



# Engineers & Scientists Acting Locally

Strategic Plan  
2024-2027



## Our Mission

Engineers & Scientists Acting Locally (ESAL) is a national organization dedicated to increasing local civic engagement by people with backgrounds in science, technology, engineering, and mathematics (STEM).

## Our Vision

ESAL envisions a future where all individuals with backgrounds in STEM can utilize both their expertise and their lived experience to actively engage in civic life.



# Organizational Background



The creation of ESAL was motivated by the experience of founder Dr. Arti Garg. After spending several years in Washington, D.C., first as a legislative adviser in Congress and then as an analyst in the White House, life brought her to California where she began working as a technologist. Missing her connection to government, she successfully applied for an appointment to a standing task force in her city, Hayward, California.

Arti found that her professional and community work intersected in a way that allowed her to impact policy issues that mattered to her and make a difference at the local level. To help others with backgrounds in STEM realize these local opportunities exist, she collaborated with other engineers and scientists who have worked in public policy to create Engineers and Scientists Acting Locally (ESAL).

For the last seven years, ESAL volunteers have led and run all aspects of the organization - governance, strategy, programs, communications, and operations. Volunteer teams developed original written content and issue-focused events to raise awareness about ways to engage locally; organized conference and workshop programs to help individuals and groups develop their knowledge and skills for engagement; and offered free and accessible resources to support someone learning the best way to get involved in their community.

Through fundraising and securing two philanthropic grants, ESAL's Steering Committee made the decision to hire the first part-time employee in March 2023. The Managing Director has enhanced the organizational, operational, and volunteer management capacity of ESAL, allowing the organization to redirect resources to setting strategic priorities for this phase of the organization's growth.

## Record of Success



[ESAL launched in 2017](#) by scientists and engineers seeking to increase local civic engagement by people with backgrounds in STEM.



ESAL [conducted a survey](#) to determine local engagement levels and needs for people with STEM backgrounds.



ESAL developed a robust and renowned [written content program](#) that features people, organizations, and ideas at the intersection of STEM and local civic engagement.



In 2020, ESAL developed a [workshops](#) and conferences program to bring local civic engagement awareness-raising and skills-building to groups and meetings of people with STEM backgrounds.



In 2020, ESAL also developed a virtual [events program](#) that features policymakers, community leaders, STEM professionals, government staffers, researchers, and more people affecting change at the intersection of STEM and local civic engagement.



ESAL launched a new website in 2022 to better highlight [original content](#), [issue-focused events](#), [workshops](#), as well as our [Local STEM database](#), [Local Engagement Map](#), and [Local Engagement Playbook](#).



ESAL relies on 30-40 volunteers who lead ESAL's programming, communications, strategy, and operations in pursuit of our mission.



In 2023, ESAL hired its first part-time Managing Director, signifying a new phase of maturity for the organization and a harbinger of great work to come.

# Our Core Beliefs

Our work is guided by the following core beliefs:



Communities thrive when all members participate and meet challenges together.



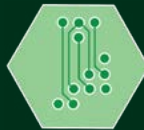
Civic engagement is compatible with a successful career.



Local civic engagement can include engaging with or leading neighborhood, campus, city, county, regional, and state groups, philanthropies, nonprofits, organizations, or governments.



Effective civic engagement starts with listening to community needs and concerns.



People with STEM backgrounds bring inquiry-driven and evidence-based problem-solving approaches that can benefit their local communities. Specific subject-matter expertise is not a prerequisite to making a difference.





## Our commitment to Justice, Equity, Diversity, and Inclusion (JEDI)

ESAL is committed to the belief that equity requires that leadership and decision-making bodies reflect and represent the people impacted by their actions. When civic participants can identify with the people in their government, it is more likely that they will find inspiration and opportunities to serve. Therefore, ESAL carefully considers diversity in all of our content and programming and strives to feature people from all geographic backgrounds, at every career stage, with expertise across the breadth of STEM disciplines, having differing abilities, and who have a diverse set of identities, including racial, ethnic, religious, cultural, gender, and sexual orientation.

As an organization, we also recognize that ESAL will be able to provide more representative content and programming if our own leaders and volunteers are reflective of the diversity in our local communities. Toward this end, we recognize that we have more work to do, particularly with respect to building an organization with greater representation from people who identify with groups that have been and continue to be marginalized both in the STEM community and more broadly.

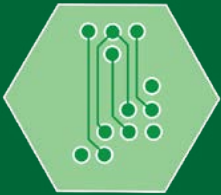
Learn about some of the progress we have made from our most recent [JEDI assessment](#).



**Network Engagement**  
**Build Organizational Capacity**  
**Increase Brand Awareness**

# Organizational Priorities

# Network Engagement



We understand that connecting individuals with backgrounds in STEM in more meaningful ways to the local communities and issues that they care most about starts with increasing awareness of how they “plug in.” We will formalize the role ESAL has played in connecting individuals with backgrounds in STEM to each other and to civic leaders and organizations for local civic engagement purposes.

## OUR GOAL:

Create avenues for individuals with backgrounds in STEM to not only identify like-minded peers and local officials, but also pinpoint issues of importance and employ effective strategies for engaging with civic matters that significantly impact their local communities.



## METRICS OF SUCCESS:

Number of trainings developed

Workshop participation

Engagement outside of training

Elected officials and civic leaders engaged

Number of portal entries

Portal activity

## THE STRATEGIES:

1. Cultivate relationships with local civic leaders and elected officials to identify issues of importance and needs in their communities.
2. Develop an online portal where individuals with backgrounds in STEM can connect with civic leaders and one another to share resources and collaborate.
3. Create an asynchronous training program that leans into ESAL's strengths in workshop development and curation to provide step-by-step guidance for many local civic engagement avenues.
4. Strengthen partnerships to offer virtual and in-person opportunities for ESAL audiences to meet, learn, and discuss intersections of STEM topics at local levels.

# Build Organizational Capacity



In order to mark a transition from an emerging organization to an established organization, ESAL seeks to expand our organizational structure and explore diverse revenue streams to ensure long term organizational stability and expansion.

## OUR GOAL:

Increase organizational capacity to maximize ESAL's impact



## METRICS OF SUCCESS:

- Board engagement levels
- Volunteer retention levels
- Staff retention and satisfaction
- Advisory board recruitment and retention

## THE STRATEGIES:

1. Update the organizational structure to increase capacity and ensure sustainability.
2. Diversify funding streams to capitalize on organizational strengths.
3. Strengthen and expand ESAL's governance practices and committees to support the needs of a growing nonprofit organization.

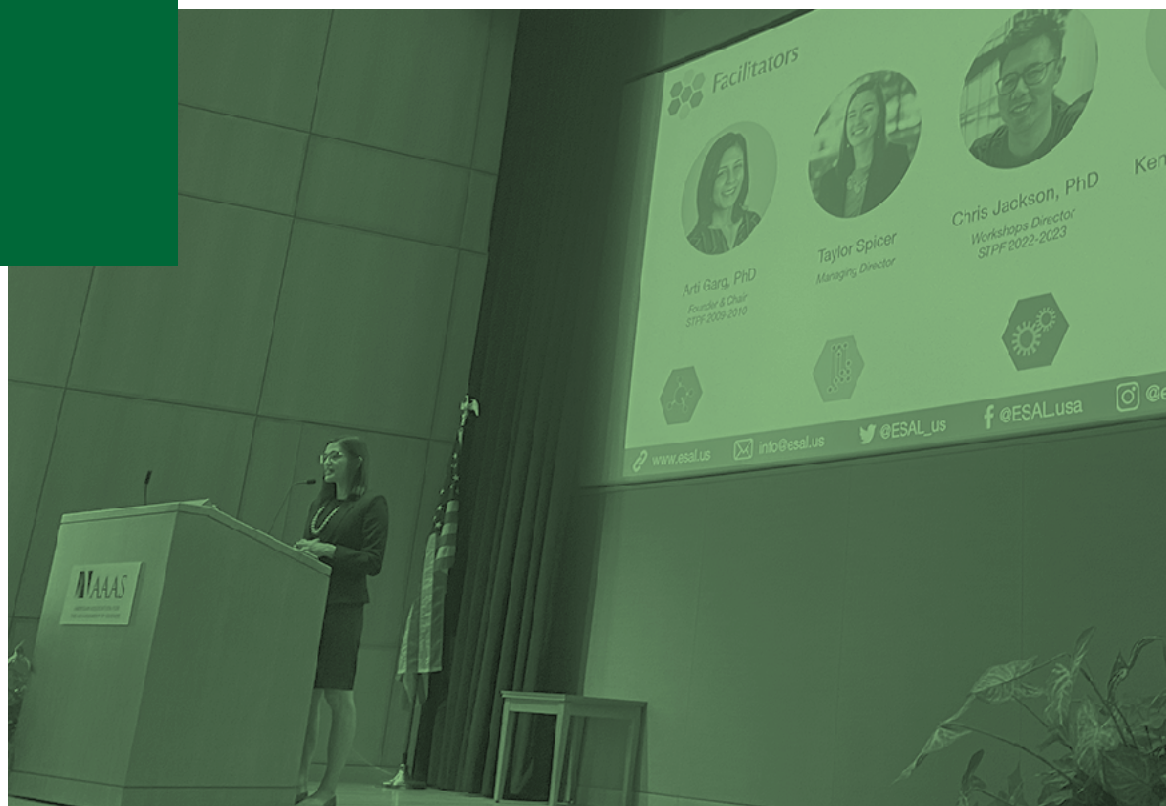
## Increase Brand Awareness



We believe that to help STEM professionals become aware of the power of their impact - and maximize that impact - we need to be intentional in the ways that we approach our audience and the communities they engage with.

### OUR GOAL:

Develop communications and marketing strategies that energize new people and organizations to contribute to local civic engagement in effective ways.



### METRICS OF SUCCESS:

- Audiences reached via communications channels
- Diversity of engagement activities
- Partnerships developed

### THE STRATEGIES:

1. Broaden our reach and our content to diversify our audiences.
2. Improve visibility of programs and impact within STEM networks.
3. Position the organization as a convener of STEM professionals in local civic engagement.

# Environmental Scan

We collected the data of eight (8) comparable organizations in STEM and civic engagement spaces to examine their budgets, expenses, mission, areas of focus, program structure and direct services, partnerships and other details to help us better understand our place in this sector.

## Benchmarked Organizations:

**California Council on Science and Technology (CCST)** works to engage leading experts in science and technology to advise state policy makers, ensuring that California policy is strengthened and informed by scientific knowledge, research, and innovation.

**Center for Tech and Civic Life** works to increase civic participation by modernizing engagement between local government and the people they serve, connecting Americans with the information they need to become and remain civically engaged, and make informed voting decisions.

**Code For America** works to improve how the government serves the public by putting technology to work for the benefit of local communities, and remove barriers to social safety benefits by designing government programs and services considering the needs of those who access the benefits.

**Street Law** works to provide knowledge, skills and motivation that leads citizens to civic and individual empowerment.

The **National Conference of State Legislatures** works to advance the effectiveness, independence and integrity of legislatures, foster interstate cooperation and facilitate the exchange of information among legislatures.

**National Civic League** works to advance civic engagement to create equitable, thriving communities.

The **American Association for the Advancement of Science** works to promote and defend the integrity of science and its use, provide a voice for science on societal issues, and strengthen and diversify the science and technology workforce. Their **Local Science Engagement Network** mobilizes scientists and engineers as advocates through local and state-based networks across the country.

**National Neighborhood Indicators Partnership (NNIP)** works to ensure all communities have access to data and the skills to use information to advance equity and well-being across neighborhoods.



## What makes ESAL unique?

Compared to the organizations that were benchmarked, ESAL is the only organization offering public access educational workshops and resources on why and how to utilize STEM skills for local civic engagement.

ESAL is spreading the message on the importance of local civic engagement through conference participation, workshops, virtual events, free digital resources, and partnership-building.

## What programming is consistent across the benchmarked organizations?

- Creating networks of STEM professionals who engage with communities, civic leaders, elected officials, court systems concerning science in relation to specific issues, policies and/or processes relevant to their communities.
- Coalescing around active engagement to fill data gaps that help policy makers, agencies and institutions educate the public on community concerns and/or address specific community issues.
- Engaging actively with federal/state/local policy makers, government agencies, court systems.
- Providing educational resources that motivate, invest in and support the next generation of professionals' career development.
- Seeking partnership opportunities with scientific organizations.



# Interested Parties Feedback

As part of the strategic planning process, we reached out to various collaborators to garner feedback through a series of questions delivered via surveys and one-on-one interviews with various interested parties, including volunteers, and strategic partners. The following section outlines the key takeaways from that engagement.

## Shift to Local Engagement

There is a notable shift in focus from national to state and local issues.

- Younger individuals are increasingly interested in state and local activities.
- ESAL's visibility remains a challenge, and there's a need for increased awareness of available toolkits.
- ESAL's focus on local policy aligns well with the need for scientists to engage more at the local level.

## Analysis vs. Advocacy

ESAL is seen as a valuable resource for teaching and providing analysis, but respondents desire a stronger push toward advocacy.

- Emphasis on providing practical advice to policymakers, including problem identification and data.
- Advocacy could involve collaborating with NGOs, local governments, and policy-neutral nonprofit organizations.

## Community Impact and Evaluation

Respondents measure success by the number of people trained, actions taken after training, database tracking, and a focus on equity and justice.

## Building Networks and Skill Sets

Focus on building skill sets and mindsets for co-creating community partnerships.

- Suggestions for a standard leadership program and increased visibility in the science community.
- Acknowledgment of the importance of storytelling and relationship-building in training scientists to communicate with legislators.
- Desire for ESAL to fund community engagement efforts, build cohort models, issue grants, and create networks.
- Recognition of the slow nature of scientific progress and the importance of educating lawmakers about the scientific process.

# Methodology

Engineers and Scientists Acting Locally (ESAL) began working with Purpose Possible in September, 2023 on a strategic plan. The Steering Committee helped us identify questions to ask, stakeholders to survey, and generally ensure we were staying true to ESAL. We spent October and November gathering interested party feedback through one-on-one interviews and surveys. We held a retreat with the full Steering Committee and members of the Leadership Committee in early December. Following the holiday break, the Steering Committee gathered twice more in January and February to finalize our plans. This strategic plan is a result of all of that work.



## Our steering committee was made up of the following individuals:

Arti Garg, PhD  
Laurie Chong, PhD  
Nick Anthis, DPhil  
Chris Spitzer, PhD  
Chris Jackson, PhD  
Kendra Zamzow, PhD  
Erin Partlan, PhD  
Emily Schafer, PhD  
Lina Zhu, MS

## Contributing leadership committee members were:

Rachel Owen, PhD  
Rebecca Mandt, PhD  
Taylor Spicer, MDP

