

Collaborative Planning Support Document:
Economic Summary



Prepared by

Redwood Region Rise High Road Transition Collaborative

December 2023

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INTRODUCTION

The following section includes:

- Background Information
- Economic Development Opportunities
- Economic Development Disparities
- Addressing Wage Disparities
- Impacts Of Economic Shocks and Shifts
- New Economic Development Opportunities

Background Information

This document provides planning support material for the Redwood Region Rise (High Road Transition Collaborative (Collaborative)). The discussion mixes direct input from collaborative members with supportive and explanatory economic development research.

The Collaborative goal is to create equitable access to opportunity for workers in the Redwood Region to attain quality jobs (with the potential for upward mobility) in resilient industries. With communities, businesses, government, tribes, and other stakeholders, the task will be to build on regional assets and competitive advantages to diversify existing and emerging industries with the potential to advance the regional economy and create quality jobs. The goal is to encourage resilient economic development by building on regional strengths and assets, supporting traded sectors, fostering innovation, encouraging talent development, and developing public-private partnerships (PPPs) that move regional industries up the value chain to advance emerging economic opportunities. All this while creating new jobs, new wealth, and a new roadmap for the Redwood Region, focusing on disinvested communities.

Equitable distribution. Marek Gootman (LHC, 2022) notes that a regional development strategy looking to create quality jobs at scale and advance a regional economy may not be able to provide jobs everywhere: “You can’t bring the economy into neighborhoods. You have to connect neighborhoods into where the economy works, which is the region.” In a large region with a dispersed population, those closest to the problem are often the farthest from the resources needed to solve it. Thinking creatively about equitable distribution of resources, and the most effective means of providing ED assistance throughout the varied communities and sub-regions of the Redwood Region, will be an ongoing issue for the Collaborative.

Economic growth can reach disinvested communities if barriers to opportunity are addressed, if *community* development strategies are deployed (as opposed to purely economic development approaches, see discussion below), and if key stakeholders—wherever they are located—involved with

creating pathways to training and employment in quality jobs can be engaged. A key goal and challenge of the California Jobs First (CJF) program is thus to identify ED strategies that create jobs while elevating equity and environmental resilience/sustainability *region-wide* as much as possible. There is also a need to figure out how to distribute implementation resources across the region: to spread available resources broadly, or to focus them on select industries and sub-regions/communities, and then (as Gootman notes) connecting members of disinvested communities with those industries. The result will likely fall in the middle somewhere and will be determined in part by Collaborative deliberation about project prioritization, as well as by available funding.

Building capacity. One approach—less focused on target sectors or “clusters” per se—is to build widespread regional capacity to pursue inclusive regional economic development by 1) dedicating ongoing funding for regional collaboratives like the Collaborative, 2) planning for how to structure and systematize regional collaboration and capacity-building after the end of CJF, and 3) implementing cross-cutting “opportunities” that could apply to most or all economic sectors (discussed below). That is, to see the initial tranche of implementation funds as effectively a first phase in which regional capacity-building and development of cross-cutting efforts occur alongside the implementation of a few major, sector-specific projects.

Cross-Cutting Approaches. A basic challenge faced by the Collaborative (and presumably all CJF regions) in connecting disinvested communities with economic opportunity is figuring out how exactly to create quality growth and quality jobs that are accessible for people in those communities. One approach, in addition to focusing on specific sectors and/or target industries, is to tap into broader trends and driving forces that cut across all sectors and industries—a “cover your bets” approach. For example, the cross-cutting EDOs discussed below (TEK, employee engagement, placemaking, etc.) could work to create a broader framework within which businesses in *any* sector would operate, a framework within which high road strategies and EDOs that create sustainable jobs for the long term can be situated and widely distributed.

Brookings Institution Research. Researchers at Brookings (Wright et al., 2020) identify five components that underlie regional economic success: 1) traded sectors (which bring money into the region and tend to foster growth in productivity and innovation), 2) talent (the pool of knowledge, skills, and expertise in a region, as well as the region’s ability to provide residents with in-demand skills and training), 3) innovation (which supports business creation, the development of new products and services, and helps with improvements in productivity), 4) infrastructure (which makes it possible for residents to connect to jobs and allows employers to connect to workers, customers, and suppliers), and 5) governance (which determines the ability of regional institutions to deliver on a common economic development agenda). While these five elements are not strategies or opportunities per se, they reflect important elements that should be kept top of mind in overall ED program planning and implementation.

Regarding governance (#5), for example, the success of economic development initiatives in the Redwood Region will depend on strong leadership (from both political and business leaders), adequate funding, clear strategic priorities, the ability to align investment and stakeholders around the priorities, and commitment to pursuing strategies long enough for them to bear fruit. The last clause is important to remember: many ED initiatives require longer periods of time (decades) and often cannot be completed in a short funding cycle.

Capacity over the long term. In fact, governance capacity and “long-termism” issues were highlighted during the Collaborative meeting held in Ukiah, California, in September 2023. There, participants in the regional SWOT analysis noted: 1) a lack of “supportive” government policies, 2) institutional capacity concerns including working in silos, none, some, or duplicative economic development efforts and lack of depth of experience in economic development), 3) difficulty with finding and applying for grants, 4) unsustained cooperation among ED collaborators, 5) lack of a collective vision, 6) fear of success and a “dream small” mentality, and 7) egos, grudges, a scarcity mindset, and mistrust. Regarding #2, the capacity to identify and respond to grant opportunities was noted several times. These are important factors to consider in defining a roadmap that ensures the needed capacity exists to implement selected projects.

The Redwood Region has many opportunities. Despite the numerous challenges with making Redwood Region-wide ED work well (distributing resources equitably, weighing short- versus long-term approaches, etc.), there are significant opportunities for economic development in the Redwood Region. The region's natural beauty and abundance of natural resources make it a prime location for tourism, outdoor recreation, and sustainable agriculture, and the region is home to a growing number of creative businesses and artists. Cal Poly Humboldt provides significant regional expertise across a range of disciplines tied to critical economic sectors. Emerging business opportunities are already being explored in the application of smart technologies, AI, and machine learning by both existing and startup businesses.

Improved digital connectivity throughout the Redwood Region is enabling more remote work opportunities, a particularly valuable opportunity given the relative immobility of the more remote regional populations. Opportunities to use traditional ecological knowledge (TEK), either alone or combined with high-tech applications (e.g., drone work in forest and fire management using TEK-based management principles), are becoming more socially and ecologically important and more economically valuable. Blue economy applications in aquaculture are on the horizon, including distributed hydroponics systems monitored by easy-to-use intelligent platforms. And the potential for a blue-green economy “big push” industry—off-shore wind—looms literally and figuratively on the horizon.

To capitalize on these opportunities, Collaborative participants note that the Redwood Region needs to explore both public and private sector approaches, including (but not limited to) 1) investing in balanced and effective infrastructure, education, community, business, and workforce development, and 2)

supporting entrepreneurship and innovation, whether in the form of new startups or new entrants, or within existing firms seeking to grow.

But identifying and prioritizing economic development opportunities (EDOs) and forces driving economic activity and change in the Redwood Region is no small task. With the diversity found in four counties and tribal lands spread over close to 10,500 square miles, from coastal to inland areas, widely dispersed populations in unincorporated areas, and myriad other differences among Redwood Region residents (age, ethnicity, race, educational attainment, income level, etc.), there are likely to be a wide range of opportunities to choose from and many ideas about which ones are most important.

Dispersed populations. During the SWOT, participants acknowledge that disinvested, priority communities¹—including tribal nations—are often united as much by ancestry, identity, status, and experience than by location. For example, many Native Americans in the Redwood Region do not live within formal reservation boundaries. Even so, tribal communities in the Redwood Region have a long history and culture that is woven through the broader region's communities and identity—their unique economic challenges, such as high rates of unemployment and poverty, are the region's challenges as well. Other disinvested communities prioritized by the Collaborative are also widely dispersed throughout the region. What this means is that program *coverage* may be as important as place-based *targeting* of projects. That is, projects selected for implementation need to be crafted in ways that both maximize equity and spread wealth broadly.

The extensive collaborative processes to date have worked to identify gaps in existing ED programs and ED capacity, and to identify strategies to fill those gaps with both specific projects and through capacity-building efforts that will help ensure that programming is sustainable after CJF funds are expended. Of course, the EDOs identified and pursued by regional stakeholders will not meet all defined needs perfectly—nor will there be a perfectly equitable distribution of “access to opportunity” from these efforts. What we can anticipate is a significant movement toward identifying and addressing unmet needs, optimizing resource distribution, and making significant regional strides toward providing equitable

¹ Disinvested communities are defined here as people who face a confluence of relatively severe and often interconnected hardships including, but not limited to, poverty, disability, lack of access to household or community resources, or lack of economic or educational opportunities; these communities disproportionately experience poorer outcomes when compared to state averages on several key indicators.

access to opportunity and greater economic participation, mobility, and well-being for Redwood Region residents.

Strategies and Opportunities

There is a close connection between ED strategies (EDS) and ED opportunities (EDOs). Generally, a strategy is a way to exploit and develop an opportunity, and often, as economic opportunities evolve, business and ED strategies evolve as well. This is how capacity-building works in a complex, adaptive system: just as opportunity definition in the business world sometimes misses the mark (the hoped-for demand does not materialize)—requiring modifications, pivots, and possibly the tossing out of a product or service idea—strategies must continually evolve to meet changing economic and market realities.

These new realities reflect and are often driven by forces outside the control of ED practitioners (e.g., disruptions such as the pandemic, broad economic swings, and so on). The goal, ultimately, is to shape effective, robust, and adaptable ED programs that help people, businesses, communities, tribes, and the broader Redwood Region become better prepared for and able to respond and move forward from unpredictable disruptions with uncertain impacts. Continuous improvement, iteration, improvisation, and adjustment to ED programs will always be needed, in both business-as-usual and disruptive times.

Unintended consequences. Selected ED opportunities and strategies can themselves have unintended consequences that are difficult to predict accurately. For example, an ED strategy focusing on developing an opportunity with a large employer in a centralized location (e.g., Eureka) could negatively impact Redwood Region-wide equity if it draws labor away from smaller towns. In fact, many ED strategies are designed to attract businesses and industries to larger towns and cities where there is a larger pool of labor and a more developed infrastructure. Of course, this often leads to a concentration of jobs and economic opportunities in these leading areas, while *increasing* disinvestment in lagging communities.

To counterbalance this potential, ED practitioners in the Redwood Region will need to work hard to consider the needs of disinvested communities and look carefully at the distributive impacts of various approaches under consideration. This includes approaches that might draw labor away from communities, as described above, but also other approaches operating within communities. For example, focusing on attracting high-tech businesses to the region may not provide job opportunities for residents, if they do not have the necessary skills or education, regardless of where they live. While this calls out the need for widely available and equitably distributed workforce education and training programs (including, importantly, on-line offerings), there is still a potential to exacerbate existing inequalities if those programs are not easy to access, making it even harder for people without such skills to get ahead.

To mitigate these risks and ensure that economic development benefits all residents, it is important to implement projects that are inclusive and equitable, including prioritizing investments in digital infrastructure and public services in smaller towns and more remote rural areas in the Redwood Region.

Providing training and support to local residents will be important for the up-skilling needed for jobs in a digital economy. A part of this effort may be encouraging businesses to locate in (or at the very least partner with) smaller towns and the more remote rural and tribal areas in the Redwood Region. As noted by SWOT participants, facilitative programs that offer incentives (tax breaks or grants) or that provide support services (e.g., childcare, or transportation) may be needed to help smaller tribal and nontribal communities catch up.

Further, encouraging businesses to form or relocate in disinvested areas may also require investments in community development and initiatives that improve the quality of life, revitalize downtowns, create affordable housing, or improve access to healthcare and education—things that make it more appealing for a business in choosing a location regardless of the economic sector in question. All these factors require catalytic leadership tied to enough resources to ensure that they can be meaningfully taken into consideration in program development, and that the resources and leadership are sustained over the long term.

Local engagement. The Collaborative’s efforts to engage with local residents in all aspects of the planning process have been and will continue to be critical to ensure that all unseen needs are surfaced, to take all concerns into account, and to ensure transparency and equity. Through multiple meetings, listening sessions, interviews, and data collection, the Collaborative project team has worked to gather qualitative and quantitative data, and to disaggregate both by race, gender, and other factors where possible to better identify and address disparities in economic opportunity in the Redwood Region. While this will ultimately make it easier to target resources and interventions to the communities that need them most, it still requires the participation and involvement of those who “own” the data and the narrative the data tells. It also requires that the input of disinvested communities be appropriately translated into actionable goals that accurately reflect their needs and values, not those of outside ED policymakers.

Investments in Community Development. Robert Pittman (ESI, 2021) notes that “definitions of community and economic development are parallel: community development produces assets for improving the quality of life and business climate, and economic development mobilizes these assets to realize the benefits of the community.” Along these lines, the Collaborative is exploring programs, such as “capital absorption,” that provide community- and/or region-level investments in pipelines of coordinated projects, with the goal of developing individual and community assets and building wealth.

The goal with such efforts is to create more equitable (and more distributed) access to economic opportunities and to financial inclusion, with the understanding that wealth inequities across the Redwood Region are strong barriers to accessing opportunity. Ultimately, with participation and buy-in, wealth-building strategies like (capital absorption) can help ensure that economic development efforts are sustainable (persisting after the CJF intervention) while remaining responsive to community-defined needs.

The correlation between community and economic development is strong and is a continued emphasis of Collaborative participants. Fostering the interaction of disinvested populations and creating more social connectivity with businesses, non-profits, schools, etc., and tracking such foundational measures as the social determinants of health, is an acknowledgement that all people and all voices matter, that everyone should be able to have job that confers dignity and provides a living-wage income, that helps build wealth (e.g., home equity), and that confers true economic inclusion.

As the Little Hoover Commission (LHC, 2022) notes: “Ultimately, regions will likely need to invest both in communities and in long-term strategies for economic growth, and carefully balance the goals of growth and inclusion. They will need to work to simultaneously create economic opportunity and eliminate barriers to that opportunity. They will also need to determine how to integrate and combine the distinct but interrelated investments and interventions required to advance both communities and the regional economy.”

ED Driving Forces

Many forces combine to drive economic activity, including the factors of land, labor, capital, and entrepreneurship. These factors all affect economic growth and impact supply and consumer demand. Driving forces can be exogenous (from the outside) or endogenous (from within). Exogenous forces are often global in nature, and include (among others): policies and practices supporting economic liberalization (viz., multi-market interdependence), global trends toward a digital economy and remote work, increased automation, gains in worker productivity (often at the expense of certain types of jobs), and the impacts of global disruptions (pandemics, environmental and climate change impacts, recessions, supply chain disruptions, etc.) on economic systems, communities, families, and individuals. Driving forces are also local, rising from the ground level up.

As one example, the ability to identify and implement EDOs (that both shape and respond to consumer demand) is often driven by a community’s or region’s leadership capacity, the availability of assets (e.g., land, labor, capital, know-how), and the entrepreneurial capacity of a community or region. These are all important driving forces affecting how an economic system is structured and how it is set up to identify, create, and capture opportunities (i.e., how customers and increased demand for goods and services are created (Pipa and Galston, 2023). Taking this broader view, the driving forces of economic change and opportunity in the Redwood Region include (but are not limited to):

- 1) Deliberate equity-based strategies to address settler-colonial economic practices, acknowledge different ways of structuring economic activity and related barriers to participation in economic development processes (both planning and implementation) such as barriers to employment, to engaging in entrepreneurship, and to other ways of participating (i.e., acting as a consumer or producer) in the economy. A straightforward example is “food deserts” in rural areas, which represent an inequitable barrier to participation in the economy that also directly impacts health

and well-being. Strategies to address these barriers include programs and policies designed to increase participation for priority communities in such areas as affordable childcare, healthcare, transportation, and housing, among others.

- 2) Similar to #1, the broader “enabling environment” within the Redwood Region, including the physical and human capital within which the regional economy functions, is an important driving force as far as it both is shaped by and directly impacts consumer demand. As noted by many Collaborative participants, the generally poor infrastructure and lower educational and skills attainment among Redwood Region residents, particularly among disinvested communities, present significant challenges (on the supply side) to employment, business startup and growth, and business retention and long-term sustainability. As many communities are struggling with job losses, population decline, high poverty, empty buildings, and crumbling infrastructure, strategies that build on the assets, defined needs, and desires of each community will be critical in efforts to spur economic activity, create jobs, and foster more equitably distributed wealth and prosperity.
- 3) An emerging focus in policy and practice toward policy development and program implementation support for resilient and sustainable economic activity can play a strong role in shaping economic activity on the supply and demand sides. These government-led approaches (policies and regulations) can incentivize more robust and adaptive responses to both gradual (business as usual) and disruptive (economic, natural, climate) changes and create demand for more resilient products and services.
- 4) Digital economy: Technological advancements in communication, transportation, and e-commerce have opened new markets, reduced barriers to remote work, altered business models, and made rural areas more accessible and attractive for businesses and individuals; more widespread use of smart technology (AI, machine learning) has had impacts on labor productivity and jobs.
- 5) Economic disruption and ensuing change from long-term structural changes in the regional and global economy that shape supply and demand, including (but not limited to): a) the Redwood Region region-wide shift from an extractive to more mixed-industry model, b) economic disruptions such as the Great Recession, c) economic globalization and liberalization of trade, e) (potentially) long-term higher interest rates, f) the pandemic, and g) natural disasters.
- 6) Global environmental changes, particularly the threat of climate change, impact the factors of economic growth, limit economic activity in some instances, and provide incentives for new forms of economic activity in others. One example is the implementation of policies, programs, and economic and business models based on circular systems and regenerative design (e.g., the circular bio-economy).
- 7) Regional out-migration (brain drain) and population decline, with impacts on consumer demand, labor force availability and participation, and business growth and sustainability.
- 8) Workplace norms and generational (Boomer, Gen X, Millennial, Gen Z) dynamics, including a growing older population and differences in approach to work, life, and work-life balance, among younger generations, all impact economic activity. Differences include the rise of gig and remote

work (particularly during and after the pandemic), the desire for greater workplace flexibility, and more attention to individual needs (e.g., neurodivergence) and family schedules.

- 9) Government initiatives and investments to support economic development and infrastructure improvements in rural areas can help create a more receptive framework for economic activity.
- 10) Business management that increases firm innovation and productivity through employee engagement and entrepreneurial thinking programs. Such programs focus on the workplace environment and have a stronger focus on “customer creation” (i.e., demand-driven economic development) as a precursor to job creation (Nink, 2023).

Equity and Resilience

At the highest level, equity and resilience are the key EDOs and driving forces for economic development in the Redwood Region (admitting that successful exploitation of opportunities is in itself a potent driving force of economic activity). To achieve equity and resilience requires “flipping the script” about who gets to generate, interpret, and hold the data that informs change (and ultimately determines success). In identifying EDOs, key questions to ask include:

- How do we best identify and prioritize community-developed, equitable, and resilient EDOs in preparation for project selection and implementation?
- How do we facilitate needed structural changes in economic and industry dynamics in the widely varying contexts within the Redwood Region?
- How do we build equitable wealth among Redwood Region residents for the long term?

For the Collaborative, centering equity requires 1) a clear understanding of shared priorities in the Redwood Region among counties and communities, and 2) the creation of capacity at all levels to organize community members and convene key community stakeholders. To this end, as described elsewhere, the Collaborative has been working to: 1) determine a high-level vision for the Redwood Region, 2) set criteria to guide collaborative planning and implementation at the regional, county, community, and tribal levels, and 3) establish models for effective governance of the overall process that is able to elicit key issues related to equity.

Generational issues. Several other issues should be considered in the design of equitable, inclusive, and resilience-promoting ED strategies, including (as noted above) differences introduced by generation gaps and, for example, how Millennials and Gen Z might approach the work world compared to Boomers or even Gen X. For example, as Millennials and Gen Z (the younger generations) enter the workforce in significant numbers, they bring new expectations and preferences that are having a profound impact on labor availability (as they often migrate to locations where they can find more educational opportunities and jobs), productivity, and the nature of work itself (Chetty et al., 2014). Younger generations are more likely than older generations to participate in the gig economy (more short-term, independent work assignments), perhaps driven by a desire for flexibility, autonomy, and more control over work-life

balance. The gig economy can provide flexibility and opportunities for entrepreneurship, but it often also involves lower wages, fewer benefits, and less job security (Rural Innovation, 2023).

Remote work. Similarly, younger generations may prefer more remote work opportunities, in part owing to their greater familiarity with digital technology, as well as to satisfy a desire for a different work-life balance than their elders. Remote work has several benefits, such as reduced commuting time, increased productivity (in some cases), and a wider pool of talent for employers (e.g., drawing workers from across the Redwood Region and beyond). But it can also lead to challenges, such as communication breakdowns, isolation, and a lack of work-life boundaries (e.g., too much couch time) that impact productivity and job satisfaction (Choudhury, 2020). As noted, younger generations are also more likely to leave rural areas for urban centers in search of better job opportunities, higher wages, and more diverse lifestyles, creating a rural brain drain with negative impacts to the rural labor supply. The preferences and expectations of the younger generations are challenging traditional notions of work and are forcing employers to adapt to ensure they are positioned to attract and retain talent from this group.

Tribal and at-risk youth are a particularly important demographic to understand in terms of defining pathways out of poverty. Input from Collaborative stakeholders (SWOT) identified behavioral and mental health and trauma (particularly historical), substance use, and high Adverse Childhood Experience (ACE) counts among at-risk youth. Dropout rates, absenteeism, and completion of “A-G requirements” (courses students must take to be eligible to attend a California State University) were also identified as more prevalent among at-risk youth. SWOT participants noted insufficient skills building, lack of career technical education and workforce development in regional schools. There was overall agreement that the region is not a place of opportunity for young people, and that they leave their communities to pursue higher education and work opportunities elsewhere. Because many of these out-migrants do not return, one of the consequences is a lack of professionals to “pass the torch to” in what is becoming a growing crisis in business succession.

One goal of programming for Native and other at-risk youth is to redefine what educational attainment means and to offer alternatives to traditional higher education, including work in the trades and training in digital technologies. An RRR expert panel discussion highlighted the importance of “Cradle to Career” career technical education and other pathway programs. As one example, the Blue Lake Rancheria (BLR; located in the City of Blue Lake, Humboldt County) tribe’s Toma Resilience Campus project (under construction) and K-12 *Pathmakers* program (discussed below) provide programs offering mentorships and apprenticeships for Native Youth (and others), and are designed around college and career readiness, among other goals. BLR is currently developing an apprenticeship program for several sectors, focusing initially on the renewable energy industry, including solar technology development (e.g., PV arrays) and off-shore wind tracks.

But perhaps an even more important focus for regional youth, in addition to developing the skills needed for specific occupations, is to develop their self-efficacy, well-being, overall thinking skills, and social

skills, including their ability to create personal and professional networks (a goal facilitated in part by internships and apprenticeships). As the IFAD (n.d.) notes: “To thrive in this new world of work, youth need to know how to search for information and create networks. In addition to basic technical skills, they need to know how to think critically and solve problems. And they must possess non-cognitive skills to be conscientious, open to ideas and able to get along well with others. Educational institutions face a big challenge to meet the emerging needs of this new world of work.”

ECONOMIC DEVELOPMENT OPPORTUNITIES (EDOs)

Identifying 3-5 projects for the implementation phase of the CJF program is no small task, given the large number of economic development opportunities (EDOs) spread across the four counties of the Redwood Region. Prioritizing EDOs for implementation will require balancing several factors, including 1) equity (addressing both priority disinvested communities and cross-region distribution), 2) the resilience-related impacts and/or design of selected projects, 3) the project’s “shovel-readiness,” and 4) other factors identified by the Collaborative collaborative processes as important criteria for project selection.

Below we discuss issues with the identification and selection of EDOs in the Redwood Region, exploring 1) how barriers identified by the Collaborative can be seen as EDOs, 2) potential EDOs identified by the Collaborative for the four Redwood Region target sectors, and 3) “cross-cutting” EDOs that have broader impacts that affect many (if not all) industry sectors.

Turning Identified Barriers into Opportunities

Often, opportunities are found in overcoming barriers, or by effectively responding to change—a hallmark of a resilient system. From the Collaborative SWOT analysis, several Redwood Region-wide barriers were identified. These are all barriers that can be turned into economic development opportunities (EDOs), as follows:

- Limited regional skill pool for emerging industries. In some cases, though not always, the skill pool reflects a region’s education levels. If these levels are generally lower, which is the general pattern for rural vs. urban (the Redwood Region is no exception), the ability to attract businesses that need specialized and/or high-tech skills can be impacted. Opportunity: provide higher education and/or job opportunities inside the region, plugging the “brain drain” that exacerbates the skills gap.
- Lack of diverse industries, which can increase vulnerability to economic fluctuations. Opportunity: Enable economic diversification by fostering entrepreneurship and business incubation (see below), and by training a skilled workforce more capable of supporting new, diverse industries across a range of sectors (i.e., horizontal skills that can be transferred between different sectors).

- Inadequate infrastructure (e.g., transportation, utilities, digital connectivity, etc.) can impede economic growth by hindering business operations and limiting access to markets. Opportunity: develop policies and plans to improve infrastructure.
- Limited entrepreneurship, including skills, entrepreneurial culture, and access to capital, can inhibit business creation and growth, dampening innovation, customer creation, and job creation. Opportunity: create business incubators and work to develop a culture of entrepreneurship and a region-wide entrepreneurship ecosystem. Cal Poly Humboldt is developing an entrepreneurship ecosystem, as one example, which includes a partner venture capital outfit (Lost Coast Ventures). Creating a culture around entrepreneurship is cited by researchers as one of the foundational elements to getting more startups going in a region (Krueger, 2007).²
- Low consumer spending power and low median incomes means limited disposable income, which can discourage businesses from investing in a region as they foresee insufficient demand for their products and services. Opportunity: this is a classic economic development dilemma, where the attractiveness of a community for business formation, attraction, and retention depends on a certain element of anticipated customer demand, and that demand would be facilitated by the existence of said businesses. Priming the pump in some manner is needed in this situation.
- Outdated or restrictive policies and regulations present hurdles, particularly for small businesses, generally discouraging business development and investment. Opportunity: review policies and regulations, explore examples from other regions and communities, and adopt new approaches that better serve emerging interests.
- Resistance to change is common in communities with long-standing traditions and cultural norms, which can make it difficult to introduce new businesses or technologies. Opportunity: work to build a new narrative incorporating emerging ideas into existing narratives.

RRR Target Sector EDOs

The Collaborative has targeted four sectors for more rigorous exploration of regional economic development opportunities (EDOs) and innovation opportunities, including:

- Health and Caregiving (HC)
- Arts, Culture, and Tourism (ACT)
- Resilient and Renewable Energy (RRE)
- Working Lands and Blue Economy (WLBE)

² The 2011 City of Arcata report “Developing the Seedbed for Arcata’s Emerging Entrepreneurs” contains several recommendations for the development of a comprehensive entrepreneurship development system that are widely applicable today. See: <https://www.cityofarcata.org/DocumentCenter/View/278/Developing-the-Seedbed-PDF>.

These four broad-based sectors represent a wide range of business types across the region. As discussed above, several place- and people-based cross-cutting strategies can facilitate the exploitation of these sector-specific EDOs (both within and across sectors). Recommendations for EDOs identified below were developed by the Collaborative, including input from the SWOT session, sector tables, listening sessions, and other research and communications from Collaborative stakeholders.

Health and Caregiving (HC)

Several workforce and industry-development initiatives are planned or underway to improve healthcare in the Redwood Region. Workforce initiatives include: 1) attracting and retaining healthcare providers (e.g., loan repayment programs, 2) scholarship programs for rural youth, 3) improving compensation and benefits, 4) expanding scope of practice (e.g., allowing nurse practitioners, physician assistants, and other qualified professionals to provide a wider range of services), 5) developing K-18 pipeline programs, 6) developing a rural residency program, and 7) developing a community health worker program (training local residents to serve as liaisons between patients and the healthcare system). Telehealth and mobile healthcare initiatives include: 1) procurement of equipment and expanded healthcare worker training, 2) education and outreach to address digital literacy gaps, 3) equipping vans or remote clinics with diagnostic and treatment tools and supplies needed for vaccinations, screenings, ongoing care for chronic conditions, etc. (this can also be coordinated with local transportation providers to improve patient access to mobile services).

The Healthcare Education Hub. One economic development opportunity underway (involving the repurposing of an industrial facility in Arcata) is a project between Cal Poly Humboldt and College of the Redwoods: the “Healthcare Education Hub” (HEH). The HEH is designed to provide educational programs for Cal Poly nursing programs and training for healthcare service providers. A subsidiary goal of the HEH is to provide expertise and support applied research and technical assistance in the development and implementation of regional health industry job-creation strategies, high-skilled regional talent pools, and HC “innovation cluster” business expansion. The goal of the facility is also to partner with healthcare stakeholders across the Redwood Region to facilitate commercialization efforts in areas like telehealth, and to entrepreneurial activities in high-growth health products and services.

One approach under review for the HEH is to work with the Regional Innovation Accelerator Network (RIAN) as a venture development organization (VDO), partnering, as one example, with the BLR tribal Health Clinic and other tribal healthcare providers (e.g., UIHS), deploying best practices that target identified economic development objectives in the HC sector. In the proposed framework, something like EDA’s “Innovation Index 2.0” would provide regional practitioners with an easy-to-compare method of assessing innovation capacity across the Redwood Region by providing a composite index of innovation inputs and outputs built on data on: 1) human capital, 2) business dynamics, 3) business profiles, 4) employment and productivity, and 5) economic well-being.

Broadband and healthcare. Many Collaborative participants have pointed to the importance of a cross-cutting strategy for opening new EDOs exploiting the Redwood Region’s expanding broadband connectivity and creating new telehealth options. In the Redwood Region, as in most rural regions, healthcare provision is suffering due to hospital consolidation and a general difficulty in retaining medical professionals. Tele-healthcare services promise access to quality healthcare from home, a great solution, but one that also requires a reliable broadband network. While broadband in the Redwood Region has begun to change the regional HC sector by supporting interconnectivity between clinic locations, healthcare partners, and patients, upwards of 10-20% of the population in the Redwood Region still lacks broadband access, and in tribal areas the number is closer to 30% (UCLA, 2022). As the Redwood Region healthcare industry moves to more telehealth options, rural residents must be able to access these services or continue to suffer from higher levels of poor health. In short, telehealth is a major economic development issue for rural regions and could be considered a keystone EDO for the Collaborative.

Working Lands and Blue Economy (WLBE)

Working lands include agriculture, forestry, and ranching, forming a significant economic base for the Redwood Region. Key characteristics of the working lands sector in the region include: 1) agriculture: diverse agricultural production, including food crops (ground-based and hydroponic), dairy, cannabis, and wine, 2) forestry: extensive forests, providing timber, recreation, and environmental benefits, and 3) ranching: cattle and sheep ranching, contributing to the region's agricultural economy.

The so-called “blue economy” encompasses economic activities related to oceans, coasts, and marine resources. Key aspects of the blue economy in the Redwood Region include: 1) commercial fishing: diverse fisheries, including salmon, crab, and groundfish, 2) aquaculture: emerging aquaculture industry, including oyster and seaweed cultivation, and farmed fish, 3) coastal tourism: scenic coastline, attracting recreational fishing, surfing, beachcombing, and wildlife viewing activities.

During the Collaborative listening sessions and the regional SWOT, the natural beauty and abundant natural resources of the Redwood Region were mentioned often as a regional strength and as a source of manifold EDOs. Participants noted a high potential for innovation in the WLBE sector, including developing the ecosystems and microbiomes that provide diverse opportunities for regenerative agricultural practices (e.g., on grasslands). Cultural factors contribute to the Redwood Region’s strength in this domain: the original inhabitants and stewards of the land are still living here, and traditional ecological knowledge (TEK) has high value in more effective land and forest management practices. Tribal governments and nations in the Redwood Region are known for their work to protect and restore our lands, forests, and rivers. Improved salmon populations from dam removal on the Klamath River (along with other river-restoration activities) presents an important EDO. An additional EDO noted by participants is the “back to the land” movement, which centers low-impact, off-the-grid, sustainable living in the Redwood Region hinterlands.

Another significant WLBE EDO noted is in reducing the fuel load in our forests and developing commercial uses for that biomass. Specifically for the communities adjacent to forest conservation areas, there is excitement for workforce training opportunities (e.g., a proposed heavy equipment training site in Orick). Controlled burns, cultural burns, and other fire and conservation activities are workforce development opportunities that offer great potential for integration of TEK. Other economic development opportunities in the Redwood Region's WLBE sectors identified by the Collaborative include (but are not limited to):

- Sustainable agriculture and horticulture to enhance productivity and environmental stewardship, with incorporation of TEK where possible.
- Local foods hubs, farm-to-table offerings, and dockside fish markets.
- Development of sustainable nature-based infrastructure and nature-based solutions, including wetlands and forest restoration.
- Hydroponics development to provide distributed and resilient food production.
- Increased mariculture activities, including seaweed (kelp), fungi, and abalone farming.
- Aquaculture development to diversify the region's seafood industry.
- Increased value-added product development and marketing.
- Development of ecosystem services markets (e.g., carbon offsets/GHG sequestration) to monetize the environmental benefits of working lands.
- Sustainable fisheries that ensure the long-term health of marine ecosystems.
- Coastal tourism, including recreation opportunities that also protect natural resources and eco-tourism (see below)--a cross-sector (WLBE/ACT) approach.

Arts, Culture, and Tourism (ACT)

The Arts, Culture, and Tourism (ACT) sector has multiple EDOs. Firms in the ACT sector encompass a wide range of activities, including visual arts, music, performing arts, cultural heritage preservation, tourism (and eco- and agri-tourism offshoots), among others. Key characteristics of the ACT in the Redwood Region as noted by Collaborative participants include: 1) many arts organizations, including museums, theaters, and art galleries, 2) cultural events, including festivals, concerts, and art exhibitions, and 3) cultural efforts, including traditional arts and Indigenous cultural practices, and 4) heritage sites. All of these are attractive amenities for tourists and residents alike.

Tourism in the Redwood Region encompasses activities related to travel and leisure and includes: 1) natural attractions such as redwood forests, wild coastlines, mountain ranges, and scenic rural countryside, 2) outdoor recreation opportunities such as hiking, camping, fishing, and kayaking, and 3) diverse cultural attractions, including museums, art galleries, historical sites, and other offerings on tribal and nontribal lands. Activities supporting ACT EDOs identified by the Collaborative include:

- Support and invest in arts organizations, cultural events, and arts education programs.

- Foster cultural heritage preservation, including protection and promotion of cultural heritage sites and traditions.
- Enhance tourism infrastructure (lodging, transportation, recreation) and facilities.
- Market Redwood Region tourism destinations and activities through targeted marketing campaigns.
- Develop integrated arts and tourism experiences.
- Explore cross-sector opportunities such as agri-tourism.
- Market certain areas of the Redwood Region as a destination for climate refugee tourists (seeking a vacation spot away from the heat at home) by showcasing the cool climate, coastal clean air, and access to abundant water.

Resilient and Renewable Energy (RRE)

The energy sector (primarily focusing on renewable energy and energy efficiency, and movement away from fossil fuels to the maximum extent possible) is rapidly growing and presents significant economic development opportunities for the Redwood Region. The Collaborative process identified several EDOs in the RRE sector. Lake County has a unique advantage, for example, with their geysers and geothermal energy production, possessing one of only three sites in the world where it is possible to tap into geothermal resources close to the surface. The coastal counties offer good sites for offshore wind development (a process of development well underway), with prospects of developing what is currently envisioned as the largest offshore wind farm in the nation. There is great potential that is already being exploited for distributed energy resources such as solar photovoltaic arrays and microgrids, particularly in Humboldt County (e.g., the Blue Lake Rancheria tribal microgrid, and the Redwood Coast regional airport microgrid in McKinleyville). Reducing wildfire risk from above-ground power transmission infrastructure provides an additional benefit from the development of distributed energy resources across most of the Redwood Region communities and tribal lands.

Examples of other EDOs identified by the Collaborative include (among many others):

- investing in residential, commercial, and industrial energy efficiency retrofits,
- entrepreneurship and innovation in the design of energy-efficient products and services (e.g., new devices, or rebate and audit programs),
- developing workforce development opportunities in energy efficiency and renewable energy to prepare people for jobs in the sector,
- developing the “hydrogen highway” for the Redwood Coast, an idea aligned with fleet conversion for transport in the region, and
- wide-scale development of distributed energy resources, including large projects (community-scale microgrids, off-shore wind), and small-scale applications (residential, commercial, and community-scale), designed to bolster regional resilience.

Many participants noted that there are often competing sector interests. For example, there is a need to balance multiple demands of other sectors, such as RRE, on the Redwood Region's harbors. For example, many fishing-allied associations have expressed concern with the potential disruptions caused by the construction of offshore wind turbines, when that industry takes off. Questions raised during the Collaborative meetings include: "How can the fisherman still be allowed to fish when the wind turbines are being transported?" and "How can we find a way that both groups can use the waterways?"

Tribal EDOs

The Blue Lake Rancheria (BLR) tribe (located adjacent to the City of Blue Lake, in Humboldt County) is an example of a tribe that has worked for decades with regional partners on sustainable, resilient economic development. Building off the priorities outlined in the tribe's CEDS, BLR is currently constructing the "Toma Resilience Campus" (funded by the U.S. Economic Development Administration). The Toma project was designed in collaboration with regional partners and is focused on developing a pipeline of resilience entrepreneurs and disaster preparedness professionals with the creative, innovative, and entrepreneurial mindset and knowledge needed to build and strengthen a more resilient regional economy. As the economic conditions of the region are subject to severe impact from natural disasters and other disruptions, the Toma facility will provide programming responsive to all hazards (economic and natural) through its emphasis on regional capacity building for preparedness, response, and recovery, and its emphasis on greater regional self-reliance.

Based on conversations with regional stakeholders, the Toma will provide a place for sharing ideas and resources, learning new skills, creating resilient solutions, incubating new businesses, and training a more resilient regional workforce. The goals are to provide a testing ground for new ideas, to support both new and tried-and-true approaches to resilient economic development, to create new businesses and jobs that support regional economic resilience to disasters and other threats, and to provide a model for resilient economic development practices in other tribal communities, rural regions, and even urban areas.

The Toma project dovetails with the BLR's *Pathmakers* program for K-12 students. The program, begun in 2018, is a community-driven, comprehensive project to help K-12 Native Youth become college- and career-ready through culturally-responsive, extra-curricular, STEAM-focused "makerspace" programming that provides them with additional choices and paths for accessing educational opportunities. In the program's theory of change, Native Youth will gain the skills and competencies that make them college and career ready because they acquire greater: 1) self-efficacy, 2) abilities to set goals and persist in achieving them, and 3) interest in Science, Technology, Engineering, Arts and Math (STEAM). The *Pathmakers* program is designed to address achievement gaps and strengthen the self-determination of Native Youth as they come to see themselves as capable and contributing members of ingenious and resilient cultures.

Little Hoover Commission (LHC, 2022):

“Especially in less well-resourced regions, continued state support and funding for capacity building beyond [CJF] is likely to be necessary. This funding is a vital investment in the institutional infrastructure for inclusive development. It makes possible ongoing leadership and allows conveners to build and maintain staff, develop expertise, expand outreach and engagement with stakeholders, and enhance their ability to build relationships and trust among collaborators.”

However, given a myriad of potential regional priorities and limited CERF funds, the agencies administering CERF should focus the program and regional stakeholders toward: 1) identifying and supporting opportunities to invest in sustainable industries with significant potential to attract additional private and public dollars, lift up regional economies, and create quality jobs at scale, 2) aligning those investments with strategies and programs that will ensure disadvantaged communities are able to access the quality jobs created, and 3) sharing a portion of CERF funds with community-based organizations, with the goal of building their capacity to participate in regional economic development planning and help connect communities with quality jobs and economic opportunity.”

Cross-Cutting Opportunities (CCOs)

In addition to the sector-specific EDOs outlined above, a number of “cross-cutting” opportunities (CCOs) have been identified during the Collaborative process. These CCOs cut across all sectors and provide a different focus for economic development activities that includes (among others) 1) consideration of and response to the broader economic driving forces outlined above, 2) response to community and cross-region needs as defined by the Collaborative, by regional CEDS documents, and other sources, and 3) the needs of individuals as expressed by a variety of institutions and by people themselves. As with other portions of this assessment, the CCOs themselves can be considered as opportunities and economic driving forces in their own right. Further discussion of CCOs is provided below.

CCO: Governance and Collaboration

Input from across the region is clear that capacity building in governance and collaboration in the planning and implementation of EDOs across the region requires effective governance and collaboration, which in turn requires effective leadership at all jurisdictional levels. As the Little Hoover Commission (2022) notes: “It requires significant time, energy, and commitment to manage cross-sector relationships, build trust and understanding, and maintain common purpose among stakeholders with different interests, priorities, and expectations.”

Regional capacity to sustain economic development requires 1) “institutional alignment,” 2) sufficient resources, 3) investments in training, research and development, 4) modernized infrastructure, and 5) entrepreneurship (Ibid.). To get industry buy-in and participation, the LHC advises that regions like the Redwood Region figure out how to move beyond existing coalitions and build broader partnerships (like the Collaborative) able to have “meaningful conversation based in data, lived experience, and community desires about where there are opportunities to grow middle-skill jobs and connect young people to solid career pathways” (Ibid.).

CCO: Wealth-Building

The rural wealth gap is an issue for disinvested communities in the Redwood Region but presents an important cross-cutting opportunity for wealth-building. Across the nation, rates of homeownership (owing in no small part to difficulties making down payments) are much lower in disinvested areas, and much lower for people of color than for whites. In addition, wage stagnation, income inequality, and a growing shortage of affordable homes have increased cost burdens, such that many people pay as much as 50% of their income for housing. Disinvestment in low and moderate-income communities, especially communities of color, produces substandard living conditions and spurs displacement, often to communities with fewer opportunities, services, and resources. This is an economic and a public health issue.

Existing community development tools and institutions in the Redwood Region leave many gaps: places, firms, and people that do not have ready access to capital. Determining how residents and businesses lacking wealth can reap more benefits when investments are made in underinvested communities is a key issue for the RRR H RTP. This will require a greater understanding of wealth-generation and economic empowerment dynamics, and of community investment models such as “capital absorption,” an approach that seeks to develop a pipeline of investable projects across a portfolio of projects with similar focus and needs (e.g., affordable housing). To effectuate this CCO, and to center equity and build community wealth through economic development programming, will require 1) developing shared priorities and vision for what wealth sharing and access looks like, 2) organizing community members and firms, 3) establishing implementation criteria and providing guidance and monitoring, and 4) advocating for supportive policies and funding.

CCO: Building a “Hope Economy”

Communities in the Redwood Region often grapple with high rates of mental health issues and substance abuse. These challenges can hinder economic development by limiting the ability of individuals to participate in the workforce, engage in entrepreneurial pursuits, and contribute to the overall vitality of the community. To address these challenges, community and ED leaders can adopt several strategies, including:

- Mental health awareness campaigns and educational programs to raise awareness about mental health issues, reduce stigma, and to encourage individuals to seek help and support.
- Telehealth services and virtual counseling to provide better access to mental health services, overcoming geographic barriers and ensuring that residents have better access to the care they need.
- Creating a network of support groups and peer-to-peer connections to provide more safe spaces for individuals to share experiences, receive encouragement, and build a sense of community.

Some Collaborative participants noted a general sense of gloom and despair in many communities in the Redwood Region. One idea that was brought forth is the “Hope Economy,” which emphasizes the importance of fostering a sense of hope, possibility, and optimism in rural communities—so-called “psychological capital” As Pleeging and Burger (2020) note: “Neoclassical economic theory has tended to focus only on subjects that can be measured objectively and can be generalized to universal rules. . . . [H]umans are much more complex than the traditional image of the calculating, rational homo economicus leads us to believe. . . . [E]conomics might become a more hopeful field by incorporating more of the complexity of human behavior and experience.”

In the Hope Economy theory of change, by cultivating a (realistic) belief in a hopeful future, individuals are more empowered to act, innovate, and better contribute to economic activity and growth, thereby restoring a sense of agency, self-efficacy, and community pride. An additional benefit of the Hope Economy model is found in its emphasis on recognizing and appreciating the contributions of a diverse range of individuals and embracing the diversity of perspectives and talents within the community. The idea is that the approach helps create an inclusive environment that supports innovation and growth in disinvested communities by fostering hope, thereby tapping into a latent creativity resource, and likely multiple new marketable opportunities.

[CCO: Creativity, Innovation, and Entrepreneurship](#)

From 1997-2022, SMEs created 12.9 million net new jobs despite the pandemic, accounting for two of every three new jobs (SBA, 2022). The creativity and innovative capacities of regional entrepreneurs represent an important cross-cutting opportunity for the region—not just for startups and new business creation, but for innovation occurring within existing firms that can further competitiveness and job retention/creation. As discussed elsewhere in this summary, a number of regional strategies and projects are underway that focus on entrepreneurship ecosystem development (e.g., Cal Poly Humboldt), business incubation (e.g., Blue Lake Rancheria), the development of technology commercialization pathways, K-18 entrepreneurship education, and other approaches that seek to build on the creativity, knowledge, and unique skillsets of Redwood Region residents and the unique physical and natural assets the region provides.

Convening groups in the Redwood Region around shared interest in growing research and development related to innovation and entrepreneurship can help foster new partnerships and build support for entrepreneurial networks that span industry sectors. Echoing entrepreneurship research, which identifies the importance of intermediary organizations to bridge entrepreneurial skills with entrepreneurship ecosystem assets, county residents and priority communities participating in the Collaborative have suggested forming and/or funding intermediary organizations with the capacity to train, coach, and build leadership skills—including entrepreneurial thinking—in the diverse communities of the Redwood Region, and to build social and business networks focused on specific sectoral and job-creation goals. These intermediaries can also help ensure that the voices of local entrepreneurs are heard, and that the input from disinvested and priority community entrepreneurs is an important component of intra- and cross-sectoral plans, projects, and regional partnerships that emerge in the years ahead.

CCO: Digital Economy

The digital revolution impacts all sectors and is perhaps the most impactful CCO. Lack of digital skills or access to broadband services makes economic mobility more difficult, as even formerly blue-collar work like the trades and auto repair are almost completely digital now. At present, the impacts of the digital economy are often felt in the Redwood Region in changes to labor supply and relative wages, with out-migrants seeking digital skills or jobs in tech industries leaving the area. However, as many participants noted, the digital revolution also fosters new connectivity, networking, and cooperation opportunities within the Redwood Region (as well as between the Redwood Region and other regions)—the Redwood Region-wide Collaborative Zoom sessions are an example of such fruitful connectivity.

Further, digital connectivity can provide improved coordination and “knowledge spillover” possibilities (that used to require closer geographic proximity), which are important for improving innovation and new firm creation—one of the leading sources of new jobs (Wagner, 2023). Digital automation can also increase worker productivity (of course, with likely negative job impacts). In addition, as Redwood Region gains better digital connectivity, it will be more able to participate in distributed business models as partners in the value chain (e.g., something like a marketing company run out of a cabin in the Lake County mountains).

The digital revolution affects all economic sectors. One approach highlighted by the Collaborative is distributed manufacturing. The “design global, manufacture local” (DGML) business model, for example, deploys open access information sharing and inter-firm cooperation and trust in a high-tech, distributed, networked business model where product designs are shared globally, but fabrication and manufacturing occur locally. (The Toma facility at the Blue Lake Rancheria is exploring this model in its economic development portfolio.) In DGML, as in other emerging business models, high-speed digital connectivity provides a way to connect supply and demand and improve the speed and accuracy of information exchanges, lowering transaction and search costs (Hao, 2023). In a DGML (or similar) model, transaction costs are lowered, supply chains are shortened, and economic leaks are plugged. Importantly, rural

manufacturing sectors can gain a new foothold. This is a business model that can effectively function almost anywhere. Distributed hydroponics are an example of this inherently more resilient business model.

CCO: Employee Well-Being and Engagement

A common theme heard among Collaborative participants is the issue of poor mental and behavioral health among certain individuals and populations in the Redwood Region. An individual that suffers from mental and/or behavioral health concerns is far less likely to be gainfully employed and develop the educational background and skills needed to get into a job and to move into higher-paying positions as their career progresses. While the employee environment at a business should not be expected to solve these problems, the business environment can play a strong role in employee attraction, retention, and advancement (Fast Company, 2022).

Employee engagement refers to the level of enthusiasm, dedication, and commitment that employees feel towards their work and their organization. Highly engaged employees are more likely to work hard, take initiative, contribute innovative ideas, be satisfied with their jobs, *stay with their employers longer* (and presumably stay in the Redwood Region), and be more productive (Ibid.). In the Redwood Region, enhancing employee engagement can play a pivotal role in driving innovation and productivity—and importantly, in creating jobs. Benefits of employee engagement include (Ibid.):

- Increased innovation: engaged employees are more likely to think creatively, challenge the status quo, and generate new ideas. They are more willing to experiment and explore new approaches, which can lead to innovations that provide new customers and create the need for new hires.
- Enhanced productivity: worker engagement correlates with productivity. When employees feel valued, connected, and invested in their work, they are more likely to work hard and be more productive.
- Improved problem-solving: engaged employees are better at identifying problems and addressing challenges. Active employee participation in problem-solving contributes to a more effective, efficient, and productive workplace.
- Reduced turnover: high levels of engagement foster loyalty and satisfaction, leading to lower employee turnover rates. This also saves businesses money that would be spent recruiting and training new employees.

CCO: Place-Making

Communities in the Redwood Region face significant challenges, including population decline, economic stagnation, and a loss of identity. Many Collaborative participants discussed “changing the narrative” and rewriting the local and regional self-image, which is often a negative one (backward, isolated, lacking in

opportunity, etc.) A concern is that these narratives can become self-fulfilling, leading to a lack of community spirit and further disinvestment.

In contrast, “re-narrativization” strategies focus on reframing the story of rural communities, highlighting their unique strengths, assets, and potential (Kobersmith, 2021). Such strategies involve celebrating the rich history, culture, and natural beauty of a place while showcasing the residents’ resilience, innovation, and entrepreneurial spirit—an often-mentioned characteristic of Redwood Region residents was resilience and “stick-to-itiveness.” By re-narrativizing Redwood Region communities, more positive and empowering images can be created that could help attract new residents, businesses, and outside investment. Place-making strategies include (Cahill, 2023):

- highlighting the unique qualities and character of the community (and region),
- engaging local residents in the storytelling process to ensure their voices are heard,
- celebrating the achievements and contributions of community members,
- creating inviting public spaces and enhancing the attractiveness of the community (placemaking), and
- leveraging social media and digital platforms to amplify the community's story.

CCO: TEK, Regenerative Design, and Circular Economies

Applying circular economy and regenerative design principles was a common theme heard among the Collaborative discussions and represents an approach that, with creativity and innovation, can be applied to all economic sectors. One example that was identified of a similar region deploying a circular, regenerative approach is the North San Joaquin Valley (NSJV) “CBIO” (circular bio-economy) project. The NSJV region has high poverty rates, relatively low educational attainment, and environmental justice and public health challenges like the Redwood Region. And, like the Redwood Region, it is a diverse region with a long agricultural tradition (both Indigenous and “conventional”), with significant potential for innovation. Goals of the CBIO and similar projects that could be applied to the Redwood Region include:

- Accelerate the transition to a net-zero carbon economy through bio-enabled and other regenerative solutions.
- Advance racial equity and build community wealth through sector and workforce development strategies that center diversity, equity, inclusion, and access in the development of new regenerative economic principles.
- Improve environmental and public health outcomes among vulnerable communities that surround agricultural activities.
- Promote a more regenerative, resilient, and sustainable food and agriculture system that creates sustainable livelihoods (i.e., jobs).

- Reclaim tribal sovereignty by reintroducing centuries-old farming practices and working across generations to preserve language and cultural practices.
- Uplift Indigenous culture as an avenue for achieving community health and well-being.

CCO: Choices Made by Public and Private Decision Makers

The choices made about public-sector ED policies and private-sector opportunities to pursue (among other choices) are obvious but have important cross-cutting implications. Nobody can predict the future with certainty, but thoughtful trend analysis, predictive foresight, and entrepreneurial skill can suggest choices that lead to more beneficial and robust (i.e., widely applicable) outcomes. One straightforward but impactful policy choice, for example, noted by SWOT participants would be to focus ED resources on youth development (e.g., internships and mentorships, career pathway pipeline development), as opposed to strategies focused solely on support for select business sectors. As with many choices about the future, there is also the issue of short- versus long-term payoffs. As noted above, many economic transitions require long time horizons in planning. Project funding mandates often mandate short-term deliverables and documentable outcomes that are not well-suited to decades-long transitions. Many of these short-term project funding cycles do attempt to address this issue by requiring sustainability plans for how the project will be continued after the funding period closes.

Responsive Strategies for Developing and Exploiting EDOs

To develop sector-based EDOs and the CCOs, several strategies have been used or are being explored by the Collaborative, including (but not limited to):

1. Empowering local decision-making by providing smaller and more remote communities and tribes with a meaningful role in the decision-making processes vis-à-vis the broader Collaborative. This has involved encouraging broader representation on various Collaborative tables and/or councils, participation in project planning, and input on funding allocations.
2. Fostering regional collaboration among businesses, organizations, and communities across the region to develop joint projects and share resources with the goal of maximizing the impact of economic development investments and better ensuring that all Redwood Region communities benefit from the planning and implementation processes.
3. Addressing financial inclusion and asset-building through programs that provide greater access to financial services (e.g., affordable loans, credit counseling, and investment opportunities) and programs such as “capital absorption” that empower residents from disinvested communities to build wealth and stability.
4. Promoting community-driven development through initiatives rooted in the strengths and assets of disinvested communities, leveraging local knowledge, expertise, and cultural and physical assets to drive sustainable economic growth.

5. Collecting and analyzing data on equity, resilience, and other economic indicators, such as income levels, employment rates, and business ownership, disaggregated by race, gender, and other factors, to continually identify, track, and address regional disparities.
6. Establishing accountability mechanisms to ensure that economic development initiatives (both pre- and post-implementation) are achieving their equity and resilience goals, and that resources are being allocated fairly.
7. Promoting collaboration and partnerships among government agencies, businesses, non-profit organizations, and community leaders to address Collaborative equity and resilience issues collectively and effectively.
8. Exploring the use of a transparent, formula-driven CJF implementation fund allocation based on objective criteria (e.g., population density, economic need, and potential for economic growth) or other approaches agreed-upon by the broader regional collaborative (LHC, 2022).
9. Prioritizing projects with regional impact, not just benefits for individual counties, communities, or tribes. Regional projects could include areas such as infrastructure improvements, affordable housing programs, workforce development initiatives, and business development support.
10. Implementing a community-based grant program that specifically targets smaller and more remote communities and tribes. These grants would be easily accessible and designed to support local initiatives that align with and leverage the Collaborative’s overall economic development goals and projects.
11. Enhancing communication and transparency and regularly communicating with all stakeholders about the Collaborative process, including the allocation of CJF implementation funds. The Collaborative process is designed to provide clear explanations of planning and implementation decisions and is working to ensure that all communities and tribes have access to information about the process, available resources, and potential funding opportunities.
12. Conducting regular equity and resilience audits to assess the impact of economic development strategies and investments on different communities, to identify any disparities inequity and resilience, and to adjust as needed. New metrics may be needed to achieve equitable and resilient outcomes.

ECONOMIC DEVELOPMENT DISPARITIES

Collaborative Input. From discussions, listening sessions, and meetings held by the Collaborative, it is evident that existing economic and community development programs and institutions in the Redwood Region leave many gaps—places, people, and needs that are not being well served either by existing economic conditions or by the ED programs in place to improve them (if there even are any). As such, Collaborative stakeholders are working to identify opportunities to effectively address wage disparities and stagnation, income and wealth inequalities, the shortage of affordable homes, and other dynamics that have led to economic disparities and inequitable burdens throughout the Redwood Region.

Wealth gaps add to the struggle for many residents. A lack of inherited wealth leaves many households unable to purchase homes, start businesses, and access stable rental housing. Further, many Redwood Region residents pay high percentages of their incomes for housing and other basic needs. The inability for many to “make a go of it” (or the perception that it will be difficult to do so) leads to displacement and out-migration to places that provide more opportunities, or, conversely (and unfortunately), to places that have fewer if any opportunities! Attention to the community investment models and processes in which people can accrue greater wealth, and with it the economic leverage they need to access opportunity and mobility (either where they live or elsewhere), is thus a paramount concern for the Collaborative.

It is often the case that economic disparities (e.g., income, wealth, etc.) are mirrored by ED disparities (e.g., lack of workforce training programs, poor infrastructure, etc.). That is, the very communities most in need of assistance are often the ones most poorly equipped to provide it—and they often do not.

Local Government Policies and Initiatives

Local government policies and initiatives will likely be influenced by Collaborative conversations among education and community and economic development organizations, government and workforce development organizations, grassroots organizations, and business organizations. In the Collaborative meetings, tribes and workforce development organizations have reported that community distrust can be a hurdle for broader participation (i.e., greater equity) in economic development planning. Community members participating in listening sessions and the Local Planning Table meetings also reported a lack of trust in government and economic development agency planning processes due to the history of extractive boom-and-bust cycles of development, and the failure of governments and business to deliver on previously planned projects or to include community feedback in planning processes.

Feedback on federal and state policies and grant programs suggested that they have traditionally been poorly designed to support the Redwood Region’s ability to compete or develop projects that meet specific regional needs, and are often characterized by shifting and unrealistic timelines, vague or unrealistic performance criteria, and disbursement schedules that do not account for the time and resources required to form partnerships, ensure community participation, design responsive and complex regional projects, and deliver results. In reviewing existing local policies and initiatives and pointing toward their future development and evolution to address (perhaps) newly defined needs, these dynamics will be important to keep at the forefront.

As noted above, in response to information barriers, distrust, and high transaction costs of participation, community members see great value in the development of intermediary organizations to convene partners at the local and/or regional levels. These intermediaries can help: 1) build trust among participants and develop more community-based (meaning all community members) and -led solutions, 2) craft mutually-agreeable policies friendlier to businesses, developers, community organizations, and residents, 3) create funding terms and processes that are more easily navigated, enabling businesses and

agencies to implement projects more easily, and 4) develop targeted coaching and training for emerging leaders that can build capacity for long-term progress.

The Redwood Region is a new state-designated planning area. Historically, local and county economic development entities in the region have not worked together on plans or projects (CJF and is one of the first efforts to organize and collaborate on Redwood Region-wide plans and projects). Responding to requests from county residents and priority communities to form and/or fund intermediary organizations with the capacity to train, coach and build leadership skills in diverse communities, facilitate respectful dialogue, and build social networks focused on specific goals can help ensure local voices contribute to plans, project designs and formation of local and regional partnerships within and across industry sectors.

However, as noted by Collaborative participants, there is strong regional alignment across industry sectors, goals and strategies that presents opportunities for partners to design projects with regional relevance, with leverageable, complementary resources, and with the potential to be implemented and create positive impacts on a regional scale. Convening groups around shared interest in growing research and development, education, business entrepreneurship and communications/marketing strategies can help incubate partnerships and build support networks across industry sectors, leading to the incubation of business and attendant job creation.

County CEDS

All counties in the Redwood Region are updating (Del Norte, Mendocino) or preparing new (Humboldt, Lake) CEDS documents. Collaborative listening sessions revealed challenges experienced with respect to completing, updating, and implementing CEDS and other plans, some of which were impacted by the pandemic. All counties address the need to expand and grow business opportunities, jobs, development projects, support for small businesses and entrepreneurs, and building the capacity and resilience of rural and Tribal communities, through investments in broadband and transportation infrastructure. Additional strategies from the regional CEDS are provided below.

Industry diversification strategies and efforts to increase living wage jobs include:

- Develop culinary, cultural, eco-, experiential, and other niche brands of tourism.
- Develop new forest industry/biomass/timber products.
- Expand programs applying Traditional Ecological Knowledge, including those preserving aquatic resources, traditional diets, and wildfire management.
- Expand specialty foods cultivation, processing, distribution, and sales.
- Grow healthcare enterprises.
- Grow technology-based firms across industries.
- Increase light manufacturing.
- Invest in renewable energy.

- Invest in fire mitigation and safety practices.
- Support sustainable agricultural, forestry, and fishery products.

Infrastructure strategies to ensure that suppliers, residents, and visitors can easily access resources and opportunities throughout the region, including:

- Deliver broadband to rural communities.
- Develop and preserve water resources (storage, management, wastewater).
- Develop regional multi-modal and active-transit options.
- Enhance public transportation options.
- Establish Community Hubs for community benefits (e.g., education, work, recreation) and disaster preparedness.
- Expand and construct emergency routes.
- Expand highways/roads to accommodate supply chain routes, commuters, and visitors.
- Invest in airports and harbor/port infrastructure.
- Increase ADUs, workforce housing, affordable housing, and address permitting, zoning.

Skill development strategies to ensure that businesses and residents are prepared and resourced to participate in the local economy include:

- Develop quality messaging, outreach, and marketing.
- Develop research and lab space to grow emerging industries.
- Increase childcare affordability and availability.
- Invest in ocean education and other high-demand career paths.
- Support business entrepreneurship and a thriving small business environment.
- Train on cooperative development/ownership.
- Upskill workforce in skills needed in the Target and other sectors.

Specific sectors, strategies, and opportunities from the four counties’ CEDS are presented in the tables below:

Table 1: County CEDS, Key Sectors

County	Key Sectors
Del Norte	<ul style="list-style-type: none"> ● Education ● Government services ● Healthcare ● Prisons ● Retail/tourism

County	Key Sectors
Humboldt	<ul style="list-style-type: none"> • Alternative Agriculture • Building & Systems Construction • Diversified Health Care • Forestry Products • Investment Support Services • Management & Innovation Services • Niche Manufacturing • Specialty Food, Flowers & Beverages • Tourism/Arts and Culture
Lake	<ul style="list-style-type: none"> • Agriculture • Recreational opportunities • Wine industry
Mendocino	<ul style="list-style-type: none"> • Accommodation & food services • Agriculture/Forestry • Health care & social services • Manufacturing • Retail • Tourism

Table 2: County CEDS, Goals and Strategies

County	Goals/Strategies
Del Norte	<ul style="list-style-type: none"> • Diversify the regional economy (increase technology-based firms, light manufacturing, healthcare). • Promote tourism industry expansion. • Support expansion of sustainable agricultural, forestry, and fishery products. • Invest in improving and maintaining a comprehensive transportation network that meets the needs of industry, commuters, and visitors. • Enhance education, workforce training, housing, and healthy lifestyle opportunities. • Create a thriving small business environment that fosters entrepreneurship and innovation.
Humboldt	<ul style="list-style-type: none"> • Infrastructure (especially transportation and broadband). • Support efforts to improve workforce development programs for all industries. • Build, attract, retain, and grow industries. • Build, attract, retain, train, and grow workforce (4-year education and trade/skill paths). • Identify, fund, and empower alternative agriculture. • Develop a plan to promote tourism, arts, and culture.

County	Goals/Strategies
Lake	<ul style="list-style-type: none"> ● Promote and participate in regional economic development initiatives. ● Promoting resilient rebuilding, based on current and future risk, through innovative ideas. ● Ensuring a regionally coordinated, resilient approach to infrastructure investment. ● Providing families safe, affordable housing options and protecting homeowners. ● Supporting small businesses and revitalizing local economies. ● Addressing insurance challenges, understanding, and accessibility. ● Building local governments' capacity to plan for long-term rebuilding and prepare for future disasters. ● Pursue resilience and economic development simultaneously.
Mendocino	<ul style="list-style-type: none"> ● Develop innovative value-added economic sectors. ● Increase equitable community-wide prosperity. ● Support the development of workforce training and skills. ● Develop a resilience strategy.

Table 3: County CEDS, Opportunities

County	Opportunities
Del Norte	<ul style="list-style-type: none"> ● Outdoor recreation. ● Sister City relationship with Rikuzentakata, Japan. ● Expand fishing boat access on rivers. ● Alternative energy (wind, wave, waste-to-energy, solar). ● Business mentoring resources. ● Redefine agriculture to include timber and fishing; diversify and create value-added products. ● Obtain state and federal grants. ● Develop the Del Norte EDC into a coordinating entity for all county jurisdictions.
Humboldt	<ul style="list-style-type: none"> ● Business expansion. ● Refine branding/marketing. ● Niche Manufacturing. ● Tourism, Arts/Culture. ● Utilize untapped workforce (justice involved, youth, those with physical/developmental disabilities). ● Involve youth in identifying opportunities. ● Outdoor recreation. ● Develop port and harbor. ● Renewable energy (solar/microgrid, wind).

County	Opportunities
Lake	<ul style="list-style-type: none"> ● Invest in infrastructure (broadband, roads, housing, airport, public transportation, water/wastewater) ● Tourism (farm to fork, healthy food, recreation, arts) ● Education in globally marketable skills (including in science—both laboratory and computer-based) ● Harbor development (Konocti, Thompson, etc.) ● Increase presence on social media with a positive tone. ● Partner more with Colusa and Lake counties. ● Mining (replace exports of cinder blocks and manufacture locally to create jobs and revenue). ● Increase grant proposal development capacity.
Mendocino	<ul style="list-style-type: none"> ● Tourism. ● Adoption of technology and innovation. ● Green jobs and infrastructure.

Tribal Planning Table

Output from the Tribal Planning Table indicates that tribal leaders are interested in collaborating on projects that help develop well-paying jobs and that support new business development. Many Tribes (and non-tribal communities) are moving away from timber operations and investigating enterprises in forestry, land management and restoration, and renewable energy. Strong support has been expressed for economic development initiatives tailored to tribal needs (e.g., focusing on Indigenous arts culture and experience, traditional ecological knowledge, etc.).

Tribal stakeholders expressed the need to establish secure funding (grants and loans) to support economic development initiatives. A particular funding focus was state government agencies, lending institutions, and Tribal-serving organizations who can help organize information about funding opportunities and collaborating with labor organizations and educational organizations on job training programs. Tribal stakeholders are looking for support on collaborations with other Tribes on developing programs that benefit both tribal members and the region.

Tribes experience economic barriers in accessing funds for the benefit of their Nations and communities due to the way funding opportunities are structured. Tribes often do not have resources to manage reimbursement grants and are unable to advance expenditures and wait for reimbursement. It can also be difficult for Tribes to qualify for larger grants (e.g., pilot projects) because they do not have adequate staff, time, or resources to put together a collaborative proposal and/or to meet project requirements.

ADDRESSING WAGE DISPARITIES

Wage disparities and poverty are issues that have perplexed policymakers for a very long time. In 1967, Lyndon Johnson’s National Advisory Commission on Rural Poverty published the *People Left Behind* report, detailing the Commission’s efforts to sort out how government could help create a “favorable economic environment” that included guaranteed employment, a mandatory minimum wage, and an end to racial and locational discrimination.³ While there have been modest declines in rural poverty over the intervening years, these can be partly explained by a relatively older rural population receiving safety net transfers such as Medicare and Social Security (Romig, 2023). The overall persistence of wage disparities and poverty in rural (and urban) regions—including mobility out of poverty across generations—suggests that there is still a lot of work to be done.

Wage disparities in rural regions result from many factors, including place of residence, marital status, educational attainment, job skills possessed, work experience, policy levers in place, discrimination and differences in bargaining power, and occupational options available (e.g., the digital economy’s tendency to locate in urban areas), among other factors. As one would expect, skilled labor typically earns higher wages than unskilled labor (even if most of the “skills premium” goes to people in urban areas).⁴ But as Elise Gould (researcher at the Economic Policy Institute) bluntly argues, “expanding college enrollment and graduation is not an answer to escalating wage inequality” (Gould, 2019). Recent wage gains, in Gould’s view, are more readily explained by tighter labor markets and mandatory minimum wage laws than by differences in educational attainment. (Gould notes, in fact, that the wages of the bottom 60 percent of college graduates went down over the period 2000 to 2017 (Ibid.)).

When labor markets are tight, employers must pay more to attract and retain workers; and as the unemployment rate falls, wage growth usually goes up for low-wage workers.⁵ Without strong labor standards (such as mandatory minimum wage policies), it is often only in tight labor markets where low-

³ In March 2018 researchers revisited the 50 years that had passed since the *People Left Behind* report, exploring: 1) how race affects poverty, underemployment, and income mobility, 2) child poverty and local strategies for addressing childhood disadvantage, 3) how economic restructuring and entrepreneurial activity are related to poverty and mortality, and 4) the social safety net and poverty dynamics.

⁴ Real weekly earnings of college-educated men in rural areas have been stuck at about \$1,000 for 50 years. Even among college-educated men in urban areas, earnings have not risen considerably in 20 years (RUPRI 2018).

⁵ The results indicate that a 1-percentage-point drop in unemployment results in annual wage growth for workers at the 10th percentile of the wage distribution that is 0.5 percentage points faster. For example, if annual real wage growth is at 1.0 percent, then a 1-percentage-point fall in unemployment would result in annual real wage growth rising to 1.5 percent (Bivens and Zipperer, 2022).

wage workers see wage growth. Similarly, low- and moderate-wage workers may suffer during economic slowdowns but tend to do better during economic expansions (Bivens and Zipperer, 2018).

Other factors, including marital status and employment rates, play a role in wage disparities. Marriage is correlated with family income and poverty status, and marriage rates have dropped over the past 50 years, particularly for rural households headed by parents with low levels of educational attainment (Baily et al., 2016). In the Redwood Region, employment rates have declined over time for workers with fewer skills—unlike times when workers with less than a high school education could more easily find a job.

Employment rate differences for this less educated labor pool could also be a result of the workforce’s changing age composition, as older people are less likely than younger people to have a high school diploma (in the Redwood Region, the share of the population between ages 45 and 64 is larger than the share of workers between ages 25 and 44).

The issue of whether and how declines in employment might affect wages, however, can provide more questions than answers: is a decline in employment a result of declining wage levels and fewer opportunities for growth? are the least productive workers more likely to quit, leaving room for the wages for remaining workers to increase? There is a significant difference in the median annual wages between low-wage and high-wage occupations and sectors in the Redwood Region. The wage gap is often a reflection of different skill requirements and the levels of education and training needed for different types of work. The wage gap between low-wage and high-wage sectors is a complex issue, though, with many contributing factors including the cost of living, the demand for labor (e.g., if there is a “tight” labor market), and the labor supply, among others.

Implications of Wage Disparities for Workforce and Economic Growth

Wages are one of the key indicators of the ability to achieve a desired standard of living. The Collaborative goal of increasing access to high-quality jobs necessitates an attention to wages—and to efforts to collaboratively develop strategies to solve wage disparities. These efforts will require the design of strategies to contend with (among others) 1) broader macro-economic (driving) forces, 2) the advantages that urban areas have with generally higher levels of education and more skills-based, higher-paying industries, and 3) (absent direct transfers such as a Universal Basic Income) the generally long-term nature of creating a regional economic system that supports sustainable job and wage growth (as noted by the LHC).

While there are many workforce and economic factors impacted by wage disparities, housing is one of the more foundational issues for wage earners—and more broadly a foundational concern for a community’s or region’s ability to develop a thriving economy. The ability to afford a rental or to purchase a home (and build wealth) is a product of income, housing affordability, and (relatedly) housing availability. Clean, safe housing is important for people to fully function in society and in the workforce. Many communities in the Redwood Region lack an adequate supply of (all forms of) housing, leading to high rents and high

home costs. Often, housing shortages and high costs force low-wage workers into overcrowded living arrangements, and/or necessitates long commutes from an affordable residence to one's place of work.

In the Redwood Region, many people without access to housing are forced into living in their vehicles, some form of makeshift shelter, or even the streets, making it even harder to participate in the labor force. The lack of access to affordable housing became more critical during the pandemic, as businesses closed and workers were either laid off or forced to find other work. Some people were able to work from home, but many service-industry establishments (e.g., food, tourism, hospitality) had to close, making life even more difficult for workers struggling to afford housing.

Wage disparities have several other negative impacts on regional economies like the Redwood Region, including: 1) reduced productivity, as workers paid less are often less productive (low wages can lead to stress, anxiety, and discouragement/disengagement), 2) increased turnover, as low wages can lead to higher turnover as workers quit, find other employment, or move out of the area, 3) reduced economic growth, as workers earning less have less money to spend, so demand for goods and services is decreased along with economic growth (a downward spiral), 4) brain drain, as more educated or skilled workers migrate to regions with higher wages, depriving their home regions of valuable talent and further hindering economic growth in low-wage regions, and 5) worker unrest, as workers who feel they are not being paid fairly may strike or quit (Thiede et al., 2020).

ED Responses to Wage Disparities

ED practitioners have a range of tools to deploy to address wage disparities, including:

- **Public Employment.** Wage disparity is related to income, and public employment for low-skilled workers is one approach to provide income while meeting community development needs such as infrastructure, beautification, etc. These employment programs could be tied to training programs designed to help workers ultimately move to private sector employment.⁶
- **Promote pay equity and address discrimination.** This strategy would focus on workplace policies and incentives for employers to implement more equitable wage structures. This includes strengthening labor laws that protect workers' rights to fair wages, overtime pay, and safe working conditions.

⁶ Ohio State University economist Mark Partridge (AEDE 2020) contends that the benefits of place-based policies to increase employment (e.g., wage subsidies) go mostly to the financial elite. He also believes that people-based policies (e.g., migration subsidies) suffer from low take-up, that education and training programs are slow and expensive to run, and that poverty-reducing policies affecting trade, low minimum wages, declining unionization, or technological change are ineffective. Partridge instead calls for public employment for low-skilled workers, and more research into basic income strategies.

- Strengthen labor unions and collective bargaining to shift the power balance between employees and employers by providing support for labor unions that give workers a voice in wage and benefit negotiations.
- Raise the minimum wage. While California has a mandatory \$15.50 minimum wage, further increases would help reduce income inequality even more while stimulating consumer spending. Adjusting the minimum wage regularly is important to keep pace with the cost of living.
- Encourage occupational mobility through career counseling, apprenticeships, and retraining programs to help workers transition into higher-paying occupations (vertical career ladders, and horizontal career lattices).
- Offer workforce training. Provide affordable and accessible education and training opportunities so workers can develop the skills and qualifications needed for higher-paying jobs.
- Foster business startups and entrepreneurship. Business openings and closings (turnover) in higher-paying industries have been correlated with net job creation, higher-wage jobs, and poverty reduction in rural counties (the evidence is less clear for turnover in lower-paying, service type businesses) (Bunten, 2015).
- Improve financial sector services. This is an example of an indirect ED approach with a wide range of potential benefits, including addressing wage disparities. One key issue here is the idea of “banking deserts” (rural areas with fewer financial service institutions), which makes it more difficult for individuals and local businesses to get conventional startup or expansion loans. Research (Tolbert et al., 2014) suggests a relationship between the prevalence of independent local banks and increased business formation, higher wage and income levels, and lower poverty rates.

IMPACT OF ECONOMIC SHOCKS AND SHIFTS

Counties in the Redwood Region are vulnerable to economic shocks and shifts. The 2008 recession had a big impact on the region, as the collapse of the housing market led to widespread job losses. The COVID-19 pandemic has also had a significant impact on the region, as the closure of businesses and the decline in tourism (among other sectors) also led to job losses and economic hardship. Other forms of disruption, including natural disasters (wildfires, earthquakes, floods, landslides, etc.) climate change, social unrest, and abrupt policy changes (e.g., changes in tax and health policies) can pose a significant economic disruption as well. Most such disruptions are both unpredictable and of uncertain magnitude and duration. Resilience thus often requires a robust response toolkit and a fair degree of individual and group improvisational skills.

Extreme events present challenges for communities (in the Redwood Region and elsewhere) in terms of planning, response, and recovery. Such events require the attention of government and community leaders to several factors, including environmental, socio-economic, infrastructural, and societal (e.g., social capital, such as inclusion and trust) resilience. Rural communities in the Redwood Region have many

residents who are generally poorer in health and less individually resilient, for example, which may affect their personal ability to plan for, respond to, and recover from economic shocks and shifts (not to mention the community's or region's overall resilience capacities).

An example of an economic development response to disaster is the BLR Toma Resilience Campus project (discussed earlier). The Toma was designed as a response to repeated regional disruptions from natural and economic forces and reflects the economic and resilience goals articulated in BLR's tribal CEDS: "to preserve sovereignty, to spur job creation, to develop long-lasting economic enterprises" (among other goals). Economic development and regional partnerships have long been a goal of BLR, which has expanded and upgraded its infrastructure and worked with regional partners to upgrade shared infrastructure, and to promote business opportunities and long term, skilled job creation all aimed at increasing tribal and regional resilience.

BLR's CEDS details the tribe's economic development goal of expanding training services and facilities at BLR (to be facilitated in part by the Toma campus), including first responder/emergency response training, climate and community resilience training, and skills-based training facilities and programs in multiple economic sectors and community development areas. The Toma facility fulfills the tribe's goals of establishing a Native American business incubation, workforce development, and apprenticeship/internship center that provides startup assistance, skills training and certifications, job placement, and ongoing coordination with regional economic, education, workforce, and community-based organizations. The Toma training facilities, fabrication lab, and commercial teaching kitchen will offer workforce development programs to help workers develop skills that address the current and emerging hiring needs of the business community, including disaster preparedness and resilience-related products and services.

The incubation ecosystem concept of the Toma works with many regional and national partners to create a supportive culture around entrepreneurship in five main areas: 1) disaster preparedness and community response capacity-building, 2) smart technology, 3) clean and efficient energy, 4) light and advanced manufacturing, and 5) sustainable agriculture. The Toma facility's focus on "smart" technologies and the development of regional capacity for light and advanced manufacturing and relocalization of manufacturing and production aligns well with regional needs.

Turning Disruption into Opportunity

Forging an economic path forward for the Redwood Region that prioritizes equity, job growth, resilience, and resilience to disruption requires a comprehensive approach to turn disruptions into opportunities and "bounce forward." Examples of sector-based strategies to bounce forward (or at the very least, buffer the impact of disruptions) include:

- Developing distributed energy projects (e.g., solar plus storage, microgrids) to reduce reliance on fossil fuels and mitigate the impact of supply cutoffs.
- Providing workforce development programs in renewable energy installation and O&M to help with any needed infrastructure repairs.
- Expanding access to healthcare services to underserved rural and tribal areas, including community health clinics and telehealth services, to improve response and recovery capacity.
- Promoting climate-adaptive and sustainable farming and forest-management practices, creating economic opportunities by increasing crop and forest resilience, and shortening the post-disruption rebound period.
- Sourcing products locally to lessen the impact of long, fragile, and disruptable supply chains.
- Creating/strengthening worker (farmer, rancher, etc.) cooperatives to build social inclusion and trust shown and facilitate faster recovery (DHS, 2023).

Impacts on specific regions and populations.

Each community in the Redwood Region has assets that can both help and hinder resilient recovery after a shock or shift. For example, a remote community may have unique assets (historic architecture, access to nature, etc.) that can be leveraged to attract tourists and help the local economy during both business-as-usual times and after a shock or shift. However, a community's remote location can also hinder its ability to access services and resources, and to coordinate with neighboring communities and stakeholders (e.g., on service-sharing or mutual aid agreements for police and fire).

The more remote communities in the Redwood Region are also at a disadvantage in terms of economic recovery and resilience planning/implementation and resources, as communities in closer proximity often share responsibilities for workforce education/training, provision of infrastructure (including broadband) and affordable housing, among other areas. Identifying the strengths and vulnerabilities of more remote communities (as with communities anywhere) is important to better understand the potential impact of a disruption on the community, and on specific subpopulations. More vulnerability is associated with greater risk, so identifying and reducing vulnerabilities can increase resilience to risks and enhance recovery capacity.

Impacts on workers. Depending on its severity, an economic disruption can have substantial impacts on the Redwood Region workforce. More severe disasters can lead to mass migrations away from the region, depleting the workforce and making economic recovery even more difficult as the human capital needed for recovery no longer exists. It is thus important to identify ways to retain as much of the workforce as possible during and after a disaster, possibly through housing assistance and other forms of aid (food, medicine, short-term employment, etc.). Developing strategies to prepare for and minimize workforce losses during a disruption can offer a much-needed buffer for workers and businesses as they ride out the storm to calmer times (so to speak).

Reported impacts to workers included (among others): 1) job losses from business closures in tourism and hospitality, among others, with workers in service industries (already with lower wages and fewer benefits) disproportionately affected, 2) wage stagnation or decline, 3) less stable and secure employment (e.g., more gig and part-time jobs), 4) shifts toward automation and remote work, resulting in displacement or the need to acquire new skills, and 5) stress from job insecurity, financial hardship, and social isolation (increased rates of reported depression).

Impacts on business and industry. The Redwood Region is no different from other regions across the globe when it comes to the effects of a comprehensive economic disruption. During the pandemic, for example, many businesses in the Redwood Region suffered from: 1) closures owing to reduced or no demand, 2) declining revenue from closures, restrictions, and changing customer behavior, 3) supply chain disruptions that brought shortages, delays, and price increases, 4) shifting customer behavior toward more online shopping (and also a preference for outdoor activities), 5) inability to adapt quickly to online operations and to compete in the digital marketplace, and 6) increased reliance on government grants and loans to stay afloat.

Impacts on public sector entities. Economic shocks also impact local government budgets and public goods and services provided, which in turn impact local businesses and families. Impacts to the public sector included 1) increased strain on healthcare, social assistance, and education, requiring budget adjustments and resource reallocation, 2) budget impacts from declining tax revenues as a result of economic contraction (with impacts to service delivery and infrastructure investments), 3) staffing shortages due to burnout and health concerns (among other reasons), 4) increased pre-existing disparities in access to public services, and 5) a shift in priorities that pulled resources from other community needs.

Of course, economic disruptions can also present opportunities to reimagine community priorities and public sector activities that may have been previously ignored, including 1) the creation of new partnerships and encouraging relationships of trust with disinvested populations that historically have been left out of policy and planning processes (a feature, in fact, of the Collaborative process), and 2) the development of new priorities and ideas to improve equitable access to public resources.

Impacts of Shocks on Sub-regions and Populations. The Redwood Region's disinvested communities and priority communities often experience "compounding vulnerabilities" in times of disruption, with challenges like poverty, food insecurity, and inadequate healthcare being amplified, widening the opportunity gap. A number of factors increase vulnerability, including (among others): 1) a lack of access to critical resources like emergency aid, healthcare, and educational support, 2) a lack of broadband access to essential information, services, and economic opportunities, 3) increased risk of displacement from eviction and foreclosure, 4) exacerbation of existing inequalities (e.g., poverty, lack of access to healthcare, and limited job opportunities), 5) increased food insecurity from disruptions to food supply chains and increased job losses, 6) limited access to technology and crucial information, services, and

remote work opportunities, and 7) increased isolation and mental health challenges from disruption to social networks and support systems.

NEW ECONOMIC DEVELOPMENT OPPORTUNITIES

Economic development opportunities also arise in response to economic shocks or longer-term shifts. Several of the EDOs identified above are appropriate in both business-as-usual and disruptive times (admitting that business as usual typically requires ongoing adjustments). All EDOs have challenges and risks associated with their pursuit, many of which can be deal-breakers, but many of which can be overcome through careful foresight and planning, agility during response, and thoughtfully-developed recovery strategies. Even so, a fair degree of improvisational skill and agility may be required to adapt EDOs to emergent and continually changing conditions (Mafimisebi et al., 2023). Types of EDOs and related strategies that may be more suited for emergent conditions include early (pre-disruption) identification of:

- 1) key investment areas and workforce development needs to prepare for post-disruption transitions and the emergence of resilient industries,
- 2) underutilized synergies within the Redwood Region and with outside markets, with identification of opportunities for intra- and inter-sectoral and public-private cooperation to maximize benefits,
- 3) ways to effectively utilize the Collaborative regional roadmap, including high-quality job creation targets (pre- and post-disruption) in resilient industries, informed by the needs of disinvested, priority communities in the Redwood Region, and
- 4) EDOs and related investments that have multipliers and benefits across the Redwood Region, including investments that leverage local, regional, state, federal, and philanthropic dollars to maximize economic benefits and that reflect the inclusive vision and plan for Redwood Region economic vitality established in the Collaborative regional roadmap.

A key purpose of the Collaborative to date has been to establish a functional, inclusive regional economic planning process and network to continue advancing, implementing, and realizing EDOs. This process has involved rigorous research and collaborative information gathering to identify key potential project investments (for the implementation stage) and related workforce training needs that support economic vitality and that meet near term and strategic industry and public sector workforce demands. The Collaborative project team has helped establish broader regional awareness of public, private, and philanthropic funders and programs in addition to CJF (that can serve as leverage) and has been developing a structure for strategic pursuit of project funding across the Redwood Region during and beyond the CJF project period.

Entrepreneurs and networks to build resilience.

As noted, the uncertain nature of disruption in any system (temporally, spatially, etc.) calls for a high degree of preparedness and response capability, but there will always be the need for improvisation in how a person, community, tribe, business, government, or other entity responds to dynamic and unpredictable change. Entrepreneurial skills (whether among business owners or among the workforce) can be a critical component to ensure that such skills are present in the Redwood Region. To this end, it is important to understand both the impact of entrepreneurship in total and by industry (on employment and other measures of growth), and the impact of entrepreneurship on economic growth within different communities in the Redwood Region (e.g., defined by census tracts, townships, or other geographically-defined areas). Assessment of changes in employment or changes in the total numbers of firms in a particular area can include measures such as educational attainment, which might affect the relative supply of entrepreneurs.

Building more resilient economic systems in the Redwood Region can be furthered by enhancing regional social capital—a resource noted by many in the Collaborative as currently in short supply. Social capital is a product of networks, norms, inclusion, and trust (Halstead and Deller, 2015). In social capital theory, social influences shape human interaction, including economic choices. Networks are shaped by the social connections among economic actors in the Redwood Region. Following the theory, creating productive networks requires frequent interaction among actors, which can produce norms and, ultimately, trust. In this framework, entrepreneurial opportunities can arise from these networks through information sharing and knowledge spillover on such things as availability of resources, market demand, feasible financing, and so on (Conroy et al., 2017). Entrepreneurs can use information gained from such networks to find new opportunities, assess risk, and develop business models and strategies for increasing productivity and profitability.

Challenges and Risks of Pursuing Opportunities

There are always challenges, risks, and opportunity costs in pursuing EDOs. In the Redwood Region (as in most places) there is a diversity of EDOs to choose from and myriad driving forces that impact their potential. With an influx of new resources, the Redwood Region needs to consider what is better: 1) to spread resources out widely and risk diluting the effectiveness of individual projects, 2) to concentrate resources on a few, centralized projects, and risk drawing labor from smaller communities, or, perhaps, 3) to figure out a way to spread the resources widely *and* effectively? Even with the clear mandate to identify 3-5 regional implementation projects, answering this question is not easy.

In determining what EDOs are appropriate, one can consider (among other things) individual and firm behavior, market forces, and how the policy framework (including economic development programs) in place will influence behavior and respond to and/or shape market forces as a given project is implemented. A decision to shape policies in support of or provide government assistance to selected EDOs should be influenced by informed expectations about the combined effects of these policies and market forces, as well as by a realistic assessment of existing community capacities; it is reasonable to be

leery of overly-prescribed development pathways that may be more risky to the extent they fail to consider local capacity constraints. As noted above, one of the more important broad-based EDOs for the Collaborative may simply be the strengthening and systematizing of local-to-regional capacity to act on more targeted, if somewhat widely distributed, EDOs.

Power imbalances. To better identify pathways toward greater and more equitable investment and community wealth in the Redwood Region, and to create new economic opportunities and new jobs, it will be important to understand and to counteract the forces that have led to communities and populations becoming disinvested in the first place. Such disinvestment is in part a product of long-standing wealth and power imbalances, but structural economic and geographic forces are also significant factors leading to disinvestment. Identifying and unlocking the potential of EDOs in the Redwood Region thus requires an understanding of 1) power relationships impacting equitable service provision, 2) the synergies among and multiplier effects of various forms of economic assistance (policies and incentives), and 3) the leadership capacity of local and regional economic developers (broadly construed) to craft and implement effective programs (Schuetz and Pagano, 2023). The creation of accessible and transparent social and policy networks within the Redwood Region—like those hopefully emerging from the Collaborative process—may be the critical factor in terms of surfacing and redressing power imbalances, and promulgating more effective, equitable economic development in the years ahead.

Enabling greater economic opportunity for individuals and market access for businesses, and creating jobs that are accessible to all, is both an inter- and intra-regional concern; the coordination and integration of participatory efforts fostered by the Collaborative may lead to new institutional arrangements within the region as well as between the Redwood Region and other regions. Such new arrangements can help foster broader and more equitable participation, help “level out” wealth and power imbalances, and help identify place-specific EDOs that are well-suited to the unique cultures and visions of different communities.

Uniform or varied approaches. The development of new, more equitable and resilient forms of economic activity in the Redwood Region—and the equitable distribution and selection of EDOs (given these relative power systems)—must temper the appeal of “efficient” one-size-fits-all approaches with the understanding that the interplay of individual, market, and policy forces in unique contexts and particular places will impact economic activity (producer-consumer dynamics) in unique, unpredictable, and context-specific ways. Region-wide implementation projects, for example, will likely fare better if more attention is paid to how their application in specific communities will *differ*: the policy task may be to develop robust mechanisms for implementation that allow for significant flexibility at the ground (community) level.

The regional approach taken by the Collaborative is designed to enhance cooperation between stakeholders, highlight and address specific regional and community qualities and needs, mobilize local/regional expert knowledge, and foster new intra- and inter-regional partnerships. Adoption of regional or sub-regional approaches to planning—and building the capacity to do such planning—will

enhance the likelihood that regional and local governments and economic development agencies can effectively coordinate the networks and approaches needed to apply the right amount of resources to (hopefully) well-defined problems, and to create beneficial synergies among projects across the varied terrain of the Redwood Region.

Synergies. Synergies—the connection between two or more activities where the combination of effort produces effects that are both qualitatively and quantitatively greater than if the activities were conducted in isolation—can be a significant boost to the effectiveness of ED programs. For example, strengthening a positive link between tourism and regional agricultural products (agri-tourism) can lead to greater economic outcomes than might occur with a focus on just one or the other sector. Importantly, identification of these synergies can both spring from (and support) new networks and forms of conversation and cooperation across the region, as well as from other integrated planning efforts that may arise. The task becomes one of achieving coordination, efficiency, and effectiveness in EDO selection and to make good use of the multiple potential synergies that may exist.

Institutional effectiveness. Achieving coherence and coordination (and synergy) among implementation approaches requires substantial institutional effectiveness in planning, implementation, management, evaluation, and extension of such offerings. Establishing this institutional effectiveness throughout the Redwood Region is in fact a critical foundation for the Collaborative. Identifying complementary EDOs will require that all economic development stakeholders pay close attention to the “development mixes” across the region, including the mix of factors including capital and labor availability, market structures, research capacity (including participatory and collaborative research or discovery), and other inputs. New institutional arrangements will likely arise as needed. Many have in fact been forming in the Redwood Region to attend to the Collaborative process.

Animation and capacity-building. Perhaps the most important of these arrangements is broad-based, equitable participation as evidenced by the Collaborative meetings. The notions of local ownership and subsidiarity are closely linked with the concept of equitable regional planning: that is, dealing with *social and political issues at the most immediate or local level that is workable*. As noted earlier but worth repeating, the bottom-up strategies to identify EDOs require the identification of the assets and opportunities (asset-based approaches) for new economic activities available within specific communities or sub-regions; creating conditions conducive for rural enterprise growth and job creation (EDOs) necessitates close attention to context that only local actors have access to. Effective animation⁷ and capacity building strategies (such as the Collaborative meetings) are helping to mobilize local interests and resources in place-based economic development in the Redwood Region, but there is work to be

⁷ “Sociocultural animation is a method of empowering people to participate in the development of their own groups or communities, looking at their own needs, capabilities, knowledge and skills to identify problems and the adequate strategies to solve them” (Montez, 2020).

done. Participatory approaches can be critical for the integration of different interests, but they must be well facilitated.

Knowledge of the rural context. And while participatory approaches at the ground level may be necessary for effective rural economic development, they are often not sufficient. There is also a need for effective program and policy information, associated decision-support systems, and leadership capacity at higher institutional levels. A lack of knowledge about rural development processes (including the complexity and diversity of rural areas and systems, their links with broader economic and policy systems, and the unpredictable dynamics of overall system changes) means that most policies impacting rural development are generally developed with only partial knowledge. While this is a common feature of policymaking in general, it does suggest the need for some nuance and policy robustness, at the very least.

Resilience, and bouncing forward equitably. A key goal of the Collaborative is to make the region more prepared to respond to economic disruptions, to plan for recovery, and to bounce forward from the effects of the pandemic (among other disruptions) and make the region more resilient to future change. To do this, the Collaborative process has worked to identify prior weaknesses to help make clearer the challenges and risks of projects selected for implementation. An ongoing challenge is to ensure equity and inclusion in the planning and implementation process, and to help create more access to opportunity for disinvested, priority populations—to ensure that selected projects provide access to opportunity for underserved and disinvested populations and increase their chances of more fully participating in economic, social, and civic life as they help define the roadmap for a more equitable and resilient regional economy.

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Note: additional material included above is from source material gathered from the RRRise Collaborative meetings (Meetings, Listening Sessions, Tables, etc.) and from regional source documents (County and Tribal CEDS, regional planning documents, etc.).

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APPENDIX 1: DISCUSSION OF RELEVANT ISSUES

As shown above, poverty and unemployment are both spatially distributed and concentrated in the Redwood Region. Typically, in the Redwood Region and elsewhere, disinvested communities are characterized by lower incomes, higher social-service demands, deteriorating housing stock, and higher unemployment rates. Such “lagging” places often have inadequate infrastructure and public services, failing schools, and few jobs matching the skills of residents. These are economic disadvantages, but they also present economic opportunities, as will be described below.

As noted elsewhere, a concern for any region like the Redwood Region is the out-migration of young people. Population stagnation or decline, or aging population pyramids (see demographic discussion above), create difficulties for the economies of smaller communities. Rural de-population in some communities is, in fact, a dynamic that ED can foster if programs create better opportunities in other areas. Because of out-migration and brain drain, regional efforts must be cognizant of the interplay between strategies and how regional efforts or efforts in larger municipalities with stronger economies can impact community-level efforts in more depressed areas. The distribution of economic development programming and funding as part of the CJF implementation phase (and the associated provision of community goods) will have strong potential impacts on equity that must be looked out for.

In the Redwood Region, another important issue is a relative lack of individual wealth and resources. Whether it is because of low income or no income or low or no inherited wealth, a lack of individual resources impacts one’s ability to buy food, acquire job skills, access transportation, afford a house or a rental, access healthcare, or to secure childcare needed to be able to work. As with all problems, though, the other side of economic problems is that they can (and must) be re-envisioned as economic development opportunities. And in a rural and distressed region such as the Redwood Region, there are many such opportunities.

From an equity perspective, then, in exploring such problems-as-opportunities, it is important to ask: to whom might the benefits of a particular strategy accrue? If the benefits of place-specific investments accrue primarily to landowners (as can be the case with certain strategies), the program likely misses the equity goal. If an approach discourages out-migration, for example, it could negatively affect an individual who might be better served by moving to a different place. Of course, all potential outcomes and impacts, positive or negative, cannot be foreseen or controlled for, but educated guesses can be made, and ongoing evaluation of outcomes is advised.

As described in regional CEDS documents, many communities in the Redwood Region have neglected infrastructure, underperforming schools, and inadequate public safety provision—that is, specific places in the Redwood Region are experiencing underinvestment and inadequate provision of public goods (safety, education, transit, community identity, political networks, housing and labor markets, etc.). Out-

migration in this context is very harmful for communities, even as it improves an individual's prospects, as it further erodes an already flimsy tax base. Because many lower-income households are in areas characterized by low property wealth and high numbers of renters, public goods needed to support economic activity are often underprovided. This dynamic often contributes to a downward spiral.

Targeting, Coverage, and Mobility

Targeting ED efforts (i.e., identifying and helping the intended beneficiaries of a given strategy) can be more difficult if the benefits of resources invested into distressed places are not specifically targeted to the intended population (i.e., if new jobs created go to non-target residents or new in-migrants). Similarly, the *coverage* of an intervention—the share of the intended beneficiary population affected (presumably positively)—is important to consider. If assistance is targeted to disinvested communities or places with concentrated poverty, who is getting left out? *Mobility* is a third concern. For example, if a community lacks jobs, good schools, and affordable housing, then the conditioning of assistance on whether an individual lives or works in a particular area might discourage a move that would better serve their needs.

A final concern: if economic development increases economic activity in a community, there could be a commensurate increase in housing costs and general prices, an increase that must be matched or exceeded by hoped-for wage gains. If cost of living increases but wages do not, the result is greater inequity. But if the increased values can be recaptured and redistributed (e.g., through Community Benefit Agreements), then agreements to increase raise wages, create affordable housing, and provide other social services can be made to be more equitable.

More on Networks. A big difference between leading and lagging regions is the degree to which local economic actors {define} are both mobilized and organized. Leading regions are characterized by development processes that are more democratic and bottom-up, and that involve a wide range of well-organized economic actors. And such bottom-up processes are more likely to emerge and succeed when economic development entities understand their local/regional contexts vis-à-vis the broader state, national, and international contexts {ref}; this ability depends on the capacity (skills, knowledge, and attitude) of economic actors and the internal and external networks in which they are involved (Ejdemo et al. 2021).

Policymaker Capacity. The capacity of policy makers is an important factor in turning a lagging region or community around. Capacity includes the ability to implement strategies and policies that match the priorities and needs of the community or region, the ability to attract public funds and private investments, the ability to establish good working contacts with other governments at all levels, and generally to establish favorable conditions for firms to start up and operate (Aspen 2019).

On Growth and Development

Growth and development. In defining terms, it can be helpful at the outset to distinguish between *growth* and *development*. Growth is a quantitative measure, while development is more qualitative—aimed at a stated goal. In other words, GDP can measure output growth (or decline), but establishing a desired GDP growth rate (and related measures such as median household GDP) is more of a *development* goal.

Economic and community development. A second distinction is between community development and economic development. In community development, the focus is more on the activities and functions of a particular place (a “community” can be a municipality, or the Redwood Region could be considered a regional community). Aspects of a community that can be developed include (among others) 1) economic goods and services, infrastructure, 2) social norms and culture, 3) participatory opportunities (social, economic, etc.), 4) mutual support, and so on (MSSU n.d.). These community-level development functions are facilitated by a host of institutions (government, economic, education, religious, associations, family, etc.) linked horizontally within a community and vertically with the county, region, state, or federal governments.

As Christenson and Robinson (1989) noted over 30 years ago, too much reliance on vertical, external organizations can negatively impact community *autonomy*, and a balanced approach is often useful that can use both horizontal links to identify community priorities and vertical links for access to outside resources and expertise. Relatedly, *economic development* (ED) can be defined as “a process that influences growth and restructuring of an economy to enhance the economic well-being of a community” (IEDC n.d.). ED often has two primary and related objectives: 1) creation of jobs and wealth, and 2) improvement of quality of life. Typically, the focus in ED is on jobs, wealth creation, and the businesses that can support the growth of each.

It's all combined in the end. Of course, growth, community development, and economic development have significant overlap. For example, fostering business diversification, a key goal of the CJF, is both a resilience strategy and a way to grow the tax base⁸ to fund other community and economic development programs.

⁸ Business tax revenue helps support public employees, parks and amenities, roads and infrastructure, public facilities (community centers, libraries, government buildings, etc.), public safety, housing, workforce development and education, and overall quality of life.

APPENDIX 2: TARGET SECTOR OPPORTUNITIES EXAMPLES

Sector	Example Opportunity from Collaborative	Viability
HC	Expand access to mental health and substance abuse treatment services	Steady growth due to the aging population and increasing prevalence of mental health and substance abuse issues.
	Prioritize developing specialized healthcare services for the aging population	Steady growth due to the aging population and increasing demand for specialized care.
	Emphasize attracting and retaining healthcare professionals through incentives and training programs	Challenges in attracting and retaining healthcare professionals due to competition from urban areas.
	Leverage telemedicine technologies to provide remote healthcare services to underserved areas	Telemedicine can improve access to healthcare in underserved areas without the need for additional physical infrastructure.
WLBE	Focus on sustainable forestry practices and value-added wood products	Challenges due to fluctuations in timber prices and competition from imported wood products.
	Emphasize developing sustainable fisheries and aquaculture operations	Challenges due to overfishing and environmental regulations.
	Prioritize organic agriculture, value-added agricultural products, and ecotourism	Growth from increasing demand for organic and locally sourced food, as well as ecotourism.
	Leverage opportunities in sustainable ranching, ecosystem services markets, and wildlife-based tourism	Challenges from land use changes and competition from other land uses.
ACT	Focus on promoting outdoor recreation, indigenous cultural experiences, and art festivals	Growth due to increasing interest in outdoor recreation and cultural experiences.
	Emphasize developing ecotourism opportunities, such as whale watching and kayaking tours	Ecotourism is a growing niche within the tourism industry and can attract visitors seeking sustainable travel experiences.
	Prioritize promoting wine tourism, culinary experiences, and arts-based events	Wine tourism, culinary experiences, and arts-based events can attract visitors seeking unique and engaging experiences.
	Leverage opportunities in nature-based tourism, recreational fishing, and cultural heritage	Nature-based tourism, recreational fishing, and cultural heritage preservation can attract visitors seeking outdoor

Sector	Example Opportunity from Collaborative	Viability
	preservation	recreation and cultural experiences.
RE	Focus on developing geothermal resources	Geothermal power is relatively stable with predictable energy production.
	Emphasize solar and wind energy development	Solar and wind energy are renewable energy sources with declining costs and increasing efficiency.
	Prioritize energy efficiency retrofits and programs for households and businesses	Energy efficiency retrofits and programs can reduce energy costs and create jobs in the construction and energy services industries.
	Leverage opportunities in biomass energy and industrial energy efficiency	Biomass energy may face challenges due to environmental regulations and competition from other renewable energy sources. Industrial energy efficiency can reduce energy costs and create jobs in the energy services industry.

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APPENDIX 3: ED STRATEGIES—BROADLY DEFINED

There are multiple ways to classify the ED strategies that will be a part of the Collaborative’s regional roadmap. Here, to clarify, we categorize strategies into five primary types: 1) broad-based, 2) sector-based, 3) business-focused, 4) workforce, and 5) community-based:

- 1) Broad-based strategies take a regional focus, looking at regional specializations and opportunities for broad collaborations on projects (e.g., capital absorption, affordable housing, healthcare, broadband, inclusive and equitable economic growth, etc.), and on regional labor market dynamics (in- and out-migration, intra-regional labor market shifts), and other areas. Broad-based regional strategies can be developed to respond more effectively to economic shocks—particularly regarding impacts on disinvested communities (e.g., through mutual aid agreements). Increasing regional economic equity, including closing gaps, attaining universal levels of service, and disaggregating impacts by race, ethnicity, income, etc., are highly prioritized in this broad-based approach.
- 2) Sector-based strategies often focus on “traded sectors” and targeted approaches such as efforts to a) woo a large employer, b) develop, attract, retain, and expand SMEs, and c) develop equitable and resilient business strategies for firms across all sectors. Also, sector-based strategies for increasing economic diversification, particularly in those areas at particular risk from disruptions (e.g., pandemic, climate-related, etc.), and removing barriers to attraction and retention of businesses and quality job access for disinvested communities, will be needed.
- 3) Business-focused strategies include programs such as those offered by SBDCs for direct-to-business assistance and other industry demand-driven programming.
- 4) Workforce strategies are talent-based, designed to assess and improve worker skillsets, job placement potential, employee well-being, and employee engagement. These strategies include preparing workers for remote work, and developing entrepreneurship skills, among other areas.
- 5) Community-based: focused on community services and amenities and workforce support (affordable housing, broadband, transportation, healthcare, childcare, arts/culture, etc.); “placemaking” and developing safe, interesting, attractive communities (for residents, businesses, tourists); this includes development focused on individuals and social inclusion.