



Decision Points for IEGO's Path Forward

An Implementation Blueprint to Spur Inclusive Growth

Part 1: IEGO Sector Strategies

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APRIL 2020

Acknowledgments

JFF would like to acknowledge Michelle Decker of the Inland Empire Community Foundation, Marek Gootman of the Brookings Institute, and Ana Gutierrez of JFF for their valuable contributions. We offer special thanks to Jennifer McDaniel of Moreno Valley College, Charles Henkels of Riverside Community College District, and Jason Cordova and Annalisa Siregar-Wurm of the Inland Empire Economic Partnership for their insights and partnership.

About JFF

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IEGO's Driving Role in Post COVID-19 Recovery

The COVID-19 crisis has brought with it an unprecedented amount of uncertainty. While we can't even begin to project the full economic impact of the pandemic globally and here in the Inland Empire, we know it will be significant, lasting, and will disproportionately impact the region's most vulnerable residents. Many IE institutions are currently in rapid response mode: schools are pivoting to virtual learning platforms, business owners are fighting to pay their workers, hospitals are battling the largest public health crisis in a century, and public agencies are providing support to a rising number of unemployed residents. Amidst the urgency of the rapid response, the Inland Economic Growth and Opportunity (IEGO) effort offers a path forward toward building a resilient economy. IEGO provides an opportunity to lead the IE's recovery effort, to reimagine and reinvent a future economy that is inclusive, equitable, and resilient to external shocks.

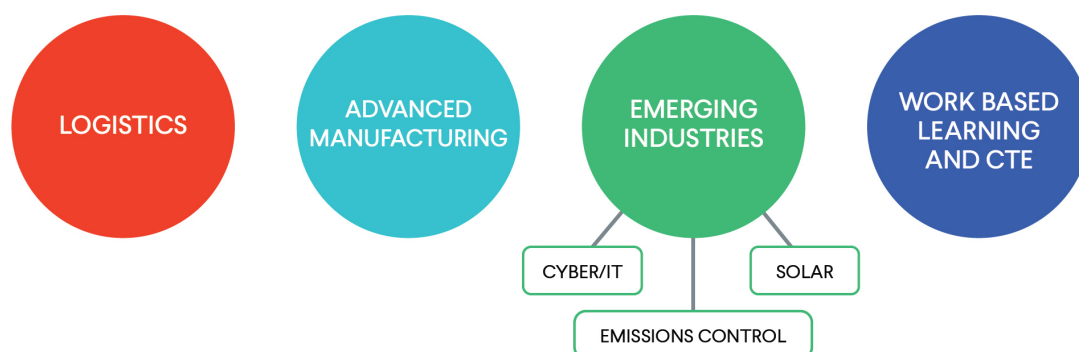
Now more than ever, the state of California is looking to its regions for leadership and collaboration on innovative models of how to develop their economies differently to produce more equitable outcomes. The Future of Work Commission is looking for ways to elevate worker voice and improve working conditions through technology. The California Workforce Development Board is investing in High Road Training Partnerships throughout the state to generate family-supporting jobs. The Regions Rise Together initiative is taking a "regions up" approach to development. While short-term state priorities may have shifted in response to COVID-19, the medium to longer-term needs remain the same: to build a thriving economy that serves all residents, grows its own talent pipelines, and transforms key industry sectors to provide high quality jobs and environmental sustainability. The IE has the potential to be a transformational leader in this effort if leaders choose to advance together.

So how can the IEGO campaign spur transformational inclusive economic development? Equity and inclusion must be a priority to achieve an economic future where all residents can earn middle-income wages. Planning and practice must be driven by values of equity, transparency, sustainability, and community engagement. It means creating a set of operating norms that formalize new and innovative ways of working with community groups, residents, workers, and youth—elevating their expertise and co-designing and implementing solutions for a sustainable and equitable economic future. When planning for recovery, inclusive economic strategies will be increasingly important. This blueprint offers some recommendations and decision points for IEGO leaders to consider on the path forward to building an inclusive economy.

Part 1: IEGO Sector Strategies

IEGO's research-based strategy focuses on supporting the growth of sectors and firms that are poised to provide economic mobility and quality jobs for workers without a four-year college degree, and who represent the majority of the region's adults. In the April 2019 report, *Middle Class Jobs for a Fast-Growing Region*, IEGO leaders identified the following strategic pillars of their efforts:

1. Make the region a home of global innovation in the logistics industry.
2. Strengthen the competitiveness of the region's advanced manufacturers.
3. Accelerate the development of promising emerging industries in areas with the potential to grow more middle-skill/higher-wage jobs.
4. Distinguish the IE as a national leader and innovator in the adoption of work-based career and technical education (CTE), with a focus on attracting women and communities of color.



Guiding Questions: When reading the description of each sector strategy, please consider the following guiding questions:

- *How does this sector strategy support the larger IEGO vision of creating quality jobs for workers without a four-year degree?*
- *How can each sector strategy be more inclusive of diverse voices, sectors, and geographies? What are the roles for community groups, industry, education, and other institutions in each strategy?*
- *How can the sector strategies be aligned to create a coordinated approach to inclusive regional growth?*

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Logistics

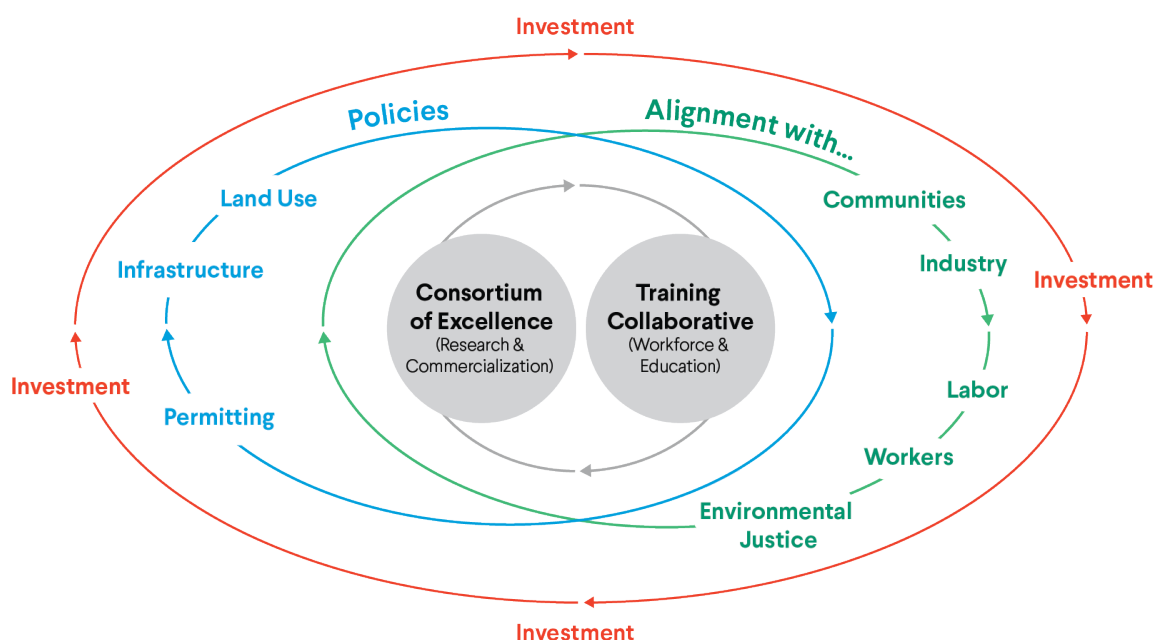
Vision

The future of the IE is inextricably connected to the future of its logistics sector. The IE holds significant infrastructure and employment assets in the Southern California logistics corridor, and logistics has been one of the region's foundational industry sectors driving economic growth. Moreover, given the fact that the logistics sector creates an above-average concentration of good and promising jobs for sub-baccalaureate workers, the equitable and sustainable growth of this sector will provide more economic advancement opportunities to workers in the region.

The IEGO campaign sets forth a four-pronged approach to its logistics sector strategy: 1) establish a Consortium of Excellence focused on innovations and technologies, including participation from universities and the business community for research, management-level education, commercialization and adoption; 2) establish a logistics training collaborative focused on securing access for workers to good industry jobs; 3) establish clear and effective policies on land use, infrastructure, and permitting to address private and public needs and expectations; and 4) secure investments to establish the region as a model for advanced transportation infrastructure and innovation, through development of multimodal goods alternatives and technology applications that enable economic growth and improve quality of life in the region.

This fall, IEGO will produce an *Investment Plan for the Inland Empire Sustainable Logistics Center of Excellence* as the tangible deliverable to mobilize the region around transforming the logistics industry, and facilitate investment conversations. This *Investment Plan* will also serve as a model in the state for building an inclusive and sustainable future for logistics that enables economic growth and improves quality of life in the region.

IEGO Logistics Sector Strategy—Inland Empire Sustainable Logistics Center



Progress to Date

To begin the work of developing a sector strategy for logistics, Georgia Tech was consulted to develop a concept proposal because of the institution's expertise in supply chain research. The output was a well-researched *California Sustainable Logistics Center of Excellence Concept Proposal* that suggests core component parts which include: 1) research and innovation, 2) entrepreneurship and business models, 3) workforce and education, and 4) policies and governance. The proposal provides helpful guidance and enrichment for upcoming regional conversations focused on building up the sustainable infrastructure for logistics.

CSU San Bernardino and the Inland Empire Economic Partnership have hosted several IEGO logistics sector strategy meetings, convening local leaders to envision what a Center of Excellence would look like for the region. The most recent one occurred on February 27, 2020, where a group of educational institutions, public-sector agencies, and regional employers came together to discuss the path forward. The group is now working on a regional capacity survey, which is set to be complete in May. The main goals of the survey include: 1) documenting existing regional assets, 2) mutually informing and building off each other's work, and 3) helping determine gaps and investment priorities.

Assets

- *Significant initiatives already in motion.* The participants at the February 27 meeting submitted 95 existing initiatives and/or local assets that are related to and can potentially support the research and innovation and the training collaborative components of the Center of Excellence. The list is expected to grow as additional partners are added. It serves as the foundation for the regional capacity survey and will help shape future conversations and focus priorities for the Center of Excellence.
- *Willingness by environmental justice and labor to join the conversation.* As evidenced by the March 11 event hosted by UC Riverside's Center for Social Innovation entitled *Taking the "High Road" on Labor and Environment: How the Port of Los Angeles Experience can Inform the Inland Empire's Logistics Future*, environmental justice groups and organized labor in the IE have done significant work in advocating for and advancing equity, sustainability, and job quality in the region. Their insight will significantly improve IEGO's current strategy toward achieving an inclusive outcome. Further, these groups have made significant progress in applying an environmental justice lens to lay out research, priorities, and goals for the role of workers, land use, training, and transportation. More importantly, their eagerness to partner in high-road training models bodes well for their meaningful contribution to the IEGO logistics Center of Excellence design.

Challenges and Gaps

- *Need for industry to lead.* The current concept for the Center of Excellence, although well-researched, is still a higher education-led model without sufficient grounding in the local context of the IE. With incomplete information on what industry, especially industry in the IE, really needs in terms of increasing competitiveness and strengthening the human capital pipeline, the Center of Excellence runs the risk of misalignment with local market needs, which will significantly impede its ability to achieve the desirable outcome of the IEGO logistics sector strategy.
- *Lack of inclusive process as the strategy stands today.* The logistics industry in the IE has experienced continued growth yet is facing significant equity and environmental sustainability challenges. Doing business as usual will not yield a different outcome. Therefore, it is critical for IEGO to intentionally engage in an inclusive process in its implementation of this sector strategy.

Recommendations for Next Steps

- *Engage in an inclusive process that is united behind a three-pronged goal of job quality, environmental sustainability, and economic growth.* A need that emerged from the February 27 meeting was broad-based participation in developing and implementing a sector strategy. Many noted that industry needs to play a driving role and observed that there were voices missing in the conversation. An inclusive process is about making all the critical stakeholders in the region part of the designing and implementing process, rather than merely soliciting their feedback after the investment plan is largely drafted. Therefore, it is time-sensitive for cross-sector leaders, including those from industry, education, workforce, economic development, environmental justice, labor, and the community at large, to come together to grapple with tough issues and co-design a comprehensive sector strategy that takes into account a diverse set of considerations, including research and innovation, industry competitiveness, job quality, and sustainability.
- *Create an infrastructure and workflow to develop the Center of Excellence investment plan.* The *Concept Proposal* provides a great starting point to design the necessary component parts for the logistics Center of Excellence. However, significant contextualization work is needed to make the plan investment-ready, and a team representing various sectors should drive that process. For example, community-minded business leaders can help drive both the research and the training priorities that best support industry's critical education and workforce training needs as well as create conditions to enable long-term competitiveness. Additionally, champions from environmental justice groups and organized labor can elevate important design elements to ensure the goals of economic growth,

quality jobs, and environmental sustainability. Moreover, education leaders can ensure the regional capacity survey results will help map and integrate the existing local research and training assets and ultimately determine investment priorities for the Center.

Advanced Manufacturing

Vision and Progress to Date

Another strategy presented in the April 2019 IEGO report is to “strengthen the competitiveness of the region’s advanced manufacturers.” In support of this goal, the Import and Export Advanced Manufacturers Alliance was created in 2019 to advance the capabilities and competitiveness of local firms in the manufacturing industry. The alliance consists of a network of local manufacturers and educational partners and will assist businesses with import- and export-related challenges and opportunities, support the adoption of new technologies, and serve as a united voice for the industry.

Assets

- *Coalition of small to medium-sized businesses focused on local needs.* The group of committed companies involved in this effort are predominantly small and medium-sized businesses with a local footprint. These business owners live and work in the IE and are therefore invested in an economic development strategy that benefits local communities.
- *Partnerships with higher education institutions.* To date, this alliance has engaged in conversations with leaders of the major higher education institutions in the region. These important partnerships will be crucial to maintaining and deepening support for the manufacturing industry’s workforce and research needs.

Challenges and Gaps

- *Access to funding.* A membership base of small to medium-sized manufacturers means fewer corporate financial resources available to support collective efforts.
- *Need for strategic integration with logistics.* Many of the higher education institutions and public-sector partners that are consulted and convened for the research and workforce pieces of this effort are also engaged in conversations about the logistics Center of Excellence. To increase investment into research priorities that interest both

manufacturing and logistics companies and to avoid duplication of efforts, strategic integration with the logistics strategy is needed.

Recommendations for Next Steps

- *Leverage funding opportunities from the logistics Center of Excellence.* There are numerous research topics that are of interest to both logistics and manufacturing firms, such as robotics and process automation. Although the application of these topics looks different in manufacturing, much of the underlying technology is the same. Because many of the region's higher education institutions are engaged in conversations about both IEGO sector strategies, a strategy that jointly leverages research funding can help avoid duplication.
- *Leverage this small to medium-sized business coalition to strengthen industry engagement strategies across other sectors.* Small to medium-sized businesses make up a significant portion of the regional economy and create a disproportionately large share of net new jobs in the community. However, their needs for growth and capacity for engagement require a different approach than one would use for national corporations. The experience of working with small to medium-sized businesses in advanced manufacturing, through business councils or trade associations, can serve as the foundation to catalyze the development of similar strategies that increase other sectors' competitiveness in the IE.

Emerging Industries

One of the four strategic pillars presented in the IEGO strategy report is to “accelerate the development of promising emerging industries in areas with the potential to grow more middle-skill/higher-wage jobs.” The three emerging industries identified as having potential are 1) cybersecurity and IT, 2) solar energy and battery storage, and 3) emissions technology.

Cybersecurity and Information Technology

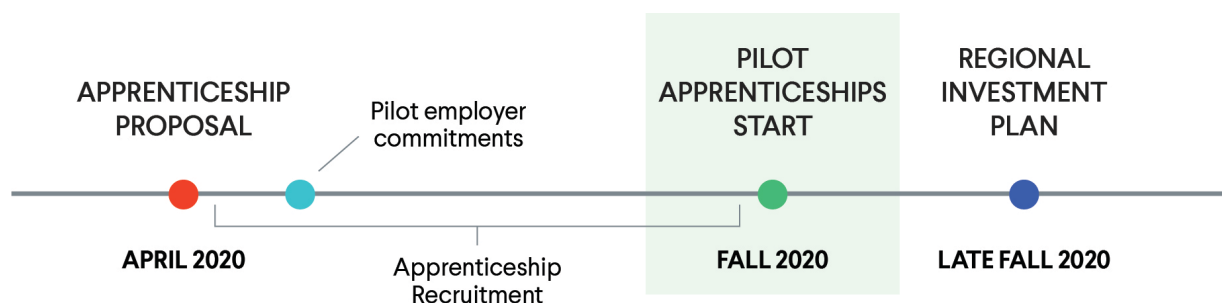
Vision and Progress to Date

A group of IE employers representing both the public and private sectors decided to operationalize the cyber/IT strategy by focusing on talent. They landed on apprenticeship as the critical piece of training infrastructure to develop.

The draft long-term vision of the cyber/IT strategy is to 1) grow a regional culture and system of apprenticeship, beginning with roles in cyber/IT; 2) help companies fill talent needs in cyber/IT; 3) allow students and workers to find quality jobs in the IE; and 4) provide equitable access to quality work-based learning experiences for students across the region.

An action team of IE employers and educational institutions (K-12, community college, and four-year) are working together to develop an IT apprenticeship pilot that will start in fall 2020. Participating industry partners include not just cybersecurity and IT companies, but also non-IT employers and large public agencies that have cyber/IT needs, like the Inland Empire Health Plan, Loma Linda University, and Bank of America. This group is now working closely with Riverside Community College District (LAUNCH) and Moreno Valley College as well as other K-12 and postsecondary partners to recruit apprentices and assist employers with program design for the fall pilot.

Short-term timeline:



Assets

- *Committed group of industry partners.* Compared with the other IEGO sector strategies, this effort is the most employer-driven. If this group can pilot and prove the financial return on investing in an apprenticeship program, that can help facilitate employer buy-in and financial sustainability for a regional system.
- *Regional apprenticeship infrastructure.* The LAUNCH apprenticeship network has established a strong foundation for a regional apprenticeship system. By building upon pilot apprenticeships in the manufacturing sector and connecting with the employer-driven cyber/IT IEGO efforts, there is great potential for scale.
- *High-quality education and training programs in cyber/IT.* The region is home to many high-quality programs, including CSU San Bernardino's nationally recognized program in cybersecurity, high school cyber/IT pathway programs (e.g., Moreno Valley High School, Canyon Springs High School), and aligned degree and certificate programs at regional community colleges, among others.
- *Regional advisory boards.* In addition to the committed IEGO employer partners, the region has a number of advisory boards that provide opportunities for coordination with this sector strategy. For instance, the Information and Communications Technology Advisory led

by San Bernardino Community College District and individual community college advisory boards can be a way to grow additional industry awareness and participation.

Challenges and Gaps

- *Ability to scale beyond the coalition of the willing.* While commitment is strong from the IEGO group of large employers that have the capacity to invest in apprenticeship, there is a need to prove the business case for this talent development strategy in order to get more widespread business participation. Additionally, once the model is tested with larger, more-resourced employers, an effort must be made to standardize the process to encourage small businesses with fewer resources to participate.
- *Duplication of efforts.* In order to provide quality work-based learning opportunities for their students, many high schools and community colleges maintain individual relationships with employers. Though not uncommon in regional work-based-learning efforts, this duplication can lead to employer fatigue and result in splintered efforts. Taking a regional approach to apprenticeship development, rather than creating an apprenticeship program for an individual employer or educational institution, is important in achieving the scale necessary to fill local workforce needs and build the human capital infrastructure needed to support other industries in the future.
- *Need for student validation.* To date, this sector strategy has not incorporated student voice in the proposal planning or design. Going forward, it will be critical to engage students to ensure alignment with interest level, schedule, and career goals, and to ensure the apprenticeships are accessible to students with barriers to employment.

Recommendations for Next Steps

- *Create a bi-county culture of apprenticeship.* Apprenticeship is a proven tool to provide companies with the talent they need while providing paid access to training for workers, especially those without a college degree. Investing in apprenticeship is a talent development strategy that stretches far beyond cybersecurity and IT—IEGO partners can pilot and refine the model in cyber/IT and then replicate across other sectors. By investing time and resources into a regional apprenticeship system, IEGO can help build critical human capital infrastructure for the region.
- *Align with a logistics cluster strategy.* Despite the seemingly different industry profiles, cyber/IT and logistics have many areas of overlap. For instance, many firms in the logistics industry have cybersecurity and IT needs that could be filled through an apprenticeship pipeline. Additionally, cybersecurity has been repeatedly mentioned by businesses and educators as a critical area of research

focus for the logistics Center of Excellence. Finding ways to align the cybersecurity strategy with the logistics strategy will strengthen both approaches.

Green Tech ---

(Solar Energy and Storage, Emissions Technology)

Vision and Progress to Date

SOLAR

UC Riverside’s College of Engineering—Center for Environmental Research and Technology (CE-CERT) and the Center for Sustainable Suburban Development have partnered to launch Solar Valley, a regional consortium of solar companies working to make Inland Southern California the solar headquarters of the United States. Their goal is to advocate for policies, programs, and practices that will incentivize the adoption of and investment in solar technologies.

EMISSIONS TECHNOLOGY

The arrival of the new state-of-the-art California Air Resources Board (CARB) facility in Riverside in March 2021 presents many opportunities for developing an innovation cluster related to environmental controls, emissions technology, and other “green” jobs. The goal, as outlined in the Brookings report, is to create a robust innovation cluster around air quality/sustainability that leverages the region’s expertise and track record, utilizing the presence of CARB for growth and attraction of firms in emissions-related technology. In preparation for CARB’s relocation, the agency has signed MOUs with UC Riverside, Riverside Community College District, and Riverside Unified School District to advance research and educational offerings focused on air quality and climate change.

Assets

- *World-renowned research capabilities in green tech.* CE-CERT works to address society’s most pressing environmental challenges in air quality, climate change, energy, and transportation. The Southern California Research Initiative for Solar Energy (SC-RISE) is a CE-CERT research arm that focuses on solar materials, integration, and adoption. SC-RISE projects include vehicle electrification, energy storage, and smart-building technology. Additionally, the 380,000-square-foot CARB headquarters will be one of the largest vehicle emissions testing and research facilities in the world.
- *Alignment with statewide energy goals.* Green technology as an investment priority is consistent with both the new California solar mandate that requires the use of solar

power on new construction projects, and more generally with the statewide 100 percent clean energy goal by 2045.

Challenges and Gaps

- *Need for support from elected officials.* Besides a handful of IE assembly members and state representatives, there are few advocates for policies to increase the adoption of and investment in green technology.
- *Need for industry as a driving force.* Much of the assets, research, and work to date around green tech in the IE has been university-driven. To increase investment and attention from elected officials and policymakers into solar and clean emissions, these strategies must elevate the economic imperative for adopting green tech in conjunction with the environmental imperative. Regional employers need to be activated in order to elevate the cost savings and increase in job quality that come with green technologies.

Recommendations for Next Steps

- *Embed green technology into a sustainable logistics cluster strategy.* A decision point among solar and clean emissions leaders has been around cluster development. Should the path forward in this sector be to pursue research and adoption, or to pursue an economic cluster strategy that seeks to build an industry of solar companies? Rather than seeking to build a cluster strategy around green technology, there is a strategic opportunity to support a sustainable logistics cluster. Leveraging CARB and CE-CERT as catalysts for green tech industry development can provide research infrastructure for transforming logistics into a more environmentally sustainable industry, and CE-CERT has already been identified for a High Road Training Partnership for the logistics industry.
- *Mobilize broad-based support from environmental justice groups.* Investment in green technologies can lead to better health outcomes and air quality in communities. For this reason, solar and clean emissions proponents should align with environmental justice and other community groups that advocate for healthier communities. Community groups that oppose increases in existing trucking routes that pollute their neighborhoods can find common ground in supporting clean transportation technologies.