

# **Exploring the Connection between Economic and Workforce Development**

Findings from a San Diego and Imperial Valley  
Regional Convening



## Introduction

Dear Colleagues,

At the James Irvine Foundation, our mission is to expand opportunity for the people of California. In 2016, we [announced our evolving focus](#) of expanding economic and political opportunity for families and young adults who are working but struggling with poverty. To advance these mutually reinforcing goals, our team has focused on a body of work around career readiness and living-wage work, with the objective of identifying solutions that:

- Improve opportunities for job and entrepreneurship training that lead to quality jobs
- Identify more ways to provide credentials that lead to a family-sustaining career
- Create higher-quality jobs that help employers grow their businesses, including by increasing small business capital for entrepreneurs
- Identify successful models of matching employers with lower- or middle-skilled workers

A guiding principle in our work is [listening and learning](#)—and also sharing back what we are hearing. Last year the Foundation hosted [listening sessions across California](#) to hear directly from low-wage workers. And throughout the past year, our team at the Foundation has been making pilot grants, conducting research, and engaging in conversations to ensure that our strategy is informed by the deep knowledge and effective models that already exist in the field. Based on those interactions, we realized there are a number of areas where generative discussions could be beneficial not only to us, but to the entire field, helping to reveal the current landscape and also to identify potential new ideas.

In that spirit, we spent the spring and summer of 2017 speaking to and convening practitioners and field experts across the state. This document shares the findings from one of those convenings, which focused on **the connection between economic development and workforce development**. While the convening was held in San Diego and included participants from both San Diego and the Imperial Valley, our hope is that the lessons learned are applicable across California.

This document contains two parts:

- 1) An **executive summary** that provides an overview of the process we undertook and the key insights that we gleaned
- 2) A **detailed synthesis** of what we learned through research, interviews, and discussions at the convening

In designing these convenings, we realized that we could only scratch the surface on these important topics. Rather than serving as a compendium of information on economic and workforce development in San Diego and the Imperial Valley, this document is intended to add to the already-rich work of organizations across both fields. Our goal in sharing this information is to help you learn from the work of others and surface new understanding, connections, and ideas.

Additionally, we invite you to also review the findings from our other regional convenings on our website: [www.irvine.org/learning](http://www.irvine.org/learning)

Thank you for engaging on this important topic.

Warmly,



Elizabeth González

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# 1) Executive Summary

## 1.1) What We Did

At the Irvine Foundation's first Career Readiness and Living-Wage Work convening of grantees and field leaders in the spring of 2017, participants came together to share their perspectives on the challenges and opportunities across the California workforce and employment landscape. Attendees painted a bold "better future" in which workers attain the right sets of skills that are valued by employers, thereby advancing, thriving, and being in a position to better support their families and ensuring that people from all backgrounds can effectively participate. To get to that better future, attendees identified a set of topics for deeper exploration, one of which was the **connection between economic development and workforce development**.

Given the existing collaboration between the economic development and workforce development fields in **San Diego and the broader Imperial Valley**, we organized a regional convening in August that brought together local leaders to further explore this connection and understand what opportunities exist to move towards a better future for the economy and workforce in the region.

To prepare for this convening, we first reviewed existing research and interviewed participants to understand the landscape of economic development and workforce development efforts in the region and the issues impacting both fields. In advance of our time together, we synthesized and shared with participants what we read, heard, and observed so our group could come together with a common baseline understanding.

To build this common understanding, we first sought to define what we mean by "workforce development" and "economic development" since these terms can include a wide range of activities:

- *Workforce development* includes a range of efforts by many organizations to "create, sustain, and retain a viable workforce that can support current and future business and industry."<sup>1</sup>
- *Economic development* "creates the conditions for economic growth and improved quality of life by expanding the capacity of individuals, firms, and communities to maximize the use of their talents and skills to support innovation, lower transaction costs, and responsibly produce and trade valuable goods and services."<sup>2</sup>

While the two fields may have different stakeholders, funders, and priorities, there are also many connection points between the two. To explore that connection, convening participants identified a number of critical trends that have implications for both the economic and workforce development fields in the region, listed in the table below. For each of these identified critical trends, the group considered where there might be risks or opportunities from both the economic and workforce perspectives. (Note that additional detail for each trend can be found on pages 10-15.)

### Key Trends

1. **Growth of the gig economy and contract work.** Corporations are increasingly looking to a web of contractors, suppliers, and freelance workers to deliver critical products and services, allowing these firms to focus on their core capabilities.
2. **High proportion of small businesses in San Diego.** Since small businesses are a major force in San Diego, economic development and workforce development organizations are constantly working to reach out and serve the small business community, whose needs may be different from those of larger firms.
3. **Growing middle-skills gap and need for workforce training.** As San Diego's economy continues to shift, the region's workforce will likely need a range of new skills to address the growing middle-skills gap in critical industries. Employers, workforce organizations, training organizations, and others are working together to document which skills are needed and determine how to best train workers.
4. **Interconnectedness of the mega-region economy.** While San Diego, the Imperial Valley, and Mexico's Tijuana have a number of differences with regards to industry mix, workforce characteristics, community needs, and local service providers, the regions and their respective workforces and economic sectors are also connected in many ways, resulting in opportunities for regional collaboration.

5. **Aspiration for balanced economic growth.** Balanced economic growth—where both high-skill and middle-skill jobs are growing in unison—helps to ensure that a region’s economy is diverse, healthy, and allows for a wide range of workers to participate.
6. **Desire for economic inclusivity and equity in the region.** There is a desire to help people who are currently struggling with poverty move back into the economic fold as productive workers with opportunities to move up the income ladder and providers for their families.
7. **Aligned goals but mismatched funding, incentives, and metrics for economic and workforce development organizations.** While organizations across workforce and economic development are aligned in their desire and efforts to better train San Diego workers and connect them to businesses across the region, those organizations are supported by a range of funding streams, each carrying different requirements, expectations, and accountability metrics.
8. **An aging population.** There is a growing senior community in San Diego—some of whom are retiring later and looking for flexible employment opportunities, raising questions of how to best engage and support this growing population.
9. **Increased automation and rapid technological advancements.** With the rise of automation, artificial intelligence, and the speed of technological advancements, millions of jobs could be at risk over the coming decades. At the same time, entirely new categories of jobs are emerging that provide tremendous opportunity and require dramatically different skills.
10. **Uncertainty around public workforce funding.** Even though the federal government has shown interest in some workforce development strategies like apprenticeships, federal budget proposals have indicated significant cuts to public workforce funding and investment, which may force local workforce development organizations to reprioritize their work and service models.
11. **Decreasing connection between education and work.** Due to rapid technological advancements and a focus on college preparation, the education system—from K-12 to community colleges—is trying to keep up by experimenting with new models that equip students with the skills needed to succeed in the changing economy.

With these trends in mind, convening participants then envisioned what the future could look like—both the “expected future” that continues along the current trajectory and a “better future” in which we’re able to take advantage of opportunities and address critical risks:

- **Expected Future:** There was a sense that San Diego would be defined by fragmentation and stagnation if nothing changed. Innovation would continue in some pockets of the economy, but the gains would become even more concentrated and the region would not be able to achieve broad-based growth. Divisions would grow between the “haves”—those with money, skills, influence, and connections—and the “have nots”. Workforce development organizations would be able to make some progress, but ultimately wouldn’t be able to bridge these gaps on a societal level.
- **Better Future:** The group was hopeful that organizations and communities could collaborate to create a better future in which all parts of the local labor force would be able to participate in the growth of the economy—and the benefits of that growth would accrue to all members of the community. Resources across the region would be aligned, forming a network of workforce development organizations, economic development organizations, employers, education providers, and governments (city, county, and regional). The region would strive for balanced economic growth, with companies engaging in inclusive practices because it’s not only good for society, but also good for business.

The group then brainstormed early ideas and next steps for moving towards this better future. Some of these ideas were new experiments, such as repurposing neighborhood gathering places (e.g., libraries, recreation centers) into workforce development hubs. Participants also explored how to add to existing efforts, such as building on programs that provide support to military families in order to better serve the broader community. For additional detail on these ideas, as well as a detailed recap of the expected and better future exercise, refer to pages 16-18.

## 1.2) What We Learned

Through research, interviews, and discussions at the convening, four broad areas of opportunity emerged that could help support a better future for the regional economy and workforce:

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### 1 Opportunity for increased collaboration within San Diego and across the mega-region

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When looking across wide and interconnected regions, it is important to consider connection points at multiple levels—in this case, intra-county, inter-county, and even trans-nationally. With this in mind, participants saw different opportunities to promote more collaboration and communication within San Diego itself and across the mega-region.

**Increased collaboration and communication among organizations in San Diego could benefit the community.** San Diego is a large region serving a diverse mix of communities. Recognizing that the City of San Diego, North County, East County, and South County are unique places with varied needs, participants voiced an opportunity for these sub-regions to collaborate more closely towards aligned economic and workforce development objectives. Some suggested it would be helpful to conduct an asset mapping exercise to understand existing organizations and resources—including smaller organizations that may be working with particular neighborhoods or sub-populations—and create regional umbrellas to align resources and address issues of shared concern.

**Additionally, there is an opportunity for more collaboration across the mega-region.** On a larger scale, coordination and collaboration across the San Diego, Imperial Valley, and Tijuana regions was also highlighted as crucial. Given the interconnectedness of the economies and workforces of the mega-region, some saw an opportunity to jointly discuss issues related to education, workforces, and trade and implement solutions together.

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### 2 Opportunity to leverage existing assets and infrastructure

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While it can be tempting to immediately think of brand new solutions, oftentimes there are spaces, services, and programs that can be leveraged to achieve similar outcomes. Where possible, it may be valuable to build from these efforts rather than designing short-lived, “flash in the pan” ideas. With this in mind, participants saw an opportunity to rethink how to leverage local assets and existing programs.

**Existing community assets could be leveraged or repurposed to create hubs for workforce development.** Many neighborhoods already have vibrant gathering places that provide various services for the community. There is an opportunity to leverage these spaces—such as libraries, recreation centers, or even malls—to serve as “pop up” training locations for important workforce development programs. This could help training organizations reach new workers and also reduce scheduling challenges and commute times for workers, helping to create more effective training opportunities.

**Progress could be accelerated by building on existing neighborhood or military family programs.** There was a sense that organizations could build on the programs that are already operating in certain neighborhoods. For instance, given the significant military presence in San Diego, many programs exist that provide support to military families. Training organizations may be able to “add on” services to these, and other, programs that are already effectively serving families in the region.

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### 3 Opportunity to promote equity and inclusion in the region

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The themes of equity and inclusion are relevant in many types of economic development and workforce development efforts—and how to integrate these concepts into solutions can vary. It is important to collectively understand how these concepts manifest and then to creatively imagine ways to respond.

**To achieve balanced economic growth, it is important to spur the innovation economy while also bolstering middle-skill and lower-skill sectors.** A healthy economy should promote growth in not only high-skill sectors (e.g., biotech), but also middle-skill sectors that are tied to population growth (e.g., healthcare), allowing for wide range of workers to participate and benefit. Given the strong growth of the innovation economy in San Diego and ensuing cost of living increases, some participants questioned whether San Diego would eventually look more like San Francisco or New York City, with robust economies but high inequality, or more like Austin and Denver, with more balanced growth. Many saw an opportunity for San Diego to be an innovation leader, while also intentionally strengthening other important sectors like healthcare and retail.

**Economic inclusivity and income mobility for workers is an important part of a strong, balanced economy.** There was a sense that if nothing changes, income inequality will continue to grow in the region and those hit hardest would likely be in already underserved communities. Fostering a more inclusive workforce would require a mindset shift that recognizes the untapped economic potential in underserved communities and works to better train and connect them to a variety of opportunities. To start early, schools can help expose students of all communities and backgrounds to all different types of work through career exploratory programs, job shadowing, and conversations with counselors. To spur systemic change, economic development corporations and universities can together start conversations with CEOs about embracing inclusivity in their workforce and making it part of the fabric of their corporate culture, particularly as consumers are increasingly considering a company's social impact when making purchasing decisions. Additionally, organizations can further influence the public mindset by visibly recognizing corporations with strong inclusive workforce practices.

**Equity also includes health and quality of life.** Equity goes beyond economic and educational opportunities; participants also talked about how equity is important with regards to health and well-being—be it physical or mental. Increasingly, health and wealth are tied, as economic stability is a critical determinant of quality of life. In the same vein, employers are also increasingly aware of their employees' well-being, especially as workers consider factors like work-life balance, medical insurance, and childcare benefits when making employment decisions. In a better future, communities would further recognize the importance of nutrition and affordable healthcare for working families, in addition to public transportation, affordable housing, and an infrastructure to support growth.

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## 4 Opportunity to better align funding, metrics, and incentives

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Even when organizations recognize the value in collaborating, uncertain funding streams, different incentives, organizational constraints, and a lack of data may hamper efforts. With increased attention to some of these stubborn “root causes,” organizations can more effectively collaborate and align their efforts toward creating meaningful community outcomes. In San Diego, participants articulated the different ways this plays out and expressed interest in exploring ways to mitigate these challenges.

**Organizations are concerned about the future of public workforce funding and see an opportunity to pursue alternative sources and models.** Convening participants voiced concern over the uncertainty of federal workforce funding, stemming from the proposed federal budget cuts. If these budget cuts are executed, local and regional workforce development organizations may have to radically rethink their work and service models since they are often funded by state and federal workforce funding. Alternatively, workforce organizations may seek other funding sources, building a strong business case to incentivize the private sector, philanthropy, and state and local governments to provide the necessary local investment. They may also consider new ways to pool funding, or create a larger fund to pursue cross-organizational priorities.

**Although organizations have different accountability metrics, there is an opportunity to share data.** Accountability can look vastly different across organizations. Each organization serves different stakeholders and collects different accountability metrics, making collaboration and data-sharing complex. A number of participants identified data-sharing as something that would be helpful, but operationally difficult. In an ideal world, governments, schools, employers, and workforce development organizations might work together to collect longitudinal data on workers to track what programs or resources had significant impacts on their careers. In the San Diego and Imperial Valley regions, workforce and economic development organizations have already established a foundation of data-sharing by collaborating on labor market analyses and other data-intensive reports.<sup>3</sup>



## 2) Detailed Findings

### 2.1) Context

The San Diego and Imperial Valley regions are dynamic. This mega-region is home to businesses across a diverse set of industries that have a wide range of talent needs. Workers in the region are also diverse and are looking for the skills and opportunities to contribute to these employers while earning a family-sustaining income. Before discussing the connection between economic and workforce development, it is important to talk about what we mean for each.

#### *Defining Terms*

The terms “economic development” and “workforce development” are always shifting, and we heard variations in what experts consider the two fields to encompass. The definitions below are intended to give our group a common language with which to discuss the nuances of regional trends, as well as bright spots and gaps in existing efforts.

- **Workforce Development:** As the Federal Reserve Bank of St. Louis notes, “The term [workforce development] has come to describe a relatively wide range of activities, policies, and programs employed by geographies to create, sustain, and retain a viable workforce that can support current and future business and industry.”<sup>4</sup> This broad-based definition includes the full range of efforts of many organizations to ensure a strong workforce in a region. However, organizations oftentimes view workforce development through different lenses:
  - Some focus on the *individual worker* and are committed to helping individuals attain the skills they need to have a prosperous and sustainable economic future.
  - Some—mainly employers—view workforce development from their own *organizational* lens and focus on the skills their business and industry needs to remain competitive.
  - Some focus on the *region or community* and work to understand the strengths and gaps of a region more broadly.<sup>5</sup>
- **Economic Development:** According to the U.S. Economic Development Agency, “economic development creates the conditions for economic growth and improved quality of life by expanding the capacity of individuals, firms, and communities to maximize the use of their talents and skills to support innovation, lower transaction costs, and responsibly produce and trade valuable goods and services.”<sup>6</sup> Key activities for organizations working in economic development tend to include growing existing businesses, recruiting new businesses, encouraging entrepreneurship, and connecting firms to skilled labor.<sup>7,8</sup>

Some are also focusing on “inclusive” economic development and growth. The Brookings Institution notes that the goal for this work is to “put a regional economy on a trajectory of higher growth (growth) that increases the productivity of firms and workers (prosperity) and raises standards of living for all (inclusion), thus achieving deep prosperity—growth that is robust, shared, and enduring.”<sup>9</sup>

#### *Connection Between Economic Development and Workforce Development*

Regardless of how one defines economic and workforce development, it is clear that the two fields are linked and critical for a region’s economic success. In the San Diego region, there is already significant collaboration between the two fields, and leaders across both affirm that a skilled workforce is a top priority. For example:

- The San Diego Regional Economic Development Corporation identifies “Workforce Talent Attraction and Retention” as one of its current initiatives and has published research on San Diego’s skilled talent pool.<sup>10,11</sup>
- The San Diego Workforce Partnership, Imperial County Workforce Development Board, and San Diego/Imperial Counties Community Colleges Association (SDICCCA) developed the “Southern Border Regional Workforce Development Plan PY 2017-2020” (as required by the Workforce Innovation and Opportunity Act) to describe the talent needs that employers are looking for and identify a set of priority sectors that will drive economic growth and employment in the mega-region.<sup>12</sup>



## Overview of San Diego's Regional Economy and Workforce

### Economic Landscape

San Diego has one of the most diversified economies in the U.S., and there are multiple ways to describe that diversity.<sup>13</sup> The San Diego Regional Economic Development Corporation identifies four clusters that drive the regional economy:

- **Defense:** San Diego currently has the largest concentration of federal military workers in the country, and its military sector accounts for approximately one in every 10 jobs in the region, including Marines, shipbuilders, and aerospace engineers.<sup>14</sup> The defense cluster also spurs significant economic activity, as defense-related spending is responsible for one-fifth of San Diego's gross regional product (GRP).<sup>15</sup> The Imperial Valley also participates in the defense cluster through its naval air facility and growing aerospace testing activity.<sup>16</sup>
- **Innovation:** San Diego is a major high-tech hub and the most patent-intense region in the nation, anchored by biotech, communications, cleantech, and software.<sup>17,18</sup> The innovation economy makes up nearly one-fourth of San Diego's GRP and has a significant multiplier effect—every job in the technology industry, specifically, creates an additional 2.7 jobs in other sectors.<sup>19</sup> According to the National University System Institute for Policy Research, the innovation economy only employs 11 percent of the county's workers, while accounting for 23 percent of the county's payroll, which indicates wages may be disproportionately concentrated in this high-paying cluster.<sup>20</sup>
- **Tourism:** San Diego is the country's top domestic travel destination, attracting more than 34 million leisure and business travelers every year.<sup>21,22</sup> The annual influx of visitors generates over \$700 million in state and local taxes, and some visitors even stay to start businesses or raise families.<sup>23</sup> The tourism cluster—including hotels, food service, and attractions—employs nearly 12 percent of San Diego's workforce.<sup>24</sup>
- **Other Local Business:** San Diego's robust local economy includes a wide variety of other industries: retail, healthcare, manufacturing, and professional services, among others. While each of these sectors has its own important characteristics, this large cluster makes up about half of San Diego's GRP and 65.4 percent of the region's employment.<sup>25,26</sup> In Imperial County, agriculture is a critical local sector and a top employer.<sup>27</sup>

Another way to describe San Diego's regional economy is in terms of sectors. In partnership with other organizations, the San Diego Workforce Partnership has identified five priority sectors:

- **Advanced Manufacturing:** The advanced manufacturing sector spans a number of fields, from defense to biotech. The sector is relatively high-paying, accounting for about 15 percent of San Diego's workforce, but 22 percent of the county's payroll.<sup>28</sup> Eighty-five percent of employers noted it was challenging to find qualified job candidates, especially for jobs in the production, drafting and technicians, engineering, computer, and software occupations.<sup>29</sup>
- **Clean Energy:** This sector focuses on environmentally friendly solutions, including renewable energy, alternative transportation, and green building. While the clean energy sector is relatively small, it is growing rapidly—by as much as 11.5 percent in 2015 alone.<sup>30</sup> The sector is also heavily fragmented, with half of these businesses in San Diego County employing fewer than five employees.<sup>31</sup> In addition, renewable energy and cleantech are key for natural resource-rich Imperial Valley, which is prime for geothermal, biofuel, wind, and solar energy production.<sup>32</sup>
- **Healthcare:** Healthcare is key to San Diego County's aging urban population, as one-fifth of workers are at least 55 years old and approaching retirement.<sup>33</sup> The sector is a large employer in the region, accounting for over 12 percent of jobs and providing many middle-skill job opportunities for the workforce.<sup>34</sup> Fifty-seven percent of healthcare employers reported difficulty finding qualified job candidates.<sup>35</sup>
- **Information and Communication Technologies:** This sector consists of telecommunications, video gaming, cybersecurity, data analytics, and bioinformatics, and includes Qualcomm, one of San Diego's two Fortune 500 companies.<sup>36</sup> This sector employs over 200,000 workers and is forecasted to grow 13.7 percent in the span of five years.<sup>37</sup>
- **Life Sciences:** San Diego is recognized as one of the country's top life sciences hubs, especially for biotech, pharmaceuticals, and medical devices.<sup>38</sup> Even though life sciences is a differentiating sector for San Diego, it only employs approximately 3 percent of workers in San Diego County—though that number is growing rapidly, with 9

percent growth in 2015 alone.<sup>39</sup> There may also be some synergies with Imperial Valley, where agriculture outputs can be used in certain areas like biofuel development.<sup>40</sup>

### Workforce Landscape

In terms of the region's workforce, it is important to note some basic facts related to unemployment, education and experience, and income:

- **Unemployment:** San Diego County's unemployment rates have been trending downwards over the past few years, from 6.4 percent in June 2014 to 4.3 percent in June 2017.<sup>41,42</sup> This low unemployment rate has led to upward pressure on wages and challenges for companies in finding skilled employees.<sup>43</sup> However, unemployment in Imperial County remains at 20.8 percent, returning to mid-2014 levels after a few years of fluctuation.<sup>44,45</sup>
- **Education and Experience:** The percentage of well-educated workers in the San Diego regional economy is considerable and growing. Thirty-seven percent of San Diegans 25 years or older hold a bachelor's degree or higher, compared to the national average of 33 percent and Imperial County's 14.1 percent.<sup>46,47,48</sup> Furthermore, 60 percent of people who migrate to San Diego have graduated college, demonstrating that the region attracts well-educated workers.<sup>49</sup> In addition to education, San Diego also has a relatively experienced, older workforce. Compared to peer metropolitan areas, experienced workers over the age of 45 comprised a larger share of San Diego's workforce, indicating the impending "silver tsunami" of retirements in the near future may have proportionally greater implications on the regional economy.<sup>50</sup>
- **Income:** San Diego has higher and more evenly distributed incomes compared to California and the country as a whole. San Diego County's 2015 median household income was \$67,320, which is considerably higher than the national average and slightly higher than the statewide average. San Diego County has a 13.8 percent poverty rate, which is lower than the U.S. and California rates. The county's Gini coefficient—a measure of income inequality—showed less income inequality than the U.S. as a whole, the state of California, and other major cities like San Francisco and Los Angeles.<sup>51,52,53</sup> Meanwhile, Imperial County has a median household income of \$41,079 with a significantly higher poverty rate of 24.3 percent.<sup>54,55</sup>

## 2.2) Understanding Regional Trends

The perspectives shared by convening participants provided a better understanding of some of the region's critical trends, as outlined below, which have implications for both the economic and workforce development fields in the region:

1. Growth of the **gig economy** and **contract work**
2. High proportion of **small businesses** in San Diego
3. Growing **middle-skills gap** and need for **workforce training**
4. Interconnectedness of the **mega-region economy**
5. Aspiration for **balanced economic growth**
6. Desire for **economic inclusivity** and **equity** in the region
7. **Aligned goals, but mismatched funding, incentives, and metrics** for economic and workforce development organizations
8. An **aging population**
9. Increased **automation** and rapid technological advancements
10. Uncertainty around **public workforce funding**
11. Decreasing **connection between education and work**

In the following sections, we have provided additional detail related to each of these trends.

### Trend 1: Growth of the gig economy and contract work

There is a growing trend among large corporations to eschew vertical integration and instead look to a web of contractors, suppliers, and freelance workers to deliver critical products and services, enabling these corporations to focus on their core capabilities. This shift can

#### In your words:

*"We're seeing the end of the vertically integrated corporation."*

produce a number of positive trends that are helpful for some workers. For instance, the gig economy can provide more flexible work opportunities for workers who need more control over their schedules and may be particularly attractive to an older generation that remains in the workforce but is looking for more flexibility.

However, the growth in the gig economy also leads to uncertainty around what types of enterprises that will exist in the future, how they will be organized, what types of workers and skills will be needed, and what benefits and job security will look like. Without careful thought and planning, a number of factors could lead to a more stratified workforce, exacerbating inequality between the “haves” and “have-nots.” These factors include connections to job opportunities, access to mentors and capital, and even access to reliable internet—all of which are critical in a number of these jobs. To proactively address these concerns, training organizations have an opportunity to incorporate training for tools that would help workers be successful in this shifting economy; participants highlighted soft skill training and entrepreneurship training (e.g., how to grow a business, retain customers, manage finances) as two important places to start.

Additionally, the growth of the gig economy and contract work is creating clusters of small businesses that deliver their specialized services in silos. Several interviewees posited that the region’s economy could benefit from the development of mechanisms that enable these different clusters of small businesses to collaborate – for instance, an IT support firm partnering with independent computer systems analysts to bid on a complex technology contract. Networks of small support services that specialize in supporting a host of small companies with outsourced services, such as employee benefits management and multi-media design, are also emerging.

### **Trend 2: High proportion of small businesses in San Diego**

In San Diego County, small businesses are a major force. While small businesses (those with fewer than 500 employees) employ approximately half of all private-sector workers in California, they employ nearly 86 percent of workers in San Diego County.<sup>56,57</sup> In addition, very small businesses (those with fewer than 50 employees) comprise 95 percent of businesses in San Diego County and account for a large part of San Diego’s economic growth.<sup>58</sup> Based on the high concentration of small businesses—especially in high-growth industries—among other factors, Forbes ranked San Diego the best place in the U.S. to start a business.<sup>59</sup> And while they are decentralized, small business span a range of sectors thereby forming a diverse and resilient economic base.

Although small businesses make up most of the San Diego regional economy, some interviewees observed that small businesses tend to pay lower wages than large firms in most industries. Across the state of California, employees of small businesses earn \$45,842 on average, while employees of large firms (those with more than 500 employees) earn approximately 36 percent more at \$62,246.<sup>60</sup> However, it is not clear whether variation exists across the same role at large and small firms or whether other factors drive this difference.

From a workforce development perspective, several participants noted that small employers can be harder to serve than large employers. Large companies have greater capacity to hire and train large numbers of workers, requiring less outreach, coordination, and aggregation on the service provider’s part. Training programs can be more easily developed and customized to fit a single large employer’s needs, rather than trying to address the distinct needs of many small businesses. To bridge the gap, there could be new ways to aggregate small businesses together and support them in new ways. As a starting point, there is an opportunity to further enlist small businesses in developing solutions, partly by helping to explain the value of workforce development efforts in a data-driven way and re-thinking incentives to help small businesses—especially those in low- and moderate- income communities—more effectively hire interns and full-time positions.

*“Gig economy workers and freelancers may not have job security or medical insurance, which could change the landscape of the healthcare sector.”*

*“There are many clusters of small businesses providing complementary services, but operating in isolation.”*

*“More of San Diego’s job growth is from newly formed companies than large businesses.”*

*“Because small businesses are so fragmented, serving them is harder.”*

*“There should be trainings not only for getting a job, but also for becoming an entrepreneur. That would connect economic and workforce development.”*

*“We need to inform small businesses of their role and responsibility in developing the talent pipeline.”*

### Trend 3: Growing middle-skills gap and need for workforce training

As San Diego's economy continues to shift, the region's workforce will need to be equipped with a range of new skills to address the growing skills gap. To accomplish this goal, interviewees explored how employers, workforce organizations, training organizations, and others could best work together to uncover which skills are needed and how to best equip workers with those skills.

#### Understanding which skills are needed

In San Diego, there is a shortage of middle-skill workers in a range of occupations, including administrative support, healthcare practitioners and technicians, sales, maintenance, construction, production, and transportation; this skills gap has also hindered the growth of several key priority sectors like healthcare, advanced manufacturing, and information and communications technology.<sup>61</sup> In addition to middle skills, interviewees also identified "soft skills" or "essential skills" like teamwork and critical thinking as high priority for employers.

A number of participants talked about the importance of understanding the needs of employers and involving them in the design of workforce and training solutions for both new and incumbent workers. To do so, collaborations between educational institutions, nonprofits, and employers can help bring the right groups together to co-create the effective models and approaches. These organizations can also help bridge the "awareness gap" by exposing students to different kinds of work, especially middle-skill jobs, through career exploratory programs and youth internship opportunities starting as early as middle school.

#### How to best equip workers with critical skills

A number of organizations—including community colleges, four-year colleges, and other training providers—play critical roles in designing and delivering education that prepares workers in the region. Some interviewees discussed how these organizations could most effectively deliver quality training in the future, as new skills are needed in the workforce. In some cases, this training can be grounded in particular sectors of the economy. For example, the healthcare sector has historically included a wide range of middle-skill professions and is seen as a sector that fosters learning and growth in workers. As the industry shifts more toward technology solutions (e.g., electronic medical records), there will be a need for workers with new skills.

On a wider scale, training providers can also focus on transferable skills or competencies that span across sectors (e.g., analytics trainings for use in advanced manufacturing, healthcare, and high tech), instead of skillsets specific to a job or career. These skill "bundles" and other important competencies could eventually be recognized through micro-level certifications that are validated by employers in an effort to better connect students' education with the skills needed in the workplace.

### Trend 4: Interconnectedness of the mega-region economy

While San Diego and the Imperial Valley have a number of differences in terms of industry mix, workforce characteristics, community needs, and local service providers, the regions are also connected in various ways. Interviewees were open to exploring opportunities for regional collaboration in general, as well as in specific fields such as:

- **Aerospace:** The Imperial Valley and San Diego mega-region is home to a strong aerospace presence with a naval air facility in El Centro and cutting-edge manufacturers. And with 360 days of clear flying weather every year, close proximity to San Diego, and open land, the Imperial Valley is an ideal testing ground for innovations in rockets, jets, unmanned aerial vehicles, and other experimental technologies.<sup>62</sup>
- **Biotech:** San Diego is a leading biotech hub with \$3.8 billion in revenue.<sup>63</sup> The Imperial Valley's considerable agricultural activity can serve as ideal partner for this industry, producing important components such as manure, algae, sugarcane, and

*"Delivering workforce training is becoming a more collaborative effort."*

*"Employers need workers who are prepared with 'essential' skills."*

*"Employers are the ones who do the hiring. They are key in developing the talent pipeline."*

*"We need to balance the short, intensive training people need to get back to work with the longer-term skills and certifications they'll need."*

*"The economy is changing too fast for job-specific trainings to remain viable."*

*"We are stronger as a mega-region than separately, and we should acknowledge that there are also massive differences. But, those differences can complement each other."*

other crops.<sup>64</sup> The two regions are exploring algal research and development, with further collaboration on biofuel development also a possibility.

- **Clean energy:** The Imperial Valley is home to many natural resources, such as nearly-endless sun and wind, affordable freshwater resources, one of the largest sources of geothermal energy in the Salton Sea area, and considerable agricultural production.<sup>65,66</sup> As both San Diego and Imperial Valley look to expand clean energy and “blue-tech” (i.e., water technologies), regional partnerships can potentially accelerate progress for both regions.

And beyond the connection between San Diego and the Imperial Valley, the connection to the Tijuana region of Mexico is also critically important. Many people from Tijuana, San Diego, and the Imperial Valley travel across the border every day. Their economies—such as San Diego’s life sciences sector and Tijuana’s medical device manufacturing sector—are also deeply intertwined.<sup>67</sup>

In order to optimize workforces and industry across regions and nations, better alignment could be useful on many fronts—politically, fiscally, socially, culturally, and more. Longer term, there could be an interesting opportunity to consider a cross-national workforce development agenda to train and connect workers and industries across the mega-region.

### **Trend 5: Aspiration for balanced economic growth**

Balanced economic growth depends on strong growth in both high-skill sectors (e.g., biotech) and middle-skill sectors that are tied to population growth (e.g., healthcare). Planning for and achieving balanced growth ensures that a region’s economy is diverse, healthy, and allows for a wide range of workers to participate. For example, this type of economic development is credited with helping Austin, TX, become one of only four metro areas in the country that achieved inclusive economic growth from 2010-2015.<sup>68</sup>

In the San Diego region, a number of interviewees described how the “innovation economy” has benefited the region by attracting talent and investment, producing breakthrough technology, and creating high-paying jobs. However, some interviewees questioned what this growth in high-skill sectors meant for the 63 percent of San Diegans without bachelor’s degrees, raising concerns of growing economic inequality in the region, especially as the cost of living and housing prices increase.<sup>69</sup> These questions highlight the importance of exploring how economic and workforce development organizations can prioritize and support a range of sectors to drive broad-based growth. Looking forward, some questioned whether San Diego would eventually look more like San Francisco or New York City, with robust economies but high inequality, or more like Austin and Denver, with more balanced growth.

To achieve balanced growth, some organizations are actively balancing their efforts to continue to spur the prominent innovation economy while also bolstering middle-skill industries like healthcare and lower-skill ones like retail. To do so, there may be an opportunity to utilize big data to better understand and share trends in middle-skill jobs, such as which areas hiring in real time and capturing the skills needed to be successful across thousands of middle-skill jobs. In addition to focusing on skills, participants noted that supporting employers who were creating middle-skill jobs was also important. Whether through targeted investment funds, targeted tax credits, or other means; supporting these businesses further can spur balanced growth. Overall, the regional economy can grow to be even more resilient by fostering growth in a range of sectors.

### **Trend 6: Desire for economic inclusivity and equity in the region**

There are several ways to consider inclusivity and equity in the region’s workforce and economic development.

*“If you’re talking to someone looking into renewable energy, the Imperial Valley is where you would want to be, but the workforce is in San Diego.”*

*“Given the interchange of our workforces, there could be more connectivity between our transportation systems, education, business, and cultures.”*

*“We need to pay attention to all sectors that contribute to the economy.”*

*“The innovation economy is significant for San Diego, but we should recognize that not everyone benefits from it.”*

*“The first step is helping young people and parents understand what our economy looks like and where there is opportunity.”*

*“We focus a lot on training middle-skill workers, but we also have to support the sectors and businesses that employ them.”*



First, a number of organizations described the importance of bringing people who are currently on the margins back into the economic fold as productive workers and providers for their families. For instance, nearly one-tenth of 16- to 24-year-old residents of San Diego County are “opportunity youth” who are disconnected from school and work, and only 35.5 percent of them are looking for work or working—compared to 60.2 percent of all 16- to 24-year-olds in San Diego.<sup>70</sup> Other groups with barriers to employment (e.g., ex-offenders) may also be looking for onramps into the regional economy.

However, serving these populations often requires additional efforts or partnerships with other service providers, especially for those with significant barriers to employment. And when connecting these workers to employers, developing a business case is critical. San Diego’s businesses may be open to hiring from these groups—one survey of small businesses showed that 77 percent were open to hiring youth and 72 percent were open to hiring ex-offenders<sup>71</sup>—but we heard that businesses may not *prioritize* these hires without a compelling business case beyond “corporate social responsibility.” And beyond a business case, it is also important to consider the role of social capital (e.g., coaching, mentoring, connection to job opportunities) in connecting underrepresented populations to quality jobs, as well as logistical hurdles (e.g., transportation).

To accelerate progress, some participants shared that anchor institutions, such as hospitals and universities, could have an important role to play in leading the charge on diversity and inclusion and could serve as a model for private sector employers. When involving the private sector, it is also critical to think of messaging and framing, as concepts like being “pro-family” may be more universally supported by corporate leadership.

On a broader scale, some are thinking about economic mobility and ensuring that a wide range of community members can move up the ladder. A growing body of research on economic mobility shows that local decisions can affect a child’s ability to gain an education and find gainful employment as an adult. Fortunately, San Diego ranks sixth in upward mobility out of the 50 largest metropolitan areas in the U.S., and community leaders remain committed to find ways to continue to help those from a range of different backgrounds advance.<sup>72</sup>

### **Trend 7: Aligned goals but mismatched funding, incentives, and metrics for economic and workforce development organizations**

Overall, organizations across workforce and economic development are aligned in their desire and efforts to better train San Diego workers and connect them to businesses across the region. At the same time, organizations in economic and workforce development are supported by a range of funding streams, each carrying its own requirements, expectations, and accountability metrics.

While economic development funding primarily originates from the private sector, workforce development funding is more dependent on the federal budget and guidelines, and training organizations like community colleges and nonprofit organizations cover costs through a range of state, local, philanthropic, and fee-based funding streams. Thus, when attempting to collaborate, organizations may agree on a solution, but struggle to find capacity and alignment to take it on. To address this challenge, there could be greater opportunities to pool funding across multiple organizations to address important outcomes and divvy up the work according to organizational strengths and constraints. Doing so could increase the overall “pie” for organizations in the region, but requires higher levels of coordination.

In addition to funding, accountability can look vastly different across organizations. Organizations are required to serve different stakeholders and collect different metrics, making collaboration and data-sharing even more complex. A number of interviewees identified data-sharing as something that would be helpful, but operationally difficult.

*“The entire economy benefits when everybody plays a role in it.”*

*“Underrepresented populations are harder to reach.”*

*“Even if low-income folks find jobs, they may not be able to get to work due to the lack of accessibility.”*

*“Many of us agree that local leaders can affect income mobility.”*

*“We have incredibly strong relationships across the two fields and a real desire to improve the region.”*

*“We sometimes chase funding instead of focusing on outcomes.”*

*“Our organizational success is often measured differently.”*

### **Trend 8: An aging population**

The effects of an aging population manifest in many ways:

- In many industries, a large number of baby boomers are expected to retire in the coming years, leaving many middle-skill jobs and management positions open for employers to fill. Helping employers train the right workforce that will be ready to step into these open roles will be critical.
- Many baby boomers are also deciding to retire later, but are seeking more flexible hours and working conditions. Participating in the gig economy can provide great flexibility, but may require older workers to gain new skills (e.g., mobile technology).
- An aging population may shift the economic demand for certain products and services, such as an increased need for healthcare. From an economic development perspective, it is important to help businesses respond to this shift in demand and consumption to be able to capture and serve the senior market. Meanwhile, workforce development organizations and the healthcare industry are considering how to train more healthcare workers (e.g., nurses) to meet the needs of the older population.

*"Instead of retiring at 65, older workers can pick up consulting or freelancing gigs in the field of their expertise and work from home with flexible hours."*

### **Trend 9: Increased automation and rapid technological advancements**

With the rise of automation, artificial intelligence, and the speed of technological advancements, millions of low- and middle-skill jobs could be at risk over the coming decades while the demand for high-skill, STEM jobs continues to increase.

Preparing workers for new roles—and sometimes entirely new categories of jobs—will likely require a range of new skills, requiring training organizations to more dynamically adapt. The importance of on-the-job training may also grow as technologies change so quickly that learning them in the context of the work setting could be more valuable. Additionally, creative ways to encourage more STEM education and awareness will continue to be important.

*"In the future, work may look very different. With automation replacing jobs, there may soon only be one worker per household."*

The long-term future of work may also bring about some policy change. For instance, policymakers will need to consider what the appropriate minimum wage should be. On the one hand, it should be high enough so that it enables workers to provide for their families. On the other hand, a higher minimum wage could accelerate the need for automation in some low-skill occupations. Over the longer term, if automation eliminates a large number of low- and middle-skill jobs, policy makers may consider solutions like universal basic income.

*"The future is here, and educators are trying to keep up."*

### **Trend 10: Uncertainty around public workforce funding**

The future of federal workforce funding is uncertain, as some budget proposals include significantly reduced funding for workforce development. If these budget cuts are executed, workforce development organizations may have to radically rethink their work and service models since resources would sharply decline. Alternatively, these organizations can look to other funding sources such as employers, philanthropy, state, and local governments to provide additional investment for existing and new bodies of work.

*"Workforce development reform and budget cuts could see organizations working more closely with employers out of need for funding, perhaps on a contractual basis."*

### **Trend 11: Decreasing connection between education and work**

For many years, employers have defaulted to hiring workers with two- and four-year degrees. But as workplace become more specialized, some participants saw a growing disconnect between what students learn in school and what they need to be successful in a job. To address this observation, there may be an opportunity for schools to expose students to the world of work earlier so they can understand what skills are needed in the workplace. In addition, further collaboration between employers and training providers could also better to prepare students for the workplace.

*"There is a lot of focus on the academics now, so graduates come out with less workforce readiness."*



## 2.3) Envisioning a Better Future

With these regional trends in mind, convening participants then envisioned what the future could look like in two forms—the “expected future” that continues along the current trajectory and a “better future” in which we’re able to take advantage of opportunities and address critical risks.

### *Expected Future*

In an “expected future” that continues along today’s trajectory, there are a number of positive trends that could continue to benefit the San Diego economy and workers. For example:

- The innovation economy would still continue to be a major driver for the region as there is a deep knowledge base in the region.
- Tourism would remain relatively strong, spurring job growth in areas like hospitality, food, and craft beer. Additionally, San Diegans that could afford the housing prices would continue to choose the area for retirement.
- Clean tech would likely remain strong as water industries related to desalinization and irrigation would remain important; solar technology would grow increasing viable in this sunny region.

However, the expected future would largely be defined by fragmentation and division. While the pockets of the innovation economy would remain strong, there would be challenges in growing it broadly without an increased focus on STEM education and training. Additionally, San Diego’s economy would grow increasingly stratified with robust high-paying jobs and many minimum-wage jobs, with pressure on middle-skill jobs. This stratification could also exacerbate concerns related to affordability—especially housing—and could even lead to societal-level effects as some slowly “give up” on the American Dream.

### *Better Future*

While there were a number of challenges in the expected future, group was hopeful that organizations and communities could collaborate to create a better future. Participants imagined a future where the local labor force could support economic growth and the benefits of economic growth would accrue to all members of the community. Resources across the region would be aligned and working together, with education providers and employers collaborating to support workforce needs and a public sector that is able to react quickly to shifting economic conditions. Funding would also be more aligned and focus on overall community outcomes, rather than overly-narrow metrics. Additionally, there would also be increased collaboration among city, county, and regional officials to create a better quality of life (e.g., affordable housing, public transportation, wellness), a shared workforce agenda, and business growth. By focusing on all parts of the economy, the San Diego region could become a global leader in innovation, creating high-, middle-, and lower-skill jobs across a variety of sectors.

At the same time, the region would also embrace and strive for inclusivity and diversity across all aspects, including socioeconomic status, race, gender, and age. Communities would recognize the importance of equal access to resources and opportunities, giving every student to right to a high-quality education—from pre-K to college to summer programs and internships. Employers would also value inclusivity and incorporate this value into their corporate culture and hiring decisions.

A better future also includes more connection across the mega-region, as the San Diego, Imperial Valley, and border regions of Mexico are intimately connected. Participants imagined ways to create new forums to discuss cross-national workforce, trade, and economic issues.

## 2.4) Early Ideas and Next Steps

Based on this expected and better future exercise, the group brainstormed early ideas and next steps that could help to bridge the gap from the expected future to the aspired better future. While there are many ways to group these areas of opportunities, they largely aligned with the four broad areas of opportunity:

- Opportunity for increased collaboration within San Diego and across the mega-region
- Opportunity to leverage existing assets and infrastructure
- Opportunity to promote equity and inclusion in the region
- Opportunity to better align funding, metrics, and incentives

## Key Areas of Opportunity

### Opportunity for increased collaboration within San Diego and across the mega-region

- K-12 schools, workforce development organizations, and employers can work more closely to **expose students to potential careers**. The creation of a talent development center could help connect workforce development leaders to education as early as pre-K. Middle and high schools can further strengthen relationships with employers and workforce development organizations so they can introduce students of all different communities to all different types of work through field trips, career fairs, job shadowing, or technical education. In addition to college preparation, there could be more career readiness and support in schools with the help of workforce development organizations. For instance, counselors could play a key role in sharing knowledge about the labor market and be trained to hold honest discussions with students about potential careers and skills needed.
- Workforce development organizations and colleges can **engage clusters of employers to identify skills and competencies they value and would acknowledge**. Employers can also be more involved in giving feedback on curriculum, co-developing learn-and-earn training programs, and hiring students for internship or apprenticeship opportunities.
- Given the interconnectivity of the workforces and economies of San Diego, the Imperial Valley, and Mexico's Tijuana region, **increased communication and alignment among their governments and organizations** could be helpful. Some even suggested creating a physical "Western White House" where the two sides could discuss trade and other issues.
- **Local officials can continue to foster relations** and keep in touch with organizations and neighborhoods through monthly meetings and town halls.
- Smaller agencies can sometime be left out of important conversations, even though they're the ones in the trenches doing the work to connect individuals and pathways. **Larger organizations can work with these smaller agencies to be part of conversation and partner** where appropriate.
- **Nonprofits can continue to convene regularly** to better understand each other's work. With stronger connections made, they may be able to better align resources, build alliances, make referrals, and apply for joint funding.
- Organizations operate in a wide range of networks that include other service providers, employers, and government agencies. By **better connecting and mapping these networks**, organizations can better understand the landscape of potential partners.
- One strong collaborative effort already underway is **One San Diego Skills for Success**, which is a regional cross-sector group of 15 school districts, five community colleges, nonprofits and hundreds of industry partners with the goal of preparing all young adults for college and career success in advanced industries. Many participants highlighted this effort and noted the opportunity to grow and build on it.

### Opportunity to leverage existing assets and infrastructure

- There is an opportunity to **leverage existing community assets to create hubs for workforce development**. Many neighborhoods already have vibrant gathering places that provide various services for the community. Instead of building new workforce development centers or asking community members to commute long distances for trainings, neighborhoods could leverage existing institutions like libraries, recreation centers, or malls to deliver some trainings.
- In San Diego, **anchor institutions like universities, hospitals, and museums play a key role** in weaving together the civic fabric and also employing large number of workers. There could be an opportunity to work more with these anchor institutions to strengthen their own workforces and serve as regional leaders on inclusion and equity.
- Given the significant military presence in San Diego, a number of programs exist that provide support to military families. Organizations could involve, leverage, and **build on these military family programs** to better serve a relatively large segment of the community.
- Beyond military programs, there is also a range of programs to build from—although more so in San Diego compared to the Imperial Valley. Where possible, it may be valuable to **build from these efforts** rather than designing short-lived, "flash in the pan" ideas.



#### Opportunity to promote equity and inclusion in the region

- Organizations can help employers **understand the business case** for equity and inclusion—specifically that there is large, untapped potential both as a talent pool and a potential customer base.
- With a strong business case, workforce and economic organizations can **start conversations with CEOs about inclusive strategies**. Over time, there is an opportunity to help businesses make inclusion a part of their corporate culture, from hiring decisions to marketing efforts.
- Nonprofit organizations and businesses can work together to **design creative ways to take steps toward inclusion**. One idea in particular was for companies to “adopt” a school from an underserved region to help those students learn more about a company’s work.
- Governments and companies can incorporate these inclusive values into their **purchasing strategies** by buying from entrepreneurs or companies from underserved communities.
- One existing effort to build from is **inclusive learning lab** with the Brookings Institution that brings different organizations together to understand specific opportunities and barriers to economic inclusion that impact San Diegans.

#### Opportunity to better align funding, metrics, and incentives

- Organizations have a wide range of stakeholders, missions, and capabilities and sometimes struggle when they accept funding **that doesn’t align with their goals**. By mapping the different funding streams and understanding what is available, organizations could potentially better target funding that is more aligned with their work.
- Beyond mapping existing funding sources, there is also a need to advocate for **more stable, multi-year funding** from a range of sources that better matches the goals and timelines of the work on the ground.
- Building on existing collaborative efforts underway, organizations can work to **better align resources and creatively partner together**. One example would be for some organizations to align on a project or set of outcomes and then jointly apply for funding, create a shared pool, and divvy up the work that best aligns with organizations’ strengths.

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San Diego Regional Economic Development Corporation	Mark Cafferty	President and CEO
San Diego Regional Economic Development Corporation	Ashley Swartout	Manager, Economic Development
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San Diego Workforce Partnership	Peter Callstrom	President and CEO
San Diego Workforce Partnership	Andy Hall	Chief Operating Officer
San Diego/Imperial County Community College Association	Sunny Cooke	President
South County Economic Development Council	Cindy Gompers-Graves	President and CEO
University of California, San Diego	Mary Walshok	Associate Vice Chancellor of Public Programs and Dean of Extended Studies
United Way of San Diego County	Laurie Coskey	President and CEO
United Way of San Diego County	Tia Anzellotti	Director of Partnerships

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