assessment of the needs.

A key innovation made possible by this grant is the ***Paso Del Norte Climate Fellowship***. Created by the City of El Paso Office of Climate and Sustainability, the fellowship will consist of 27 volunteers from across the region organized in 9 teams of 3 people. Scheduled to launch in March of 2024, it will provide the cornerstone to our community ability to do more than reach people, but rather to empower them from within their own neighborhood. The fellows are planned to deploy on an annual basis as follows:

- Central El Paso County including the City of El Paso: 5 teams, 1 for each planning area within the city limits.
- West El Paso County including Anthony & Vinton: 1 team.
- East El Paso County including San Elizario, Socorro, Horizon City: 2 teams.
- Hudspeth County: 1 team.

Climate Fellow recruitment will begin in the fall of 2023 and will be chosen from a range of high school, undergraduate and graduate students and to the greatest extent possible, representative of the region to which they are assigned. Local school programs such as early college education, the University of Texas at El Paso, Texas Tech University and El Paso Community College represent key partners that will act as a starting point for recruitment. Recent graduates of regional institutions will also be considered. Climate Fellow recruitment, from within their respective communities, 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. Having a community member lead these conversations will empower both the Fellow and the community.

The mission of the fellowship is to work across the partner network leveraging level 2 stakeholders such as Frontera Land Alliance, the El Paso Community Foundation, Eco El Paso, the Community First Coalition and promotora groups. Fellows will be offered specialized training in this type of work as well as in justice, equity, diversity and inclusion efforts. The information gathered during the fellowship program's outreach will be incorporated into the data collection/analysis for the PCAP, CCAP, and Status Report. The City of El Paso alongside the selected Climate Action Consultants will be tasked with incorporating data collection critical to the regional planning analysis into the deliverables of the CPRG.

The following indicate categories that establish the framework for public and stakeholder engagement. These are by no means exhaustive, but rather provide a basis for communication moving forward:

1. **Identifying Communities of Need:** Identifying the region's most vulnerable and underserved populations will be the primary step in creating a robust engagement and outreach plan. Currently, partners affiliated with the Leadership Steering Committee have been selected because of their connection with and knowledge of their own communities. Beyond the LSC, Level 2 stakeholders are deeply embedded within communities and offer a perspective from the boots on the ground. These structures allow for a robust and well-informed perspective of each area of the MSA from a vulnerability standpoint. In addition to the partnerships and knowledge of our community, we anticipate usage of a variety of nationally recognized tools. For example, Climate and Economic Justice Screening Tool: https://screeningtool.geoplatform.gov/en/ , the United States Census and the CDC Social Vulnerability Index.

2. **Stakeholder Engagement:** The El Paso MSA will involve stakeholder groups and the public in the development process by meeting with and engaging in public spaces such as schools, libraries, community recreation centers, faith-based centers and areas of worship. In addition to in person engagement, public outreach will be activated in virtual as well as hybrid models utilizing a unique City of El Paso asset, the Center for Civic Empowerment (CCE). The center is equipped to host up to 150 people in person with dynamic audio/video, multilingual translation and full access for persons of all abilities across the entire territory. The CCE will be the home base for digital outreach and communication for this work.

   Each regional entity will attend at least 1 engagement meeting. While some engagements will be led by LSC entity staff, our team acknowledges that in order to truly engage and ultimately empower, it is trusted community groups that must facilitate interaction. Key engagements will be strategically planned in collaboration with and ultimately facilitated by Level 2 Stakeholder partners such as Neighborhood Associations, Regional Coalitions, Community Organizations and promotora groups. Promotora outreach is inclusive of a network of organizations whose mission is to provide reliable, timely and accurate information to vulnerable families who have traditionally been more disconnected and have less access to basic needs, including internet access and where Spanish is the predominate language. PDN Climate Fellows will play a moderating role in all community outreach. This model has been utilized successfully in underrepresented areas of our region for many years. This is where the PDN C3 model created by the City of El Paso moves well beyond traditional models and reaches the most underrepresented.

3. **Public Engagement Plan:** The basis of public engagement for the El Paso MSA rests on two pillars, the PDN Community Climate Collaborative and the PDN Climate Fellowship. (See Overall PSE) The City of El Paso alongside a consulting team of climate and equity experts will oversee all public engagement across the region. Maintaining a consistent presence within each community, the team will co-lead presentations and information sessions alongside Level 2 Stakeholders. Public engagement planning will be dynamic and responsive to the feedback received throughout the process.

4. **Development Process:** Progressive plan development updates will be made available to the public through both public websites such as the City of El Paso's Office of Climate and Sustainability (OCS) as well as City of El Paso's Social Media

sites. Updates will be made monthly with updated dates to each new post. All past progress notes will be made available on the City of El Paso's (OCS) web page.

In addition to digital posting of plan updates, presentations to partners and organizational leadership across the region will be consistent and collaborative for the duration of the CPRG. These meetings are publicly posted and often digitally streamed and archived for accessibility. However, beyond posting plan updates, re-engagement with Level 1 stakeholders for the duration of the process will be key to assuring benefit to all communities as well as providing public accountability on commitments made early in the process through the finalized plan.

## Key Deliverable #1: Priority Climate Action Plan

**Development Approach:**

The El Paso MSA will produce the following deliverables under its PCAP:

(i) preliminary GHG inventory,

(ii) quantified GHG reduction measures,

(iii) low-income and disadvantaged communities' benefits analysis, and

(iv) review of authority to implement.

The following phases of work will define the production of the PCAP deliverables:

1. **Preliminary Planning and Coordination:** The lead entity will leverage already established regional partnerships, reinforcing already open lines of communication. Beginning with the Leadership Steering Committee, exchange of information regarding existing initiatives, projects and or plans supportive of climate action form the basis for both this workplan and entrance discussions regarding roles and responsibilities among the partners. Alignment of resources as well as expectations across multiple entities including the granting agency, EPA, is core to a strong beginning for this work.

   **Grantor / Lead Entity Alignment Session**

   The City of El Paso invites representatives of the EPA assigned to CPRG in our region to meet with our team in our capacity as Lead Entity with the goal of identifying key points of contact for the both the grantor (EPA) and the grantee (lead entity) as well as establishing a common expectation of deliverables, bringing forward questions posed by the broader collaborative and confirming alignment of objectives, priorities, key deliverables and associated planning activities for the 4 year duration of the grant.

   **Post Grant Award Community Partner Kick Off**

   Following grant award and alignment with the EPA team, the City of El Paso will convene an in-person community partner kick-off inclusive of not only the leadership steering committee, but also level 2 Community Stakeholders in order to introduce the breadth of the work and the currently projected outcomes for our community. This initial meeting will provide opportunity for both LSC entities and level 2 Community stakeholders to provide feedback in terms of regional climate priorities and resources that may have not already been considered. The Kick Off will occur within 45 days of grant award with an intended deliverable summarizing feedback and potential as well as document /s for the various partners and levels of commitment for each.

**Climate Action Consulting Selection and Award**

Following grant award, the City of El Paso will finalize the selection process for Climate Action Planning Professional Services. Procurement activities are intended begin as early as June 2023 in order to be ready to kick off the CPRG Program by late summer 2023 / Early Fall 2023. Consultants will be required to comply with all timelines and deliverables associated with CPRG.

In addition to the climate consulting team, to assure objective equity and inclusion throughout the process, the El Paso MSA has elected to procure an independent justice, equity, diversion and inclusion consultant. (*See Budget and Timeline*)

2. **Data collection:** The development of the PCAP and CCAP rely on a substantial and thorough data gathering effort as well as literature review at the MSA level. The contracted consulting team will, via the City of El Paso, interact with surrounding municipalities, utilities and other community partner agencies with access to relevant data informing this phase of the project. Each partner entity will be responsible for assisting in the data collection phase of the work. That responsibility applies but is not limited to the following three categories:

**GHG emissions data:** For emissions data, the consultants and partners, depending on availability, will collect data in the following order: local, State, and National level-data. Priority will be given to primary data but in some instances secondary data might be necessary to develop the products of the PCAP and CCAP. The team will gather, if available, (a) the existing historic and current GHG inventories available, (b) identify current and projected GHG emissions per sector, (c) economic and population data, current and forecasted, (d) employment data, (e) list of projects with potential to reduce GHG emissions, (g) co-pollutants data, and (f) projects' information on GHG emissions reduction potentials.

As stated in the Program Guidance documentation, EPA's or other Federal sources' data may be used for the development of the GHG emissions inventory[1].

**Planning and Policy Inventory:** Review of existing climate pollution-related projects, studies and planning frameworks: An in-depth review of ongoing and future climate pollution-related activities, existing policy and comprehensive planning works. This will include studies, policies and regulations as well as mitigation and adaptation actions anticipated or currently under development.

As of the writing of this workplan, the planning and policy inventory has already begun. Beginning with the comprehensive inventory conducted in 2018 as a part of the City of El Paso Resilience Strategy, as well as an initial scan of Leadership Steering Committee partners the team has identified key planning documents and previous studies addressing issues related to climate action. Many of them while not named "Climate Action Plan", do in fact address climate related concerns and potential solutions. Currently there are information gaps related to smaller more rural communities. This indicates a need to lean into a comprehensive scan of state and national studies conducted in the area as well as direct interaction with leadership in those communities at the onset of our work.

**Asset Inventory:** An initial list of relevant projects, studies, policies, regulations and development strategies as well as existing financial vehicles and funding sources on regional level will be developed.

This activity will be primarily based on an in-depth data-gathering and literature review of available information as well as collaboration with the local stakeholder network, academic institutions and key regional experts to compile all the required information. Similar to the planning and policy inventory, there are currently information gaps across the territory, to be addressed at the onset of our work.

1 Inventory of U.S. Greenhouse Gas Emissions and Sinks by State; US GHG Reporting Program; National Emissions Inventory.

3. **Analysis and calculations**

    a. **Preliminary GHG inventory:** with the previously collected data, the preliminary GHG emissions inventory will be developed using a nationally recognized methodology.

    It is important to note that occasionally, GHG accounting methodologies used to prepare GHG inventories require primary data that might not be available for some sectors or municipalities; in this case, secondary data at state and/or national level will be utilized. Thus, it is important to review, if necessary, different country-level sources, and, if needed, cross-check the data or cover lack of data with the corresponding national stakeholders throughout the Consultant's national network. Please note all these assumptions and suggestions will be discussed with the EPA during the inception phase.

    b. **Quantified GHG reduction measures:** During the Data Collection phase information on measures would be collected (see above). For the PCAP, a list of priority measures will be put together. This set of measures will have information as contained in CPRG Project Guidance document for Planning. Special emphasis will be given to measures that reduce emissions and pollutants in low-income and disadvantaged communities, evaluating and defining any unexpected negative consequences due to the implementation of the projects (i.e. increased economic burden).

    c. **Low-income and disadvantaged communities' benefits analysis:** Census, CDC's Social Vulnerability Index[2] and CEJST platforms to inform the Low-income and disadvantaged communities' benefits assessment. Data from these tools combined technical information for each prioritized measure will enable a thorough analysis and selection of appropriate indicators for monitoring and evaluation of the projects. Description of the engagement process can be found below under the PCAP Public and Stakeholder section.

    d. **Review of authority to implement:** each GHG reduction measure included in the PCAP will be assessed by the team with regards to its statutory and regulatory requirements. Channels of communication with relevant federal and state agencies will be established as part of this program to address, among other things, any actions needed for implementation of the measures (see below under PCAP Interagency and Intergovernmental Coordination for more information).

**PCAP INTERAGENCY AND INTERGOVERNMENTAL COORDINATION (IIC):**

IIC for the PCAP is focused primarily on exploratory information gathering, trust building and codification of roles and responsibilities. The Information to be gathered includes specific challenges, needs and desired outcomes from the different communities of the El Paso MSA. In order to coordinate the three-level stakeholder groups, the following activities will be carried out:

Identification of key actors: While a robust list of stakeholders has already been identified to participate in the Leadership Steering Committee, outreach to both Level 1 and Level 2 stakeholders will commence upon initiation of the PCAP work. As each partner joins the work, their role regarding development or implementation of the program will be established. A commitment to the outcomes of the CPRG at any level is necessary to assure meaningful participation and long-term program sustainability beyond the grant cycle.

1. **Institutional and operational arrangements:** The process of establishing a singular climate action plan focused on reducing GHG emissions across the territory, creating benefit for underserved communities requires extensive multi-jurisdictional cooperation and commitment. In order to overcome challenges and leverage opportunities presented by the complex political, cultural and socioeconomic conditions of the region and the various institutions, a clear operational structure will be codified

[2] https://www.atsdr.cdc.gov/placeandhealth/svi/index.html

in the three-level structure of the proposed IIC (Leadership Steering Committee, Level 2 Stakeholders and Level 1 Stakeholders)

a. **Operational Planning:** This workplan and the program guidance will serve as the basis of the 4-year operational plan. A draft framework including specific agency roles and responsibilities will be presented for discussion and adoption during the Post Grant Award Community Kick Off. Key deliverables confirmed in that document include: 1) Confirmation of a Point of Accountability 2) Instruction regarding how to utilize and access a shared working cloud drive that will function as the repository for information, documentation and work product and 3) a working project calendar illustrating key project deadlines, community benchmarks and recurring coordination meetings. City of El Paso staff will function as administrators of drive and the project calendar. While in person interaction is preferred, hybrid options will be available given the expansive geographic nature of the MSA.

**b.** **Institutional Agreements**: Interagency agreements will be guided by the structure of the IIC as defined above. Leadership Steering Committee partners will be part of a comprehensive cooperation agreement adopted by each entity. Level 2 stakeholders will be asked to participate in a memorandum of understanding that clearly establishes the responsibilities of that entity to the group. Level 1 stakeholders are the least formal of the three. A statement of community climate priorities will be developed as part of the PCAP. The document will function as a pledge to activate volunteers and provide clarity regarding the path forward.

**PCAP PUBLIC AND STAKEHOLDER ENGAGEMENT (PSE):**

**Climate Fellows will engage with their respective communities**

The PSE processes were described above in detail and lay out the first engagement with level 1 stakeholders and the activation of level 2 ones. During PCAP PSE, the team will be learning and exploring the desired outcomes, benefits and perceptions of climate change and climate action from the communities.

## Key Deliverable #2: Comprehensive Climate Action Plan

**Development Approach:**

El Paso MSA will produce the following deliverables under its CCAP:

(i) GHG inventory,
(ii) GHG emissions Projections,
(iii) GHG reduction targets
(iv) quantified GHG reduction measures
(v) Benefits analysis for the full geographic scope and population covered by the plan,
(vi) low-income and disadvantaged communities' benefits analysis,
(vii) review of authority to implement,
(viii) Intersection with other funding availability, and
(ix) Workforce planning analysis.

It is important to note that the development of the CCAP will be based on the work previously carried out to produce the PCAP. Some deliverables are a continuation of the ones to be developed for the PCAP and some are completely new. The activities described below to produce the above-mentioned deliverables will refer, in some instances, to sections of Key Deliverable #1. The Consultant will, under direct supervision of the LE, lead the development of the CCAP deliverables.

1. **Data collection:** for the CCAP, data will need to be classified by sector, both for emissions and sinks. Sectors to be included in the CCAP are industry, electricity generation and use, transportation, buildings, agriculture, natural and working lands and waste and materials management. Data will be classified by sector and jurisdiction of the MSA.

    a. **GHG emissions data:** see PCAP development approach for a detailed explanation on the data gathering process and sources.

    b. **Review of existing climate pollution-related projects, studies and planning frameworks:** the list of measures identified for the PCAP will be updated. New identified measures will be included in the final list for the CCAP and those projects no longer viable or cancelled will be removed from the list. Again, for the CCAP, measures will be classified by relevant sectors.

    c. **Pollutants and co-benefits data:** co-pollutants data will be gathered for all participating jurisdictions of the MSA. Data will be collected from municipal and counties' environmental services departments; TCEQ and other relevant agencies. Other co-benefits, if applicable and measurable, will be tracked and monitored (i.e. health benefits, reduced commuting time). Unintentional and negative impacts will be pre-identified, if applicable, for each mitigation measure. Mitigation and monitoring plans will be incorporated as part of the Benefit Analysis deliverable.

    d. **Funding research:** on top of alignment with IRA and BIL federal funding, the team will look into other existing funding programs from federal agencies (EPA, DOE, DOI, DOT, FHWA, FTA, FRA, USBR, and EDA), state agencies (SECO, TWDB, TCEQ), the North American Development Bank (NADB), and private sector donors and foundations focusing on climate issues (TxWAC, Texas Water Foundation, Surdna Foundation, Lyda Hill Philanthropies).

    e. **Workforce data:** the team will engage with the regional workforce development agency, Workforce Solutions Borderplex[3], to evaluate workforce needs, gaps and challenges and identify potential solutions region-wide.

2. **Analysis and calculations**

    a. GHG inventory: with the previously collected data and the preliminary GHG emissions inventory carried out for the PCAP, the complete GHG inventory will be developed. Multiple tools and datasets will be considered and agreed upon the MSA partners and the consultants. The proposed accounting methodology is the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories[4]; having been used by most US and international cities, it will allow El Paso MSA to track progress of its mitigation efforts and compare and evaluate measures from other regions and cities. The GPC methodology will allow to categorize emissions by sector as specified in the Program Guidance document. All MSA jurisdictions participating in the program will have a comprehensive breakdown of their GHG emissions by sector.

    The proposed baseline year for GHG emissions is 2019, a pre-Covid19 year with regular trade and commercial activity. If necessary, due to lack of data, 2021 might be considered as a second option. The final baseline year will be agreed upon between the partners, EPA and the selected consultants.

    b. **GHG emissions projections:** two different projection scenarios will be developed for 2030 and 2050. The "business-as-usual' scenario, with no GHG emissions measures implemented, and the "sustainable" scenario where all identified measures are implemented. Sectoral projections will be developed for all sectors included in the GHG

[3] https://borderplexjobs.com/

[4] https://ghgprotocol.org/sites/default/files/ghgp/standards/GHGP_GPC_0.pdf

emissions inventory. Economic and demographic data are essential for the development of this deliverable and will be closely considered during the data collection phase.

c. **GHG reduction targets:** targets will be set for 2030 and 2050. These targets will be agreed upon partners and the community based on the reduction measures identified, economic conditions and what the best is for the region. Targets will be consistent with National and State targets, if applicable.

d. **Quantified GHG reduction measures:** based on the priority list of measures identified for the PCAP, the final and complete list of GHG reduction projects will be put together. Special emphasis will be given to the development of the metrics to track success and to identify funding sources, public and private. Without a robust set of performance metrics and the necessary funding, the future implementation of the measures will be challenging and the proposed GHG reduction targets hard to achieve. Measures identified for the PCAP may not be included in the final list for the CCAP depending on its planning and funding state at that point.

e. **Benefit analysis:** data on co-pollutants reduction will be developed for this section. Collaboration between MSA partners and TCEQ is key for obtaining and analyzing the mitigation effect on co-pollutants. As soon as summer of 2023, the team will engage with the regional office of the TCEQ to start collecting and evaluating data.

f. **Low-income and disadvantaged communities' benefits analysis:** Census, CDC's Social Vulnerability Index and CEJST platforms to inform the Low-income and disadvantaged communities' benefits assessment. Data from these tools combined technical information for each prioritized measure will enable a thorough analysis and selection of appropriate indicators for monitoring and evaluation of the projects. Description of the engagement process can be found below under the PCAP Public and Stakeholder section.

   Concrete data on co-pollutants emissions reductions and other benefits for low-income and disadvantaged communities will be included in the CCAP.

g. **Review of authority to implement:** each GHG reduction measure included in the PCAP will be assessed by the team with regards to its statutory and regulatory requirements. Channels of communication with relevant federal and state agencies will be established as part of this program to address, among other things, any actions needed for implementation of the measures (see below under PCAP Interagency and Intergovernmental Coordination for more information).

h. **Intersection with other funding availability:** Phase II of the CPRG program will be prioritized for funding the identified mitigation measures but other funding sources from IRA and BIL will be monitored by the team. Federal agencies such as DOE, DOT and EDA will monitored as well as state agencies like SECO and TXDOT. Other sources, like the North American Development Bank (NADB), foundations and private organizations will be included in the funding alignment evaluation.

i. **Workforce planning analysis:** a sectoral analysis of possible workforce shortages and needs will be conducted in conjunction with the regional workforce agency, Workforce Solutions Borderplex[5]. The analysis will include existing relevant programs and funding sources, expected shortages, needs and potential solutions for the development of the needed workforce.

5 https://borderplexjobs.com/

Training for the development of GHG emissions inventories and projections, including sections on data collection, calculation and analysis, will be scheduled and budgeted for the selected consultants to train staff from all members of the Steering Committee to be able to carry out this work efficiently, accurately and independently in the future.

**CCAP INTERAGENCY AND INTERGOVERNMENTAL COORDINATION (IIC):**

All protocols and processes explained under the PCAP section for IIC will be utilized for the CCAP but there are specific actions that will be taken to ensure the correct development of the CCAP IIC. Information gathered from partners under the PCAP will be confirmed, verified, and updated if necessary. Refining of data and expanding the analysis of the climate measures will be included in this CCAP IIC.

The LSE, alongside the consultants, will closely track alignment with new or modified programs and actions at the state and federal level. This ongoing awareness of policy and/or funding changes will ensure an optimal development of climate measures in the region.

**CCAP PUBLIC AND STAKEHOLDER ENGAGEMENT (PSE):**

During the CCAP PSE the fellows work will adapt to the needs of the communities, looking for concrete feedback on perceptions, goals, benefits and outcomes from the community and how to collaboratively translate those into climate action and meaningful initiatives that serve the community. Level 1 and 2 stakeholders will support, alongside the consultants and the City of El Paso, all activities necessary to gather community input and strengthen the climate work in the region.

## Key Deliverable #3: Status Report

**Development Approach:**

In the summer-fall of 2027 the Status report will be submitted to the EPA. The scope of this report will include the items described below. An internal report will be produced by Fall 2026 in order to be ready to comply with the final timeline of the program a year later.

a. **Quantified GHG reduction measures:** Measures identified under the CCAP will be monitored and evaluated. The key indicator of this phase will be the state of implementation of the measure: finalized, in-progress, rejected/not-implemented. In case of a measure in development, next implementation steps, actions and challenges will be defined on the status report.

b. **Updated Benefits Analysis:** co-pollutants updated data will be included in the report, including information of co-benefits as defined under the CCAP and unintended consequences of the implementation of the measures/CCAP.

c. **Updated Low-Income and Disadvantaged Communities Benefits Analysis:** identical analysis as the one conducted for the b/ section above.

d. **Updated Review of Authority to Implement:** newly approved legislation and regulations will be identified, if applicable, under the review of authority section.

e. **Update review of Intersection with Other Funding Availability:** updated information on federal, state and private funding available after the submission of the CCAP in 2025.

f. **Updated Workforce Planning Analysis:** in conjunction with the regional Workforce entity, workforce development, challenges and needs will be updated.

g. **Next Steps/Future Budget/Staffing Needs:** a detailed analysis of necessary steps for the region to continue progress towards its GHG goals and climate action will be developed. Staffing and budget needs will be defined as well as new funding sources and regulations. This section will build upon the CCAP and other relevant planning efforts for the region as of 2027.

Updates for the GHG inventory and GHG emissions projections will be developed if possible for the fall of 2027. These updates are may not be produced depending on data availability and relevance at that point for the region. Staff will be trained to use the selected software or tool for GHG calculations. This will ensure the correct tracking of the measures and projections not only for the final two years of the project (2026 and 2027) but in the long term as well. This training will be extended to regional partners of the El Paso MSA.

**STATUS REPORT INTERAGENCY AND INTERGOVERNMENTAL COORDINATION (IIC):**

Specific meetings of the Steering Committee will be scheduled as soon as Spring 2026 to coordinate all necessary tasks and activities for the development of the Status report. Meeting will be held quarterly until the submission of such report. The establishment of the PDN C3 will enable the regional support for climate work beyond the development of the CCAP in an ongoing way. An intense 4-year collaborative effort between regional entities should be the initial step towards a continued and coordinated regional climate collaboration.

**STATUS REPORT PUBLIC AND STAKEHOLDER ENGAGEMENT (PSE):**

Paso Del Norte Climate Fellows will co-lead, alongside City of El Paso staff and consultants, the stakeholder and community engagement effort, identifying next steps and discuss potential funding opportunities and neighborhood scale projects with their respective communities.

All status updates regarding regional climate initiatives will be made available to the public through both public websites such as the City of El Paso's Office of Climate and Sustainability (OCS) web page as well as partner Social Media sites. Updates will be made monthly with updated dates to each new post. All past progress notes will be made available on the City of El Paso's (OCS) web page.

Ongoing discussions including informational in-person sessions and updates will continue with each community beyond the CPRG grant period. Climate Fellows, Level 1 and Level 2 Stakeholders will be invited back for these engagement sessions on a voluntary basis. These will serve as next steps to be taken within their local governments.

**ENVIRONMENTAL RESULTS, OUTPUTS, AND OUTCOMES**

The following are representative of initial discussions with the PDN C3 and previous planning efforts. A large part of the effort in developing the PCAP will be to better understand what outcomes the community is seeking with regard to climate action. Identifying and defining what is important at the household, neighborhood and business level will be transformative for the prioritization the CCAP. While the initial outputs and outcomes may remain, the community will ultimately drive additional results and metrics.

**Outputs**

- Priority Climate Action Plan (PCAP), March 1, 2024.
- Comprehensive Climate Action Plan (CCAP) Summer-Fall 2025
- Status Report, Summer-Fall 2027
- Fellowship Established and Number of Fellows successfully completing the program
- Four (4) Climate Innovation Teams events attended, Summer-Fall 2027

- Municipal staff trained on the selected methodology to calculate GHG emissions and emissions projections.
- Demographics of Engaged Residents (Focus on youth, seniors and low-moderate income)
- Awareness of community programming + regional climate change impacts
- Number of Community Partners engaged and connected with climate initiatives
- Ratio of number of events to number of community members in attendance and engaged
- Overall reach of climate communications (including social media)

**Outcomes**

- Tons of pollution (GHG and co-pollutants) reduced over the lifetime by the measures identified.
- Tons of pollution (GHG and co-pollutants) reduced in low-income and disadvantaged communities.
- Tons of pollution (GHG and co-pollutants) reduced annually.
- Enhanced community engagement and participation on climate related activities.
- Improved staff capacity across the MSA to address the impacts of climate change.
- Creation of jobs related to the identified measures.
- Impact on climate related health concerns within our region
- Outreach outcomes
    - Establish consistent community presence
    - Establish long-term regional collaboration
    - Build community trust

**Performance metrics for outputs and outcomes**

The metrics necessary to track success of the implementation of the project and achievement of the outputs and outcomes will be developed before the submission of the first quarterly report. An easy-to-use tool (i.e. excel based tool) will be developed to track progress of:

- Budget: expenditures and purchases.
- Deliverables as defined for the PCAP, CCAP and Status Report
- Outputs and outcomes

The tracking and reporting tool will be updated, at least, quarterly before the submission of the reports to the EPA.

**SCHEDULE:**

The proposed schedule will be uploaded as a separate file.

**REPORTING:**

As described in Section 12.6 of the program guidance, quarterly reporting will be performed. The first report will be submitted 4 months after the signing of the agreement with EPA. These reports will cover work status, work progress, difficulties encountered, financial expenditures, preliminary data results if applicable, anticipated future activities, and any changes of key personnel. The development of these reports is included in the schedule and accounted for in the budget.

**BUDGET:**

The proposed budget will be uploaded as a separate file.

**CLIMATE INNOVATION TEAMS:**

The El Paso MSA is interested in participating in the Climate Innovation Teams listed below. Travel to annual convenings has been included in the workplan budget for four (4) staff members. Attendance to the CIT convenings will strengthen the project's deliverables by incorporating lessons learned and best practices from all over the nation into the El Paso MSA Climate Plan.

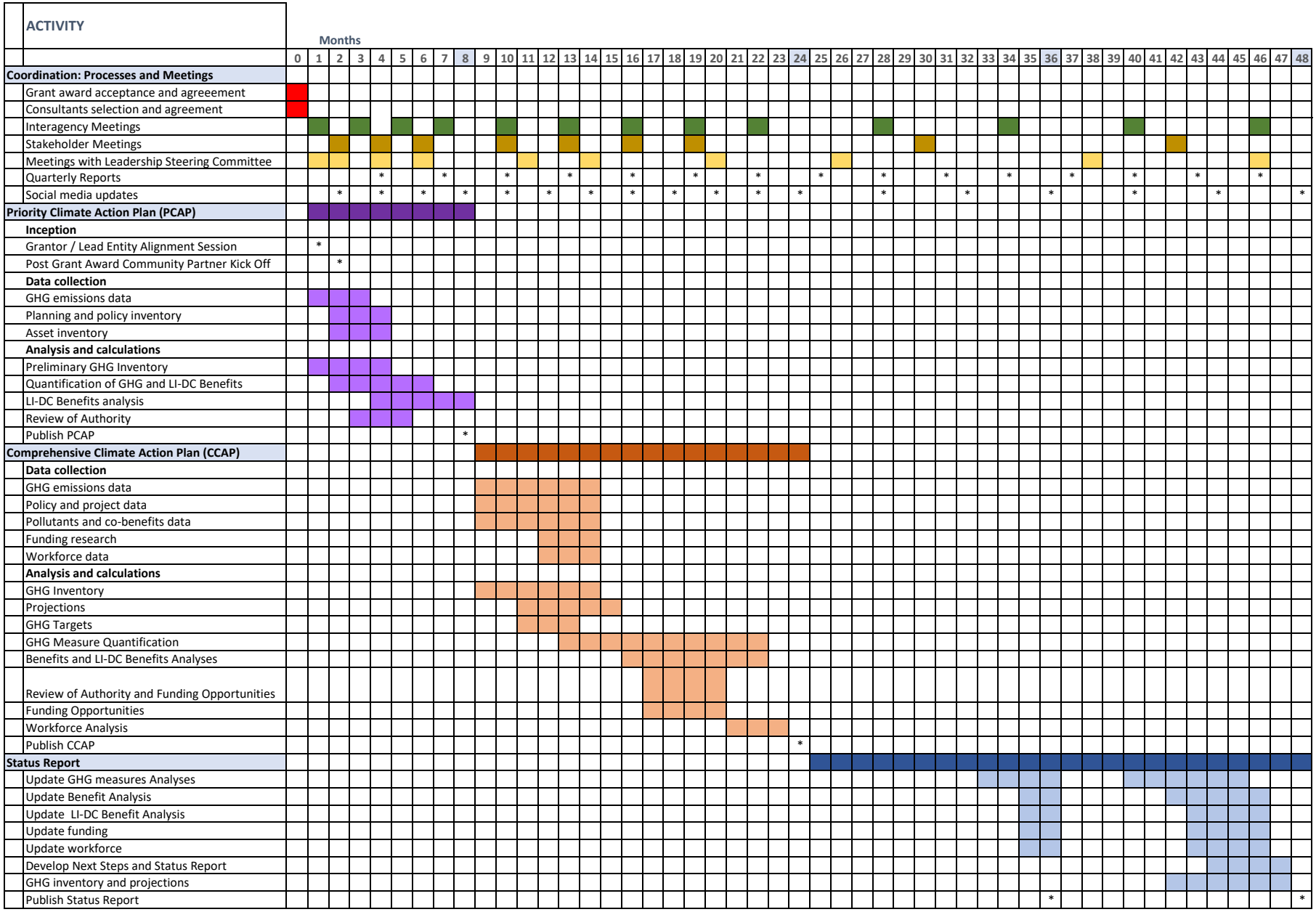
- Estimating emission reductions and program benefits in disadvantaged communities.
- Sector-based strategies.
- Workforce development.
- Leveraging funding from other federal, state, and private sector sources.

The El Paso MSA would be interested in exploring the option of creating a CIT focused on Climate Action for interjurisdictional territories that cross either state lines, international boundaries or both.

| | Year 1 | Year 2 | Year 3 | Year 4 | | Total |
|---|---|---|---|---|---|---|
| **Personnel** | | | | | | |
| | | | | | | $ - |
| | | | | | | $ - |
| TOTAL PERSONNEL | $ - | $ - | $ - | $ - | | $ - |
| **Fringe Benefits** | | | | | | |
| | | | | | | $ - |
| | | | | | | $ - |
| TOTAL FRINGE BENEFITS | $ - | $ - | $ - | $ - | | $ - |
| **Travel** | | | | | | |
| Travel for 4 staff to attend Climate Innovation Team Training Workhop | | $ - | | $ - | | $ - |
| Airfare: 4 @ $800 round trip | $ 3,200 | $ 3,200 | $ 3,200 | $ 3,200 | | $ 12,800 |
| Per Diem: 4 staff X 4 days @ $60/day | $ 960 | $ 960 | $ 960 | $ 960 | | $ 3,840 |
| Hotel: 4 staff X 3 nights @ $250/night | $ 3,000 | $ 3,000 | $ 3,000 | $ 3,000 | | $ 12,000 |
| Local Mileage | | | | | | $ - |
| Outreach, 100 mi/mo @ $.65/mi x 12 mo | $ 780 | $ 780 | $ 780 | $ 780 | | $ 3,120 |
| Fellowship milleage 1225 mi/mo @ $.65/mi x 12 mo | $ 9,555 | $ 9,555 | $ 9,555 | $ 9,555 | | $ 38,220 |
| TOTAL TRAVEL | $ 17,495 | $ 17,495 | $ 17,495 | $ 17,495 | | $ 69,980 |
| **Equipment** | | | | | | |
| | | | | | | $ - |
| | | | | | | $ - |
| TOTAL EQUIPMENT | $ - | $ - | $ - | $ - | | $ - |
| **Supplies** | | | | | | |
| Office and related supplies to support outreach meetings, trainings, etc | $ 10,000 | $ 10,180 | $ 10,000 | $ 10,000 | | $ 40,180 |
| Fellowship program supplies | $ 10,000 | $ 10,000 | $ 7,420 | $ 7,420 | | $ 34,840 |
| TOTAL SUPPLIES | $ 20,000 | $ 20,180 | $ 17,420 | $ 17,420 | | $ 75,020 |
| **Contractual** | | | | | | |
| Facilitation, Interpretation and Translation Services for Stakeholder Meetings | $ 20,000 | $ 20,000 | $ 7,500 | $ 7,500 | | $ 55,000 |
| Analytical and Modeling Services | $ 90,000 | $ 90,000 | $ 25,000 | $ 25,000 | | $ 230,000 |
| TOTAL CONTRACTUAL | $ 110,000 | $ 110,000 | $ 32,500 | $ 32,500 | | $ 285,000 |
| **Other** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Fellowship program $625/mo*12mo*27 fellows | $ 202,500 | $ 202,500 | | | | $ 405,000 |
| GHG calculation software | | | $ 7,500 | $ 7,500 | | $ 15,000 |
| Workforce analysis | $ 20,000 | $ 60,000 | $ 10,000 | $ 10,000 | | $ 100,000 |
| Equity Auditor | $ 25,000 | $ 25,000 | | | | $ 50,000 |
| TOTAL OTHER | $ 247,500 | $ 287,500 | $ 17,500 | $ 17,500 | | $ 570,000 |
| **Indirect Charges** | | | | | | |
| Federal Negotiated Indirect Cost Rate = 0% | $ - | $ - | $ - | $ - | | $ - |
| (Indirect Rate x Personnel = Indirect Costs) | | | | | | $ - |
| TOTAL INDIRECT | $ - | $ - | $ - | $ - | | $ - |
| TOTAL FUNDING | $ 394,995 | $ 435,175 | $ 84,915 | $ 84,915 | | $ 1,000,000 |

El Paso MSA Climate Planning
Timeline and Milestones



Attachment B

PROPOSAL

AECOM

# Climate Action Plan

RFP # 2023-0670R
City of El Paso

September 13, 2023

Delivering a better world

September 13, 2023

**City of El Paso**
Rhonda N. Easter
Purchasing & Strategic Sourcing
City Hall, 1st Floor
300 N Campbell Street, El Paso, TX 79901
easterrn@elpasotexas.gov

**RE: Response to Request for Proposal for the 2023-0670R Climate Action Plan**

Dear Members of the Selection Committee,

AECOM Technical Services, Inc. (AECOM) is pleased to submit this proposal in response to the City of El Paso (City) Request for Proposals (RFP) to develop a Climate Action Plan. We are excited to support the City in creating a regional plan for the El Paso Metropolitan Statistical Area (MSA) that provides a framework for both reducing greenhouse gas (GHG) emissions, and preparing the region to be resilient to climate crises including air pollution, extreme heat, drought, and flash floods. Our team will assist El Paso in developing a plan that carefully considers the region's physical and social vulnerabilities and uniquely binational infrastructure and economy.

We have assembled a team of experts in climate mitigation, adaptation, stakeholder and community engagement, and funding and implementation to support the City of El Paso in navigating this complex process. Our team is led by the AECOM's El Paso office in partnership with our national Climate Advisory Services practice. Team members Barracuda Public Relations (Barracuda) and Quantum Consultants (Quantum) bring extensive experience conducting engagement and resilience planning (respectively) in El Paso. Our team also includes ICLEI Local Governments for Sustainability USA (ICLEI), a national leader in GHG inventories and sustainability planning.

**Our team will leverage the following capabilities to complete the scope of work delineated in the RFP:**
**Local presence and understanding.** Project Manager Gilbert Andujo, who will serve as the primary point of contact for this proposal, is based in El Paso and led the Rio Grande Council of Governments' Regional Flood Plan. Project Executive Steven Duong, who has responsibility for overseeing the contract, has worked across Texas on adaptation and resiliency projects including for the City of Dallas, Texas General Land Office, and Texas Department of Transportation. Our AECOM team also brings extensive experience working with the City of El Paso, El Paso Metropolitan Planning Organization, and cities and counties throughout the region.

**Pioneering experience in climate action planning.** Our national Climate Advisory Services team has supported local governments in climate planning for 15 years and have helped more than 80 cities and counties to define climate visions, goals, targets, and strategies that align with their priorities. We bring in-depth experience in GHG quantification, analysis, and strategy development, as well as expertise in analyzing and planning for urban heat, drought, and flooding.

**Commitment to engaging disadvantaged communities who are most impacted by climate change.** Our team's work on the City of Dallas' Comprehensive Environmental and Climate Action Plan (CECAP) through which we engaged 2,000 residents from every zip code of the City of Dallas, is an example of how we center equity and inclusion at the heart of our approach to the planning process.

We look forward to the opportunity to further discuss this exciting project with you and your regional partners.

Sincerely,

Victor De la Garza, PE
Vice President, Authorized Signatory
915-701-8796
victor.delagarza@aecom.com

Gilbert Andujo, PE
Project Manager and Primary Point of Contact
915-478-2770
gilbert.andujo@aecom.com

# Factor A

## Project Understanding, Approach, and Preliminary Work Plans

FACTOR A

# Project Understanding

The El Paso MSA has the opportunity to demonstrate incredible leadership by developing an ambitious and equitable Climate Action Plan (CAP). Recent flood and heat events, as well as the COVID-19 pandemic and the region's ongoing challenges with air pollution, highlight the region's vulnerability to climate change and other shocks and stressors. These events disproportionately affect the region's most vulnerable residents, strain the stormwater infrastructure and electric grid, and test the limits of regional emergency response capabilities. Addressing these concerns is critical as climate change continues to affect the frequency and severity of extreme weather events in the region. Solutions to these challenges must consider improving the physical health of El Pasoans as well as the City's social and economic well-being.

**Impact of climate change on the El Paso region.** El Paso is in the middle of a 20-year megadrought, and high temperatures have impacted regional access to water. In the last decade the Rio Grande water supply is declining and less reliable, and this trend is likely to increase in the future. The region depends on the Rio Grande to supply water for drinking, landscaping, and agriculture. River water scarcity places a great reliance on groundwater supply. To make up for river losses, both cities and agricultural operations consistently pump more than the water system can recharge over decades.

Over the last 100 years, triple-digit temperatures have become more frequent. Urban areas in the region experience Urban Heat Island (UHI) effect, exacerbated by a low tree canopy, particularly in disadvantaged communities. Electric utility companies are increasingly struggling to meet energy demands during peak summer leading to black and brown outs.

The region is also experiencing more intense rainfall that resulted in major flash flood events in 2006 and 2021. Lack of updated zoning codes and regulations for design standards related to drainage, impervious surface, and building orientation – particularly extra-territorial jurisdictions – further aggravates the impact to communities in the form of property damage.

**Communities in the El Paso region need climate action.** The MSA has a large low-income population, undocumented people, colonias, tribal nations, and people of color. According to Climate Mapping for Resilience and Adaptation (CMRA) tool, nearly 65% of El Paso County and 100% of Hudspeth County are considered Justice40 disadvantaged communities. 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. This indicates that **residents in the El Paso MSA region are likely to face greater challenges in accessing resources, preparing for climate hazards, and recovering from disasters than the rest of the U.S.**

Adding to the challenge, many El Pasoans 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, making social mobility particularly challenging.

**Binational infrastructure and economy.** The El Paso MSA is a part of a larger Borderplex (El Paso-Las Cruces-Juárez). In 2021, the Borderplex region held the distinction of being the fifth-largest employment center in North America when it came to manufacturing. This region played a crucial role in facilitating trade with Mexico, contributing to 17% of the total trade volume and boasts an exceptional manufacturing sector.

The region continues to face serious air quality challenges and has a history of being designated as non-attainment by Environmental Protection Agency (EPA) for air pollutants such as carbon monoxide, ozone, and particulate matter. This is due in part to the large number of trucks that circulate between Ciudad Juárez and El Paso. The El Paso-Ciudad Juárez region is served by three major commercial truck ports of entry and the El Paso-Ciudad Juárez international border crossing is one of the busiest in the world. **It is integral to coordinate with surrounding regions to collectively work towards meeting climate action goals.**

Overall, this CAP effort will build upon previous and ongoing initiatives in the region, identify gaps, and engage stakeholders to understand where there are the best opportunities for the region to make a significant impact in reducing its climate impacts while building resilient systems and programs, and promoting equity in all aspects of work.

# CHALLENGES

## INFRASTRUCTURE

**Transportation Networks**
92% of residents commute by car

**Building the Workforce**
Attracting young professionals

## COMMUNITY

**Challenges of a Border Metroplex**
Border communities have issues with air quality, water scarcity, and degradation of natural resources

**Human Health & Preventable Disease**
There is a high level of preventable disease directly affected by the surrounding physical environment

**Poverty & Food Access**
Lots of neighborhoods "have been informally established, lack critical infrastructure and there are food desserts"

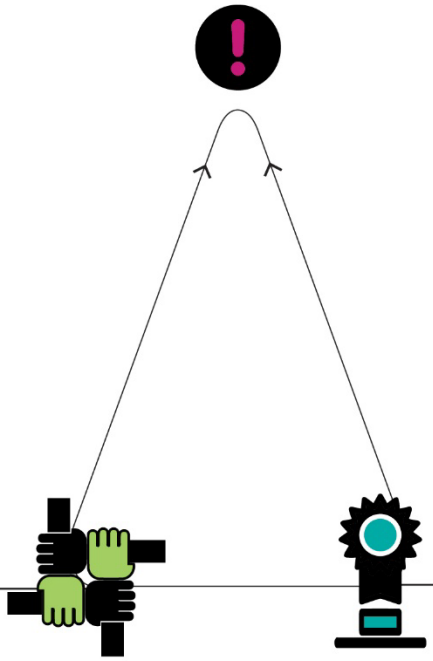
## CLIMATE

**Flash Flooding**
There has been increased frequency and severity of flooding in recent years

**Drought**
El Paso depends on Rio Grande River for 50% of water supply

**Energy Affordability**
Approximately 30% of household income is spent on electricity alone

**Extreme Heat**
Increase strain on electrical grid due to extreme heat



## CITY INITIATIVES

**SMART City Initiative**

**Plan El Paso**

**US Mexico Border Heat Health Partnership**

**Strategic Planning Vision**

**100RC Partnership**

## AECOM TEAM EXPERIENCE

**Regional Flood Plan**

**100 RC**

**Texas GLO**

**Dallas CECAP**

**Long Beach CAAP**

# Project Approach

The AECOM team will work in close collaboration with the City and the stakeholders in the MSA to develop a comprehensive regional CAP that addresses both mitigation and adaptation. We will support public and intergovernmental engagement, and work closely with the City's diversity, equity, and inclusion (DEI) consultant to integrate equity considerations throughout the planning process. Critical deliverables will include the Priority Climate Action Plan (PCAP), Comprehensive Climate Action Plan (CCAP), and Status Report in accordance with EPA's Climate Pollution Reduction Grant (CPRG) program. In addition, we will conduct a risk and vulnerability assessment, develop adaptation strategies, and establish outputs, outcomes, performance metrics, a public-facing dashboard, and annual reporting template for the City.

Building on the technical analysis, the AECOM team will develop a clear, concise CAP that summarizes the community engagement process and technical analysis and identifies key strategies for implementation. The CAP will be a bilingual and visually stimulating document written in an engaging style accessible to members of the public while still retaining its utility as a planning tool by the region.

Overall, our approach is designed to:

- Establish excellent communication to allow the consultant and the City to work together as an integrated team and successfully deliver the CAP.
- Engage with disadvantaged communities who are most impacted by climate change, including El Paso's strong grassroot environmental justice movement, the regional *promotoras* network, local community-based organizations, and neighborhood associations.
- Prioritize equity throughout the process, including by coordinating with the City's independent DEI consultant at the start of every task, identifying the equity implications of each GHG measure or adaptation strategy selected, and focusing on strategies that contribute to a just transition for fossil fuel workers.
- Position the City and partner agencies for EPA CPRG funding in early 2024 by identifying implementation-ready projects for the PCAP. AECOM is carefully tracking the EPA guidance on the CPRG program and will align our methodologies with EPA requirements.
- Provide consistency and coordination in approach between the CPRG deliverables and adaptation plan, so that the final CAP can comprehensively capture all elements of the project.

# Preliminary Workplan

This section describes our proposed workplan. We have uploaded a corresponding timeline and detailed deliverable schedule as part of the CPRG Work Plan document through IonWave. For each draft deliverable, we assume that the City will coordinate review and provide one consolidated set of comments for the AECOM team to address in the final version. If selected for this project, we look forward to negotiating a refined scope of work and list of deliverables with the City of El Paso in alignment with the proposed fee.

## TASK 0. PROJECT MANAGEMENT

AECOM will organize a kick-off call with the City to introduce core team members, confirm project goals, review the project scope and proposed schedule, and discuss communication protocols. Following the kick-off, we propose holding monthly project management calls with the City team. These meetings will be an opportunity to debrief on stakeholder and public engagement and intergovernmental coordination, review and coordinate progress on deliverables, and discuss upcoming steps. Additional project team meetings to collaborate on individual tasks will be schedule on an as-needed basis.

### Task 0 Deliverables

- Organize and facilitate one one-hour virtual project team kick-off meeting, including meeting agenda, presentation, and minutes (i.e., bulleted email summary of decisions and next step items).
- Host virtual 30-minute bi-weekly project check-in meetings during PCAP and CCAP development, including meeting agendas and minutes.
- Host virtual 30-minute monthly project check-in meetings during Status Report development, including meting agendas and minutes.
- Monthly invoices and progress reports.

### Task 0 Assumptions

- Project planning, kickoff, and check-in meetings will be virtual; AECOM can provide Microsoft Teams invitations or can use an alternative virtual meeting platform provided by the City team.
- Virtual project check-in meetings will be up to 30 minutes long and will include AECOM Project Manager, Deputy Project Manager, with Project Director and/or technical staff participating on an as-needed basis.

## TASK 1. EQUITY STRATEGIES

While climate change affects everyone, we understand that not everyone is affected equally. Disadvantaged communities including low-income families,

undocumented individuals, communities living in colonias, tribal nations, Latino, Black, and people of color, children and elderly populations are most impacted. Yet they have the least means to adapt and are often underrepresented in planning processes. A 'just transition' to climate change is one where no person, neighborhood, sector, or community is left behind in the shift away from fossil fuels. Climate adaptation and mitigation solutions have the potential to address economic, health, and social inequities and this task will leverage these investments to maximize benefits and prioritize community members with the greatest needs.

This task will be integrated throughout other tasks to center community perspectives in a transparent decision-making process and elevate actions that can result in equitable outcomes. Working alongside the independent DEI consultant hired by the City, we will develop equity strategies to embed into the engagement and outreach process and plan recommendations. While the specifics of this approach will be defined in partnership with this consultant, we will utilize the following considerations to guide the development of the framework and plan, based on our experience supporting similar efforts.

*Equitable engagement and outreach:*
- Being transparent and building trust between the community and government.
- Identifying key communities to prioritize outreach and engagement.
- Offering Spanish translation as described throughout the tasks below.

*Evaluating equity implications of PCAP, CCAP, and adaptation strategies:*
This includes answering the following questions
- Do the benefits of this action prioritize those with the greatest need/address existing disparities?
- Does this action improve health and quality of life?
- Could this action increase access to jobs, housing, healthy food, transit?

*Monitoring progress in meeting equity goals over time:*
- Identifying performance metrics to understand benefits to specific populations over time.

**Task 1 Deliverables**
- Bulleted lists of equity strategies that will be embedded in the technical work at the start of each technical task (Task 4 – PCAP, Task 5 – CCAP, Task 6 – Status Report, Task 7 – Risk and Vulnerability Assessment, Task 8 – Adaptation Strategies, Task 9 – Outputs, Outcomes, and Performance Metrics, and Task 10 Final Climate Action Plan).
- One two-hour coordination/brainstorming call with the City and the DEI consultant to integrate equity strategies into the Public and Stakeholder Engagement Plan.
- Seven two-hour coordination/brainstorming calls with the City and the DEI consultant to embed equity in each technical task.

**Task 1 Assumption**
- AECOM team will coordinate in this task with the independent DEI consultant hired by the City.

## TASK 2. PUBLIC AND STAKEHOLDER ENGAGEMENT

Barracuda will lead public and stakeholder engagement, working closely with AECOM and the City, and incorporating input from governmental/agency stakeholders and the DEI advisor.

### TASK 2.1. PUBLIC AND STAKEHOLDER ENGAGEMENT PLAN

Working closely with the City and the rest of the AECOM team, Barracuda will create a Public and Stakeholder Engagement Plan that enables strong representation from low-income and disadvantaged communities and individuals with lived experience of injustice. Barracuda has built trusted partnerships throughout the El Paso MSA, and we have up-to-date contact information for the stakeholder groups outlined in the City's CPRG workplan. We will provide a Public and Stakeholder Engagement Plan that meet the City's goals of producing the required CPRG deliverables, as well as delivering a Climate Action Plan for the region that addresses both GHG mitigation and climate adaptation strategies.

The Public and Stakeholder Engagement Plan will outline a framework for engagement, outreach, and a timeline to engage with:

- **Leadership Steering Committee:** A senior-level advisory group comprising multiple public entities.
- **Paso Del Norte Community Climate Collaborative:** Stakeholders, partners, and agencies embedded across the MSA.
- **Level 1 Stakeholders:** Community members, community-based organizations (CBOs), and neighborhood associations.
- **Level 2 Stakeholders:** Regional organization (e.g., electric utility, water utility, Texas Commission on Environmental Quality (TCEQ), regional community foundations, conservation groups, health agencies).
- **Paso Del Norte Climate Fellows:** Twenty-seven student volunteers from across the region, to be organized, recruited, and deployed by the El Paso Office of Climate and Sustainability.

We propose to prioritize our public outreach efforts on the Level I Community Stakeholder groups, with the goal of actively bringing community members, CBOs, and neighborhood associations into the process, helping them build a sense of ownership of the project, and establishing/restoring community trust.

Barracuda Public Relations' institutional knowledge will assist in developing a Public and Stakeholder Engagement Plan that will leverage tools such as Climate and Economic Justice Screening Tool (CJEST), the United States Census and the CDC Social Vulnerability Index to identify underserved or overburdened communities to prioritize. We will work with the Leadership Steering Committee, Paso Del Norte Community Climate Collaborative, and Level 2 stakeholders to identify CBOs and other key community members to engage in the process.

### Task 2.1 Deliverable

- Draft and final Public and Stakeholder Engagement Plan.

### Task 2.1 Assumption

- City will share the draft plan with the DEI consultant, Leadership Steering Committee, Paso Del Norte Community Climate Collaborative, and other key stakeholders for their review and provide one round of consolidated feedback.

## TASK 2.2. ENGAGEMENT EFFORTS

We are prepared to help the City gather stakeholder information, facilitate meetings, and document meeting minutes and action items. Our public engagement strategy is multifaceted and involves data collection, community engagement, benchmarking, and reporting outcomes.

- **Public engagement events:** After developing the Public and Stakeholder Engagement Plan, we will facilitate six in-person public engagement events and three virtual events. Barracuda will provide a Spanish translator for all nine events.
- **Climate empowerment meetings with *promotoras*:** Engaging with El Paso's *promotoras* is necessary to connect with vulnerable families who have traditionally been more disconnected and have less access to basic needs, including households that lack internet access and for whom Spanish is the main language. We will facilitate 14 smaller, bilingual meetings in these areas. We assume one member of our team will facilitate these meetings, supported by Climate Fellows. Barracuda have extensive experience in working with our local *promotora* networks through our outreach work during the COVID-19 pandemic, where our focus was to vaccinate people in El Paso County's most vulnerable areas.
- **Bilingual interactive online surveys:** We will host two surveys in English and Spanish on an online interactive public outreach tool, such as Social Pinpoint. This tool allows users to provide feedback on their own time.

Barracuda will organize and summarize data collected from the engagement and provide to the project team to help inform PCAP, CCAP, and adaptation plan development. Additionally, we will encourage stakeholders and fellowship members to conduct meetings-in-a-box (described below in Task 2.3) in communities or neighborhoods that show interest in learning more.


To communicate topics related to climate change, mitigation, and adaptation, we will include interactive culturally relevant meeting activities, such as:

- **Beginning meetings with a "Rompe Hielo,"** where we establish awareness of our individual contributions to climate change by beginning with an interactive personal carbon footprint activity.
- **Gamifying the conversation with "Climate Loteria,"** where familiar icons/practices (e.g., La Original: a grandmother with a mercado bag waiting for public transportation, or Los Leftovers: a plastic butter container full of beans) are used to gather information on community priority areas while engaging in an activity that is fun and familiar.

### Task 2.2 Deliverables

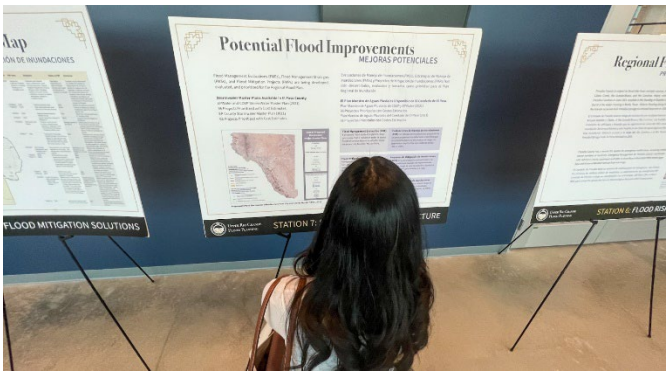
- Facilitate in-person, prepare materials and meeting summaries for six in-person public engagement meetings.
- Facilitate, prepare materials and meeting summaries for three virtual public engagement meetings.

- Train and prepare materials for climate fellows and city staff to attend 14 Climate Empowerment meetings in hard-to-reach areas (one representative from Barracuda attends and prepares meeting summaries/notes).
- Create, distribute, and analyze two bilingual surveys.

### Task 2.2 Assumptions

- City will support with meeting logistics such as securing venues for the in-person meetings and outreach to promote the events.
- Four people from the AECOM team will attend each of the six in-person public meetings.
- Four people from the AECOM team will attend each of the three virtual public meetings.
- One bilingual consultant team member will be present at all nine public meetings.
- The consultant team will print poster boards for the in-person meetings and provide supplies and snacks/ refreshments.

*Figure 1. Upper Rio Grande Regional Flood Plan Open House*




## TASK 2.3. OUTREACH STRATEGIES

The success of Task 2.2 engagement initiatives depends on attracting diverse representation from community members, CBOs, and neighborhood association representatives to attend events and respond to surveys. Barracuda will use the following strategies to raise awareness of the Task 2.2 initiatives:

- **Outreach through local *promotora* networks:** We know that communicating with vulnerable communities often requires us going door-to-door and by intercepting them in community hub areas, such as supermarkets and public transportation. We will leverage our connections with the *promotoras* to spread the word about the plan and encourage participation in public events and surveys.
- **Create a 'meeting-in-a-box' kit:** We will create an interactive meeting-in-a-box kit for the Paso del Norte Community Climate Collaborative, the Paso del Norte Climate fellows, neighborhood associations and other community leaders, to amplify the message and collect valuable information from constituents throughout the MSA.
- **Empower Paso Del Norte Climate Fellows:** We will conduct two in-person training sessions with the Climate Fellows on how they can use the meeting-in-a-box kit to run smaller Climate Empowerment meetings in their neighborhoods. We will also conduct two trainings with the Climate Fellows to deploy them to administer intercept surveys in areas with low response rates.
- **Social Media Strategy:** Barracuda is the first agency in Texas to be certified by the National Institute of Social Media. We plan to create a social media strategy that takes into consideration our bilingual audience and is supported by goals to measure the strategy's effectiveness. If permitted, we propose using this opportunity to create and build the social media presence and e-newsletter subscription list of the Office of Climate and Sustainability, as well as to build a community that supports and promotes these goals. The social media strategy will be developed with a holistic mindset aimed at creating a community excited for sustainability, where they can see how to make a difference through our weekly Climate Tips and Reduce Your Carbon Footprint campaign and overall educational awareness. We believe our strategy will set us apart by moving away from being a transactional account used solely to promote meetings and information on the PCAP and CCAP process and will instead create an authentic identity that encourages public participation, communicates progress, is transparent, inclusive, and committed to creating an actionable CAP for the El Paso MSA.

### Task 2.3 Deliverables

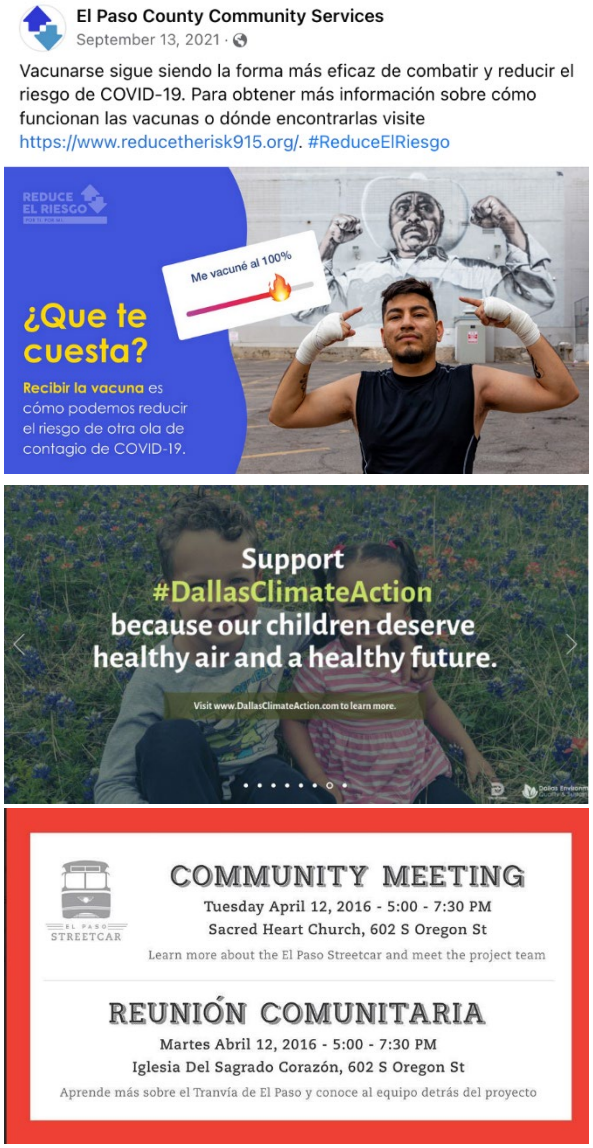
- Draft and final material for 'meeting-in-a-box' kit.
- Eighteen bilingual social media posts, plus additional (approximately 8) paid social media ads to promote surveys and public meetings.

- Two two-hour in-person training sessions with Climate Fellows on engaging community members through the surveys in areas with low response rates.
- Two two-hour in-person training sessions with Climate Fellows on using the 'meeting-in-a-box' kit to host small meetings in their neighborhoods.

### Task 2.3 Assumptions

- City will coordinate logistics for scheduling and securing venues for the training session.
- City will support with printing outreach material (fliers, meeting-in-a-box kits, etc.) for distribution.
- While Barracuda will not create outreach material other than social media posts, we will share graphic files so they can be repurposed as fliers.

*Figure 2. Example Social Media Posts*




## TASK 3. INTERAGENCY AND INTERGOVERNMENTAL COORDINATION

The Climate Action Plan will require significant coordination and input from all regional stakeholders to integrate with ongoing planning efforts happening in the MSA, and to build an effective coalition for implementation. Over the course of the planning process, the City's CPRG workplan anticipates convening 10 meetings with the Leadership Steering Committee and 13 meetings with the Paso Del Norte Community Climate Collaborative.

The AECOM team will support up to 12 of these meetings: six virtual meetings and six in-person. For these 12 meetings, we will prepare meeting materials, facilitate discussions, and following up with meeting notes/debriefs.

During the kick-off meeting (Task 0), the AECOM team will work with the City to identify the critical milestones in the planning process that require feedback from stakeholders, so that we can target our meeting support accordingly.

As part of this task, we will also develop brief quarterly reports for the City to submit to the EPA program manager. These reports will summarize work status and progress, difficulties encountered, financial expenditures, preliminary data results if applicable, anticipated future activities, and any changes of key personnel. We expect City staff will provide input regarding project financial expenditures and any key personnel changes within the City team.

### Task 3 Deliverables

- Facilitate in-person, prepare materials and meeting summaries for six in-person Interagency and Intergovernmental Coordination meetings.
- Facilitate, prepare materials, and meeting summaries for six virtual Interagency and Intergovernmental Coordination meetings.
- Up to 16 quarterly reports for the City to submit to the EPA.

### Task 3 Assumptions

- City will support with meeting logistics including scheduling the meeting, sending out the invite, and securing the venue.
- Up to two members from the consultant team will attend each meeting.

## TASK 4. PRIORITY CLIMATE ACTION PLAN

The AECOM team will work closely with the City and its partners to develop a PCAP that sets the region up to be competitive for upcoming CPRG implementation grant funding and establishes the baseline for the CCAP. ICLEI will lead the technical analysis for this task, with AECOM focusing on technical review, strategic guidance, and deliverable production.

### TASK 4.1. PRIORITY GHG INVENTORY, EMISSIONS PROJECTIONS, AND REDUCTION MEASURES

This initial PCAP task consists of a regional GHG inventory and emissions forecasts that will be developed using ICLEI's ClearPath software:

- **MSA-wide GHG Inventory:** ICLEI will conduct a regional, high-level U.S. Community Protocol-compliant GHG Inventory for 2021 or 2022 for the El Paso MSA region. The regional inventory scope will account for emissions by sector, including stationary energy, transportation, waste, industrial processes and product use, and energy generation. The inventory will address the six primary GHGs: carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride ($SF_6$).

  ICLEI and AECOM will work with the City, surrounding municipalities, utilities, and other community partner agencies to provide a thorough data gathering effort to inform the inventory. Decisions about tools and datasets to consider and use will be made jointly with MSA partners. The GHG inventory will be aligned with EPA CPRG Guidance and, to the extent possible, the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC); ICLEI's ClearPath inventory tool can report results according to the US Community Protocol and the GPC.
- **MSA-wide GHG emissions projections:** We will also use the ClearPath software to calculate regional, "business-as-usual" GHG emissions projections for the near-term (2030) and long-term (2050) timeframes. Projections will be made by sector, such as transportation and buildings, and will also quantify GHG emission reduction scenarios based on the reduction measures analyzed in Task 4.2. We will provide a request for information (RFI) to the City that lists the emissions growth indicators needed to complete the forecasts, such as demographic and economic projections.
- **Planning and Policy Inventory:** We will expand upon the in-progress planning and policy inventory that will identify ongoing and future climate pollution reduction activities. We will review the in-progress draft inventory, and compare activities identified with the regional GHG inventory to produce a high-level policy gap analysis that identifies where further action is needed relative to the region's emissions sources. The results of this policy inventory will directly inform PCAP and CCAP reduction measure development, as well as the adaptation strategy identification phase. We will also solicit input from the Leadership Steering Committee to complete this task.

#### Task 4.1 Deliverables

- Comprehensive GHG Inventory for the El Paso MSA.
- GHG emissions projections for 2030 and 2050 for El Paso MSA.
- Planning and policy inventory matrix (Word or Excel).

#### Task 4.1 Assumptions

- AECOM team will provide the data request list to the client for distribution; client will be responsible for follow up on data collection with entities and agencies and the AECOM team will provide technical assistance to answer data collection questions.
- Requested data will be available and provided to AECOM in the format requested to perform the GHG calculations; If any data requested is not provided or unavailable, we can assist the City in identifying proxy data or alternative emissions accounting methods to estimate the data gaps.
- City will assist in collecting assigned GHG emissions growth indicators (e.g., demographic and economic forecasts).

### TASK 4.2. QUANTIFIED GHG REDUCTION MEASURES

Building on the Task 4.1 analysis, we will identify a focused list of GHG reduction measures for the PCAP. Potential measures may include municipal planning policies that incentivize high-density development, investments in renewable energy and community solar, transitioning fleets to electric vehicles, and laying the groundwork for mass-transit development. The GHG reduction measures included in the PCAP will be near-term, implementation-ready actions that can reduce emissions reported in the PCAP GHG inventory.

We will develop a set of criteria and a process for prioritizing quantified measures with input from the Leadership Steering Committee. Reduction measures that have the greatest quantified impact and those that reduce emissions and co-pollutants in low-income and

disadvantaged communities will be highlighted for priority consideration. Using the ClearPath software, we will analyze, quantify, and report the emissions reductions that can be achieved through each of the prioritized reduction measures when implemented at the county and regional levels.

### Task 4.2 Deliverables

- Technical memo (draft and final) describing proposed methodology for technical analyses to identify and select PCAP measures and quantify GHG reductions.
- GHG reduction measures list (draft and final), including emissions benefits quantification and prioritization analysis results.

### Task 4.2 Assumption

- We will develop a list of inputs needed to support quantification and coordinate with the various stakeholders to confirm assumptions, identify data sources, and review draft GHG reduction results.

## TASK 4.3. LOW-INCOME AND DISADVANTAGED COMMUNITIES (LIDAC) BENEFITS ANALYSIS

As a region that is home to many underserved and disadvantaged communities, understanding the impacts of different emissions reduction strategies on these communities is especially important in the El Paso MSA. The AECOM team will assess how GHG reduction measures benefit LIDAC across the full geographic scope of the PCAP. Sources such as the CDC's Social Vulnerability Index (SVI), American Community Survey (ACS) data on poverty and other demographic variables, and the CJEST will be used to identify LIDACs. AECOM is conscious that these data sources do not provide a complete picture of community needs and may not accurately reflect specific populations such as undocumented immigrants and communities living in Colonias. To make the analysis as comprehensive and relevant as possible for disadvantaged communities, the AECOM team will supplement the quantitative analysis with input from El Paso MSA stakeholders and ongoing feedback from the public and stakeholder engagement strategies in Task 2.

After identifying the communities of interest, the AECOM team will work with the City and the steering committee to develop a qualitative evaluation matrix that will allow us to assess the expected direct and indirect benefits of the GHG reduction measures for LIDACs. In addition to GHG reduction, benefits can include improvement in air quality, household cost reduction, job creation, increased opportunities for active transportation, and so on. Our team has developed several multi-criteria evaluation frameworks to support climate action prioritization discussions, including the ASAP tool developed for C40 Cities. Leveraging these examples, we will develop an action evaluation matrix to support rapid evaluation and decision-making from long lists of potential measures. The matrix would list potential climate measures in rows with the community benefits in columns and include a qualitative rating for each benefit included.

The AECOM team will develop the evaluation rating scales with input from the City and Leadership Steering Committee members, and then perform initial LIDAC benefit impact evaluations to be reviewed and confirmed by the Leadership Steering Committee.

To the extent that specific location data are available, we will map measures included in the PCAP to determine which fall within identified LIDACs. The analysis will also provide an overview of planned and/or ongoing engagement with LIDACs and CBOs to inform plan development and implementation.

### Task 4.3 Deliverable

- Technical memo (draft and final) summarizing the analyses, including identification of LIDACs in the MSA, qualitative matrix evaluating benefits to LIDACs, summary of outreach in LIDACs and engagement participation from LIDACs.

### Task 4.3 Assumption

- Up to 10 benefit criteria will be selected and evaluated qualitatively.

## TASK 4.4. REVIEW OF AUTHORITY TO IMPLEMENT

Successful implementation of the GHG reduction measures identified in the PCAP and CCAP will require coordination across regional, sub-regional, and local levels of government and identification of statutory and regulatory barriers across the region. To efficiently analyze authority to implement across jurisdictions, the AECOM team will first classify climate action measures by type (e.g., building code updates, education and outreach initiatives, planning/zoning requirements, renewable energy investments, etc.). We will develop a matrix of these categories of interventions and any statutory or regulatory gaps at the state and local government level.

For each of the proposed GHG reduction measures, we will identify whether relevant local agencies already have existing statutory or regulatory authority to implement the measure or whether such authority needs to be obtained. We will also work with different jurisdictions to research innovative ways to use existing authority to achieve climate goals. For example, county land use powers in Texas are limited under state law. Despite this, some counties have taken advantage of their subdivision

authority to ensure that developers comply with new requirements, including environmental controls.

### Task 4.4 Deliverable

- Draft and final matrix of the recommended GHG reduction measures by type, relevant agencies, and whether these agencies have authority to implement the measure or need to obtain authority.

### Task 4.4 Assumption

- Implementation authority will be evaluated for up to 11 entities in the MSA.

### TASK 4.5. DRAFT AND FINAL PCAP

The AECOM team will synthesize the deliverables from Tasks 4.1 through 4.4 into an initial draft of the PCAP that contains all EPA-required elements. This initial draft will be provided to the City, Leadership Steering Committee, and other relevant stakeholders for feedback and comments. Subsequently, AECOM will address comments and provide a final version of the PCAP that is appropriate for submission to the CPRG application by the end of February 2024 with ample time for El Paso to meet the CPRG deadlines.

### Task 4.5 Deliverable

- A draft and final PCAP in accordance with EPA guidelines, including list of potential measures for inclusion in the PCAP; GHG reduction evaluation; LIDAC analysis and engagement plan; authority to implement; and summary of stakeholder engagement activities.

### Task 4.5 Assumption

- The final PCAP deliverable will be developed as a Word document in English and provided to the City in Word and PDF format. As described in Task 10, the final CAP will be graphically laid out and translated into Spanish.

## TASK 5. COMPREHENSIVE CLIMATE ACTION PLAN

The CCAP will build on the preliminary planning conducted in the PCAP to develop a more comprehensive CAP. Like the PCAP, our partners ICLEI will lead the technical analysis for the CCAP with AECOM focusing on technical review, strategic guidance, and deliverable production.

### TASK 5.1. CCAP GHG INVENTORY

ICLEI will expand the GHG inventory compiled during the PCAP to include additional sectors. The final GHG inventory will include a breakdown of emissions and sinks by the following sectors:

- Stationary energy
- Buildings
- Transportation
- Waste and materials management
- Industrial processes and product use
- Energy generation
- Livestock
- Land use
- Agriculture, forestry, and other land use

The inventory will meet the EPA guidelines for a CPRG CCAP GHG inventory, and will include carbon removals (i.e., carbon sinks) to the extent possible based on data availability.

In addition, ICLEI will develop a local government operations GHG inventory in the ClearPath software for the City municipal operations. The inventory will include electricity and heating fuels for all buildings and facilities owned and or operated; electricity used in streetlight and traffic signals; fleet fuels used in on-road and off-road equipment and related to employee commutes; emissions from landfills, water and wastewater treatment facilities; and process and fugitive emissions and emissions from industrial processes and refrigeration, as data allows.

### Task 5.1 Deliverables

- Expanded MSA-regional GHG inventory (draft and final) with additional emissions sectors included.
- City municipal operations GHG inventory.

### Task 5.1 Assumptions

- Data for municipal operations inventories will be collected during the regional GHG inventory data collection process.
- AECOM team will provide data request list to the client for distribution; client will be responsible for follow up on data collection with entities and agencies and the AECOM team will provide technical assistance to answer data collection questions.
- Requested data will be available and provided to AECOM in the format requested to perform the GHG calculations; if any data requested is not provided or unavailable, we can assist the City in identifying proxy data or alternative emissions accounting methods to estimate the data gaps.
- City will assist in collecting additional GHG emissions growth indicators, as needed, to supplement information collected during the PCAP process.

### TASK 5.2. CCAP EMISSIONS PROJECTIONS, TARGETS, AND REDUCTION MEASURES

AECOM and ICLEI will update the PCAP analysis to provide the following CCAP components:

- **GHG emissions projections:** ICLEI will expand the GHG emissions projections developed in the PCAP to include each emissions source in the CCAP GHG inventory. Emissions will be projected under two scenarios—a "business-as-usual" scenario where no additional GHG emissions measures are implemented, and a "sustainable" scenario where the identified PCAP and CCAP measures are implemented to demonstrate progress toward target achievement. ICLEI will also develop a "business-as-usual" emissions forecast for the municipal operations inventory based on the expected growth rate of city operations.
- **GHG reduction targets:** In coordination with project stakeholders, we will assist El Paso with developing a set of GHG reduction targets for 2030 and 2050. The targets will be defined with consideration for the potential GHG reduction measures, economic conditions, and other conditions impacting the region and its communities. Target setting will also consider national and/or state targets, as applicable.
- **GHG reduction measures:** Following PCAP submission, we will begin developing an expanded list of GHG reduction measures. The list will be informed by the CCAP GHG inventory and projections, the draft reduction targets, and other considerations like federal funding availability for measure implementation. Measures identified during PCAP development that were infeasible in the short term, for example due to lack of authority or funding, could be reconsidered and included in the CCAP reduction measures list.

Through an iterative process between AECOM, ICLEI, the Leadership Steering Committee, and stakeholders, we will model mitigation measures in the ClearPath software. We will develop a set of metrics to help track the impact of each reduction measure. Based on these and other variables developed in subsequent tasks, we will offer updated prioritization criteria for the measures. The Leadership Steering Committee will have full access to ClearPath and other supporting materials.

As part of Task 9, AECOM will identify key performance metrics that can be monitored by lead entities for each reduction measure.

### Task 5.2 Deliverables

- Updated GHG emissions projections (draft and final), broken down by sector and scenario ("business-as-usual" and "sustainable" scenario where measures are implemented); municipal operations "business-as-usual" emissions forecasts.
- Updated GHG reduction targets (draft and final) for 2030 and 2050 accompanied by a written explanation of the rationale for these targets.
- Complete and final list of GHG reduction measures (draft and final), estimated potential benefits of such measures, and the justification for each measure.

### Task 5.2 Assumption

- Up to 48 reduction strategies will be identified.

## TASK 5.3. BENEFITS ANALYSIS FOR FULL GEOGRAPHIC SCOPE AND POPULATION OF THE PLAN

We will work with El Paso and the Leadership Steering Committee to review and update the action evaluation matrix developed during the PCAP in Task 4.3, including confirming a consistent set of community benefits to be evaluated as part of the benefits analysis. Here again, we will leverage existing tools to efficiently quantify co-pollutant reductions and confirm a framework for qualitatively evaluating the other climate action benefits.

ICLEI will develop the co-pollutant baseline and 2050 projections using a companion estimation tool to the ClearPath software that generates the GHG inventories and GHG reduction estimates. This work will be informed by data from a variety of sources, including the EPA's National Emissions Inventory (NEI), RGCOG's travel demand model, data from municipal and counties' environmental services departments, TCEQ, and other relevant agencies. Benefits of climate actions can then be compared against the co-pollutant baseline and projections to demonstrate co-pollutant reduction impact. We will then use a combination of action impact analysis tools to quantify co-pollutant reductions from the planned actions.

We will supplement the co-pollutant reduction analysis with a qualitative evaluation of other climate action benefits. Potential benefits to be analyzed include improvements in public health, environmental and economic outcomes, increased resilience, or other benefits. If there are significant benefits or disbenefits that may stretch beyond the El Paso MSA, for example to neighboring areas in New Mexico or across the U.S.-Mexico border, these will also be documented qualitatively. We will develop a benefits analysis matrix that lists potential climate measures in rows with the community benefits in columns and includes a qualitative rating for each benefit included. The AECOM team will develop the evaluation rating scales with input from the City and steering committee members, and then perform initial community benefit impact evaluations to be reviewed and confirmed by the steering committee.

### Task 5.3 Deliverables

- Technical memo (draft and final) describing proposed methodology for benefit analysis, including a proposed list of benefits criteria and how they will be applied.

- Qualitative matrix evaluating benefits of proposed GHG reduction measures with accompanying text summarizing methodology and results.

### Task 5.3 Assumption

- Up to 10 benefit criteria will be selected.

## TASK 5.4. UPDATED LOW-INCOME AND DISADVANTAGED COMMUNITIES BENEFITS ANALYSIS

The AECOM team will update the benefits analysis for disadvantaged communities submitted in the PCAP with the potential benefits and disbenefits of the comprehensive list of GHG reduction measures. Any new data or considerations particular to low-income and disadvantaged communities will be included. Examples of impacts that may be covered include locally specific co-pollutant emissions reductions, increased climate resilience, green job creation, or decreased energy costs from implementing energy efficiency upgrades. The team will develop the evaluation rating scales with input from the City and steering committee members, and then perform initial community benefit impact evaluations to be reviewed and confirmed by the steering committee.

### Task 5.4 Deliverable

- Technical memo (draft and final) summarizing the technical analyses, including identification of LIDACs in the MSA, a qualitative matrix evaluating benefits to LIDACs, summary of outreach in LIDACs and engagement participation from LIDACs.

## TASK 5.5. UPDATED REVIEW OF AUTHORITY TO IMPLEMENT

The AECOM team will update the previously conducted review of authority to implement by considering the statutory and regulatory requirements of each GHG reduction measure identified for CCAP. Given current developments in the state legislature that may limit local governments' regulatory authorities related to climate, this update will also note whether any already identified authorities have changed since the PCAP was submitted.

### Task 5.5 Deliverable

- Matrix of the recommended GHG reduction measures, relevant agencies, and whether these agencies have authority to implement the measure or need to obtain authority.

### Task 5.5 Assumptions

- Implementation authority will be evaluated for up to 11 entities in the MSA.

## TASK 5.6. ANALYSIS OF INTERSECTION WITH OTHER FUNDING AVAILABILITY

The AECOM team will investigate sources of funding from federal and state agencies which can potentially support GHG reduction measures, especially grants and loans made available through the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA). The DOE, DOT, and EPA offer many promising grant programs aligned with sustainable transit-oriented development, decarbonization of buildings and the grid, electric vehicle adoption, and renewable energy. The team will also examine how recurring sources of federal funding available to the City and partner jurisdictions, such as the Community Development Block Grant (CDBG), the Community Services Block Grant (CSBG), and multiple transportation formula funds, may be able to support GHG reduction measures. Emissions reductions measures with multiple potential funding sources will be noted.


This task will leverage AECOM's Fund Navigator, an interactive digital tool developed by AECOM that provides continually updated information and guidance on more than 500 BIL and IRA funding programs. The tool provides a calendar of discretionary grant application timelines, a breakdown of funding appropriated for each program in the current and upcoming fiscal years, as well as preliminary Justice 40 screening for insights into the competitiveness of a project's impact area. We will use this tool to identify upcoming federal funding opportunities aligned with CCAP measures and advise the City on the alignment of CPRG implementation funds with other federal grant programs.

### Task 5.6 Deliverable

- Technical memo (draft and final) describing applicable funding sources for proposed GHG reduction measures.

## TASK 5.7. WORKFORCE PLANNING ANALYSIS

AECOM will work with the regional workforce agency, Workforce Solutions Borderplex, to understand the workforce necessary to implement the GHG reduction measures, identify gaps in the projected workforce and existing workforce development system, and propose potential strategies for closing those gaps. The public and stakeholder engagement process will inform policy recommendation prioritization related to workforce analysis and will be structured to engage key stakeholders involved in green jobs workforce training. The process will consider topics such as equitable access to climate jobs and a just transition for fossil fuel workers.

Based on the measures identified in the CCAP and in partnership with Workforce Solutions Borderplex, AECOM will use data from sources such as the Quarterly Census of Employment and Wages, the Occupational Employment and Wage Statistics program, and Longitudinal Employer-Household Dynamics program to identify industries and occupations that will be in high demand to implement climate actions. We will evaluate current and projected occupational growth to identify where there may be gaps in labor supply.

### Task 5.7 Deliverable

- Memo summarizing workforce planning analysis.
- Attend up to five coordination/brainstorming calls with Workforce Solution Borderplex.

### Task 5.7 Assumption

- City will engage with Workforce Solution Borderplex to act as sub-awardee and manage workforce analysis in the region. The City will schedule calls with Workforce Solution Borderplex.

## TASK 5.8. TRAINING FOR STAFF AS DEFINED IN THE CPRG WORKPLAN

ICLEI will lead one training session to train staff and members of the Leadership Steering Committee on how to perform GHG calculation work independently in the future using the ClearPath software. The training session will cover topics such as:

- GHG inventory data collection.
- GHG inventory development in ClearPath.
- GHG projection estimates in ClearPath.
- GHG reduction measure calculation and analysis in ClearPath.

ICLEI will conclude the session by sharing other resources available that staff can leverage to independently complete this work in the future.

### Task 5.8 Deliverable

- One three-hour long virtual training session on use of GHG modeling software.

### Task 5.8 Assumption

- City will schedule the virtual training session and circulate the invitation.

## TASK 5.9. DRAFT AND FINAL CCAP

The AECOM team will synthesize the elements of Task 5 into a draft copy of the full CCAP, for review by the City, Leadership Steering Committee, and other relevant stakeholders. AECOM will implement any necessary corrections or additions and present a final copy of the CCAP to the City with time for review and submission to the CPRG application.

### Task 5.9 Deliverables

- Draft and final CCAP in accordance with EPA guidelines, including:
    - GHG inventory results
    - GHG emissions projections
    - GHG reduction targets
    - Quantified GHG reduction measures
    - Benefits analysis for the full geographic scope and population covered by the plan
    - Low-income and disadvantaged communities' benefits analysis
    - Review of authority to implement
    - Intersection with other funding availability
    - Workforce planning analysis
    - Stakeholder engagement activities

### Task 5.9 Assumption

- Final CCAP deliverable will be developed as a Word document in English and provided to the City in Word and PDF format. As described in Task 10, the final CAP will be graphically laid out and translated in Spanish.

## TASK 6. STATUS REPORT

We will produce a draft Status Report in fall 2026 that includes updated analysis on the components summarized below. The AECOM team will collect information on the region's implementation progress through collaborative group discussions at Leadership Steering Committee meetings and through data requests for necessary information provided to committee members.

– **Quantified GHG reduction measures:** Using the list of variables developed in Task 5.3 for monitoring and evaluation of the GHG reduction measures, we

will work with the Leadership Steering Committee to track implementation progress across jurisdictions and agencies. The status of each reduction measure will be noted in fall 2026 for the internal report as finalized, in-progress, or rejected and not implemented. For each reduction measure, AECOM will work with the Leadership Steering Committee to note key successes and challenges during implementation, how the measure may have changed in response to these successes and challenges, and next steps to ensure advancement of the measures.

- **Updated LIDAC benefit analysis:** The AECOM team will work with the Leadership Steering Committee and implementing agencies and jurisdictions to update the original LIDAC benefits analysis included in the CCAP. In particular, the update will include any unexpected co-benefits or unintended consequences of implementing the reduction measures that impact disadvantaged communities.
- **Updated co-pollutant benefit analysis:** The report will include updated data on co-pollutants, including information about co-benefits or unintended consequences.
- **Updated review of authority to implement:** Any updates related to new state or federal legislation and regulations that affect local authorities will be documented. For example, legislation currently advancing in the Texas Legislature may introduce new limits on local powers to issue ordinances more stringent than state law on certain topics.
- **Updated analysis of intersection with funding availability:** The internal report will include updated information on any additional federal, state, or other funding and financing sources that can support the GHG reduction measures. The focus will be on any new sources of funding not previously identified in the CCAP.
- **Updated workforce planning analysis:** Through partnership with local stakeholders and Workforce Solutions Borderplex, the internal report will assess challenges and needs related to workforce development for implementing the GHG reduction measures. Any changes and updates in workforce needs since submission of the CCAP will be highlighted.
- **Next steps:** The internal report will conclude with a summary of the key next steps required for the El Paso region to continue making progress toward GHG targets and to facilitate successful implementation of the GHG reduction measures. Staffing and budget needs will be defined, as well as new funding sources that the region might pursue and regulations that require adjustments in existing activity. To the extent possible, any strategies to address unintended consequences, especially for low-income communities, and challenges with funding, authorities, and workforce needs will be noted. Overall, this section will summarize developments in the El Paso region's climate planning, action, and context since submission of the CCAP. Examples of potential next steps could include identification or priority programs or measures from the CCAP for implementation in the near-term or long-term, additional planning that could be possible with additional resources, and actions to support implementation projects that have yet to start but are expected to begin soon.

### Task 6 Deliverable

- Draft and final Status Report in accordance with EPA guidelines, including:
  - Quantified GHG reduction measures
  - Updated benefits analysis for the full geographic scope and population covered by the plan
  - Updated low-income and disadvantaged communities' benefits analysis
  - Updated review of authority to implement
  - Updated intersection with other funding availability
  - Updated workforce planning analysis
  - Next steps, future budget, staffing needs
  - Updated GHG inventory and projections
  - Stakeholder engagement activities

### Task 6 Assumption

- The Status Report will be developed as a Word document in English and provided to the City in Word and PDF format. As described in Task 10, the final CAP will be graphically laid out and translated in Spanish.

## TASK 7. RISK AND VULNERABILITY ASSESSMENT

As the effects of climate change intensify, the El Paso region is likely to face more frequent and severe extreme heat days, longer heat waves, stronger precipitation events, and greater risk of flooding, drought, and wildfires. El Paso has already experienced a record-breaking 44 consecutive days over 100 degrees in the summer of 2023. The region also faces swings between extremes of wet and dry, with extended drought punctuated by intense storm events that can lead to flash flooding. All climate impacts will likely have a disproportionate impact on the region's vulnerable and low-income communities, making it critical that equity and economic resilience are considered as part of the climate risk and vulnerability assessment and adaptation strategies. As part of a binational, tri-state, and bilingual region, El Paso has a unique opportunity to address climate resilience in collaboration with its cross-border partners.

## TASK 7.1. LITERATURE REVIEW

Through its partnership with 100 Resilient Cities, the City has already established a solid foundation for its climate adaptation work that this project will acknowledge and build upon. AECOM will also leverage our extensive familiarity with statewide resilience-related challenges from our work conducted for the Texas Statewide Resiliency Plan. Building upon this, AECOM will review up to 10 local and regional climate resilience studies and local hazard mitigation plans from the City of El Paso, El Paso County, Hudspeth County, and other stakeholders, including Fort Bliss, Las Cruces, and Ciudad Juárez, to understand the landscape of existing adaptation efforts. The goal of the literature review is to align with adopted or planned policies and goals and leverage past efforts, findings, and actions. Additionally, we will review past hazards that have occurred in the City, including flash flooding in 2006 and 2021 and recent heat waves, droughts, and their impacts. A list of documents and reports that could be included in the literature review is listed in the blue box to the right.

### Task 7.1 Deliverable

- Literature review summary memo (draft and final).

### Task 7.1 Assumption

- AECOM team will review up to 10 climate resilience and adaptation documents from the City of El Paso, El Paso County, Hudspeth County, and other stakeholders.

## TASK 7.2. DATA COLLECTION

**Climate Projection Data**

The AECOM team will begin with a review of climate projections and available data for climate change impacts that may occur in the El Paso region. Through our work on the Texas Statewide Resiliency Plan, we are already highly familiar with climate hazard datasets that may impact the El Paso region. Climate projections will be selected from nationally recognized sources such as the CMRA tool and NOAA Climate Explorer. Climate projections generally represent the 30-year average of multiple global general circulation models, and for this assessment, we will focus on time horizons of 2030 and 2050 to inform immediate and longer-term actions. For consistency with federal planning and the Texas Statewide Resiliency Plan, we recommend using the high emissions scenario (representative concentration pathway 8.5), which reflects current the global trajectory in GHG emissions. This review will inform the identification of appropriate hazard datasets for discussion with the City.

For extreme heat, it is also critical to evaluate the results of the urban heat island mapping study conducted by the City in partnership with NOAA, the National Weather Service, and the University of Texas. Understanding urban heat islands can help identify areas with higher exposure to extreme heat that should be prioritized for heat reduction strategies. To evaluate flood risk, the AECOM team will examine future increases in precipitation intensity and frequency, in combination with FEMA floodplain mapping. For wildfire risk, AECOM will examine wildfire danger days, which are approximated by humidity, vegetation fuel moisture, and other variables.

**Federal reports:**

- EPA Region 6 Climate Adaptation Plan
- Fourth and Fifth National Climate Assessments (Fifth NCA expected Fall 2023)

**State and local reports:**

- Resilient El Paso
- El Paso Urban Heat Mapping and Heat Perceptions Study
- Central Texas Extreme Weather and Climate Change Vulnerability Assessment of Regional Transportation Infrastructure
- Plan El Paso
- 2021 El Paso County Hazard Mitigation Action Plan

Table 1 summarizes potential hazards and their data sources that could be included in the climate vulnerability assessment for El Paso.

*Table 1. Potential climate projection sources and indicators*

| Hazard | Climate Projection Source | Indicator/Variable |
|---|---|---|
| **Extreme Heat** | Climate Mapping for Resilience and Adaptation Tool*<br>Urban Heat Mapping and Heat Perceptions Study | Annual days with maximum temperature > 100°F<br>Urban heat islands |
| **Flooding** | Texas Water Development Board | Historic 100- and 500-year floodplains |
| **Precipitation** | Climate Mapping for Resilience and Adaptation Tool | Days each year with precipitation exceeding the 99$^{th}$ percentile |
| **Drought** | Climate Mapping for Resilience and | Days each year with less than 0.01" precipitation |

| | | |
|---|---|---|
| | Adaptation Tool | Maximum number of consecutive dry days<br>Days per year with precipitation (wet days) |
| **Wildfire** | MACA (Multivariate Adaptive Constructed Analogs) data via Climate Mapper | Days per year with high wildfire danger (based on daily temperature, humidity, and precipitation) |

**Note that CMRA provides climate hazard projections for early-century (2015-2044) and mid-century (2035-2064) time frames.*

**Asset Data**
The AECOM team will collect data on transportation assets (roads, bike and pedestrian lanes, bus stops, and bus routes), utilities and utility districts (electricity, natural gas, water, wastewater), building infrastructure (police and fire stations, schools, recreation facilities, libraries, and community centers). The team will coordinate with the City of El Paso, El Paso County, and Hudspeth County to acquire available geospatial data (e.g., from the City of El Paso's Open Data repository). The team will also coordinate with Fort Bliss to understand what assets and infrastructure within the city of El Paso and El Paso County are critical to their ongoing continuity of operations.

Additionally, the AECOM team will evaluate research and studies characterizing economic losses for businesses and the local economy due to climate change. For example, for AECOM's economic assessment of extreme heat in the Phoenix metropolitan region, we analyzed the impact of extreme heat on labor productivity and increased energy demand for air-conditioning and qualitatively assessed the effect of heat on retail and tourism. With low annual precipitation and limited water resources, the El Paso MSA region's large agricultural economy is likely to face increased impacts from extended drought. In addition, flooding and other hazards could disrupt transportation networks in the region, potentially affecting El Paso's advanced manufacturing sector. Cross-border trade also plays a critical role in the regional economy, and AECOM can build on our analysis of climate disruptors on international border crossings for the Statewide Resiliency Plan to identify potential disruptions for the regional economy. Based on our review of existing literature, we will qualitatively characterize potential impacts on the economy and businesses.

The vulnerability of natural resources to climate change will also be evaluated qualitatively. Natural resources include water resources, habitats, tree canopy cover, parks, and energy resources. For example, drought could pose risks to the region's water resources while heat increases water demand for irrigation. AECOM is well versed in evaluating the effects of climate change on habitats, water, and vegetation and has worked on vulnerability assessments for the Texas coast, the Coastal Bend bays and estuaries (Corpus Christi), and the impacts or urban heat in Phoenix.

**Social Vulnerability**
El Paso is a binational border region with a large proportion of low-income, socially vulnerable, and non-English speaking residents. Vulnerable residents are not only more likely to face greater impacts from extreme heat and flooding, 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 adaptation-related challenges and priorities. Thus, it is essential that El Paso's climate vulnerability assessment understand how vulnerable communities are likely to be affected by climate hazards. The AECOM team proposes to leverage data analyzed in the PCAP and CCAP LIDAC analyses, supplemented with the National Risk Index or the CDC Social Vulnerability Index, to identify populations with the highest risk to climate hazards. Overlaying areas with high social vulnerability with climate hazard exposure mapping can help identify communities that are likely to be more vulnerable to climate impacts and should be prioritized for adaptation strategy implementation.

### Task 7.2 Deliverables
- Memo (draft and final) describing the data collection process, data sources, and rationale; summaries of climate change hazards and impacts, describing current conditions, and projected changes, including impacts to local communities.
- GIS datasets for climate hazards and social vulnerability.

### Task 7.2 Assumption
- City of El Paso, El Paso County, Hudspeth County, and other stakeholders will provide all datasets for assets related to public infrastructure, businesses, and natural resources. The AECOM team will not perform quality assurance checks on datasets.

## TASK 7.3. VULNERABILITY ASSESSMENT
Once data on climate hazards and assets have been gathered, the AECOM team will carry out a vulnerability assessment. For each climate hazard and asset type, vulnerability will be expressed in terms of exposure (whether or not an asset is within the area impacted) and sensitivity (to what degree will exposure damage an asset); adaptive capacity (the asset's ability to adjust or

respond to a hazard) will also be considered to adjust sensitivity ratings. The AECOM team will map the selected climate hazards from Task 7.2 for two-time horizons, and in collaboration with the City choose one scenario to carry forward to the vulnerability assessment.

**Exposure.** The AECOM team will spatially overlay assets and socially vulnerable populations with climate hazards to identify assets and areas with the highest exposure. Climate projections for temperature and precipitation are produced at an approximately 2.3 by 2.3-mile resolution. However, areas along the Rio Grande, in Socorro, Lakeside, Borderland, and Montoya are in the 100- or 500-year floodplain, which is based on historical data and is higher resolution than climate projections. Figure 3 and Figure 4 provide an example of the El Paso MSA region's future exposure to drought and wildfire, respectively, in the mid-century timeframe under a high-emissions scenario.

**Sensitivity.** Sensitivity is the degree to which an asset, community, or resource is impacted by climate stressors. Assets, communities, or resources with low sensitivity to an impact will experience only mild or moderate damage or operational disruption from exposure to that impact, while those with higher sensitivities may experience greater disruptions and damage, including potentially irreparable damage. Sensitivity ratings will be developed on a scale of 0 (no sensitivity) to 3 (high sensitivity) based on AECOM's prior experience with sensitivity analyses, previous studies, federal guidance (e.g., Federal Highway Administration sensitivity matrix), expert review, and stakeholder input. A matrix will be developed for each type of asset documenting the degree to which a hazard will impact the function or service of the asset. provides examples of sensitivity ratings for several critical assets.

**Adaptive Capacity.** Adaptive capacity is the ability of an asset to adjust, repair, or flexibly adapt and respond to damage or disruption. Assets that have high adaptive capacity are likely to have lower vulnerability than assets that are unable to respond. The AECOM team will review with the City and other project stakeholders the adaptive capacity of assets to determine if any asset's sensitivity ratings should be modified based on their ability to adjust (e.g., if they can be easily relocated to avoid hazard exposure). Based on feedback, assets will higher adaptive capacity may have their sensitivity ratings lowered, which will in turn result in a lower vulnerability score. Similarly, assets with lower adaptive capacities will likely have a higher vulnerability score. In most instances, adaptive capacity findings will inform strategy and recommendations development rather than adjust sensitivity ratings.

**Vulnerability.** As the final step in the vulnerability assessment process, exposure will be combined with sensitivity to assign an overall vulnerability score for assets.

The overall vulnerability score will be determined by the following equation:

*Vulnerability = Exposure Rating * Sensitivity Rating*

Vulnerability scores will be calculated separately for each asset and hazard combination. Results will be summarized in a vulnerability matrix. Scores will be used to prioritize assets with the highest vulnerability for consideration of adaptation strategies in Task 7.4. The AECOM team will develop a vulnerability assessment technical memo that describes overall methodology, summarizes results, and identifies the El Paso MSA's highest vulnerabilities. The results will inform the next step in the project, strategy development.

### Task 7.3 Deliverable

- Vulnerability assessment technical memo, including exposure maps for climate hazards, sensitivity rating matrix, adaptive capacity assessment, and vulnerability score matrix.

### Task 7.3 Assumption

- AECOM will develop hazard exposure maps for the 2030 and 2050 timeframes but will conduct vulnerability assessments for one timeframe under the high-emissions scenario. AECOM recommends the 2050 timeframe to support actionable planning recommendations and align with best practices, including State of Texas vulnerability assessments.

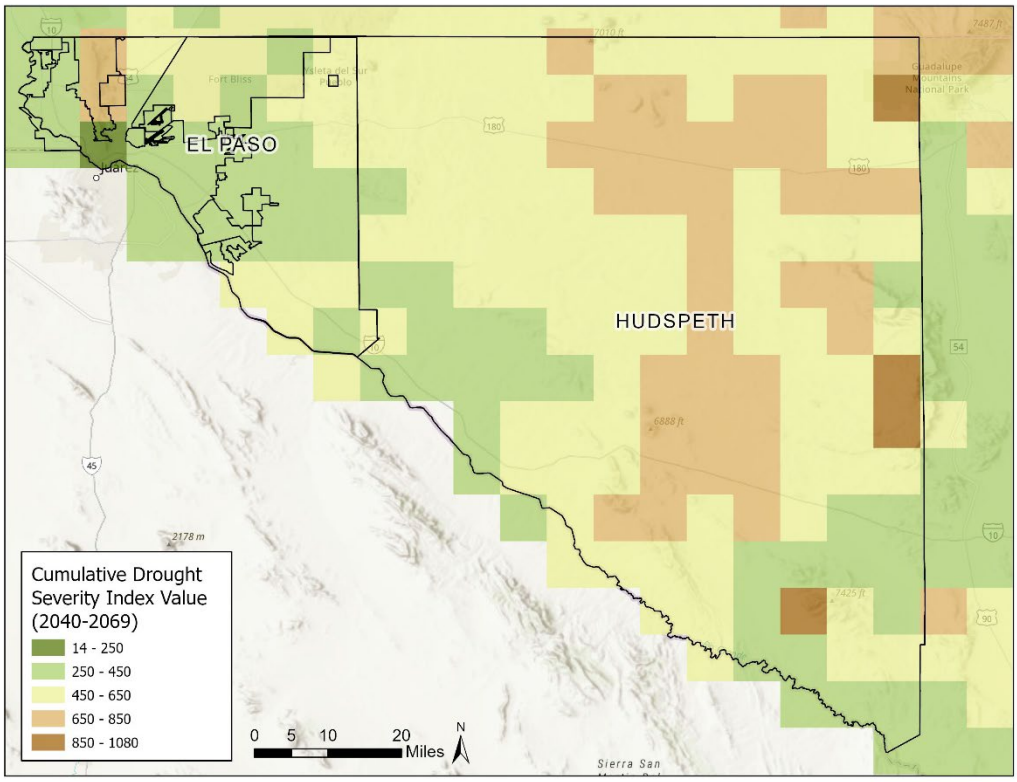



*Figure 3. Future drought exposure for the El Paso MSA region for the mid-century (2040-2069) timeframe under a high-emissions scenario.*

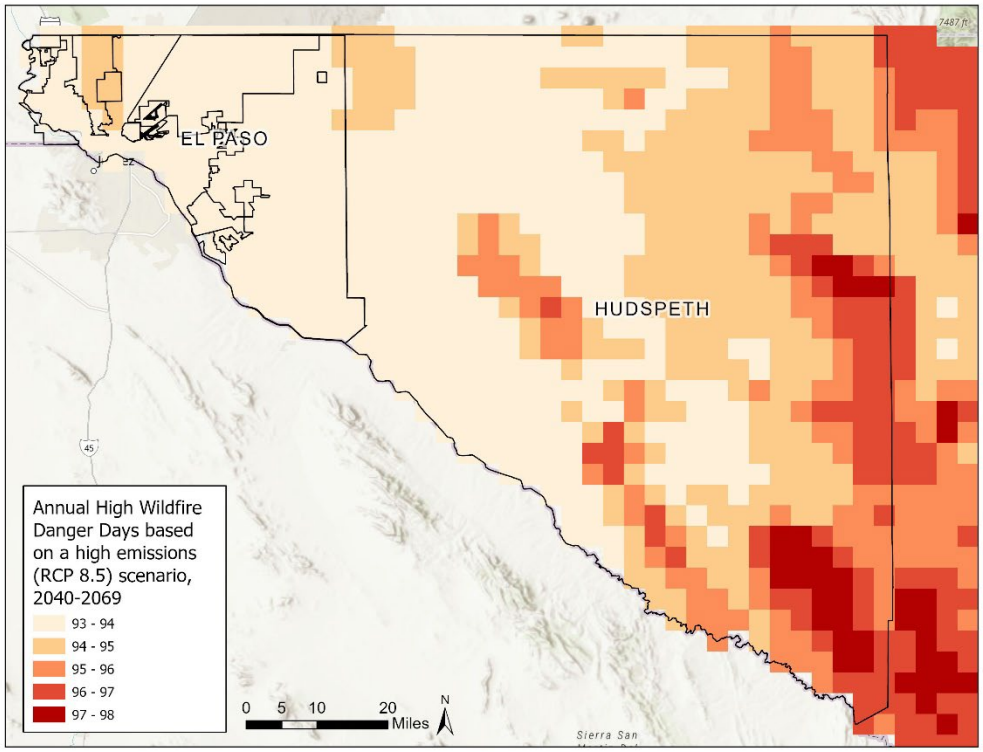



*Figure 4. Future wildfire risk, as indicated by the number of days each year with high wildfire danger, for the El Paso MSA region for the mid-century (2040-2069) timeframe under a high-emissions scenario.*

*Table 2. Sample sensitivity matrix for selected asset/natural resource types.*

| Asset Type | Extreme Heat | Drought | Flooding |
|---|---|---|---|
| Infrastructure – Hospitals | Moderate – Extreme heat increases energy demand while reducing transmission efficiencies, making power outages more likely due to an overloaded electrical grid. Power outages at a hospital could endanger patients in critical conditions. | High – The primary functions of many critical resources will be significantly impacted by drought conditions, as patients and workers will need access to water. | High – Electrical and mechanical equipment can be damaged by flooding, which could lead to power outages, HVAC system failures, and plumbing system failures. |
| Transportation – Roads | Moderate – Heat can cause asphalt to soften, deform, crack, or split. Concrete pavements can experience blow-ups due to heat-related slab and joint expansion. | Low or Moderate – Severe drought can shrink or compact soils beneath road surfaces, potentially resulting in pavement degradation, cracking, splitting, and potholes. Roads built on non-expansive soils have lower sensitivity to drought. | Low or Moderate –Infrequent flooding is unlikely to lead to infrastructure damage for rigid pavements and thick asphalt pavements. Flexible pavements are more sensitive to flood-related damage, depending on the strength of their base layers. |
| Natural Resources – Water | Moderate – Higher temperatures increase evaporation rates; depleting water supplies in reservoirs. | High – Drought can affect the supply of water from the Rio Grande, which makes up nearly half of El Paso's potable water supply. Drought also prevents groundwater and aquifers from recharging. | Moderate – Flooding can lead to contamination of reservoirs and other water supplies, requiring more treatment. |

### TASK 7.4 RISK ASSESSMENT AND ASSET PRIORITIZATION

The AECOM team will conduct a risk assessment for the most vulnerable assets based on the likelihood of exposure (determined in the climate exposure assessment), and consequence of exposure, based on the potential impacts of asset disruption or failure. Potential costs of disruption and failure can be evaluated based on criteria such as operational and financial costs, such as the cost of downtime and costs to repair or replace assets, and broader social, economic, environmental costs. The likelihood and consequences of exposure will be summarized in a matrix to identify the assets whose disruption or damage would pose the greatest risks for the El Paso region.

Next, we will develop a list of asset prioritization criteria, including vulnerability, risk, impacts to low-income and vulnerable communities, financial costs for agencies, and impacts for natural resources. The prioritization criteria will be refined based on project stakeholder feedback. The AECOM team will then use the criteria to develop a list of prioritized assets, which will be reviewed with project stakeholders to ground truth findings and identify if any assets that are highly important are missing. If additional priority assets are recommended by stakeholders and confirmed by the City, we will note them within the risk assessment memo and those assets will be considered during the adaptation strategy development phase (Task 8).

#### Task 7.4 Deliverables

- Risk assessment matrix and memo describing methodology of risk assessment and results.
- Asset prioritization criteria and list of prioritized assets.

## TASK 8. ADAPTATION STRATEGIES

AECOM will work with Quantum to develop and analyze a tailored set of adaptation strategies. Climate adaptation strategies for the El Paso MSA region will be informed by community engagement and public outreach activities carried out in Task 2, the results of the vulnerability assessment in Task 7, and past strategies and progress from the City and other stakeholders.

Note that the RFP requested sub-tasks within the Adaptation Strategies task to develop performance metrics related to risks and vulnerability, develop an interactive dashboard with content, graphics and metrics for each sector that is easy to update by City staff, and develop a template for annual reporting and communicating progress on climate risks. Please refer to Task 9 for our proposed approach on how to integrate

these items with the corresponding elements related to the PCAP and CCAP GHG reduction measures.

### TASK 8.1. STRATEGY DEVELOPMENT

The AECOM team will develop an initial list of policy-based, program-based, and project-based adaptation strategies to address vulnerabilities for public infrastructure, business districts and economic growth, natural resources, and vulnerable populations. In addition to project-specific strategies, we will develop neighborhood- and community-scale adaptation strategies that are responsive to the needs of vulnerable and low-income communities. To protect vulnerable and low-income residents, it is critical that strategies are equitable, have the support of community members, and respond to cross-cutting resilience challenges.

Where possible, we will build upon existing resilience efforts from the City, such as the community resources documented in the "Stay Cool, Stay Safe" dataset and recommendations from the El Paso Climate Crisis Advisory Committee (CCAC) Framework on flood risks, water resources, and urban heat islands. In addition, we will also coordinate with Fort Bliss to understand their resilience strategies underway, such as to increase energy resilience with a microgrid, and identify opportunities for collaboration.

Strategies will largely fall under the following categories:

- **Structural:** Strategies that address physical vulnerabilities of assets. (e.g., raise, shade, defend), with a subset of engineered/nature-based solutions. While it is anticipated that some governance-based or informational strategies will be widely applicable across El Paso, strategies address physical vulnerabilities will tend to be more site-specific. These strategies will be described for the plan, but not designed. Structural strategies may include alternate materials that can withstand very high temperatures, stormwater management, flood management solutions, retrofits of bus shelters, or programs to support cool roof and cool wall deployment.
- **Governance:** Strategies that address governance-related vulnerabilities of assets (including planning, design, regulatory, and operations and maintenance, etc.) associated with different types of planning, design, and permitting documents. We anticipate that governance strategies will focus on longer-term strategic actions. This can include, for example, the development of an urban forestry management plan or water conservation strategy, resilience criteria to embed into design standards and economic development activities, and ready-to-execute procurement contracts so that emergency and clean-up activities can be rapidly deployed in the aftermath of events.
- **Informational:** Strategies that provide improved understanding of the vulnerabilities of assets arising from a lack of information, including feasibility studies and data gaps. We anticipate that informational strategies will focus on a few key actions, such as establishing a program to tag and monitor assets for condition assessments more frequently due to their vulnerability or developing coordination plans with emergency preparedness teams to communicate decisions about closures and detours. Examples here include a study on long-term water supply availability or the impacts of extreme heat on cross-border trade.

For business and economic development specifically, the AECOM team will develop a custom set of strategies to increase business resilience, including recommendations that can be implemented at the scale of an economic district and those that can be implemented by individual businesses to increase their readiness and responsiveness to climate hazards and other disruptors. These strategies can help protect and enhance El Paso's businesses on an individual scale while increasing the overall resilience and vibrancy of the El Paso economy.

**Prioritization.** From the initial list of adaptation strategies, the AECOM team will coordinate with the project stakeholders to identify 12 strategies to advance for further development, including cost-benefit analysis (Task 8.3) and performance metrics development (Task 9.1).

To prioritize strategies, we will evaluate the full list of strategies for their potential climate hazard reduction impact, implementation feasibility, and other criteria. Following our similar approach to qualitative measure benefit analysis described for the PCAP and CCAP, we will develop a menu of potential benefit and feasibility criteria, which will then be tailored for the El Paso MSA region and based on community/stakeholder input. Example criteria are provided in **Error! Reference source not found.**. Strategies will be rated against each of the chosen criteria using a qualitative ordinal ranking scale to arrive at a final list of 12 prioritized strategies. These strategies will be advanced for detailed development.

*Table 3. Example evaluation criteria to prioritize adaptation strategies.*

| Category | Evaluation Criteria |
|---|---|
| Financial | Capital cost<br>Operational cost |
| Environmental | Air quality<br>GHG reduction<br>Biodiversity<br>Water resources |
| Social | Public health<br>Jobs<br>Equity |
| Governance | City authority<br>Regulatory barriers |

### Task 8.1 Deliverables

- 22 initial climate adaptation strategies and 12 prioritized climate adaptation strategies.
- Business resilience memo providing strategies to increase the resilience of individual businesses and economic districts.

### Task 8.1 Assumption

- AECOM will develop an initial long list of up to 22 adaptation strategies; based on prioritization and stakeholder feedback, 12 strategies will be developed in detail.

## TASK 8.2 STRATEGY ANALYSIS

**LIDAC Analysis.** Low-income and vulnerable communities are likely to bear the brunt of climate change impacts, as they are more likely to live in neighborhoods with fewer resources, work in jobs that place them on the frontline (e.g., as farmworkers or delivery workers), and have lower capacity to respond and recover. Thus, it is critical to review adaptation strategies to understand their potential impacts on low-income and disadvantaged communities, with a goal to amplifying benefits and opportunities while minimizing any negative impacts.

For each strategy, the AECOM team will consider how it can be designed to support greater adaptation capacity or hazard protections in vulnerable communities, such as through prioritizing implementation actions in LIDAC neighborhoods, increasing the inclusivity and accessibility of implementation tactics, and partnering with community-based organizations to host workshops and events in LIDAC areas. We will also consider how each strategy could potentially benefit low-income and disadvantaged community members, such as improvements to public health, creation of job opportunities, and other local economic or environmental outcomes.

Additionally, the AECOM team will track and note any potential negative impacts that may result from adaptation strategies, particularly those that disproportionately affect LIDAC communities. For example, strategies that may lead to gentrification, displacement, or loss of income for disadvantaged communities should incorporate guardrails or tactics to mitigate these potential impacts. We will discuss actions to minimize or mitigate negative consequences of adaptation strategies, with particular attention to mitigating any impacts that affect affordability, income health, and quality of life for community members in a negative way. To the extent possible, we will incorporate input from community engagement and outreach efforts with disadvantaged communities to inform the assessment of potential challenges and solutions associated with adaptation measures.

In addition, the results from the LIDAC analysis will also inform the development of equity-focused performance metrics in Task 9 Outputs and Outcomes. This will enable El Paso to track over time how its adaptation strategies are contributing to health, safety, and other outcomes for its most vulnerable and low-income residents.

**Funding Source Review.** For each prioritized adaptation strategy, the AECOM team will outline investment strategies to support implementation. A range of resources will be identified, including state and federal grants, local revenue sources, conventional financing opportunities, and more innovative financing structures (e.g., environmental impact bonds, catastrophe bonds). For these funding and financing options, we will provide information on their compatibility with adaptation strategy types, as well as applicability of the funding sources to activities such as maintenance and operation expenses and capital projects. The range of sources identified will be presented as a matrix and will consider key criteria, such as: timing, political feasibility, administrative complexity, partnerships, revenue-generating potential, and social equity. This evaluation will result in a summary of the benefits, drawbacks, and overall considerations that should serve as a guide for pursuing funding and identifying financing pathways for prioritized adaptation strategies.

**Authority to Implement.** Similar to our approach to the GHG reduction measures, for each of the proposed adaptation strategies, the AECOM team will identify whether relevant local agencies already have existing statutory or regulatory authority to implement the measure. Building off our analysis of agency authorities in Tasks 4 and 5, AECOM will identify the responsible agency's level of authority to implement each measure. For measures where agencies lack existing authority, we will identify whether they can obtain authority for specific actions or would need to coordinate with other agencies.

### Task 8.2 Deliverables

- LIDAC analysis memo on the likely impacts of each adaptation measure on low-income, vulnerable, and disadvantaged communities in the El Paso MSA, noting how strategies can be designed to amplify benefits while minimizing negative consequences.
- Matrix of funding and financing mechanisms that can support adaptation strategy implementation.
- Matrix summarizing adaptation strategies, implementing agencies, and their level of authority for measure implementation.

### Task 8.2 Assumption

- AECOM will undertake this analysis for the 12 prioritized adaptation strategies only.

## TASK 8.3. BENEFIT-COST ANALYSIS

Investing in adaptation can provide a range of financial, social, and environmental benefits. Conducting a full cost-benefit analysis on high-level actions or policies can be costly and ineffective given the number of high-level assumptions that are required and the lack of data and/or methods readily available for certain hazards. As such, for the 12 prioritized adaptation strategies, costs will be presented as bucketed ranges, from $ to $$$$. For a subset of up to five actions and policies, selected based on their priority and data and methodology availability, capital and operating and maintenance costs will be estimated, and a monetized cost-benefit analysis will be conducted accounting for the project costs and benefits over the asset lifespan.

Benefit methodologies will vary depending on the adaptation strategy. For adaptation strategies that also include GHG emission reductions that have been estimated, the social cost of GHG can be applied to estimate the monetized benefits based on the most recent federal guidance. For other benefits outside those offered by emission reductions, such as avoided costs (e.g., structural damages, human health impacts, business interruption, traffic, and transit delays), project co-benefits (e.g., recreation enhancement, ecosystem benefits, water quality improvements), and equity considerations (e.g., impacts to low-income and disadvantaged communities), a tiered methodology will be developed. For the longer list, benefits will be noted qualitatively (e.g., ratepayer savings) or quantitatively but without monetization (e.g., number of disadvantaged communities positively impacted by the strategy). Standard methodologies, such as FEMA and USDOT guidance, will be applied as relevant.

AECOM will review the tiered methodological approach (i.e., which actions should be analyzed qualitatively v. quantitively) in a meeting with the City to gather input on the various levels and information on benefits, impacts, and costs. In this meeting, the subset of adaptation strategies to be further studied for a full cost-benefit will also be discussed and selected.

### Task 8.3 Deliverables

- Methodology review meeting.
- Draft and final technical memo summarizing methodology and results.

### Task 8.3 Assumptions

- All costs estimates will be ROM based on published data and benchmarks.
- Five strategies will be selected for the quantitative analysis in partnership with the client based on priorities and data availability.

# TASK 9. OUTPUTS, OUTCOMES, AND PERFORMANCE METRICS

## TASK 9.1. DEFINE METRICS

The AECOM team will develop performance metrics that will support the El Paso MSA in tracking long-term implementation of GHG reduction measures developed for the CCAP in Task 5 and the adaptation strategies developed in Task 8. We will hold a meeting with City staff to understand what metrics they already track, and what data they have access to. We will also consider outputs and outcomes stated in the CPRG workplan. The goal is to identify 1-3 metrics for each strategy or measure that capture meaningful progress and can be tracked by the region with a reasonable level of effort. Metrics will be specific, measurable, achievable, relevant, and time bound. In addition, metrics should aim to capture strategy implementation in vulnerable and low-income communities and be informed by the LIDAC analysis.

For example, for a cool roof incentive program, the City can track both the number of incentives given out to all residents and the number of incentives provided to income-qualified applicants. Other examples could include the number of green stormwater management projects implemented, number of heat resilience design features incorporated into transit stations, and reductions in flood events in areas previously exposed to flooding.

### Task 9.1 Deliverable

- 1-3 performance metrics per prioritized GHG reduction measure and adaptation measure, including equity-specific metrics where relevant.

## TASK 9.2. DASHBOARD DEVELOPMENT

After the identification and development of performance metrics related to each strategy/measure, AECOM will develop a user-friendly, web-based dashboard to report out those performance metrics. The dashboard will incorporate maps, text, and charts to help tell the narrative of where El Paso is today, where it needs to go, and

provide a platform to track progress. To tell this story the AECOM team will develop the dashboard utilizing Esri ArcGIS Online dynamic data visualization and storytelling tools such as StoryMap, Hub, Dashboard, and Experience Builder. The interactive dashboard will be developed directly on the City's ArcGIS Online platform so all data will be hosted and accessible to the City at project completion.

While it is typical for consultants to develop and deliver interactive dashboards to clients, AECOM understands that this dashboard is intended to be a project platform for City staff to update and track progress well beyond the delivery of this scope of work. AECOM will work with the City at the kickoff of the project to identify which tool or combination of Esri tools are most suitable in presenting the narrative. In addition to identifying the appropriate tools the AECOM team will work closely with City staff to hand off the dashboard, providing training and direction for staff to take on future updates as needed.

### Task 9.2 Deliverables

- Interactive dashboard hosted on the City's ArcGIS Online platform.
- User guide providing instructions on updating performance metrics and monitoring and updating the dashboard in Word (draft and final).

### Task 9.2 Assumptions

- City has an ArcGIS Online account with one or more of the following applications:
  - ArcGIS Dashboards
  - ArcGIS Experience Builder
  - ArcGIS StoryMaps
  - ArcGIS Hub
- City will provide AECOM an account login within their organization or provide AECOM Creator account access to their organization for the development and delivery of the interactive dashboard.

## TASK 9.3 REPORTING TEMPLATE AND TRAINING

AECOM will develop an Excel-based reporting template for the City and regional partners to report community progress on City-led GHG reduction measures and adaptation strategies, as well as a user guide providing instructions on updating performance metrics and monitoring and updating the dashboard. We will conduct up to two, two-hour virtual sessions to train City staff on these tasks.

### Task 9.3 Deliverables

- Reporting template in Excel (draft and final).
- Two two-hour virtual sessions to train City staff on updating performance metrics, monitoring, updating the dashboard, and reporting template.

### Task 9.3 Assumptions

- The reporting template for PCAP and CCAP will adhere to EPA reporting requirements for the CPRG program.

## TASK 10. FINAL CLIMATE ACTION PLAN

Building on deliverables from previous tasks, the AECOM team will develop a clear, concise CAP that summarizes the community engagement process and technical analysis conducted, and identifies the El Paso region's:

- Key GHG emissions sectors and priority GHG measures.
- Key climate vulnerabilities, corresponding solutions, and strategies to mitigate these risks, and findings from the benefit-cost analysis.
- Benefits for and involvement of low-income and disadvantaged communities in the planning process.
- Outputs, outcomes, and performance metrics.
- Implementation authority, funding sources, and critical next steps for implementation.

The plan will be written in an engaging style accessible to members of the public while still retaining its utility as a planning tool by the region. Where appropriate, technical information will be included in appendices. A draft plan will be provided to the City and other project stakeholders for comment and review. AECOM will then update the draft plan into the final CAP based on one consolidated set of comments. Once finalized, the plan will be translated into Spanish, and both English and Spanish versions will be graphically laid out in InDesign.

### Task 10 Deliverables

- Preliminary draft CAP in English (Word).
- Final draft CAP in English (Word).
- Spanish translation of final draft CAP (Word).
- Graphically laid out final CAP in English and Spanish (PDF).

### Task 10 Assumption

- City will resolve and consolidate City and stakeholder comments on all drafts and submit one set of comments.

## CONTRACT COMMENTS

Because this solicitation seeks professional services rather than the delivery of physical/tangible goods, we believe that the City's standard Agreement for Professional Services is best suited to facilitate the performance of the solicited services. The City indicated its willingness to use the Agreement in its responses to questions. Therefore, we respectfully request that, if we are awarded the contract, the City use its standard Agreement as the basis for a final contract. If the City instead desires to use the contract clauses included in Section 20 of its RFP as the basis for a final contract, to the extent the City is willing to negotiate we request that Article 2, Invoices & Payment, be expanded to include the payment terms and conditions outlined in Section 14 of the Request for Proposal. Notwithstanding the foregoing, we submit our proposal subject to the parties negotiating mutually agreeable terms and conditions into a final contract.

# Factor B

## Firm Experience & Project Personnel

FACTOR B

# Firm Experience & Project Personnel

*We have uploaded our project experience, through IonWave, as part of the three Factor B – Experience forms.*

## Firm Experience

AECOM is an industry leading infrastructural consulting firm, delivering professional services throughout the project lifecycle – from planning, design, and engineering to program and construction management. On projects spanning new energy and the environment, transportation, buildings, water, our public- and private-sector clients trust us to solve their most complex challenges. Our roots in Texas go back more than 75 years. Today, AECOM has over 1,250 employees working across the State, including 24 employees in our El Paso office.

**AECOM helps to plan and design critical assets, infrastructure, neighborhoods, and ecosystems that reduce our impact on the planet and adapt communities and their livelihoods to changing climate, social, and economic conditions.**

### AECOM's Sustainability Award Recognition

**2021 American Planning Association**
**Energy Sustainability Award**
Dallas Comprehensive Environmental and Climate Action Plan

**2018 NACo**
**Achievement Award**
Silicon Valley 2.0 Climate Adaptation and Resilience

**2018 CCBJ**
**Project Merit Award**
Climate Change Adaptation and Resilience

**2015 American Planning Association California Chapter**
**Merit Award**
Best Practices, Climate Change/Extreme Weather Event Pilot Project

**AECOM has completed more than 80 sustainability, climate, and resilience projects nationally, including for cities, counties, states, and federal.** Our team has been at the forefront of climate change planning for more than 15 years. We developed some of the first climate action plans in the U.S. and have worked on climate strategies and measure development for cities and counties of all sizes in both rural and urban contexts. Our experience includes building the Climate Action for Urban Sustainability (CURB), Action Selection and Prioritization (ASAP), and a variety of customized tools to help local agencies with their climate action planning and implementation tracking.

Our team is at the forefront of CPRG planning and has helped lead agencies develop their workplan and project budgets. We bring familiarity with CPRG program requirements as well as deep experience with climate action planning.

Our national climate action planning portfolio includes the cities of Dallas, Somerville, Seattle, Baltimore, Los Angeles, Long Beach, Chicago, New York, and San Jose to name a few. We completed the **City of Dallas** CECAP in 2019 and are currently developing the **County of Dallas** Sustainability Plan. We are advising the **City of Austin** on a federal funding strategy for implementation of the City's Climate Equity Plan.

AECOM also works extensively in climate adaptation and resiliency planning throughout Texas. Working for the **Rio Grande Council of Governments (RGCOG)**, Our team led the first Regional Flood Plan for the Upper Rio Grande Region to better identify and manage flood risk to reduce loss of life and property from flooding. We are working for the **Texas Department of Transportation (TxDOT)** to conduct the Texas Statewide Resiliency Plan, have a long track record working for the **Texas General Land Office (GLO)** to develop the Texas Coastal Resiliency Master Plan (currently working towards the 2023 Plan, updating our previous work on the 2019 and 2017 plans).

**The key differentiators of our approach to climate action and adaptation planning include:**

**Local presence and understanding:** Our Project Manager, Gilbert Andujo is based in El Paso and led AECOM's work on the RGCOG Regional Flood Plan. Our AECOM team also brings extensive experience working with agencies including the City of El Paso, the El Paso Metropolitan Planning Organization (MPO), the Regional Mobility Authority El Paso Water, Village of Vinton, Town of Anthony, El Paso County, City of Socorro, Hudspeth County, City of San Elizario, and Town of Horizon City.

**National expertise:** Working with AECOM also allows the City to tap into our national network of subject matter experts, who have experience conducting climate action and adaptation planning and implementation projects throughout Texas and the U.S.

**Equitable engagement:** Our climate planning projects include a robust stakeholder engagement process that includes intentional efforts to support meaningful, equitable participation from environmental justice communities. We have successfully facilitated a wide range of stakeholder meetings, from in-person to hybrid to virtual, maximizing stakeholder participation. For this effort we are proud to partner with Barracuda on community outreach and engagement.

**Focus on implementation:** Our team helps local agencies unlock available federal and state funding opportunities, develop financing mechanisms, maximize green workforce development, and identify other critical steps to successfully deploy climate action plans.
AECOM helps our clients understand potential vulnerabilities and support initiatives that increase resilience.

**Case Study: Economic Assessment of Heat in the Phoenix Metro Area**
The Nature Conservancy engaged AECOM to understand the economic consequences of heat in the Phoenix metro area and the potential benefits offered by adaptation solutions.

Working with a technical advisory committee comprised of local and national experts, AECOM estimated the economic consequences of projected climate-related increases in urban heat through 2050. Our analysis focused on five key indicators: mortality, morbidity, shortened life cycle of infrastructure, energy demand, and labor productivity. We also conducted benefit-cost analysis of adaptation solutions including widespread implementation of cool roofs and expansion of the urban tree canopy.

The study found that the cost of not taking action to mitigate against high heat would result in an average annual economic loss of $1.9 to $2.3 billion a year. However, expanding the use of cool roofs and increasing the tree canopy are cost-effective solutions. The full report, which was covered by numerous news outlets including PBS, the Associated Press and AZ Central, can be found here.

# Project Personnel

For this opportunity, AECOM has formed a team of highly qualified, experienced professionals in climate action and adaptation planning, stakeholder and equitable engagement, benefits analysis, and climate funding and finance strategies to address the City's objectives and requirements in an integrated manner. The team has worked together extensively on developing comprehensive environmental plans related to climate adaptation and sustainability for many cities and counties throughout the nation. Several of our proposed team members are based in El Paso and are very familiar with the City and its challenges and opportunities.

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# Gilbert Andujo, PE

## ROLE: PROJECT MANAGER

**Education**
BS, Civil Engineering, University of Texas, El Paso

**Registrations/ Certifications**
Professional Engineer: NM #18615, TX #93826 (Civil)

Certified Floodplain Manager: TX

**Years of Experience:**
26 years

Gilbert has completed the civil design, inspection, or assessment for various project types related to dams, levees, floodwalls, erosion control/sediment control, water and wastewater design, trenchless rehabilitation of existing utilities and utility infrastructure design, street and thoroughfare design, drainage infrastructure design, hydraulic modeling, grading and drainage, sewage lift stations, retaining walls, site civil for buildings, and pump stations. His civil engineering experience is focused mostly within along the Texas and Mexico border and the southwest NM area, totaling in almost $750M in construction. He has led more than 75 design and studies task orders with El Paso Water giving him an in-depth understanding the flood, drainage, and W/WWTP systems in El Paso and associated stakeholders. Gilbert is fluent in both English and Spanish.

### Project experience

**Upper Rio Grande Regional Flood Plan (Region 14), Rio Grande Council of Governments (RGCOG), El Paso, TX.** Project Manager. AECOM successfully organized, developed, and delivered the first Upper Rio Grande Regional Flood Plan (URGRFP) for the Rio Grande Council of Governments (RGCOG) and TWDB. The URGRFP covered 23 West Texas counties from El Paso to Del Rio with the goal to identify specific community flood risks and recommend potential flood solutions to address these risks, such as flood studies, strategies, and projects. The plan is aimed at better managing flood risk overall to reduce loss of life and property from flooding. In coordination with community representatives and stakeholders, AECOM identified and recommended Flood Management Evaluations (FMEs), Flood Management Strategies (FMSs), and Flood Mitigation Projects (FMPs) for consideration to receive state funding from the TWDB Flood Infrastructure Fund (FIF). Gilbert coordinated the stakeholder management of more than 100 stakeholders to get buy-in on the plan and determine their areas of highest flooding, giving him an expert understanding of the flooding issues within Region 14.

**On-Call Professional Engineering Services for Stormwater, El Paso Water, El Paso, TX.** Project Manager. The work under AECOM's Master Services Agreement with EPWater included individual task orders. Gilbert's duties included assembling and leading the appropriate team capable of meeting or exceeding client expectations. A few of the task orders completed include updating the City of El Paso's Emergency Action Plan and performing a study to document ephemeral arroyos within the City of El Paso to be submitted to the U.S. Army Corps of Engineers (USACE), and providing emergency stormwater assistance to document high water marks during a large storm in 2021.

**Courchesne and NEMEXAS Levee Reaches Final Design, US International Boundary and Water Commission (USIBWC), A-E IDIQ, Various Locations along US-Mexico Border, El Paso, TX.** Civil Engineer. Project to improve the existing flood control system in order to meet the FEMA design criteria for a 100-year flood event and obtain the corresponding FEMA certification. Project was put on hold in 2015 due to the adjacent construction interfering with existing conditions. Gilbert became involved in this project at the restart of the project in 2018 as the Lead Civil Engineer. At this time, USIBWC changed the scope requiring a major change in the design. He led the complete remodel of the BIM in AutoCAD Civil 3D and updates to the plans, as well as the updates to the design per the latest USACE design criteria or needs of USIBWC. He also led the coordination between USIBWC and the El Paso Electric Rio Grande Power Plant to determine a plan for relocating their cooling line that crosses the levee. Additionally, in order to improve the sedimentation issues along the Montoya Drain, he determined a more effective angle for the Montoya Drain.

# Joshua Lathan

## ROLE: TECHNICAL DIRECTOR

**Education**
Bachelor of Environmental Design, University of Colorado

**Years of Experience:**
16 years

Joshua leads city climate action planning in the AECOM Americas region and has extensive experience in GHG emissions analysis to help cities and public agencies achieve their decarbonization goals. He has authored more than 40 climate action plans that define emissions targets and GHG reduction policy solutions. He has also contributed to the technical analysis of GHG inventory calculations and emissions forecast development to understand how emissions are likely to change in the future without further intervention. He has collaborated with AECOM colleagues to develop decision support tools for climate action planning, including the CURB emissions scenario planning tool developed for the World Bank and the ASAP tool for C40 Cities.

### Project experience

**Comprehensive Environment and Climate Action Plan, City of Dallas, Dallas, TX.** GHG Modeling Lead. AECOM developed a sustainability plan for the City of Dallas that was designed to demonstrate its commitment to the Paris Treaty climate goals, incorporate aspects resilience planning, and achieve other broad-based environmental goals with a sharp focus on the City's equity challenges. Joshua led the greenhouse gas mitigation work, including reviewing the City's base year inventory, preparing emissions forecasts, setting interim targets toward 2050 carbon neutrality, and developing and quantifying emissions reduction strategies that build upon the City's existing framework of action.

**Climate Action and Adaptation Plan, City of Long Beach, Long Beach, CA.** Technical Specialist. Joshua helped to develop a climate mitigation and adaptation plan for Long Beach. The mitigation aspect of this project involved conducting a core and consumption-based GHG inventory and forecast, setting a target, developing GHG reductions strategies, and establishing an implementation and monitoring framework. Joshua's roles included technical analysis of the energy and waste sectors in the core inventory, development of a target-setting memo that considers CA's unique legislative framework as well as science-based guidance, preparation of the consumption-based inventory following the ICLEI Community Protocol, leading development and analysis of local reduction strategies, and drafting sections of the final plan.

**Climate Action Plan and Equitable Green Workforce Development Strategy, City of Miami, Miami, FL.** Project Manager and GHG Modeling Lead. As part of this project, Joshua directed analysis of the city's base year emissions inventory and emissions forecasting efforts to estimate how the city's emissions could grow without further intervention. He then led development of four emissions reduction pathway scenarios, each focusing on a different set of emissions sources to demonstrate the multiple avenues to near-term target achievement. Based on this analysis, he helped the City establish an interim target for the year 2035 and defined the high-level emissions reduction strategies to be further developed in the CAP for target achievement.

**Net Zero Roadmap, Port Authority of New York and New Jersey, NY and NJ.** GHG Modeling Lead. AECOM is assisting the Port Authority in evaluating opportunities to achieve deep carbon reductions by 2050 for its complete Scope 1, 2, and 3 emissions sources across all line departments. Joshua developed customized GHG reduction scenario models that support rapid iteration of different implementation assumptions to help define preferred pathways to target achievement for each emissions source. The AECOM team then facilitated working group sessions with line department staff to define specific policies and programs that can be implemented to achieve the preferred scenarios.

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# Revathi Veriah, AICP

## ROLE: DEPUTY PROJECT MANAGER

**Education**
Dual MS, City & Regional Planning and Public Policy (Concentration in environment and public health), Georgia Institute of Technology

BArch, Architecture, Anna University, India

**Registrations/ Certifications**
American Institute of Certified Planner

**Professional Affiliations**
American Planning Association

**Years of Experience:**
6.5 years

As an urban planner in the Climate Advisory Services practice, Revathi is passionate about resilient and equitable community development. She brings her diverse experience from her background in architecture, urban planning and policy to the projects she works in. Revathi specializes in bringing together diverse stakeholders and data analysis with contextual recommendations to support implementation and equitable outcomes.

### Project experience

**Citywide Integrated Climate Funding Strategy & Management, City of Austin Office of Sustainability (OOS), Austin, TX.** Deputy Project Manager. AECOM is assisting the City of Austin in developing and executing a strategic federal funding plan from the Inflation Reduction Act for the implementation of its climate and environmental justice goals. AECOM will work with City departments and CBOs to identify potential projects that could be a good match for federal funding; screen federal funding opportunities for alignment with proposed projects; and develop action plans for prioritized sources. AECOM is also providing grant writing support for the Climate Pollution Reduction Grant and Urban and Community Forestry Inflation Reduction Act grant applications. Revathi coordinates with the client, stakeholders and subject matter experts to compile deliverables.

**Internal Sustainability Plan, Dallas County, Dallas, TX.** Deputy Project Manager. Committed to sustainability and environmental stewardship, the Dallas County is working with AECOM to create a Sustainability Plan. As the County's portfolio of sustainability initiatives expand and mature, the Board of Supervisors elevated the need to develop a vision and roadmap. This new plan will identify targeted policies, programs and projects that will address both current issues and proactively help the County prepare for a sustainable future. Revathi coordinated with the client, County department leads and AECOM subject matter experts to develop a vision, goals and recommendations for this plan.

**Comprehensive Environmental and Climate Action Plan, City of Dallas, Dallas, TX.** Policy Planner. As an award-winning project, the CECAP created a comprehensive roadmap that outlines the specific activities that the city can undertake to reduce greenhouse gas emissions and improve environmental quality in the city. Through implementation of a sustainability plan, City of Dallas will demonstrate a commitment to the Paris Treaty climate goals, incorporate resilience planning and achieve other broad-based environmental goals with a sharp focus on the city's equity challenges. That includes the development of strategies and policies across multiple sectors of city building, including energy, buildings, transportation, water, waste and open space. Revathi supported the development of the plan's vision, objectives and actions by helping a diverse range of stakeholders and the general public understand the benefits and commitments required to meet the plan's goals.

**Economic Development Strategy and Diversification Study, Texas General Land Office, Lower Rio Grande Valley Region, TX.** Deputy Project Manager and Phase 2 Task Lead. AECOM is providing program implementation services to help GLO develop strategies to expand the economy of counties in the Lower Rio Grande Valley region (Hidalgo, Wilacy, Cameron and Starr counties) to make them more resilient to future impacts while recovering. This study will identify and evaluate the study area's existing assets and current market, sectors and deficits, overall economy, job market, as well as economic diversification strategy and action plan so the communities in these areas are better prepared for potential impact of future major storms and weather-related disasters.

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# Vanessa Goh, LEED AP BD+C, LEED AP Homes, Envision SP

## ROLE: GHG & BENEFITS ANALYSIS TASK LEAD

**Education**
ALM, Sustainability and Green Buildings, Harvard Extension School

BS, Environmental Science UCLA

**Registrations/ Certifications**
LEED AP Building Design + Construction

LEED AP Homes

Envision SP

**Years of Experience:**
9 years

Vanessa is a sustainability consultant who specializes in greenhouse gas emissions accounting, climate action planning, and green building certifications. She develops net zero climate action plans for communities and local governments across North America. She has extensive experience creating greenhouse gas emissions inventories and forecasts, as well as emissions reduction pathways that demonstrate the technological changes to meet interim and net zero targets. She facilitates the action development and prioritization process by synthesizing stakeholder input, conducting policy gaps analyses, integrating local equity considerations and highlighting important co-benefits. Additionally, Vanessa helps projects obtain LEED certification and develops embodied carbon assessments to help clients meet their sustainability goals.

### Project experience

**Climate Action Plan, City of Balitmore, Baltimore, MD.** GHG Mitigation Specialist. AECOM is assisting the City of Baltimore in developing an equity-based CAP update that guides the city down a path to carbon neutrality by 2050. As a first step, Vanessa created the City's first ever GHG inventory for government operations. She then forecast municipal and community-wide emissions to 2050 by considering local growth indicators and external regulatory and market forces. She developed a simplified GHG reduction pathway tool that allows users to enter in a combination of different technological strategies to determine how to meet certain GHG reduction targets over time. This tool was used to develop the city's preferred GHG reduction pathways for community and municipal GHG target achievement. Draft climate actions were developed by identifying actions that aligned with the GHG reduction pathway, multiple stakeholder workgroups, and local equity issues. Vanessa will then guide City staff through an action prioritization process by analyzing action co-benefit, feasibility, and other near-term priorities. A subset of actions will then be further expanded on in implementation roadmaps that include cost estimates, lead implementers, operational considerations, and performance metrics. Finally, Vanessa will help write the CAP executive summary.

**Climate Action Plan, City of Miami, Miami, FL** GHG Mitigation Specialist. AECOM helped the City of Miami meet their C40 requirement of achieving carbon neutrality by 2050 through the CAP development process. Vanessa analyzed the City's GHG inventory in the C40 Pathways tool, created existing and ambitious emissions forecasts, identified key emission reduction strategies, and developed high-level mitigation actions. Through this process, she identified an appropriate 2035 interim reduction target to align the City with the C40 deadline 2020 framework. In order to forecast emissions, Vanessa helped the City develop forecasting indicators and aligned them with other City planning documents. Using the selected emissions reduction scenario, Vanessa helped develop policy-based reductions actions that were included in the City's CAP. She helped the City utilize a multi-criteria assessment to evaluate the draft actions' additional co-benefit returns using the C40 ASAP tool and locally relevant evaluation criteria. This assessment helped the City determine the magnitude of action co-benefits that informed final action prioritization. Vanessa integrated these findings into the City's CAP and developed an implementation plan for the prioritized actions.

**Sustainability Metrics and GHG Inventory, Los Angeles County Public Works, Los Angeles, CA.** GHG Analyst. Los Angeles County Public Works hired AECOM to develop GHG inventories for each of their departments and identify sustainability metrics for annual tracking. Vanessa developed the GHG inventories using the Local Government Operations Protocol (LGOP) and identified relevant sustainability metrics related to both inventory tracking and GRI reporting. This process involved conducting multiple interviews with department heads to understand their operations, major sources of emissions, and data availability. Vanessa created a GHG tracking and reporting tool and trained PW staff on how to conduct future inventories.

ICLEI

# Eli Yewdall

## ROLE: SENIOR CLIMATE ANALYST

**Education**
MS, Energy and Resources, University of California, Berkeley

BS, Physics, Gonzaga University

**Years of Experience:**
15 years

During Eli's 15-year career with ICLEI, he has developed comprehensive GHG emissions protocols, climate action guidance and training resources used by local and regional governments across the country. In addition to providing technical support to climate practitioners, Eli develops and maintains ICLEI's ClearPath GHG emissions management software application. He's developed over 40 GHG calculators to aid local governments in their journey to carbon-free economies.

### Project experience

**ClearPath, ICLEI, National.** Project Lead. Develop and maintain ICLEI's ClearPath emissions management software application used by over 1,000 local and regional governments.

**U.S. Community Protocol for GHG Accounting, ICLEI, National.** Lead Author and Technical Advisor. Updated accounting methods and added guidance for new approaches.

**Regional GHG Inventory and Scenario Development, Southeast Michigan Regional Council of Governments, Detroit, MI.** ICLEI Lead on project. Developed Regional GHG inventory, targets, and mitigation strategies.

**Regional GHG Inventory and CAP Development, Northeast Ohio Area Coordinating Agency Client, Cleveland, OH.** Project Lead. Developed Regional GHG inventory and targets.

**GHG Reduction Wedge Analysis, Sioux Falls, SD.** Project Lead. Developed analysis of emissions reduction wedges to meet target.

**Climate Action Plan, Gonzales, LA.** ICLEI Lead on project. Provided technical input on emissions reduction strategies and developed analysis of emissions reduction wedges to meet target.

**Philipstown Consumption-based Greenhouse Gas Inventory, Philipstown, Philipstown, NY.** Project Lead. Created a consumption-based inventory and forestry and land use inventory for Philipstown.

**Community GHG Inventory, Douglas County, KS.** Project Lead. Developed county-wide GHG inventory and forecast.

**"Working Paper: Analysis of U.S. Local Government Science-Based Targets and Pathways to Achieve Them in the Race to Zero," ICLEI, National.** Contributing Author. Contributed to writing and technical analysis of pathways for multiple U.S. cities to reach aggressive emissions targets.

**GHG Reduction Wedge Analysis, Lansing, MI.** Developed analysis of emissions reduction wedges to meet target.

**GHG Contribution Analysis Method and Toolkit, USDOE, National.** Tool Developer. Produced excel based tool to analyze factors contributing to changes in community GHG emissions.

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# Diana Edwards

## ROLE: RESILIENCY & ADAPTATION TASK LEAD

**Education**
MLA, Environmental Planning, University of California, Berkeley

BS, Sciences (Biology and Urban Ecology), Portland State University

**Registrations/ Certifications**
AECOM Project Management Certification

**Professional Affiliations**
Association of Environmental Professionals

American Planning Association

The Wildlife Society

**Years of Experience:**
12 years

Diana is a project manager and adaptation planner with experience leading climate adaptation and sustainability projects throughout the U.S. Her practice focuses on short- and long-term plans at all scales for climate change and sea level rise adaptation. She is experienced working with diverse stakeholders including municipalities, non-profits, state and regional governments, public agencies, advocacy and community groups, and the general public. She applies her multidisciplinary perspective to planning and resilience challenges in both natural and urban contexts, with particular emphasis on the integration of nature-based solutions and ecology with planning and design. She works with scientists, planners and engineers to integrate sustainability and climate change resiliency into the planning and design of restoration, transportation and infrastructure projects. She has extensive regulatory and permitting experience with federal, state and a variety of local agencies.

### Project experience

**Climate Vulnerability Assessment and Adaptation Plan, Metrolink, Los Angeles Region, CA.** Adaptation Planner. Strategized mapping approaches for climate hazards, particularly wildfire and drought, throughout the Metrolink service area. Identified adaptation strategies that could be included in Metrolink capital projects to increase resiliency along the network. Leads document production and finalization. Metrolink, the Los Angeles Region's commuter rail provider, has commissioned AECOM to conduct a system-wide climate and seismic hazards vulnerability assessment to extreme heat, sea level rise, precipitation/ riverine flooding, landslides/mudslides, wildfire, drought, and earthquakes.

**Climate Action and Adaptation Plan, City of Long Beach, Long Beach, CA.** AECOM provided services for the development of a climate action and adaptation plan, including a vulnerability assessment, sea level rise risk assessment, and preparation of adaptation strategies.

**Climate Action and Adaptation Plan, City of Davis, Davis, CA.** Project Manager and Adaptation Lead. Leads development of climate change vulnerability assessment and adaptation plan. Leads a robust stakeholder and public outreach process consisting of a Technical Advisory Committee, City Commissions/City Council, city staff, and the general public. The project identifies climate vulnerabilities as well as inventories sources of greenhouse gas emissions within the City. AECOM developed strategies to adapt to future climate scenarios that address key vulnerabilities of people and places to extreme heat, wildfire, drought, and flooding. The plan identifies targets for future greenhouse gas emissions reductions and includes prioritized actions to achieve these targets.

**Regional Resilience Framework, Southern California Association of Government, Los Angeles Region, CA.** Project Manager and Lead Resilience Planner. Leading the development of the Regional Resilience Framework which will expand the client's understanding of resilience to include broader social and economic factors and is intended to guide the exploration of emerging and potential disruptions from public health, human-caused, and natural hazards.

**Coastal Resiliency Master Plan 2020, State of Texas General Land Office, Ecosystem Services, TX.** Assisted in development of a method to screen Texas GLO coastal resiliency projects that are eligible for hazard mitigation funding. The screening highlights projects that incorporate green infrastructure into design and seeks to pair projects with relevant funding sources that support hazard mitigation using nature-based solutions. AECOM is helping the Technical Working Group to develop a protocol that will add a monetary value to the ecosystem services of green infrastructure projects specific to the Texas coastline. The aim is to include green infrastructure into disaster hazard mitigation planning and design and identify funding sources that will support these new designs.

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# Anne deBoer

## ROLE: COST-BENEFIT ANALYSIS LEAD

**Education**
Master's in City Planning & Interdisciplinary Graduate Certificate in Real Estate, Department of City and Regional Planning, University of California, Berkeley

BA with High Honors, Art History with a Certificate in Environmental Studies, Wesleyan University

**Years of Experience:**
9 years

Anne is a member of AECOM's Climate Advisory Services practice and conducts multiple criteria assessments, economic impact analysis, triple bottom line, and benefit-cost analysis to help public and private sector clients improve economic resilience. Her analysis often includes conventional financial metrics as well as broader social and environmental co-benefits to develop a comprehensive picture of both short- and long-term value of proposed investments. She couples economic analysis with contextualized and actionable program and policy recommendations to support implementation and equitable outcomes, such as through development of funding and financing strategies.

### Project experience

**Brooklyn Bridge-Montgomery Coastal Resilience Feasibility Study, New York City Economic Development Corporation, New York, NY.** Lead Analyst. This planning, engineering and design study is to inform the development of an integrated flood protection system in the Two Bridges neighborhood of Manhattan. The over half a billion-dollar project, which broke ground in 2023, will protect thousands of residents, including many who live in affordable housing, while enhancing community access to waterfront views and recreation. Anne worked with the multi-disciplinary team to develop a benefit-cost analysis and economic impact analysis that would satisfy requirements for the federal funding of the project from HUD's National Disaster Resilience Competition (NDRC).

**Flood Risk Mitigation, San Francisco Public Utilities Commission (SFPUC), San Francisco, CA.** Economics Lead. AECOM has been undertaking the economic evaluation of flood risk management measures for SFPUC by determining the comprehensive economic consequences associated with storm-related flooding and the economic benefits from improving stormwater management infrastructure within the City. This work includes cost-benefit analysis of flood risk mitigation technologies for proposed updates to the City's building code.

**Urban Heat and Air Pollution Economic Assessment, The Nature Conservancy, Phoenix Metropolitan Area, AZ.** Project Manager. AECOM partnered with The Nature Conservancy to conduct an economic assessment of current and future costs associated with urban heat and ambient air pollution in the Phoenix region. This assessment helped identify the extent of impacts in monetary terms under a business as usual scenario, and the costs and benefits of adaptation and resilience actions that can help to mitigate impacts to society, the economy and the environment. Two emissions scenarios and two future time horizons were evaluated under a no-action baseline and for two adaptation scenarios, including expanding the presence of cool roofs in the metro area and increasing the tree canopy. Anne served as the project manager, which included overseeing the AECOM work and the Technical Advisory Committee involvement. The report can be found here.

**Southeast Florida Business Case for Resilience, Urban Land Institute (ULI) and Southeast Florida Regional Climate Change Compact, FL.** Lead Analyst. AECOM partnered with the ULI, Brizaga, Inc., and Southeast Florida Regional Climate Change Compact counties to analyze the economic consequences of sea level rise and coastal flooding, and the potential economic opportunities associated with investments in resilience infrastructure. Exposure mapping was conducted across parcels and core community infrastructure assets necessary for life safety or public and private service continuity for different coastal conditions under three time horizons. Analysis was conducted to estimate the economic consequences for key loss categories (e.g., property damage, business interruption, fiscal impacts) for the four counties. REMI PI+, an econometric model, was used to estimate the cascading impacts to the regional and state economies. Analysis was conducted for a no-action scenario and two adaptation scenarios to develop a regional benefit-cost ratio for adaptation.

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# Alison Nemirow

## ROLE: EQUITABLE IMPLEMENTATION STRATEGY TASK LEAD

**Education**
MS, City Planning, Department of City and Regional Planning, University of California, Berkeley

BA (Special Honors), Environmental Studies, University of Chicago

**Speaking Engagements**
"Climate Action Doing – Get to Implementation Already!" APA National Planning Conference, April 2023

Moderator, Regional Climate Action Plans Panel, ULI Washington Leadership Institute, March 2023

**Years of Experience:**
14 years

Alison is an associate principal on AECOM's Climate Advisory Services practice. She has nearly 15 years of experience as an urban economist specializing in sustainable and equitable development, with a particular focus on developing financing and governance strategies to support execution of transformative and equitable sustainability programs. She is currently leading work on Philadelphia's Energy Poverty Alleviation Strategy, Baltimore's Climate Action Plan Update, and Austin's federal funding strategy for implementation of the City's Climate Equity Plan. Alison brings experience managing complex planning processes for metropolitan planning organizations in regions including Boston, Western Connecticut, and San Francisco.

### Project experience

**Energy Poverty Alleviation Strategy, City of Philadelphia Office of Sustainability, Philadelphia, PA.** Project Manager. Leading development of an implementation roadmap for specific actions the City can take to address energy poverty and decarbonize the residential building sector. The AECOM team is developing a toolkit of policy solutions, conducting technical focus groups with energy providers and community-based organizations to identify the most appropriate programs and policies for the Philadelphia context, and interviewing agency staff to define specific next steps, roles, and timelines for implementation.

**Climate Action Plan Update, Baltimore City Office of Sustainability, Baltimore, MD.** Project Manager. Alison is leading the consultant team that is updating Baltimore's Climate Action Plan. The update process includes an extensive stakeholder engagement process, GHG inventory, analysis of the fiscal impacts of achieving the City's net zero goals, and development of detailed implementation roadmaps that will lay out critical actions, roles and responsibilities, partnerships, and funding sources.

**Sea Level Rise Adaptation Funding and Investment Framework, MTC, San Francisco, CA.** Project Director. Advised MTC on the most equitable measures to raise new revenues for sea level rise adaptation. Hosted conversations with funders and local agencies and developed a methodology for analyzing the equity implications of various revenue-generating mechanisms (e.g., parcel taxes, ad valorem property taxes, assessment districts).

**Inflation Reduction Act Advisory Services, City of Austin Office of Sustainability, Austin, TX.** Project Manager. Supporting the City in developing a federal funding strategy for implementation of Austin's Climate Equity Plan, including facilitating workshops with staff and community-based organizations and developing grant applications.

**Net Zero Roadmap, Port Authority of New York and New Jersey, NY and NJ.** Deputy Project Manager and Implementation Task Lead. Alison developed the implementation plan for the Port Authority's climate action plan, including facilitating a series of working groups with staff from departments across the Port Authority, focused on developing specific recommendations and a decision-making process for integrating sustainability into the agency's capital program prioritization process.

**Washington State Residential Building Decarbonization Implementation Plan, Washington State Department of Commerce, WA.** Task Lead. Reviewed existing programs and funding sources for residential building decarbonization at the state, federal, and local levels. Evaluated gaps in existing programs and recommended steps the state could take to raise new funding, streamline and improve program administration, and expand uptake of existing incentives, with a particular focus on expanding access to electrification and energy efficiency measures for low-income households.

# Fred Lopez FAICP CTP, CNU-A

## ROLE: IMPLEMENTATION ADVISORY

**Education**
MPA, Master of Public Administration, The University of Texas at El Paso

BA, University of Texas at Austin

**Awards**
Transportation Manager of the Year, American Public Works Assocation, Texas Chapter

**Professional Affiliations**

American Planning Association, Texas Chapter, Board of Directors

American Planning Association, West Section - Past Director, Past Assistance Director, Past Treasurer

**Years of Experience:**
23 years

Fred has over 23 years of urban and regional planning experience, including transportation planning, comprehensive planning. land use, zoning, and code/ ordinance updates. He oversees Quantum Consultants' urban planning team and previously served as Comprehensive Plan Manager, Transportation Planning Administrator, and Deputy Director for Capital Improvement Department Planning at the City of El Paso. In 2012, he developed and managed the City of El Paso's first Transportation Planning Division, which led to new street design policies and procedures focused on improving public health by promoting walking, bicycling, and mass transit. Fred is Fellow with American Institute of Certified Planners (FAICP) and has Advanced Specialty Certification in Transportation Planning from the American Planning Association.

Fred is active in the American Planning Association Texas Chapter and is a member of APA Texas Board of Directors. Fred was designated as an Emerging Leader by the American Public Works Association in 2014 and was awarded Transportation Manager of the Year by the Texas Public Works Association in 2017. He is also a member of the UTEP Alumni Association Board of Directors.

Fred has a high level of technical expertise in land use issues, including platting, zoning, right-of way dedication and vacation. He was active in numerous code rewrites in El Paso, including zoning, subdivisions, street design, landscaping, parking, signage, and Smart Code. Fred also led the planning, budgeting, and programming for key projects in the City of El Paso's Capital Improvement Program, including several infrastructure projects utilizing federal funding.

### Project experience

**UTEP Advanced Teaching and Learning Complex Right-of-Way Vacations.**

**UTEP Paso Advanced Manufacturing and Aerospace Center (AMAC) Right-of-Way Vacations/Platting UTEP.**

**Hilton Garden Inn, El Paso, TX.**

**UTEP Master Plan, El Paso, TX.**

**Paso del Norte Trail Planning and Sustainability Services, El Paso, TX.**

**Paso del Norte Trail Strategic Implementation Plan, El Paso, TX.**

**Downtown El Paso Brownfield Community-Wide Assessment Grant Project, El Paso, TX.**

**Complete Streets Policy Planning and Implementation Services, El Paso, TX.**

**St. Clement's Parish and School Master Plan, El Paso, TX.**

**Bicycle Demonstration Projects, Las Cruces, NM.**

**Subdivision and Zoning Code Rewrite, Las Cruces, NM.**

**Zoning Code Rewrite, Anthony, TX.**

**McAllen Comprehensive Plan, McAllen, TX.**

**Las Cruces Capital Improvement Project, Las Cruces, NM.**

**Woodfin Comprehensive Plan, Woodfin, NC.**

**Bristol Comprehensive Plan, Bristol, VA.**

**Boone Comprehensive Plan, Boone, NC.**

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# Cecilia Salvans

## ROLE: EQUITABLE PUBLIC ENGAGEMENT TASK LEAD/ INTERGOVERNMENTAL COORDINATION TASK LEAD

**Education**
BA, Urban Studies and Planning, University of California, San Diego

**Professional Affiliations**
American Planning Association

**Years of Experience:**
15 years

Cecilia is the planning manager for the Urbanism + Planning practice in the AECOM's Dallas office. Her focus is on the intersection of regional planning, integrated infrastructure and sustainable development. As a senior urban planner, her strengthens lay within the ability to successfully execute multi-disciplinary projects that have a heavy emphasis with stakeholder engagement. She has served on multiple projects as lead community engagement and/or as Spanish translator during community meetings. Cecilia's ability to fluently speak and write in Spanish while understanding urban planning practices enables her to extract the right information from a wide array of community members.

### Project experience

**Economic Development Strategy and Diversification Study, Texas General Land Office, Lower Rio Grande Valley Region, TX.** Project Manager. AECOM is providing program implementation services to help GLO develop strategies to expand the economy of counties in the Lower Rio Grande Valley region (Hidalgo, Wilacy, Cameron and Starr counties) to make them more resilient to future impacts while recovering. This study will identify and evaluate the study area's existing assets and current market, sectors and deficits, overall economy, job market, as well as economic diversification strategy and action plan so the communities in these areas are better prepared for potential impact of future major storms and weather-related disasters.

**Butler Place Access and Development Plan, City of Fort Worth, Fort Worth, TX.** Community Engagement Lead. The core 42 acre Butler Place study area is bound by three major freeways (I-30, I-35W and US 287) in addition to several major rail lines, and has been long isolated from rest of the greater Fort Worth communities and not easily accessible. As Butler Place holds historic cultural significance, especially within the African American community, AECOM was tasked with developing an area masterplan and integrated infrastructure strategy to revitalize and elevate the site into a nexus of equitable housing and development while mitigating the negative impacts of urban highways. As part of the effort, the team was also asked to develop the downtown Fort Worth masterplan and concept planning and design for a brand new City Center Mobility Hub.

**Livable Centers Study: Healthy Pasadena, H-GAC/ City of Pasadena, Pasadena, TX.** Project Manager. Building upon the original Pasadena Livable Centers Study completed in 2021 by AECOM, H-GAC and the City of Pasadena is seeking to create a vibrant urban center for all ages that connects diverse housing and thriving parks with employment opportunities to support healthy lifestyles in the study area which focuses on the medical cluster anchored by HCA Houston Healthcare Southeast. Cecilia will oversee the project management, closely coordinate with the client, and also participate in community engagement to create implementable solutions.

**Pasadena Livable Centers Study, H-GAC/City of Pasadena, Pasadena, TX.** Deputy Project Manager. A revitalization master plan for a historically underinvested ethnic community in the second largest city of the greater Houston region. The plan focuses on identifying a combination of urban design treatments, development placetypes and infrastructure investment that can help expand the ability of the residents to participate in the rapid growth of Houston. Key strategies include daylighting a vacant shopping mall into a walkable, mixed-use and activated place for the community and rethinking existing land use entitlements to encourage reinvestment. Cecilia helped establish the overall framework of the project, managed the project team, and worked closely with the community engagement subconsultant team to ensure community engagement tactics utilized were inclusive of all demographics and languages.

**BARRACUDA**

# Marina Monsisvais, MBA

## ROLE:COMMUNITY ENGAGEMENT

**Education**
MBA,University of Texas at El Paso

BA, Mass Communication and Photojournalism, New Mexico State University

**Awards**
2017 Governor's Small Business Award; 2018 El Paso Women's Hall of Fame-Public Relations; 2018 Women of Impact Award; 2018 Community Spirit Award

**Years of Experience:**
23 years

Marina founded Barracuda Public Relations to be the megaphone for all the great things happening in El Paso. She has grown the company from a boutique PR agency founded around her kitchen table into one of the most recognized and respected small businesses in El Paso, TX. A graduate of New Mexico State University, she has leveraged her commercial media experience and deep engagement in the El Paso-Juárez community to create an indispensable resource for local businesses, non-profit organizations and government institutions. Under Marina's leadership, Barracuda PR has remained fully responsive to our fast-changing media landscape, expanding services to include social media management, video content creation, direct email marketing and a full suite of design services.

### Project experience

**Comprehensive Bike Plan, El Paso, TX.** Oversaw the community relations strategy for the City of El Paso's Comprehensive Bicycle Plan for the Alta Planning + Design team. Meaningfully engaged diverse audiences with a consistent message which included maximizing earned media opportunities while focusing heavily on one-on-one involvement, including interactive open houses, branded social media content and media relations. Working with Alta and the City of El Paso's Capital Improvement Department, Barracuda took the bike plan to the 40,000 people who attend the annual Chalk the Block public art festival in Downtown El Paso. By chalking life-size bike markings on the streets, planners demonstrated the impact the bike plan could have on El Paso's infrastructure. A team was also present collecting participants' feedback and capturing email addresses to ensure those who are interested remain engaged. In August of 2016, The City of El Paso unanimously approved the adoption of The Comprehensive Bike Plan.

**I-10 Connect, El Paso, TX.** She oversaw bilingual construction phase public involvement activities including virtual and in-person public meetings, copy for newsletters, news releases and SMS, door-to-door outreach, creation of graphic and video content for social media and creation of Website content. While the tactics required creativity, the messaging required great discipline. High-impact closures — even if only tentative — were communicated early and consistently throughout the project. Additionally, messaging had to faithfully return to the project's main goal of creating direct connections between I-10 and Loop 375 at mid-city while gently correcting misconceptions that the project was aimed at speeding cross-border traffic between El Paso and Ciudad Juárez.

**Multimodal Study, El Paso District.**

**Vision Zero, El Paso, TX.**

**FM 1281 (Horizon Boulevard) Corridor Study, Horizon City, TX.**

**SunCycle Bikeshare Program, El Paso, TX.**

**El Paso Streetcar Project, El Paso, TX.**

**Spaceport America, Truth or Consequences, NM.**

**El Paso Giving Day, El Paso, TX.**

**Reeves County Truck Reliever Route, Pecos, TX.**

# Our Selected Partners

AECOM has carefully selected our subcontracting partners based on their expertise, local knowledge and project experience of similar size and scope to this effort. Barracuda and Quantum are based in Texas and work frequently on El Paso projects, while ICLEI has extensive experience conducting GHG inventories for communities in Texas and nationwide. To meet the City's strong commitment to promoting full and equal business opportunities for businesses in the State of Texas.

## Barracuda Public Relations

Established in 2010, Barracuda has emerged as the premier communications and public relations firm in West Texas and Southern New Mexico. Barracuda is a team of bilingual communicators who care deeply about public engagement. The firm has a proven track record of effectively managing culturally relevant public involvement, community outreach and public relations functions related to a wide variety of infrastructure, local government, and transportation projects.

Barracuda is a Disadvantaged Business Enterprise (DBE) certified, U.S. Small Business Administration (SBA) certified, Historically Underutilized Business (HUB) certified, Woman Owned Small Business (WOSB) certified, and Women's Business Enterprise National Council (WBENC) certified. The State of Texas recognized Barracuda with the 2017 Governor's Small Business Award. Barracuda is the first agency in Texas to be certified by the National Institute for Social Media. The firm is also trained on National Environmental Protection Act (NEPA) requirements and fully understand the scrutiny that comes with large public projects. Ultimately, Barracuda knows how to satisfy statutory requirements while building an approach that goes further and creates critical community buy-in.

Barracuda's client list includes a diverse array of highly visible, transformational projects, including the City of El Paso's Vision Zero Plan, I-10 Connect (a project which had binational outreach efforts), ARPA funding listening sessions for the County of El Paso, the El Paso Streetcar Project, and the City of El Paso's Comprehensive Bike Plan.

## ICLEI Local Governments for Sustainability USA

ICLEI is the first and largest global network of local and regional governments devoted to solving the world's most intractable sustainability challenges. The firm's standards, tools, and programs credibly, transparently, and robustly reduce GHG emissions, improve lives and livelihoods and protect natural resources in the communities they serve.

ICLEI developed the methodologies that are now industry standards for U.S. local and regional government GHG emissions management, including the creation of: U.S. Community Protocol (USCP) for Accounting and Reporting GHG Emissions, Local Government Operations Protocol for Measuring GHG Emissions, Recycling and Composting Protocol, and Forestry and Land Use Update (Appendix J) to the U.S. Community Protocol. Building on our experience serving thousands of U.S. local and regional governments, ICLEI launched its ClearPath GHG emissions-management software platform in 2013. More than 1,000 U.S. jurisdictions have created community-scale inventories and climate action plan scenarios demonstrating ClearPath's ability to support emissions accounting at scale.

ICLEI has supported the following regions with GHG accounting and analysis of North Central Texas COG, Texas; South Bay Cities Council of Governments, California; Pima Association of Governments, Arizona; and Southwest Michigan Planning Commission, Michigan.

## Quantum Consultants

Founded in 2002, Quantum is a full-service, professional urban planning, civil engineering, and sustainability consulting firm. The firm's planners have decades of experience in comprehensive planning, innovative community engagement, zoning assessments and rewrites, transportation planning and capital improvement planning. Quantum maintains a unique position to identify and develop multidisciplinary approaches to thoughtful, inclusive, and distinctive solutions.

In addition to our planning experience, Quantum provides a broad spectrum of civil engineering services. The firm's team has experience in complex design projects related to transportation, stormwater infrastructure, park improvements, and residential, commercial, and industrial development.

Quantum has worked on numerous projects across the country including County of El Paso Growth Management, Paso Del Norte Health Foundation Trail, and Town of Woodfin Comprehensive Plan.

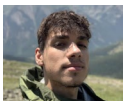
# Additional Team Members

## Steven Duong, AICP
### Project Executive

Steven is a principal in AECOM's Climate Advisory Services practice. His focus is on the intersection of urban design, sustainable development, regional planning, and integrated infrastructure. An experienced project manager and urban designer, his work in Texas includes Resilient Dallas and the City's Climate Action Plan, TxDOT Houston's Sustainable Ways to Integrate Future Transportation Study, the Texas GLO's Economic Resilience Plan and Pasadena's Livable Centers Plan.

**Relevant projects**

- Economic Resilience Strategy and Diversification Study, Texas General Land Office, Nine-County Regions, TX
- Comprehensive Environmental and Climate Action Plan, City of Dallas, Dallas, TX
- 100 Resilient Cities — Resilient Dallas, City of Dallas/Rockefeller Foundation, Dallas, TX



## Jadon Basilevac
### Climate Analyst (ICLEI)

Jadon joined the ICLEI USA team as a Program Officer in 2023. He provides technical assistance to local and regional governments to help drive deep reductions in GHG emissions. He provides training and technical assistance on topics such as GHG inventories, target setting, and mitigation strategy development. With nearly two years of experience in instruction and use of ICLEI's ClearPath software, Jadon also aids in data collection, quality reviews, and target setting and analysis.

**Relevant projects**

- Project Energy Nebraska, ICLEI's ClearPath, University of Nebraska, Lincoln, NE
- Technical Team Support, ICLEI USA Members
- Atlanta Energy Efficiency and Conservation Block Grant Support, ICLEI USA Members

## Khrystle Bullock
### Public Health & LIDAC Benefits Analyst

Khrystle is a social performance and resilience scientist who provides support to private and public sector clients to build, improve, monitor, and evaluate their sustainability to work towards more resilient practices. She has expertise in community-based participatory research, program management, health impact assessments, environmental justice and community engagement, demographic analysis, public health, interagency collaboration, and research coordination and management.

**Relevant projects**

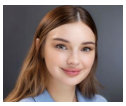
- FEMA Office of Environmental Planning and Historic Preservation, Environmental Justice Support, U.S.
- U.S. Department of Homeland Security, Climate Literacy Training, U.S.
- Social Value Guide, Shell, U.S.

## Shelley Jiang
### Climate Vulnerability Assessment

Shelley is a climate and extreme heat expert with 10 years of experience spanning climate action and adaptation planning, GHG analysis, and decarbonization strategies. She has analyzed the impacts of extreme heat on transportation infrastructure and communities, as well as the potential cooling benefits of solutions such as cool pavements, roofs, tree canopy, and transportation electrification. Shelley is also a successful grant writer and communicator, with experience in equitable community and stakeholder engagement, including a regionwide engagement effort to understand community perspectives and needs on extreme heat impacts.

**Relevant projects**

- Southern California Association of Government Regional Resilience Framework, Los Angeles Region, CA
- Texas State Department of Transportation, Texas Statewide Resiliency Plan, Texas Statewide
- City of Davis, Climate Action and Adaptation Plan, Davis, CA



## Marissa Swift, MS
### Resiliency Planner

Marissa specializes in coastal resilience planning, with a focus on preparing coastal communities, decision makers, and other stakeholders for coastal hazards such as sea level rise and storm surge. She has played a pivotal role in conducting climate risk and vulnerability assessments for various regions, employing her expertise in analyzing potential climate change impacts on ecosystems, infrastructure, and communities. She has over five years of experience working on a variety of coastal and water resources projects, including work for the Texas GLO, EPA, TCEQ, FEMA, and other public and private clients.

**Relevant projects**

- 2023, 2019, and 2017 Texas Coastal Resiliency Master Plan, Texas General Land Office, Texas Coastwide
- Matagorda Bay Ecosystem Assessment, Texas Comptroller's Natural Resources Program, Matagorda Bay, TX
- 2024-2025 and 2026-2027 Texas Ports Mission Plan, TxDOT Maritime Division, TX

## Chris Brewer
### Green Workforce Development

Chris has 27 years of experience evaluating planning, zoning, market, financial and policy aspects of real estate development. His practice has focused on workforce development and economic resiliency and revitalization, including reuse of urban brownfield sites and closed military bases, adaptive reuse projects, convention centers and arenas, and neighborhood revitalization strategies.

**Relevant projects**
- Citywide Economic Development Strategy, City of Richardson, TX
- Miami Green Jobs/Greenhouse Gas Reduction Plan, City of Miami, FL
- Economic Resiliency Strategy, Texas General Land Office, Corpus Christi, TX
- Re-Imagine Puerto Rico: Rebuild, Recovery, and Resilience, Rockefeller Foundation, Puerto Rico

## Sean Tapia, AICP, ENV SP
### Dashboard Development

Sean uses a variety of traditional and geospatial analyses to identify market and economic issues and opportunities for public and private sector clients. He uses new tools and technologies to develop feasible and implementable policies and strategies to address those issues and capture opportunities. He has developed data dashboard and visualization tools for a wide variety of projects related to resiliency planning, urban planning, arts and culture, equity, and economic development.

**Relevant projects**
- 2023 Texas Coastal Resiliency Master Plan, Texas General Land Office, Texas Coastwide
- Residential Commercial Dashboards, City of Plano, TX
- Comprehensive Plan, City of DeSoto, TX

## Israel Irrobali
### Community Engagement (Barracuda)

Israel is Barracuda's project manager, an El Paso native and a graduate of Syracuse University. He started his career in public service, working for the Governor's Office of Economic Development and Tourism. In 2017, he moved back to El Paso and worked for the City of El Paso. Israel was elected as the District 5 Trustee for the El Paso Independent School District in June 2021 with a term set to expire in May 2025.

**Relevant projects**
- Vision Zero, City of El Paso, TX
- Castner Range National Monument, El Paso, TX
- ARPA Listening Sessions, Paso del Norte Community Foundation and El Paso County, El Paso, TX

## Gabriel Garcia
### Graphic Design (Barracuda)

A graduate of the University of Texas at El Paso, Gabriel works to establish and expand our clients' brands. He leads the graphic design team to create cohesive campaigns that effectively communicate the client's unique story and message. He also works closely with our social media team to create custom graphics and illustrations that reflect the client's aesthetic voice. He is flexible and adaptable and is becoming well-versed in creating motion graphics that bring his designs to life. Gabriel's commitment and passion for the arts in the community are evident in his work.

**Relevant projects**
- I-10 Connect, El Paso, TX
- Upper Rio Grande Flood Planning, West TX
- Horizon Boulevard Corridor Study, El Paso, TX

## Victor De La Garza, PE
### TxDOT & El Paso MPO Liaison

Victor is an electrical engineer with over 23 years of experience in Intelligent Transportation Systems (ITS) including 10 years of TxDOT experience. His ITS work contributes to cleaner environments, enhanced energy efficiency, increased safety, better utilization of existing highway infrastructure, and increased mobility.

**Relevant projects**
- ITS Master Plan, TxDOT, El Paso, TX
- Transportation System Management and Operations, TxDOT, El Paso, TX
- Traffic Management Center Relocation, City of El Paso, TX

## George Pinal
### TCEQ Liaison

Dr. George Pinal is a civil engineer with more than 25 years of results-oriented engineering experience in civil, quality, and industrial engineering. His experience includes planning, designing, project managing, leading, supervising contractors, consultants, personnel, scheduling, prioritizing and the direct development of million-dollar public work infrastructure park, building, street, transit, and stormwater project implementation projects. George's previous experience includes 17 years with the City of El Paso.

**Relevant projects**
- 2035 Transborder Conformity Report–Planning, El Paso, TX
- Rider 8 Air Quality Grant Program–Planning, El Paso, TX

- Cordova Port of Entry Freight and Passenger Vehicle Traffic Concept – Planning, El Paso, TX

### Cruz Alvarez, PE, CNU-A, ENV SP
Regional Mobility Authority Liaison

Cruz is a civil engineer with a diverse background in the civil engineering including ITS, illumination, signing and striping, roadway, roadway hydraulics, pedestrian facilities, land development, and construction inspection.

**Relevant projects**
- Traffic Engineering/ITS Services, TxDOT, El Paso, TX
- Far East Signal Synchronization, City of El Paso, TX
- On-Call Traffic Activities, TxDOT, El Paso, TX

### Tatum Lau, AICP, ENV SP
Equity & Inclusion SME

Tatum is a senior associate with AECOM's Urbanism + Planning practice. She is an experienced facilitator, bringing diverse interests together to co-create solutions that are ecologically sensitive, encourage economic prosperity and are equitable for communities. She has supported public and private sector clients evaluate and develop policy, infrastructure and places that lead to equitable outcomes. She has worked with state, regional, and city governments, as well as non-profits and the development community across climate action, resilience, transportation, and land use planning.

**Relevant projects**
- Region 14 Upper Rio Grande Regional Flood Plan, Texas Water Development Board, Region 14, TX
- Comprehensive Environmental and Climate Action Plan, City of Dallas, TX
- Lower Rio Grande Valley Economic Development Strategy and Diversification Study, Texas General Land Office, Lower Rio Grande Valley Region, TX

### Chris Levitz, PE, CFM
Flood Resiliency SME

Chris specializes in resilience planning and design with a strong coastal and flood risk focus. Through these efforts, he has made consensus building communities a priority, working to align community development goals with ecological and long-term climate change needs. Developing approaches to merge green and gray infrastructure for a more resilient and adaptable community future is his focus. These efforts have resulted in multiple award-winning projects, including large-scale master planning with the Texas Coastal Resiliency Master Plan.

**Relevant projects**
- 2023 Texas Coastal Resiliency Master Plan, Texas General Land Office, Texas Coastwide
- MAAPnext Flood Studies, Harris County Flood Control District, TX
- Freeport Hurricane Flood Protection System Improvements, Freeport, TX

### Bradley Flowers, PhD
Air Quality SME

Bradley is a subject matter expert in air quality issues, in particular measurement and atmospheric chemistry of air toxics, ozone, and particulate matter. He manages large air monitoring networks that require an unusually wide breadth of knowledge across criteria and air toxics measurement and data quality. He has applied his expertise in air measurements in a variety of settings, including community ambient air monitoring studies, performance evaluations, and in support of regulatory advocacy and analysis.

**Relevant projects**
- Houston Regional Monitoring Network, Houston, TX
- Gulf Coast Growth Ventures Air Monitoring Program, Portland, TX
- Performance Evaluation of Low-Cost Particulate Matter and VOC Sensors, Houston, TX

# Factor C

## References

**FACTOR C**

# References

*We have uploaded our references, through IonWave, as part of the three Factor B – Experience forms.*

**About AECOM**
AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. See how we are delivering sustainable legacies for generations to come at aecom.com and @AECOM.

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