



ALIVE WITH CULTURE AND NATURE

Sonoran Desert Biosphere Region

Comprehensive Economic Development Strategy



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1 Executive Summary

The 2024-2029 Comprehensive Economic Development Strategy (CEDS) for the Sonoran Desert Biosphere Region (SDBR) outlines the key objectives, opportunities, and actions for economic development across the unique ecological and geographic area known as the Sonoran Desert Biosphere. This region includes various communities in Arizona including Ajo, Why, Lukeville, Gila Bend, as well as parts of the Tohono O’odham Nation and the I-8 corridor between Gila Bend and Yuma. It also incorporates stakeholders from the Mexican state of Sonora, making the strategy binational in its scope and collaboration.

Unlike traditional development plans that focus on political boundaries, this CEDS emphasizes a holistic, ecosystem-wide approach to economic development. Led by the International Sonoran Desert Alliance (ISDA), the SDBR initiative aims to address the Region’s shared challenges—economic, environmental, and cultural—while fostering inclusive growth and sustainability.

The Sonoran Desert Biosphere Region (the Region) faces a range of challenges, including an aging population, workforce shortages, limited healthcare access, and environmental threats such as climate change and desertification. At the same time, the Region’s vast natural beauty, biodiversity, and cultural heritage present significant opportunities for development, particularly in sustainable tourism, renewable energy, and cross-border collaboration.

This CEDS serves as a roadmap for the Region’s economic growth and outlines strategies that enhance regional collaboration, promote innovative and sustainable industries, and create a resilient economy that supports the Region’s people, environment, and cultural heritage.

Vision

By 2030, the Sonoran Desert Biosphere Region will be a vibrant, resilient community that balances economic growth with environmental stewardship and cultural preservation. The Region will be globally recognized as a model for sustainable living and

economic sovereignty, where innovative opportunities enable all residents to thrive, heritage is celebrated, and natural resources are managed responsibly to ensure the well-being of future generations.

Key Goals and Strategic Priorities:

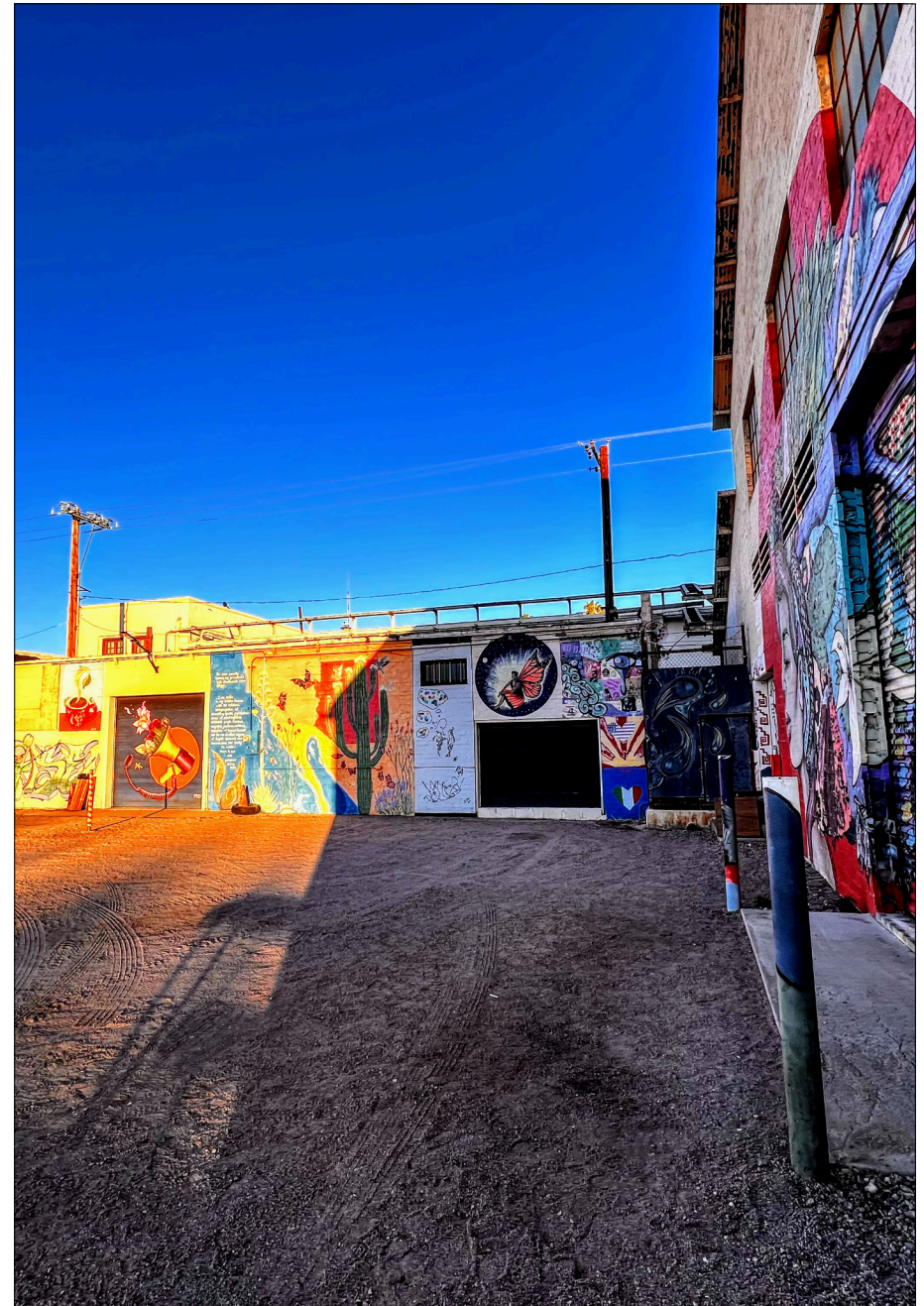
- **Cultivate a Dynamic Business Ecosystem:** Focus on fostering local strengths such as renewable energy, sustainable agriculture, and tourism while minimizing environmental impacts. This includes supporting small businesses, attracting new industries, and enhancing entrepreneurial opportunities across the Region.
- **Expand Educational Access and Workforce Training:** Invest in educational infrastructure, particularly in remote and underserved areas, to meet the demands of emerging industries. Prioritize skill development in sectors like renewable energy and environmental conservation, while also addressing the need for lifelong learning and career development services.
- **Enhance Healthcare Access:** Expand healthcare services, with a special focus on underserved communities. The plan includes initiatives to provide extensive services such as mental health care and preventative care, while developing a culturally competent healthcare workforce.
- **Ensure Affordable and Sustainable Housing:** Address the Region’s housing challenges by promoting affordable, quality housing options. This includes both new developments and the rehabilitation of existing housing stock.
- **Strengthen Local Food Systems and Promote Sustainable Agriculture:** Improve food security by bolstering local food systems through sustainable agricultural practices.
- **Foster Regional Leadership and Collaboration:** Build strong leadership and collaboration across communities and jurisdictions. This includes leveraging the Region’s cultural

diversity and ecological resources to create a unified and coordinated approach to development.

- **Develop the Region as a Sustainable Tourism**

Destination: Capitalize on the Region's unique natural and cultural assets to promote sustainable tourism. By enhancing visitor experiences and community well-being, this initiative drives economic growth and creates new opportunities for residents.

The document supports these strategies by analyzing existing conditions, industries, and the Region as a whole via a SWOT evaluation. The resultant goals, strategic actions, and resiliency needs provide a comprehensive plan for the Region's future development.





2 Background



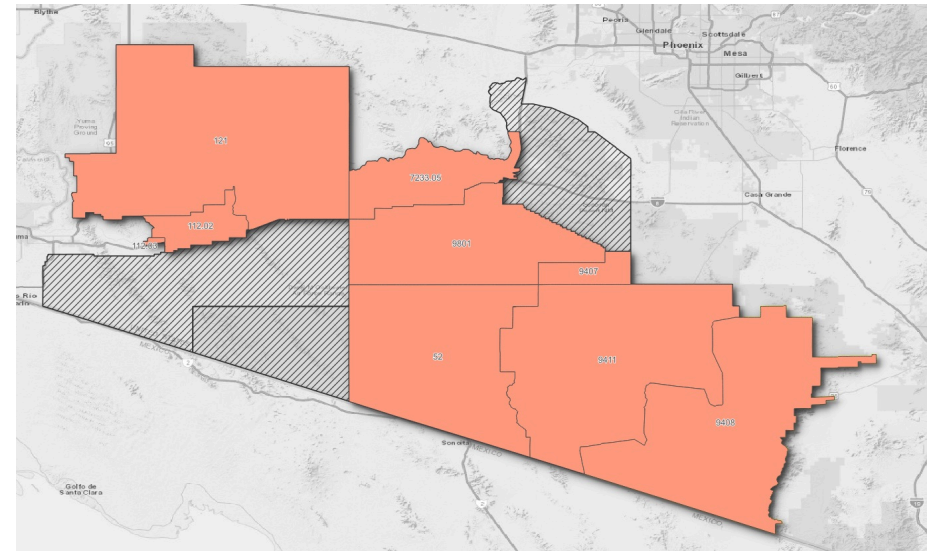
This Sonoran Desert Biosphere Region (SDBR) Comprehensive Economic Development Strategy (CEDS) is a first-of-its-kind planning effort. Rather than the traditional focus of a geography defined by political boundaries (i.e. counties and states) it focuses on a biosphere area that captures ecological and geographic similarities to create a coalition of communities that share similar challenges and interests. This effort is led by the International Sonoran Desert Alliance (ISDA).

The formal and aspirational boundaries of the SDBR encompass a wide array of federal lands, including wildlife refuges such as the Cabeza Prieta National Wildlife Refuge, national monuments like the Organ Pipe Cactus National Monument, as well as various communities. These boundaries include Ajo, Why, Lukeville, and Gila Bend, as well as communities on the Tohono O'odham Nation and those along the I-8 corridor between Gila Bend and Yuma (see Figure 1). Many of the stakeholders in the SDBR are also from the Mexican state of Sonora. This expansive geographical scope reflects the SDBR's goal to foster a holistic approach to development that transcends political borders and focuses on ecosystem-wide sustainability.

A diverse coalition of stakeholders, including tribal partners, land managers, academia, non-profits, and law enforcement agencies, plays a pivotal role in the SDBR's strategic planning and implementation. This collaborative framework ensures the strategy is grounded in the realities of the Region, respects the cultural and historical significance of the land and its people, and addresses the systemic barriers to economic prosperity.

The SDBR's strategy acknowledges the importance of confronting historical injustices and legacies of mistrust between communities and leadership. Through participatory dialogue and inclusive decision-making processes, the SDBR aims to forge a shared understanding of past wrongs while working collaboratively toward a future that honors the diverse histories and cultures of those who have lived in the Region. This commitment to transparency and inclusivity is essential for building a solid foundation for collective action and sustainable development.

Figure 1—Census Tracts Comprising SDBR



Looking to the future, the SDBR is poised to continue its journey toward becoming a model for environmental excellence, economic prosperity, and cultural vibrancy. By leveraging the Region's unique natural resources, fostering innovation, and embracing the principles of equity and sustainability, the SDBR aims to create a legacy of resilience and prosperity for current and future generations. The Comprehensive Economic Development Strategy stands as a blueprint for this vision, charting a course for growth that is respectful of the land, responsive to the needs of its people, and reflective of our shared values and aspirations.

3 Existing Conditions



Economic Profile

The Sonoran Desert Biosphere Region (SDBR) encompasses a vast area with multiple jurisdictions and varied governmental structures, complicating the task of defining precise boundaries for the Region. To address this challenge, the decision was made to use census tracts as a method to establish specific boundaries to analyze the existing economic conditions of the Region. The selected census tracts are in the following counties and are shown in Figure 1 above:

While this approach provides clear and definable boundaries, it is important to acknowledge that it might not perfectly capture all communities and people within the intended region. It includes areas not covered due to the predefined nature of the census tracts.

Maricopa County	Pima County	Yuma County
• 7233.05	• 2	• 112.02
• 9801	• 9411	• 112.03
• 9407	• 9408	• 121

Population

As of 2015, the SDBR was home to approximately 12 thousand people. By 2020, this figure rose to 13.5 thousand, an increase of 11 percent. Although most of the communities have contributed to this growth, Ajo, one of the larger communities in the Region, has experienced a notable decline (24.8 percent).

Healthy population growth is generally characterized by a steady increase in the number of residents within a region. This growth is often indicative of economic vitality, suggesting that the area has become attractive for people to live and work. A growing population can bring various benefits, such as a larger labor force, more job opportunities, increased consumer spending and economic activity, and greater diversity.

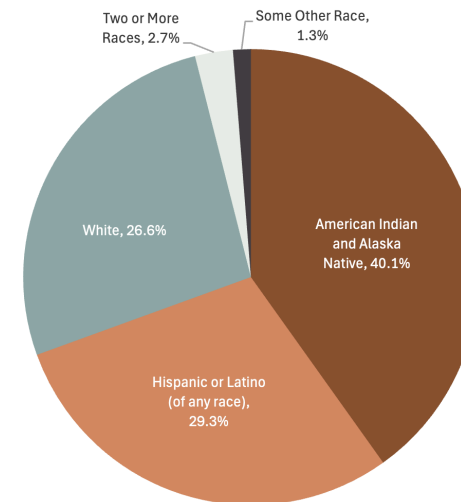
SDBR is comprised of a diverse population, with American Indian and Alaska Native, Hispanic or Latino, and White constituting substantial portions of the population, at 40%, 29%, and 27%,

Table 1—Population by Study Region 2015-2022

Population by Study Region			
	2015	2022	% Change 2015-2022
SDBR*	12,169	13,539	11.3
Ajo	3,886	2,922	-24.8
Gila Bend	1,725	1,783	3.4
TO Nation	6,857	6,973	1.7
Pima County	998,537	1,042,393	4.4
Maricopa County	4,018,413	4,430,871	10.3
Arizona	6,641,928	7,172,282	8.0

*Aggregate of census tracts provided.

Figure 2—SDBR Ethnicity by Race Distribution, 2022



Source: U.S. Census Bureau, Table B02001

respectively (Figure 2). Such diversity can be a tremendous asset, fostering a rich cultural milieu and a wide array of perspectives that enhance social and economic innovation.

Age

The median age of the Sonoran Desert Biosphere Region (SDBR) is slightly older than the median for the state of Arizona, as well as Pima and Maricopa Counties (Table 2). In 2015, the average median age across the census tracts was 34, which increased by 16% to 39.5 in 2022. This trend is likely a result of the rapid aging observed in Ajo and Gila Bend, both of which experienced a greater than 30% increase in median age during the period.

Table 2—Median Age by Study Region (2015 to 2022 Growth)

Median Age by Study Region			
	2015	2022	% Change 2015-2022
SDBR*	34.0	39.5	16.2
Ajo	45.8	59.6	30.1
Gila Bend	28.8	39.9	38.5
TO Nation	27.1	28.7	5.9
Pima County	38	39	2.6
Maricopa County	35.6	37.1	4.2
Arizona	36.8	38.4	4.3

* Weighted average of provided census tracts by total population

Among these communities, Ajo has the oldest residents, primarily due to a significant influx of retirees and seasonal residents. The median age in Gila Bend surged 38.5% from 2015 to 2022, a phenomenon linked to an outmigration of the 18-24 age group that coincided with overall population decline. The proportion of residents aged 18-24 decreased from 12% in 2015 to 6% in 2022. Meanwhile, the shares of the population aged 5-14 and 15-17

have remained consistent from 2015 to 2022.

The age dependency ratio¹ in the SDBR increased from 76 in 2015 to 83 in 2022, a rise of 8.7%. This indicates a continued shift toward economically dependent populations within the Region over the period, which may lead to increased economic demands in the future. The Region's dependency ratio is 15 points higher than the State's.

Although the age dependency ratio has seen an increase in the Region, Ajo and Gila Bend have experienced reductions of 5.7% and 11.2% in the age dependency ratio from 2015 to 2022, respectively. This drop indicates a potential rejuvenation or alteration in the demographic composition of those communities.

Table 3—Age Dependency Ratio by Study Region 2015-2020

Age Dependency Ratio by Study Region			
	2015	2022	% Change 2015-2022
SDBR*	76.0	82.7	8.7
Ajo	100.4	94.7	-5.7
Gila Bend	76.2	67.7	-11.2
TO Nation	71	76.3	7.5
Pima County	64.6	68.4	5.9
Maricopa County	63.1	63.3	0.3
Arizona	65.9	67.5	2.4

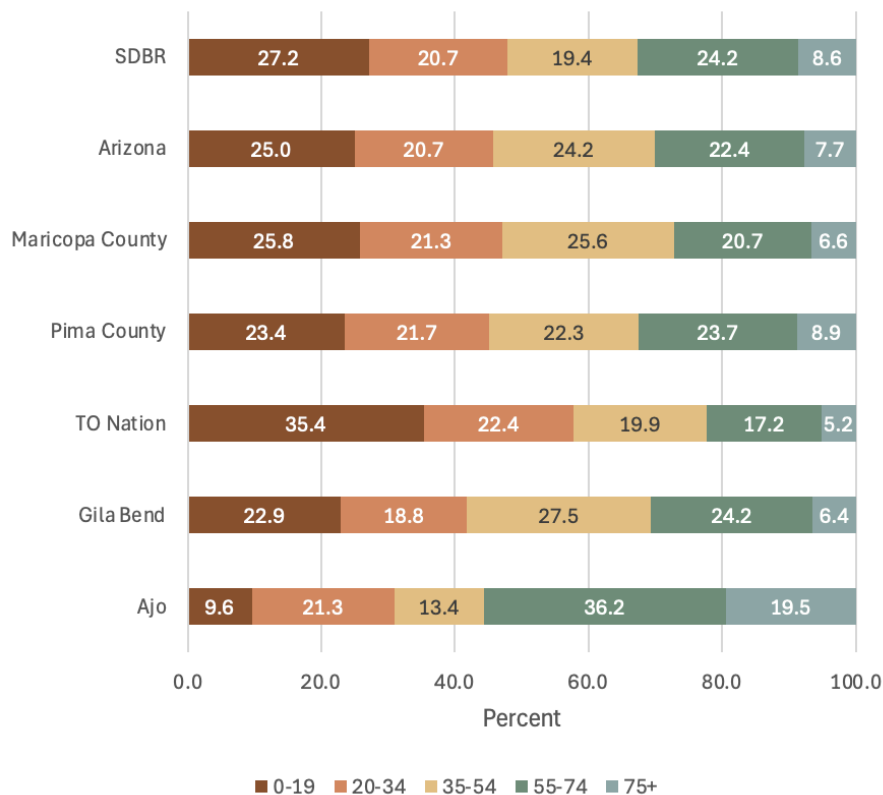
* Weighted average of provided census tracts by total population

While the SDBR demonstrates an older demographic profile with a higher age dependency ratio than all other referenced regions,

¹ The age dependency ratio is a measure used in demography to indicate the ratio of dependents (people younger than 15 or older than 64) to the working-age population (ages 15-64). It is used to assess the pressure on the productive population to support the dependent age groups.

the population distribution remains relatively balanced. As substantiated by the chart below, the distribution indicates a robust working-age population capable of economically supporting both the young (under 16) and older (65 and above) segments. However, the population of 20-34 years is slightly concerning, pointing to the potential outmigration of younger people, many of whom do not seem to return to the Region in their early career (ages 35-45). This demographic pattern, if it persists, foreshadows challenges in maintaining a labor force of adequate size and could impose long-term economic strains on the SDBR.

Figure 3— Population Distribution by Age Cohort, 2022



Income

The Sonoran Desert Biosphere Region (SDBR) possesses the lowest median household income (at \$40.6 Thousand) compared to the three reference areas of Arizona (\$72.5 Thousand), Pima County (\$64.3 Thousand), and Maricopa County (\$80.7 Thousand). The SDBR also exhibited the slowest growth in median household income among these regions.

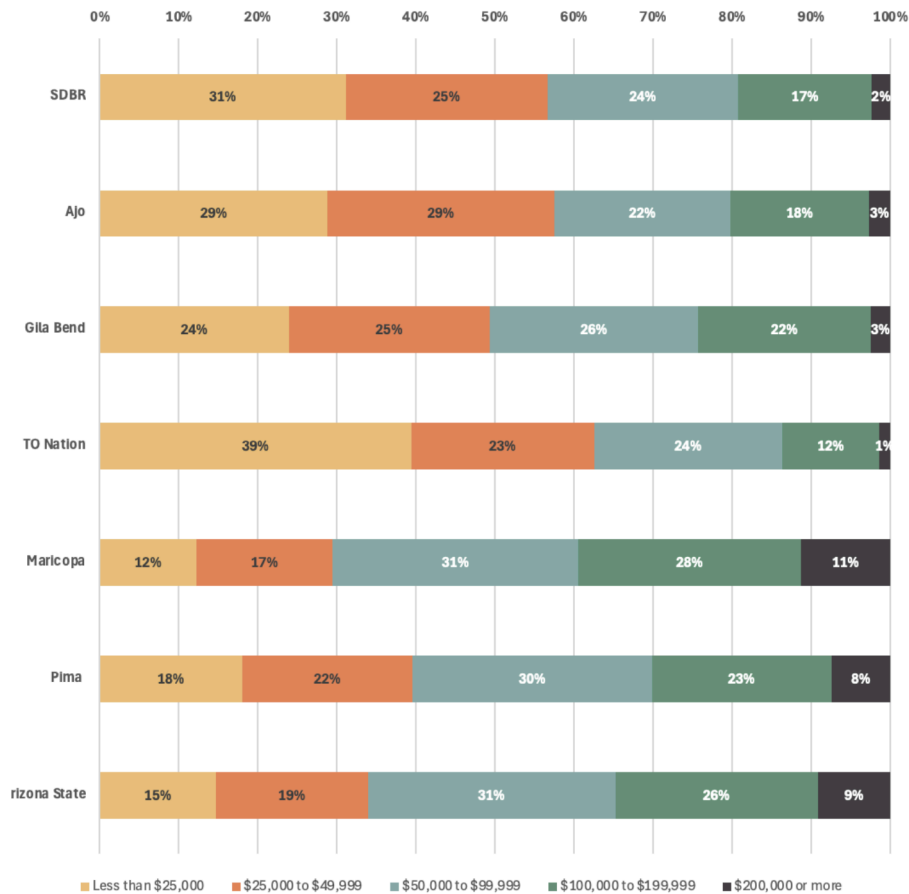
Table 4—Median Household Income by Study Region

Median Household Income by Study Region (Inflation Adjusted to 2022 dollars)			
	2015	2022	% Change 2015-2022
SDBR*	\$ 36,653	\$ 40,641	10.9
Ajo	\$ 40,216	\$ 46,250	15.0
Gila Bend	\$ 36,350	\$ 52,897	45.5
TO Nation	\$ 26,345	\$ 31,343	19.0
Pima County	\$ 56,318	\$ 64,323	14.2
Maricopa County	\$ 66,159	\$ 80,675	21.9
Arizona	\$ 61,311	\$ 72,581	18.4

*Weighted average of provided census tracts by total population

According to Figure 4, approximately 56% of households in the SDBR earn less than \$50 Thousand annually. In comparison, 34% of Arizona households earn less than \$50 Thousand annually. The Region is also smaller at the top end, with only 19% of households earning \$100 Thousand or higher (compared to the state's 35%). Higher income brackets are comparatively rare in the Region. This pattern suggests a need to review educational and skills pathways as well as the industry clusters located within the region, with the aim to increase the wages of jobs that are available throughout the Region.

Figure 4—Distribution of Household Income by Study Region (2022)

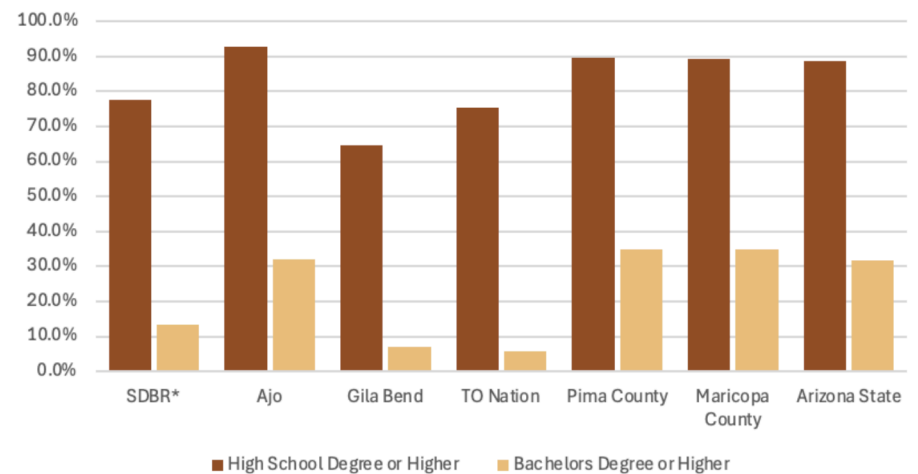


Education

The SDBR covers a vast area, with communities spread out across valleys and rural landscapes. This makes it difficult to deliver educational resources and programs to everyone, especially those in remote areas. Some communities within the SDBR have limited access to reliable internet, qualified teachers, and sufficient funding. This creates a barrier to traditional forms of education.

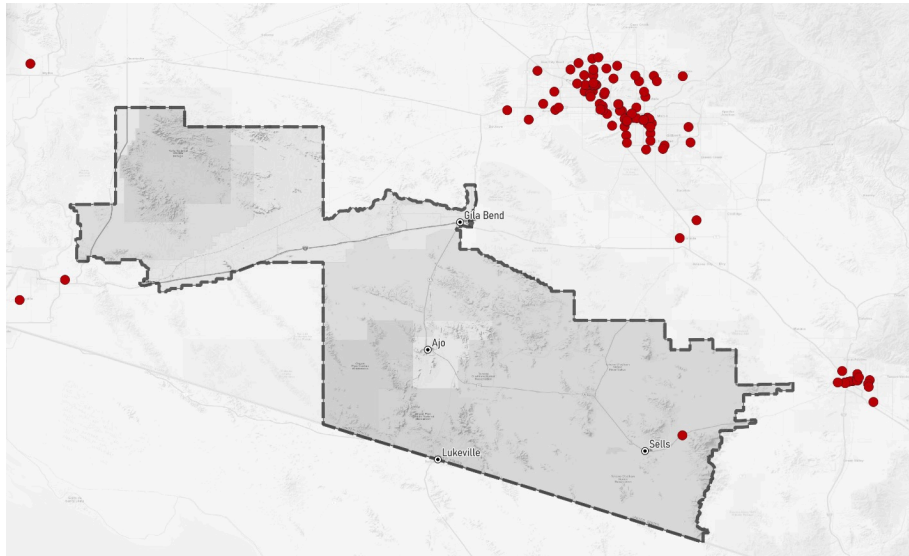
Educational attainment within the SDBR reflects these challenges. As of 2022, 78% of residents aged 25 or higher have completed high school or above, trailing behind Pima County (89.5%), Maricopa County (89%), and Arizona (89%). The Region also has a bachelor's achievement rate of 13%, significantly lower than Pima County (35%), Maricopa County (35%), and Arizona (32%). These disparities are indicative of the lack of access to institutions of higher education in the Region. The Tohono O'odham Community College in Sells is the only post-secondary

Figure 5—Educational Attainment for Population 25+ by Study Region (2022)



institution located within the Region (Figure 6). There is also a connection to Pima Community College through GED programs in Gu Vo and Ajo. Overall, there is an absence of higher education institutions within a reasonable distance for many of the Region's residents, particularly in Ajo and Gila Bend. This not only limits educational opportunities but also limits the presence of high-skill occupations requiring college and technical degrees. Comparing occupational statistics between Tucson to Ajo, there is a lower prevalence of skilled and manufacturing jobs coupled with a higher proportion of service industry jobs in the SDBR.

Figure 6—Map of Colleges and Universities (Shown as red dots) surrounding the Region



SOURCE: Integrated Post Secondary Education System (IPEDS), Better City, LLC

Labor Force

The SDBR Region has low prime-age labor force participation rate (62% compared to 76% in Pima County, 80% in Maricopa County, and 77% for the state). The prime age labor force rate only counts people between ages 20 and 64 years and should offset the impact from seasonal residents that are common to Ajo. Within SDBR, the rate is highest in Gila Bend and lowest in the Tohono O'odham Nation.

The SDBR region also has high unemployment, at an estimated 10.2% (see Table 6) in 2022. The unemployment rate has lowered considerably since 2015, meaning that fewer people who would like to work are unable to find a suitable job. Nevertheless, the current unemployment rate in the SDBR is still approximately double the reference regions. The Tohono O'odham Nation is quite high in this metric and is the part of the Region that is in the highest need of employment programming and support.

Table 5—Employment Status by Study Region 2015-2022

Prime Age Labor Force Participation Rate by Study Region			
	2015	2022	% Change 2015-2022
SDBR*	67.0%	62.4%	-7
Ajo	74.6%	69.2%	-7
Gila Bend	71.0%	76.7%	8
TO Nation	61.0%	56.8%	-7
Pima County	74.7%	75.7%	1
Maricopa County	76.8%	79.8%	4
Arizona	74.0%	76.7%	4

*Weighted average of provided census tracts by total population

Table 6—Unemployment Rate by Study Region 2015-2022

Unemployment Rate by Study Region			
	2015	2022	% Change 2015-2022
SDBR*	20.3%	10.2%	-50
Ajo	25.5%	7.5%	-71
Gila Bend	6.3%	0.0%	-100
TO Nation	27.0%	17.5%	-35
Pima County	10.0%	5.9%	-41
Maricopa County	7.7%	4.8%	-38
Arizona	8.9%	5.4%	-39

*Weighted average of provided census tracts by total population

Housing

The median home value in the SDBR has increased over the past 12 years by a comparatively modest 7% using 2022 inflation-adjusted values from 2015¹. This is much lower than for the reference regions of Pima County (32%), Maricopa County (63%), and the state (57%). The relative affordability of the Region is a strength and has driven a share of new people moving into the area, especially in Gila Bend, which is close to the Phoenix urban growth area.

Table 7—Median Housing Value by Study Region 2015-2022

Median Housing Value by Study Region				
	2015 Actual (\$)	2015 (Inflation Adjusted) (\$)	2022 (\$)	% Change 2015 (infl. Adj.)-2022
SDBR*	74,480	90,866	97,597	7.4
Ajo	82,600	100,772	111,700	10.8
Gila Bend	65,000	79,300	117,300	47.9
TO Nation	66,300	80,886	73,700	-8.9
Pima County	159,900	195,078	258,300	32.4
Maricopa County	187,100	228,262	371,400	62.7
Arizona	167,500	204,350	321,400	57.3

*Weighted average of provided census tracts by total population.

Rent in the SDBR is \$753 on average, a 6% decrease from 2015 inflation-adjusted estimates. Rent prices within the area are lower than reference regions, which are all at or above \$1,000 per month. Overall, rental prices in the SDBR remain approximately 40% lower than those in the reference regions, on average. The Tohono O’odham Nation has the lowest rent prices among the regions studied, and it is noteworthy that it is the only

¹ Inflation-adjusted values used to show the real impact on prices when discounting the broader rise of goods and services across the economy.

Table 8—Median Rent by Study Region 2015-2022

Median Rent by Study Region				
	2015 Actual (\$)	2015 (Inflation Adjusted) (\$)	2022 (\$)	% Change 2015 (infl. Adj.)-2022
SDBR*	656	801	753	-6.0
Ajo	698	852	719	-15.6
Gila Bend	597	728	920	26.3
TO Nation	479	584	546	-6.6
Pima County	816	996	1,071	7.6
Maricopa County	962	1,174	1,437	22.4
Arizona	913	1,114	1,308	17.4

*Weighted average of provided census tracts by total population

region where rent prices have declined over time in both nominal and real terms. This decrease could be due to the relatively low demand for rental units, as evidenced by a homeowner vacancy rate of 0% and a rental vacancy rate of 7.1% (see Table 9). Gila Bend has experienced the most pronounced increase in rental prices, with a 26% rise in real rent prices between 2015 and 2022.

In 2022, the SDBR had an overall vacancy rate of 28%, with an estimated homeowner vacancy rate of 2% and renter vacancy rate of 8.6%. This is down slightly from 2015’s overall vacancy rate of 30%, homeowner vacancy rate of 3.9% and rental vacancy rate of 9%. These are likely to be within the margin of error between the years and is not statistically different. The 2022 rental vacancy rate is the highest for the SDBR in comparison to other regions. Ajo seems to be the main driver of this rate (with an estimated 623 vacant units), which is partly attributable to the number of residents who seasonally migrate to the Region for just

Table 9—Vacancy Rate 2015-2022

Housing Unit Vacancy Rate by Study Region			
	2015	2022	% Change 2015-2022
SDBR*	29.9%	28.2%	-5.7
Ajo	31.1%	28.9%	-6.8
Gila Bend	20.6%	9.6%	-53.5
TO Nation	29.9%	16.3%	-45.4
Pima County	12.8%	10.2%	-20.3
Maricopa County	13.5%	8.6%	-36.8
Arizona	16.6%	11.6%	-30.1

*Weighted average of provided census tracts by total population

Table 10—Value to Income Ratio by Study Region 2015-2022

Housing Value to Income Ratio by Study Region			
	2015	2022	% Change 2015-2022
SDBR*	2.6	2.3	-10.2
Ajo	2.5	2.4	-4.0
Gila Bend	2.5	2.2	-12.0
TO Nation	2.6	2.4	-7.7
Pima County	3.6	4	11.1
Maricopa County	4.1	4.6	12.2
Arizona	3.9	4.4	12.8

*Weighted average of provided census tracts by total population

part of the year (estimated at 148 units).¹ The marked decrease in Gila Bend's rental vacancy rate between 2015 and 2022, as well as the strong growth in rental rates over the same period, provides evidence that there is a growing demand for rental accommodations in the area.

Table 11—Median Year Housing Structure Built by Study Region 2022

Housing Value to Income Ratio by Study Region	
	% Change 2015-2022
SDBR*	1972
Ajo	1960
Gila Bend	1975
TO Nation	1982
Pima County	1986
Maricopa County	1991
Arizona	1991

*Weighted average of provided census tracts by total population

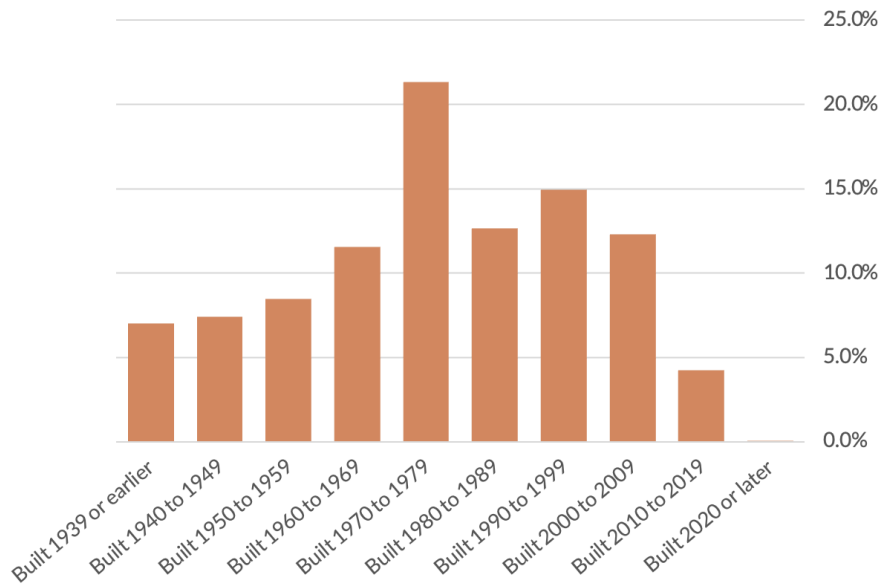
The Value to Income ratio measures the difference between the median home value and median household income. A ratio of 3 is commonly regarded as the threshold for affordability and is the standard criterion for home loan approvals. The ratio in the SDBR is around 2.3, slightly lower than it was in 2015. This measure is much lower than for reference regions and makes SDBR one of the most affordable in the state when controlling for income.

Table 11 shows that the median year in which housing units were constructed in the SDBR is 1972 (using a weighted average of the Region's census tracts), suggesting that approximately half of the homes are more than 52 years old. This is quite a bit older than that of the comparison regions of Arizona (1991), Pima (1986),

¹ Source: U.S. Census Bureau, 2022 ACS Estimates, Table B25004

and Maricopa (1991). While the year built is not a direct measure of the quality of the housing stock, it increases the risks for current homeowners if the homes are in need of repair and/or refurbishment. Inspection of housing stock revealed that there is a need throughout the Region to focus on renovations for many homes (another contributor to the vacancy rate in the case of housing units that are no longer habitable).

Figure 7—Percent of Homes in SDBR by Decade Built



The distribution of year structure-built shows that only 17% of the homes in the Region were built after 1999. The Region is going to continue to need new homes, especially in the areas that are growing or that have poor housing needing to be repaired or replaced.

Table 12— Jobs by NAICS Industry Sector: Region and State Comparison (2021)

Jobs by NAICS Industry Sector: Region/State Comparison	2021		
	Share (SDBR)	Share (Arizona)	Location Quotient
Retail Trade	11.3%	11.2%	1.0
Health Care and Social Assistance	11.2%	14.7%	0.8
Accommodation and Food Services	9.6%	9.0%	1.1
Educational Services	9.1%	7.9%	1.1
Public Administration	8.9%	4.4%	2.0
Agriculture, Forestry, Fishing and Hunting	7.3%	1.0%	7.3
Administration & Support, Waste Management and Remediation	7.5%	8.5%	0.9
Construction	6.5%	6.4%	1.0
Transportation and Warehousing	4.3%	4.4%	1.0
Manufacturing	3.6%	6.4%	0.6
Other Services (excluding Public Administration)	3.4%	2.7%	1.3
Utilities	2.5%	0.7%	3.6
Wholesale Trade	2.9%	3.5%	0.8
Professional, Scientific, and Technical Services	2.6%	5.9%	0.4
Finance and Insurance	2.6%	6.2%	0.4
Arts, Entertainment, and Recreation	2.5%	1.8%	1.4
Real Estate and Rental and Leasing	1.5%	2.0%	0.8
Information	1.5%	1.8%	0.9
Management of Companies and Enterprises	1.0%	1.2%	0.8
Mining, Quarrying, and Oil and Gas Extraction	0.2%	0.4%	0.4

Industry and Market Analysis

According to the North American Industry Classification System (NAICS) data, the three largest industries in the Region by job count are

- Retail Trade (“Retail”)
- Health Care & Social Assistance (“Health Care”)
- Accommodation & Food Services.

Table 12 presents a breakdown of the count and share of jobs per industry at both regional and state levels, along with the location quotient.¹

The Region boasts significant employment shares in Public Administration, Utilities, and Agriculture, as indicated by high location quotients. This highlights strong local specialization in these sectors. Specifically, Agriculture holds a disproportionately high share with a location quotient of 7.3, suggesting a robust regional industry far exceeding state averages.

Conversely, the Region underperforms in several key industries compared to state averages, notably in Professional Services, Finance and Insurance, Manufacturing and Health Care each show a location quotient below 1. This suggests potential areas for strategic development to align more closely with state employment patterns.

Worker and Job Counts

Figure 8 compares the number of workers within each industry to the job count available in the Region. This gives us an indication of how employment supply (workers) matches with employment demand (jobs). In key industries such as Retail, Health Care, and Public Administration, there are more jobs than there are regional workers to fill them. This suggests a robust demand for labor that is not entirely met by the local workforce, potentially

¹ LQ = Location Quotient (Local Share/State Share). Please see appendix for detailed explanation.

Figure 8—Workers Employed by Industries and Regional Residents Working in Those Industries

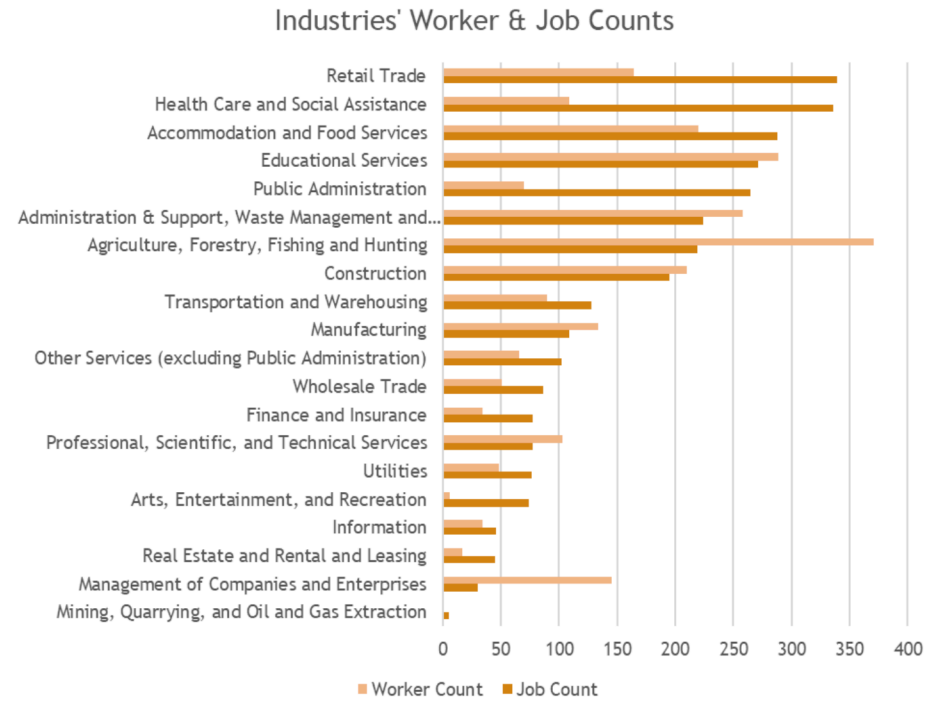
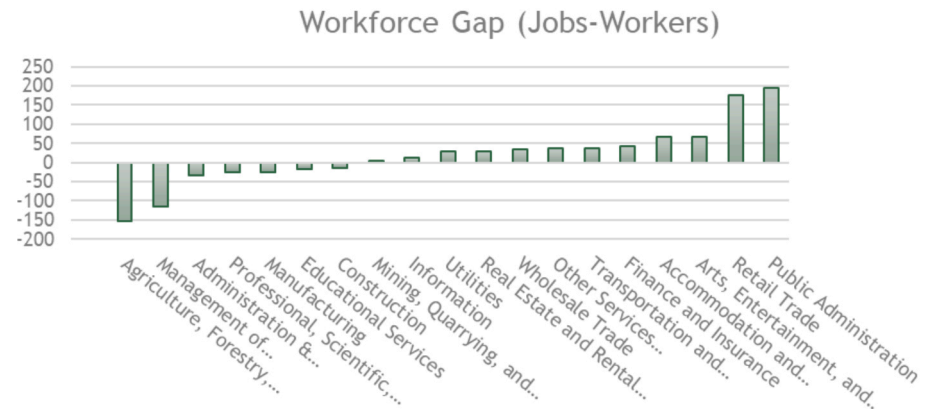


Figure 9 - Workforce Gap



opening opportunities for either attracting workers from outside the Region or investing in training programs for the local population.

Conversely, industries such as Agriculture and Management of Companies and Enterprises have more workers than jobs available, indicating a surplus of labor. This suggests that workers in these industries are finding employment opportunities outside of the Region.

Figure 4 further illustrates the disparities between job counts and the local workforce. A positive value indicates a surplus of jobs in that industry relative to the number of workers, whereas a negative value indicates a surplus of workers relative to the number of jobs.

For instance, Retail Trade shows a significant surplus of jobs, suggesting that this sector may be a key driver for economic development in the Region and could benefit from targeted job matching and recruitment strategies. Public Administration and Health Care also show a surplus of jobs, aligning with the narrative that these are primary industries for growth and

Short-term focus	Middle-term focus	Long-term focus
Tourism related industries	Renewable energy and technology related industries	Remote work-related industries
Retail	Solar energy	Creative and digital content production
Accommodation and food services	Sustainable agriculture	Educational technology
Arts and culture	Environmental conservation and management	Marketing and customer support
	Education and research	
	Green business industrial park	

investment in the Region.

On the opposite spectrum, Agriculture and Management of Companies and Enterprises display a substantial excess of workers. This misalignment could necessitate strategic interventions such as workforce retraining, job diversification efforts, or the development of new industries to absorb the excess labor.

Target Industries

By attracting a variety of industries, the Region can reduce its economic vulnerability, which currently stems from relying on a limited number of economic sectors. This diversification also gives industries access to a broader pool of untapped labor. Furthermore, industrial development typically encourages investment in infrastructure, leading to improved roads, utilities, and communication networks that benefit not only the businesses but also the local community. As these industries take root, they often trigger a multiplier effect within the local economy. The creation of new jobs and higher wages increases demand for local services and goods, further stimulating economic growth and activity.

Based on the data analyzed above, the Region could strategically focus on developing the following industries, segmented by the anticipated time frame for their implementation and impact:

Tourism

The travel and tourism industry continues to be a crucial economic driver in the United States, and its recent performance underscores the robust potential for regions like the Sonoran Desert Biosphere. Nationally, the U.S. travel and tourism industry generated \$1.9 trillion in economic output, supported 9.5 million American jobs, and accounted for 2.9% of U.S. GDP in 2023¹. In Arizona, tourism was the number one export industry in 2022. The state welcomed more than 40 million visitors who spent a collective \$28.1 billion. This visitor spending not only supported 179,100 industry jobs but also generated \$4 billion in tax

¹ <https://www.trade.gov/travel-tourism-industry>

revenue, translating into an annual tax savings of \$878 for every Arizona household¹. These substantial contributions underscore the vitality of tourism-related industries and their potential to sustain and grow the economic well-being of regions like the Sonoran Desert Biosphere.

Focusing on tourism-related industries such as retail, accommodation & food services, and arts & culture could leverage the Region's natural beauty and cultural heritage to draw additional visitors. These sectors not only attract tourists but also create employment opportunities for residents, enhancing their quality of life. There is also an opportunity to transform the Region from a pass-through area into a destination, capitalizing on its stunning natural sites like the Organ Pipe Cactus National Monument, Cabeza Prieta National Wildlife Refuge, and rich biodiversity. The Region also includes various natural areas within Gila Bend, Sonoran Desert National Monument, Butterfield Overland National Historic Trail, and Juan Bautista de Anza National Historic Trail.

Renewable Energy and Technology

Technology and renewable energy represent promising mid-term target industries for the Sonoran Desert Biosphere Region. Arizona's emergence as a significant player in the renewable energy sector, notably in solar, underscores this potential. In 2023, the state ranked ninth in the nation for solar industry growth, adding significant photovoltaic capacity that powers more than 1 million homes, with projections indicating a substantial increase in solar installations over the next five years².

Parallel to this, Arizona's technology sector is witnessing rapid growth fueled by substantial investments in high-tech industries including semiconductor manufacturing, with major projects by Intel and TSMC enhancing the technological landscape of the Region³. This technological advancement supports the renewable energy sector through innovations in energy storage, smart grid technology, and efficient solar panels, essential for harnessing the

¹ <https://tourism.az.gov/economic-impact/>

² <https://www.aztechcouncil.org/arizona-solar-energy-growth-2023/>

³ <https://www.intel.com/content/www/us/en/newsroom/resources/press-kit-intel-builds-arizona.html#gs.8u97q4>

state's high solar potential.

Furthermore, the integration of these industries is facilitated by Arizona's supportive policy environment and initiatives like the *Arizona Technology Council*, which promotes technological innovation across various sectors, including renewable energy.

Given these dynamics, the Sonoran Desert Biosphere Region is well-positioned to leverage these trends by encouraging further investments in renewable energy infrastructure, supporting technological innovations in solar power and continuing to develop policies that foster an environment conducive to sustainable industrial growth.

A "green business industrial park" is a specialized zone where businesses and facilities produce renewable energy or energy-efficient technologies, aiming to minimize environmental impact through sustainable practices such as using solar, wind, and geothermal power. Such parks support green innovations with infrastructure like efficient waste management, eco-friendly buildings, and sustainable transportation solutions.

Examples include the *Solid Waste Authority of Central Ohio* and Finland's *Green Industrial Park*. In the SDBR, abundant solar and wind resources make it an ideal location for such a park, enhancing renewable energy production, reducing greenhouse gas emissions, and lessening fossil fuel dependence. By attracting businesses in renewable energy, these parks help diversify the local economy, creating jobs and boosting economic resilience while preserving biodiversity and managing resources effectively. They also promote regional research and development, attract investments, and improve community infrastructure and quality of life, often receiving support through grants and incentives.

EDA's *Local Technical Assistance* program is beneficial for evaluating the feasibility of initiatives like these industrial parks. By conducting detailed market feasibility studies, it determines if a site or activity can meet market demands, ensuring strategic investment and development decisions.

Remote Work Areas

The Sonoran Desert Biosphere Region has potential to leverage remote work as a long-term target group, capitalizing on national trends and technological advancements. The rise of remote work has been marked by its ability to drive economic growth, enhance work-life balance, and reduce operational costs for businesses. Highlighted in a study by the Interactive Advertising Bureau (IAB) and led by a researcher from Harvard Business School in 2021, the internet economy's growth rate—seven times faster than the overall U.S. economy over the past four years—now accounts for 12% of the U.S. GDP, underscoring the critical importance of digital connectivity¹. This connectivity is vital for fostering economic development and establishing robust remote work capabilities within the Region.

Furthermore, the remote work industry's growth is supported by broader accessibility to internet services, which enhances productivity and opens up diverse job opportunities.

The Sonoran Desert Biosphere Region, with its scenic beauty and tranquil environment, could position itself as an ideal location for "destination coworking/accelerator" spaces. These spaces blend the appeal of remote work with the amenities of traditional office settings in a picturesque backdrop, potentially attracting a workforce seeking the best of both professional and personal worlds².

To effectively harness this potential, the Region could focus on enhancing digital infrastructure to support high-speed internet access, which is crucial for remote work. Additionally, promoting the development of local business support or accelerator spaces could cater to both temporary and permanent remote workers, creating a hub for digital nomads and professionals from various sectors.

¹ <https://www.iab.com/news/study-finds-internet-economy-grew-seven-times-faster/>

² Here is an example of destination coworking: <https://www.outsite.co>
At Outsite, workers can take a "workcation" that blends coworking with Airbnb convenience, offering free outdoor gear (bikes, surfboards) and house managers to arrange activities like skiing and surfing. Outsite is also committed to supporting female entrepreneurship and fostering relaxing environments.

Regional SWOT Analysis

Strengths	Weaknesses
Natural beauty and biodiversity	Jurisdictional and governance complexity
ISDA and triple-focus (Environment, culture, economy)	Workforce development and skill gaps
Robust broadband backbone	Housing availability and affordability
Rich cultural heritage spanning three nations	Educational outcomes and accessibility
Resilience and self-efficacy	Transportation infrastructure and accessibility
Dark skies	
Opportunities	Threats
Enhanced hospitality and tourism offerings	Border dependence vulnerabilities
Economic diversification through remote work and new industries	Challenges of an aging demographic
Regional collaboration	Environmental threats and desertification
Renewable energy initiatives	Climate change and sustainability challenges
Leveraging educational and research facilities	Electrical grid vulnerabilities

Strengths

Natural beauty and biodiversity: The SDBR's stunning landscapes and rich biodiversity, including UNESCO sites like the Organ Pipe Cactus National Monument and Cabeza Prieta National Wildlife Refuge, make it a prime location for eco-tourism. These attributes not only attract visitors year-round but also underscore its global significance as part of UNESCO's World Network of Biosphere Reserves, acknowledging their significant cultural, historical, and scientific value.

ISDA and triple-focus: The Region benefits from a comprehensive approach to sustainable development, emphasizing environmental sustainability, cultural preservation, and economic growth. This approach is supported by the efforts of ISDA and various non-profit organizations. These organizations also promote community engagement and workforce development programs, strengthening the regional economy and fostering a sense of community.

Robust broadband backbone: The Region boasts a well-developed broadband infrastructure, with providers like Free Range Internet offering reliable services and demonstrating a commitment to community partnership. This connectivity supports economic development and enhances residents' quality of life.

Rich cultural heritage spanning three nations: The Sonoran Desert Biosphere Region is a cultural crossroads, embodying a unique blend of U.S., Mexican, and Indigenous heritages. This diverse cultural tapestry is integral to the Region's identity and appeal, offering a distinctive experience that attracts visitors and enriches the local community.

Resilience and self-efficacy: Despite historical challenges, such as the decline of local mining industries, the Region has shown remarkable resilience. It maintains strong cultural and historical ties, which contribute to a robust sense of community and self-efficacy.

Dark skies: The Region's dark, clear skies create ideal conditions

for astronomical research and observation. Partnerships with nearby research institutions, such as the University of Arizona and Arizona State University, offer significant potential for scientific discovery and educational outreach. The Region can also enable unique tourist attractions such as star tours at Organ Pipe Cactus National Monument. These tours, which highlight the breathtaking clarity of the night sky, might be a testament to the park's commitment to preserving its natural darkness and offer an immersive educational experience for visitors.

Weaknesses

Jurisdictional and governance complexity: The Sonoran Desert Biosphere Region spans multiple jurisdictions, including Pima County, Maricopa County, Gila Bend, Pisinemo, San Lucy, and several other Tohono O'odham nation districts. This vast and diverse area presents significant challenges in governance, policy coordination, and collaborative efforts, complicating region-wide initiatives, and strategies.

Workforce development and skill gaps: Historically reliant on mining, the Region faces a critical gap in workforce skill diversification. A significant portion of the younger population seeks education and employment opportunities elsewhere, rarely returning. The Region's current labor participation rate stands at 44.4%, highlighting a workforce that is both underutilized and aging.

Housing availability and affordability: The Region experiences a dichotomy in housing needs: some areas require new housing developments, while others, like Ajo, have a surplus of vacant houses in need of renovation. The redevelopment of these properties is hampered by a lack of developers/contractors and the high costs associated with renovations, exacerbating housing challenges.

Educational outcomes and accessibility: The educational landscape of the SDBR is marked by significant accessibility challenges, largely due to its vast geographic dispersion and limited infrastructure, which make the delivery of educational resources to remote communities particularly difficult.

Additionally, schools in these areas often face funding shortfalls, exacerbating disparities in access to qualified teachers and modern learning materials when compared to more urbanized areas. Moreover, the Sonoran Desert's status as a delicate ecosystem requires the incorporation of environmental education into the curriculum, a task made challenging by the existing educational barriers. Together, these factors create a complex web of obstacles to providing comprehensive and equitable education across the Region.

Transportation infrastructure and accessibility: The Region's extensive geography poses unique challenges for transportation and infrastructure development. Limited access to efficient regional transportation and inadequate road infrastructure hinder supply chain reliability and economic connectivity, especially across international and tribal borders.

Opportunities

Enhanced hospitality and tourism offerings: The Sonoran Desert Inn and other existing accommodations in the Region are often fully booked and receive high ratings, indicating a robust demand for hospitality services. There is a clear opportunity for expanding into higher-quality, amenity-rich lodging options, including luxury resorts. Such facilities could attract more affluent tourists, encouraging longer stays and increased exploration of the surrounding areas. Additionally, leveraging the Region's natural beauty through the development of trails and eco-centric businesses could further boost tourism, particularly to national parks and monuments.

Regional collaboration: The Region presents a ripe opportunity for districts to collaborate on economic development and workforce recruitment efforts. By aligning regional interests, communities can jointly pursue projects that benefit the wider area, fostering economic growth and job creation.

Renewable energy initiatives: With its favorable geographical location, the Sonoran Desert is ideally positioned for investments in the renewable energy sector. Gila Bend's aspirations to harness renewable energy can serve as a model for other districts,

potentially expanding into areas like geothermal energy, which can contribute significantly to the Region's economic diversification.

Economic diversification through remote work and new industries: While the Region currently relies heavily on tourism and service industry jobs, there is an opportunity to diversify the economy by attracting remote workers and introducing new industries such as technology-related industries. This diversification could reduce economic vulnerability and create a more stable job market.

Leveraging educational and research facilities: Collaborations with nearby universities and research institutions offer dual benefits: enhancing local workforce development and fostering innovation. Such partnerships can provide the Region with a competitive edge, preparing residents for high-skill jobs and attracting high-tech industries to the area.

Threats

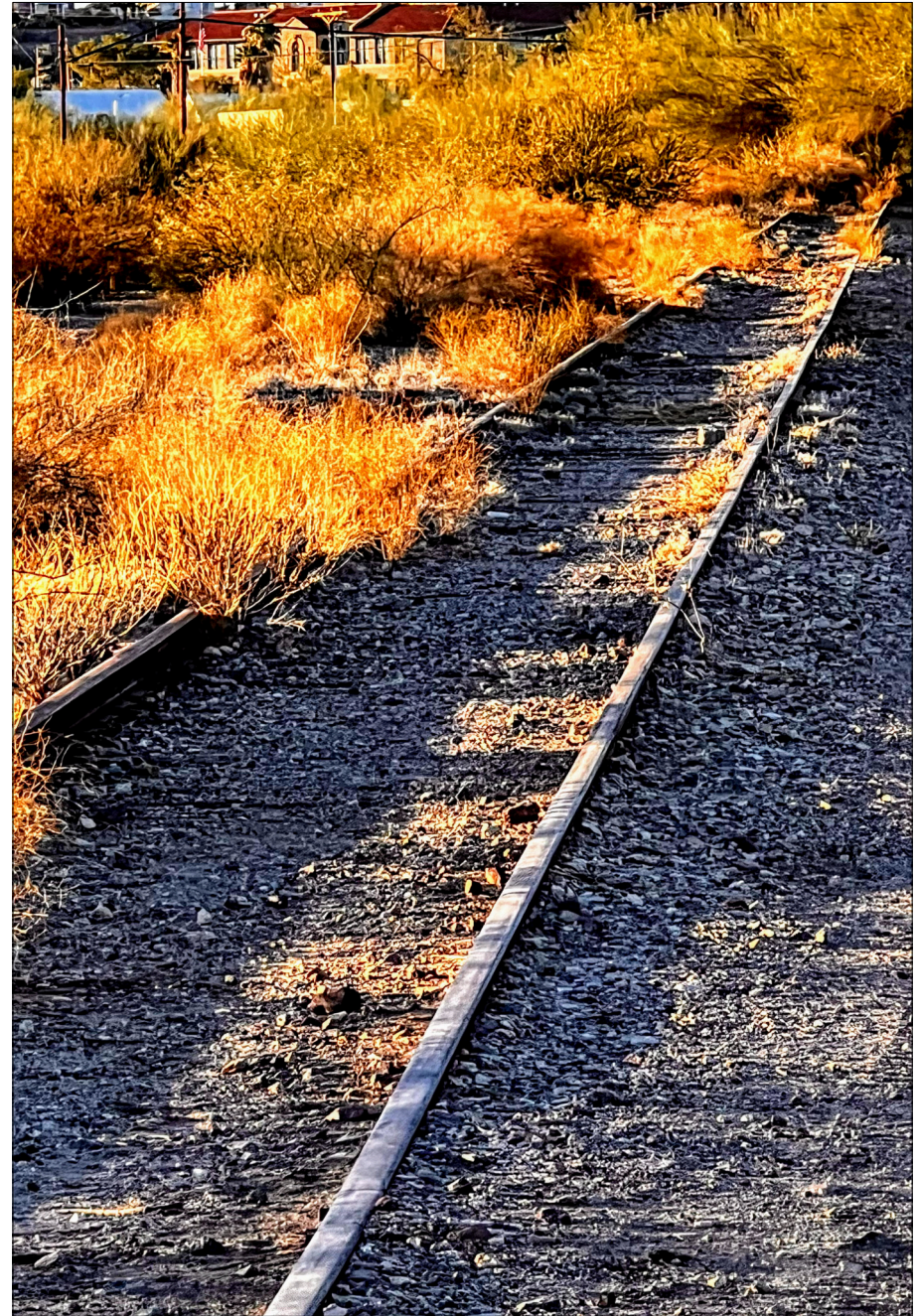
Border dependence vulnerabilities: The Region's economy is significantly influenced by cross-border labor and tourist movements. Potential border closures pose a substantial threat, as evidenced by previous instances that led to sharp declines in business sales. The reliance on the flow of tourists and labor from border crossings puts local businesses, particularly those dependent on northbound traffic such as restaurants and gas stations, in a precarious position, highlighting the need for diversified economic strategies.

Challenges of an aging demographic: An aging population within the Region presents multiple challenges for workforce recruitment, development, and healthcare sustainability. With median ages ranging from 32 to 59, and certain areas predominantly inhabited by those 65 or older, the demographic shift towards an older population exacerbates workforce limitations, particularly in sectors requiring manual labor. Additionally, the increased healthcare demands of an aging population raise concerns about healthcare provision and expenditure.

Environmental threats and desertification: The threat of desertification looms large, with potential impacts on water availability, livestock health, wildfire frequency and intensity, and the conversion of rangelands into desert. This environmental challenge is compounded by climate change, which exacerbates water scarcity issues in arid regions like Arizona. Sustainable practices and environmentally conscious development are critical for building regional resilience.

Climate change and sustainability challenges: The broader impacts of climate change, including water scarcity and the limitations it places on traditional agriculture and farming, pose significant threats to the Region. Adapting to these conditions requires innovative approaches to food security and soil management to mitigate soil depletion and ensure the sustainability of local agriculture.

Electrical grid vulnerabilities: In the wake of unforeseen weather and climate change, the older electrical infrastructure throughout the Region poses a threat to economic resiliency and growth. The unreliable electrical grid puts businesses at risk for electrical failures during weather events and can result in major losses. For example, without reliable electric, restaurants may need to close as they are unable to keep food refrigerator and meet health standards.



4 Strategic Action Plan



Vision

By 2030, the Sonoran Desert Biosphere Region will be a vibrant, resilient community that balances economic growth with environmental stewardship and cultural preservation. It will be recognized globally as a model for sustainable living and economic sovereignty, where innovative opportunities enable all residents to thrive, heritage is celebrated, and natural resources are managed responsibly to ensure the well-being of future generations.

Values

The core values for the Sonoran Desert Biosphere Region reflect its unique environment, cultural heritage, community spirit, and commitment to sustainability and preservation.

Nature and Environment

Committing to the protection the unique flora and fauna of the Sonoran Desert, ensuring the conservation of its pristine landscapes and extraordinary biodiversity for future generations.

Promoting sustainable practices that respect the delicate balance of the desert ecosystem, fostering resilience against environmental challenges.

Cultural Heritage and Community

Valuing the rich cultural heritage and diverse backgrounds of the Region's inhabitants, from indigenous histories to contemporary contributions.

Cultivating a cooperative and friendly community spirit, where creativity, mutual respect, and collaboration are cornerstones of social and economic development.

Inclusivity and Acceptance

Building an inclusive community where everyone feels at home, respected, and valued, regardless of background or belief.

Recognizing the importance of balancing honor and reckoning with the past, aiming to elevate and center historically underrepresented voices, and bridging relationships that transcend borders and boundaries.

Goals

The Sonoran Desert Biosphere Region spans a vast and diverse area, featuring various governmental structures. While collaboration is the ideal approach for initiating development and transformation within the Region, doing so will be challenging. The goals outlined are comprehensive and tailored to the Region's needs. However, achieving these goals may vary from one community to another, given that each possesses its own unique challenges, capacity, and opportunities.

It is clear that a one-size-fits-all approach is not feasible for this Region. Instead, communities should carefully select the strategies that best suit their specific circumstances. Prioritizing collaboration is essential—by sharing resources and knowledge, communities can significantly accelerate their development and growth and achieve sufficient scale to implement projects and programs. To further enhance this cooperative effort, establishing regular communication channels and joint projects will foster a more unified and effective approach to tackling the Region's most pressing issues.

Goal 1: Cultivate a dynamic business ecosystem that capitalizes on local strengths and fosters innovation with minimal environmental impact.



Supporting the diverse economic landscape within the SDBR, which spans sectors from innovative agricultural practices to burgeoning renewable energy and tourism industries, is fundamental for bolstering the Region's attractiveness to both residents and professionals. This effort is essential for fostering widespread prosperity and sustaining a vibrant economy. The strategic focus on assisting businesses to maintain financial health, adapt to and recover from economic shocks, pursue growth opportunities, innovate continually, and address workforce requirements will be a cornerstone of the economic development initiatives for the Sonoran Desert Biosphere Region.

Enhancing support mechanisms is key to better aligning individuals' skills with employer needs, a crucial step toward optimizing employment outcomes and economic performance in the Region. A concerted effort to foster a diverse workforce and entrepreneurial landscape will enrich the Region's economic fabric, ensuring its resilience against economic shocks and nurturing an environment conducive to sustained economic growth. This approach augments the Region's economic dynamism and achieves strategic population and development objectives.

Particularly, the emphasis on stimulating growth within the technology and renewable energy sectors, coupled with

attracting a highly skilled workforce, will enhance the Region's economic resilience and sustainability. As research by the Center on Rural Innovation (CORI) highlights, rural areas, including regions like the Sonoran Desert, are rich in innovative ideas and potential.¹ Initiatives that leverage the Sonoran Desert's unique environmental and cultural assets, promote sustainable development practices, and encourage innovation across traditional and emerging sectors, align closely with the broader goals of economic diversification, environmental preservation, and community empowerment.

Objectives

Increase support services and resources for all businesses and sectors

Enhance business retention, expansion, and attraction efforts

Strengthen the Sonoran Desert Biosphere entrepreneurial and innovation ecosystem to diversify the economy

Attract targeted industries such as tourism, renewable energy sectors and technology

Leverage regional offerings to enhance sector attractiveness

¹http://ruralinnovation.us/wp-content/uploads/2022/06/CORI_Rural_Tech_Landscape.pdf

Strategic Actions

1. Sector-Specific Workshops and Networking Events:

Organize targeted workshops and networking events for key industries such as renewable energy, technology, agriculture, and tourism. These events should aim to provide business owners and entrepreneurs with valuable insights into industry trends, opportunities for collaboration, and potential for innovation within their sectors. Facilitate knowledge sharing between established businesses and newcomers creating mentorship programs, hosting panel discussions, and providing platforms for sharing success stories and best practices, fostering a collaborative ecosystem that encourages economic growth and diversification.

2. Business Support Portal:

Develop an online platform that serves as a centralized resource for businesses at growth stages of development. This portal should offer easy access to a wide range of resources, including funding opportunities, regulatory guidance, market data, and business development tools. By simplifying the process for businesses to find the support and information they need, the Region can enhance business sustainability and growth.

3. "Open a Business" Resources:

Create and distribute comprehensive informational materials for prospective entrepreneurs interested in starting a business in the Region. These resources should cover essential topics such as permitting requirements, setting realistic expectations, navigating the startup process, and connecting with local experts and resources. Providing clear and accessible guidance can demystify the process of starting a business and encourage more individuals to pursue entrepreneurial ventures in the Region.

4. Succession Planning Forums and Classes:

Organize forums and classes focused on succession planning for retiring business owners looking to pass their businesses on to a new generation of entrepreneurs. This initiative should include

creating a database of businesses looking to sell and potential buyers, facilitating matches that ensure the continuity of local businesses. By supporting succession planning, the Region can maintain its economic diversity and stability, ensuring that valuable businesses continue to operate and contribute to the local economy.

5. Federal Support Advocacy:

Engage actively with local, state, and federal representatives to advocate for increased funding and support for the growth of tech and renewable sectors within the Region. This involves identifying and leveraging existing federal programs such as the Economic Development Administration's *Build to Scale* program and the USDA's *Rural Innovation Stronger Economy* (RISE) grant program. By securing more support for these sectors, the region can enhance its competitiveness and attractiveness to high-skilled workers and innovative businesses.

The EDA provides various programs aimed at boosting regional economies. The Build to Scale Program supports equitable and inclusive entrepreneurship and startup businesses. Similarly, the *Equity Impact Investments* Program offers capacity building, knowledge, and technical assistance to organizations serving underrepresented populations. Additionally, Planning Grants are available to aid in both long-term and short-term planning for eligible areas.

6. Incubation/Support Spaces:

Invest in the creation of incubation/support spaces within high-visibility areas of downtown or main street, serving as focal points for the Region's entrepreneurial ecosystem. Additionally, adding these spaces to libraries is a viable option. These spaces should provide resources and programming designed to support businesses and entrepreneurs, including access to high-speed internet, office amenities, and opportunities for mentorship or

collaborative workshops. Such spaces not only encourage the growth of local businesses but also contribute to the overall vibrancy and economic health of downtown areas.

7. Innovation and Entrepreneurship Support Programs:

Collaborate with local universities, colleges, and vocational schools to establish support programs for innovation and entrepreneurship, particularly in emerging technologies and renewable energy sectors. These programs should offer a combination of internships, mentorship opportunities, and hands-on projects that align with the real-world needs of local and regional businesses. The goal is to cultivate a pipeline of skilled individuals who are ready to contribute to the Region's economic growth and innovative capacity.

8. Broadband Enhancement:

Continue to invest in the infrastructure necessary to ensure widespread access to high-speed broadband across the Region. This effort is critical for supporting telework, online education, and digital entrepreneurship, making the region more attractive to remote workers and businesses that depend on digital connectivity. Enhanced broadband access is a foundational element for economic development in the modern economy, enabling businesses to operate more efficiently and access global markets.

Free Range Internet offers broadband access to Ajo, Why, and Gila Bend. As a growing small business, it currently serves around 700 subscribers and has reached its capacity. Free Range is now seeking partnerships with other internet providers, such as Table Top Internet, which have fiber lines in the area. The company's ongoing goal is to provide broadband access to approximately 1,500 subscribers in the area who currently lack access.



Goal 2: Enhance educational access and focus on skills essential for addressing the Region's unique economic and ecological challenges.



Education plays a crucial role in driving economic growth, fostering environmental consciousness, and embracing technological advancements. The Region's distinct ecological and economic landscapes necessitate a workforce that is educated, highly skilled, and adaptable to accommodate targeted industries such as renewable energy, technology, and sustainable agriculture. These industries align with the broader global movement towards sustainable economies and the integration of digital technologies across industries, highlighting the importance of educational attainment for both economic competitiveness and ecological integrity.

Furthermore, a strong education system plays a crucial role in retaining the current population, particularly families who value a conducive environment for raising their children. Demonstrating the Region's commitment to quality education, along with offering diverse educational opportunities and fostering a deep connection between the educational sector and local industries, ensures that residents remain invested in their community. This retention of professionals and their families supports demographic stability and economic growth, creating a positive feedback loop that fuels further investment in education and community development.

Achieving this vision requires collaborative efforts across the board. Partnerships among educational institutions,

governmental bodies, industry leaders, and community organizations are vital for developing a curriculum that is both relevant and forward-thinking. Investing in educational infrastructure, teacher training, and technology access is essential for bringing this vision to life. Additionally, creating opportunities for lifelong learning and skills development ensures the current workforce remains competitive and adaptable to the ever-evolving economic landscape. Through these concerted efforts, the Sonoran Desert Biosphere region establishes a foundation for sustainable growth, innovation, and environmental stewardship, securing a bright future for both current and future residents.

Objectives

Establish a collaborative Regional system to increase training, education, and readiness of the workforce

Promote lifelong learning and continuous professional development

Enhance career development services for youth and adults

Increase access to entrepreneurial and innovation education

Strategic Actions

1. Regional Community Workforce Alliance:

Expand ISDA's existing programs to form a broader alliance of educational institutions, industry leaders, and government representatives. This alliance will focus on identifying regional workforce needs and coordinating training programs that align with market demands and future employment trends. Drawing inspiration from successful models such as those implemented in Ajo, the alliance will ensure best practices are shared and adapted region-wide.

2. Regional Workforce Development Plan:

Develop a comprehensive plan aimed at enhancing workforce collaboration across communities. This includes expanding internship and apprenticeship programs, identifying new training opportunities, sharing services and resources, and conducting collective marketing and promotional efforts. The plan will facilitate seamless communication among partners and make it easy for job seekers to find relevant opportunities.

SDBR can take inspiration from the *Pima County Workforce Investment Board (WIB)* to develop and implement similar workforce development programs tailored to the unique needs of the Region. By studying the WIB's strategic planning, policy guidance, and coordination efforts, the SDBR can adopt best practices to create a comprehensive workforce development strategy. Collaborating with the Pima County WIB could facilitate the sharing of resources, expertise, and successful program models, ensuring that the SDBR aligns its workforce initiatives with local economic demands and programs. Such a partnership helps establish sector partnerships, career pathways, and training programs that equip the local workforce with the skills needed to thrive in the Region's key industries.

3. Engagement of Seasonal Residents in Workforce Training:

Initiate programs that leverage the experience and skills of seasonal residents for mentorship and training. These programs can provide valuable workforce readiness support, capitalizing on the expertise of retirees or semi-retirees who spend part of the year in the Region.

4. Industry and Academic Collaboration:

Strengthen the partnership between local businesses and educational institutions to collectively address the demand for technical talent, particularly in emerging sectors such as technology, renewable energy and tourism. This approach enables the development of specialized training programs that are directly linked to the needs of the local economy, ensuring a relevant and skilled workforce.

Two prominent actors currently offer sector-specific workshops and networking opportunities. ISDA runs a registered *apprenticeship program* that connects apprentices with a mentor to learn the basics related to repairing and renovating their local community. The Ajo Center for Sustainability also offers a *summer agricultural internship* that allows an educational, hands-on experience for those looking to gain experience in thoughtful agricultural practices.

5. Career Pathways Information for Mid-career Individuals:

Produce informational materials aimed at those already in the workforce who may be seeking new opportunities, including those currently employed and those looking to re-enter the workforce. Highlight training requirements, available training resources, and identify gaps in existing programs to develop new ones as necessary. This initiative should aim to provide clear guidance on career transitions and up-skilling opportunities.

6. Expansion of Access to Adult Education and Lifelong Learning:

Increase the availability of adult education programs, including GED completion, vocational training, and lifelong learning opportunities. Ensure that all members of the community have the chance to upgrade their skills and adapt to changing labor market demands.

7. Target Funding for Critical Occupations:

Actively seek and allocate funding for training programs in occupations facing significant supply-gap issues, such as healthcare, hospitality, and trade construction (WIOA is a good source of funding for such programs and will be implemented in partnership with the local WIBs). This strategic action focuses on addressing immediate and long-term workforce shortages in critical sectors, ensuring the Region's economic health and resilience.



Goal 3: Expand healthcare access and focus on comprehensive services, including preventative care and mental health, especially for underserved communities.



A healthy workforce is a cornerstone of economic development, as it enhances productivity, reduces absenteeism, and fosters a more vibrant community. In the Region, accessible and high-quality healthcare services are critical to maintaining a robust workforce capable of supporting the Region's economic goals.

Healthcare facilities such as Desert Senita Community Health Center, San Simon Health Center, and Adelante Healthcare are pivotal in addressing the healthcare needs of the Region's communities including Ajo, Gila Bend, and districts within the Tohono O'odham Nation. However, these areas continue to face several healthcare challenges due to geographic dispersion, limited facilities, and financial constraints, impacting the availability and quality of medical services.

The geographic isolation and economic challenges in the Region underscore the need for accessible and affordable healthcare services. Currently the three health centers in the Region, as the sole providers of medical services in their service areas, play a crucial role in ensuring the health and well-being of individuals.

Initiatives to improve healthcare access in the SDBR include the adoption of mobile clinics that can provide essential healthcare services directly to these isolated communities, improving access to primary care, screenings, and preventive services.

To further bolster healthcare in the Region, enhancing health literacy programs and workforce training programs are vital. Health literacy programs are designed to educate the community on health maintenance, disease prevention, and the significance of regular healthcare consultations. These programs aim to empower residents to make informed health decisions, potentially reducing hospital visits and improving overall health outcomes. It also helps residents become better informed about healthcare options and services to provide information and assistance to their neighbors and friends, many of whom do not participate in local healthcare services.

Workforce training programs are essential for expanding the capabilities of the local healthcare workforce, addressing the shortage of healthcare providers, and ensuring access to high-quality healthcare services. Such training can cover specialized skills for managing chronic diseases, emergency medical response, and the effective use of telemedicine technologies.

Implementing these programs involves community engagement initiatives like workshops, health fairs, and school-based health education, aiming to instill a culture of health awareness and self-care practices across all age groups. Collaborations with local schools, community centers, and faith-based organizations are crucial for the widespread dissemination of health education, establishing it as a community development cornerstone.

Furthermore, workforce training necessitates partnerships with educational institutions, healthcare organizations, and government agencies to align training opportunities with the Region's healthcare needs. Offering scholarships, internships, and mentorship programs can attract individuals to healthcare careers, while continuing education for current healthcare workers ensures that the workforce remains at the forefront of medical practice.

The challenges faced by healthcare providers in the Sonoran Desert Biosphere Region highlight the importance of sustained investment and innovation in rural healthcare infrastructure. Efforts to attract and retain medical professionals through loan repayment programs, along with community health outreach programs focused on education and preventive care, are essential steps toward building a more resilient and accessible healthcare system for residents.

Objectives

Provide a holistic and integrated range of healthcare services that meet the diverse needs of the community

Develop a skilled and culturally competent healthcare workforce

Improve healthcare infrastructure

Elevate health literacy among the population to empower individuals with the knowledge and skills needed to navigate the healthcare system effectively

Strategic Actions

1. Expansion of Services Offered in Clinics:

Assess current services offered by clinics and identify gaps based on community feedback and health data. Implement a phased plan to introduce additional services such as mental health care,

chronic disease management, and pediatric care to meet the broader needs of the community. Collaborate with healthcare professionals, including visiting specialists, to extend the range of services available in existing facilities.

2. Establishment of Healthcare Facilities in Underserved Areas:

Develop and execute a detailed plan to construct new healthcare facilities, including clinics and mobile health units, specifically targeting underserved regions within the SDBR. This strategic action aims to bridge the gap in healthcare access, ensuring all community members—regardless of their geographic location—have equitable access to essential healthcare services. Prioritize locations based on community health needs assessments to maximize impact.

Worldwide, according to the United Nations, nearly 50% of indigenous adults over the age of 35 suffer from type 2 diabetes. The *Minority Health Office* reports that in 2018, American Indians were almost three times more likely than non-Hispanic white adults to be diagnosed with diabetes. Diabetes puts these populations at risk for further complications related to kidney disease, as well as degenerative retinal disease. In 2020, only 1% of American Indians received preventative care for diabetes and related diseases.

3. Community-Wide Health Promotion and Disease Prevention Programs:

Implement comprehensive health promotion and disease prevention initiatives across the community that address prevalent health concerns such as diabetes, heart disease, and obesity. These programs will involve a combination of educational outreach, routine health screenings, and vaccination campaigns designed to engage community members in proactive health

maintenance and disease prevention. Efforts should be tailored to the specific health profiles and needs of different community segments to ensure effectiveness.

4. Healthcare-Focused Workforce Development Programs:

Create and launch targeted training and development programs aimed at expanding the local healthcare workforce. This includes not only traditional medical roles such as doctors and nurses but also extends to mental health professionals and support staff. A key focus will be on training programs that emphasize service to underserved communities, ensuring that healthcare professionals are prepared to meet the unique needs of these populations. Partnerships with local educational institutions and healthcare organizations will be vital in developing and delivering these programs.

Sonoran University of Health Sciences, formerly Southwest College of Naturopathic Medicine and Health Science, is undergoing a transition towards offering more courses and degrees. This transition may provide the Region the opportunity to partner with new programs and degrees offered at the university. The school recently added a College of Nutrition and a School of Mental Health. Both programs, if leveraged, could aid in the staffing and service shortage experienced by the Region.

5. Coordinated Care Network Establishment:

Forge partnerships among healthcare providers, community organizations, and government agencies to establish a coordinated care network. This network will focus on delivering holistic healthcare services that address the complete health needs of individuals and families, facilitating seamless access to a range of services from preventative care to specialized treatment. The network aims to streamline care delivery, improve health outcomes, and enhance patient experiences through coordinated efforts and resource sharing.

6. Healthcare Infrastructure Upgrades:

Invest in upgrades to existing healthcare infrastructure, ensuring facilities are equipped with the latest medical equipment and technology necessary for high-quality care delivery. This includes diagnostic tools, treatment technologies, and patient management systems. Upgrading infrastructure will not only improve the quality of care but also increase the efficiency of healthcare delivery, making it easier to address the needs of the community effectively.

Health Fairs and Screenings bring together the community and health professionals to provide information on various health topics and services available. Specifically, health fairs inform the public about the services available from the region's providers, as well as provide information related to the specific health barriers within the region. Additionally, health fairs may offer free health screenings, like blood pressure, to allow the community to be informed on their own personal well-being.

As a good example, Desert Senita Community Health Center runs an annual health fair and frequently offers screenings at their facilities. These screenings range from mammograms to bone density scans to retinal imaging. Regular updates are posted on the Desert Senita Community Health Center [Facebook page](#).

7. Health Literacy Improvement Initiatives:

Launch targeted initiatives designed to improve health literacy among the population. These efforts will focus on educating community members about health issues, the importance of preventative care, and how to navigate the healthcare system effectively. By empowering individuals with the knowledge to make informed health decisions and engage in healthy behaviors,

these initiatives aim to foster a community that is more proactive about its health and wellbeing.

8. Community Health Worker Program:

Establish a community health worker program to serve as a bridge between healthcare providers and the community. Community health workers can offer culturally sensitive health education, navigate patients through the healthcare system, and provide support for managing chronic conditions. By working within their own communities, these individuals can foster trust and improve the overall effectiveness of health interventions.

9. Mental Health First Aid Training:

Offer mental health first aid training programs to educators, law enforcement officers, and community leaders. This training aims to equip non-healthcare professionals with the skills to recognize signs of mental health issues and provide initial support and guidance to individuals in distress, bridging the gap until professional help is available.



Goal 4: Ensure the access of quality, sustainable, and affordable housing to meet the diverse needs of the population.



Housing remains a concern for resident quality of life and plays a critical role in attracting and retaining a diverse demographic across income and age groups. The Region faces unique challenges and opportunities, shaped by its vast landmass and the specific conditions governing land availability, including protected areas that limit development.

In some communities within the region such as Gila Bend, San Lucy and Pisinemo Districts, there is a pressing need for new and affordable housing developments. Conversely, other areas such as Ajo possess a significant stock of abandoned houses that present an opportunity for rehabilitation. It's crucial to address the specific needs of each community distinctively. For instance, areas like Ajo have numerous older homes requiring extensive maintenance and upgrades. Initiatives such as the ISDA's Apprentice-to-Journeyman program are exemplary, offering affordable home maintenance while simultaneously providing local employment and training opportunities.¹

In Gila Bend, the affordable housing crisis mirrors broader state-wide challenges, albeit with some promising developments on the horizon. Recent funding initiatives by Maricopa County, which include over \$10 million for a Community Land Trust, aim to enhance housing affordability through the acquisition,

¹ More about the program: <https://static1.squarespace.com/static/5e0144fd0435dd177bb77d3b/t/5e5ada499d9d61249da95138/1583012434451/ISDA+journeyman.pdf>

rehabilitation, and resale of single-family homes for low-to-moderate income residents.²

Developing smaller, sustainable housing options such as tiny homes can be innovative solutions to combat urban sprawl and effectively utilize available land. Accessory Dwelling Units (ADUs) are also seen as a viable solution, allowing homeowners to add independent residential units on their existing properties. Collaborative efforts with organizations like USDA Rural Development and local entities such as Pima and Maricopa Counties could facilitate the necessary approvals and funding to promote such developments.

Moreover, the focus should be on enhancing existing neighborhoods to create integrated, vibrant community spaces, rather than developing isolated, homogeneous developments. This approach not only protects the community's atmosphere but also ensures new developments are seamlessly woven into the existing social and cultural fabric.

² <https://www.maricopa.gov>

Objectives

Identify and repurpose vacant, abandoned, or underutilized properties as affordable housing solutions, and efficient use of existing resources.

Increase the development of a range of housing types, including single-family homes, townhouses, apartments, and co-housing communities, to cater to different family sizes, income levels, and lifestyle preferences.

Strategic Actions

1. Housing Needs Assessment:

Begin by commissioning a detailed study to understand the current housing landscape, including the availability, affordability, and condition of existing housing stock, as well as identifying future housing needs. This assessment should consider demographic trends, economic factors, and environmental sustainability concerns unique to the Region. To facilitate the process, increase the engagement with housing authorities such as *Housing Authority of Maricopa County*, *Regional Affordable Housing Commission | Pima County, AZ*, to commission these studies.

2. Seasonal Resident Engagement and Housing Maintenance Skills Assessment:

Initiate a program to engage retirees and winter residents who are interested in contributing to the redevelopment of vacant buildings and units. Conduct skills assessments to identify their areas of expertise, such as construction, architecture, project management, teaching, or training. This step involves organizing workshops and informational sessions to inform retirees about the opportunities available and the impact their involvement could have on community revitalization efforts.

Create specialized training programs that leverage the expertise of seasonal residents to mentor young professionals and community volunteers involved in housing redevelopment

projects. These programs could cover a range of topics, from sustainable building practices and renovation techniques to project management and financial planning. The goal is to facilitate knowledge transfer and capacity building, empowering a new generation of workers with the skills needed for successful redevelopment while providing retirees with meaningful part-time employment and volunteer opportunities.

3. Funding Strategy and Capacity Building:

Developing a comprehensive funding strategy for supporting housing redevelopment projects. This strategy involves identifying and targeting potential capital sources, such as government grants for urban renewal and affordable housing, and attracting private investors interested in sustainable development. Establishing public-private partnerships can leverage resources and expertise from both sectors for mutual benefit. To ensure effective execution, capacity-building workshops for housing authority team members are crucial. These workshops will focus on grant writing to create compelling, compliant proposals that highlight community impact, as well as investment pitch workshops to engage private investors by emphasizing the financial viability and social value of renovating and preserving existing structures.

Goal 5: Promote sustainable agriculture and strengthen local food systems to improve food security and resilience.



The Sonoran Desert Biosphere Region faces significant challenges related to food security and access to nutritious foods. Despite Arizona's prominence as the third-largest producer of fresh market vegetables and a leading state in organic vegetable production¹, a substantial portion of the population struggles to obtain healthy food. In 2022, the U.S. Department of Agriculture reported that 12.8% of Americans experienced food insecurity, defined as limited access to adequate food due to financial constraints². In Arizona, around 13% of residents face similar challenges. *Feeding America* estimates that while nearly 9% of residents in Maricopa County experience food insecurity, Pima County food insecurity sits at an estimated level of 14%. Additionally, Yuma County ranks the highest amongst the three with nearly 18% of their residents as food insecure. This highlights a critical need for effective food security initiatives.

The SDBR encompasses diverse communities with unique needs, particularly in remote and rural areas where access to fresh, nutritious and affordable food is limited. These areas often rely on gas stations and Dollar Stores for food and necessities due to a scarcity of fresh markets and grocery stores, leading to the designation of these areas as 'food deserts'. Such conditions

¹ https://agriculture.az.gov/sites/default/files/AZDA_GuideToAZAg_2018.pdf

² <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-security-and-nutrition-assistance/#:~:text=The%20prevalence%20of%20food%20insecurity,of%20a%20lack%20of%20resources.>

underscore the importance of local initiatives that allow residents to participate in local food production and distribution to enhance food security and build resilient local food systems by increasing the consumption of fruits and vegetables³.

State and non-governmental organizations have made strides in addressing food insecurity. The *Arizona Food Bank Network*, and *Arizona Food Systems Network* have developed interconnected systems of food banks and coalitions to provide consistent aid. The *Arizona Statewide Food Action Plan* emphasizes creating sustainable local food production, distribution, and processing systems. However, challenges remain, particularly in ensuring equitable food distribution across urban and rural areas.

Food banks play a crucial role in this effort. The SDBR falls within the service areas of the Yuma County Food Bank and the Southern Arizona Food Bank, which tend to primarily serve urban regions, potentially leading to uneven distribution in more remote areas. Initiatives like the Tucson Food Share and Free Food Pantries, supported by funds from the American Rescue Plan⁴, and Temporary Emergency Food Assistance program

³ <https://www.cambridge.org/core/journals/public-health-nutrition/article/place-and-food-insecurity-a-critical-review-and-synthesis-of-the-literature/01F27415CF7E86D06E67FE2347D73086>

⁴ In 2024, Maricopa County dispersed \$500,000 in American Rescue Plan Funds to various municipalities within the County to provide housing and nutrition assistance to income-qualified individuals. These funds have gone to sustaining food distribution through the Tucson Food share and Free Food Pantries.

(TEFAP), provide vital assistance, but more comprehensive strategies are needed to address food insecurity holistically.

Residents in remote regions are particularly vulnerable, with evidence suggesting that local food production and distribution initiatives can significantly improve access to nutritious food.¹

Objectives

Strengthen food security initiatives

Increase local agricultural production and develop methods for its distribution

Educate the community on sustainable practices

Strategic Actions

1. Food Bank Distribution Networks:

Expand the reach of existing food banks by integrating mobile distribution services to better serve communities across the Region. This enhances logistical capabilities by partnering with local businesses for resource support.

2. Community And Neighborhood Gardens:

Promote the development of community and neighborhood gardens by utilizing county properties and public spaces. Programs like "adopt a plot" or community gardens can encourage community members to engage in cultivating their own food, thereby enhancing local food production and ensuring fresh produce availability. These gardens can serve as vital community hubs that foster social interaction and collective community engagement.

¹ <https://www.cambridge.org/core/journals/public-health-nutrition/article/place-and-food-insecurity-a-critical-review-and-synthesis-of-the-literature/01F27415CF7E86D06E67FE2347D73086>

3. Local Food Production And Distribution:

Promote local food production and distribution by developing cooperative grocery stores, co-ops, and farmer's markets that source food directly from local farmers and gardeners. This initiative supports local agriculture and ensures access to diverse, affordable food options, especially in underserved communities. Strengthen farm-to-table programs by creating partnerships between local farmers and community institutions like schools, hospitals, and restaurants, and hosting regular events that highlight local produce. Additionally, provide financial assistance to farmers through grants, subsidies, and low-interest loans to adopt sustainable practices and finance necessary equipment and expansion, fostering the sustainability of local farming.

4. Public Awareness And Education Initiatives:

Launch comprehensive public awareness campaigns and educational programs to support local food systems and sustainable agricultural practices. Utilize local media, social media, and community events to educate the community on the benefits of these practices. Partner with schools and community centers to implement educational programs that teach sustainable agriculture and healthy eating. These programs can include hands-on learning experiences, such as school gardens, where students can engage directly with growing food, enhancing their understanding and appreciation of agriculture.²

² <https://www.nifa.usda.gov/about-nifa/blogs/community-foods-projects-improving-national-food-security>

Goal 6: Build strong leadership and foster collaboration across communities for effective strategy implementation and resource sharing.



The Region consists of communities across 3 counties in Arizona. The cross-county nature of the region poses obstacles for leadership and collaboration. The distinct areas within the SDBR have both strengths and weaknesses, and collaboration aids in fortifying existing weaknesses with another area's strengths. These collaborative substitutions in the region's economy can allow for more a resilient expansion of the economy at scale throughout the Region.

The Region falls into the jurisdiction of several different economic development departments. Collaboration amongst several Arizona economic development departments and offices has typically occurred through the establishment of Economic Development Districts, such as the *Southeastern Arizona Governments Organization (SEAGO)*. SEAGO was initially established in 1972, through a series of intergovernmental agreements between the four member counties: Graham, Greenlee, Cochise, and Santa Cruz. SEAGO provides regional planning services in transportation, mobility, economic development, community development, environmental planning, housing, and aging services. SEAGO functions as the hub for collaboration across participating counties through acting as a Council of Governments, or a Regional Council. In doing this, SEAGO acts as a central administrative apparatus of the four counties' grants and guides the economic development strategy for their region.

A centralized point of exposure and communication works as an accessible, public-private facing body to generate dialogues and change within a region. SEAGO aids in the communication efforts between member counties and tribes. The *SEAGO* website showcases the member towns and counties and connects interested entities easily with the members' websites and social media. Currently, other organizations in the operate on a smaller scale to SEAGO, but similarly function as an administrative hub. Organizations such as ISDA enhance collaboration amongst businesses and leaders within Ajo and the area immediate surrounding the community. This collaboration has aided in securing funds and exposure to the community's efforts to develop, expand, and renovate available spaces in Ajo.

Regional integration methods can contribute to social networks and the formation of incentive structures between entities. Regional integration can lower information costs and increase the accessibility of information across the Region. Elected officials and their governments tend to avoid collaboration beyond jurisdictional boundaries due to risk aversion and resource constraints. In merging jurisdictional boundaries, regional collaboration lowers risk, and the potential political costs associated with information and resource sharing. In the area of economic development, regional collaboration contributes to efficient transmission of information, broader network structures, and the solving of coordination problems.

Regular meetings and special councils contribute to feelings of efficacy and collaboration within communities. *Youth civic engagement* in municipal governments has the power to benefit both the community and youth who participate. In offering avenues for youth participation in municipal governments, participating populations may experience feelings of enhanced self-esteem, empowerment, and self-efficacy. The engagement of youth in government and decision-making processes is shown to aid in decreasing inequality in each Region. The introduction of youth voices aids in bridging gaps in information and grievances that are known to younger demographics and maybe not be apparent to older ones.

Collaboration on several levels offers the potential to build out resilient connections between localities and continue to grow strong economies throughout the region. Deeper connections throughout the Region can aid in further resource sharing and reduce transaction costs related to being in a geographically large and remote area.

Objectives

Establish effective communication mechanism between stakeholders

Develop leadership training programs for required areas

Foster collaborative projects and resource sharing

Strategic Actions

1. Communication Platform:

Develop robust digital platforms such as a regional collaboration portal. This could include features like online forums, newsletters, and shared document repositories that facilitate seamless information sharing and coordination among all stakeholders.

2. Youth Council:

Establish a youth council to engage younger generations in regional planning and leadership. Recruit young leaders from diverse backgrounds within the Region to form the youth council. Provide training and mentorship to empower these young leaders to participate actively in decision-making processes. The youth council will serve as a platform for the younger generation to voice their ideas and perspectives, ensuring that Regional strategies are inclusive and forward-thinking.

3. Leadership Training and Mentorship Programs:

Conduct a detailed needs assessment in collaboration with educational institutions to pinpoint critical areas requiring leadership training. Based on this assessment, develop tailored leadership training programs with local universities and colleges, covering strategic planning, community engagement, and conflict resolution.

Also, set up mentorship programs that link emerging leaders with experienced professionals. These can include one-on-one mentoring, group workshops, and networking events, all designed to foster leadership skills and professional development.

4. Collaborative Projects and Resource Sharing:

Facilitate workshops and focus groups to implement common goals and the unified regional action plan determined in the CEDS. Through that process, initiate joint projects that leverage diverse stakeholder strengths, such as infrastructure development, tourism expansions, environmental conservation, food security and educational program as discussed in this Plan. Also, perform a resource mapping to efficiently plan and execute resource sharing among the stakeholders.

Goal 7: Develop the Region as a sustainable tourism destination that highlights its unique environmental and cultural assets, enhancing resident quality of life and visitor experiences.

The Sonoran Desert Biosphere Region represents a unique and invaluable ecosystem that spans parts of Arizona and northern Mexico. With its rich biodiversity, distinct landscapes, and cultural heritage, the SDBR is an ideal candidate for sustainable tourism development. Sustainable tourism seeks to minimize negative impacts on the environment, culture, and economy while maximizing positive contributions, ensuring that resources are preserved for future generations, cultural heritage is respected, and local communities benefit economically. A 2023 study by the Global Wellness Institute found that the wellness tourism market, which often overlaps with ecotourism, is expected to reach \$1.4 trillion by 2027. This¹ demonstrates the increasing demand for travel experiences that are both enriching and sustainable.

The primary objective, therefore, should be to preserve and promote the Region's diverse cultural and environmental assets. This can include initiatives to protect indigenous traditions, historical landmarks, and local arts, creating enriching cultural experiences for visitors and locals alike. This includes initiatives to protect indigenous traditions, historical landmarks, and local arts. For instance, programs similar to those at the *Feynan Ecolodge* in Jordan, which promotes local culture and environmental responsibility through community-driven projects, can serve as an effective model. Collaborations with cultural

¹ <https://globalwellnessinstitute.org/global-wellness-institute-blog/2023/11/28/wellness-tourism-will-cross-the-1-trillion-mark-in-2024/>

institutions can lead to interactive workshops, guided tours, and educational campaigns that emphasize the importance of preserving these assets. These initiatives ensure that both locals and visitors appreciate and engage with the rich cultural heritage of the Region.

Engaging local communities in tourism development ensures that the benefits of tourism are equitably distributed. Platforms for community input and engagement in decision-making processes are essential, allowing locals to shape tourism strategies that impact their lives and livelihoods. This approach aligns with the principles of community tourism², where local communities retain control over tourism activities and reap direct benefits, as seen in successful models around the world.

The Region's proximity to the Mexico border presents a significant opportunity to expand the tourism industry. Collaboration with Mexican partners can create a truly tri-national tourism experience, attracting visitors from both sides of the border. This collaborative approach can extend to marketing efforts, promoting the region to both RV park enthusiasts seeking affordable options and high-end tourists interested in resort experiences.

² More about community-based tourism: Mtapuri, Oliver & Camilleri, Mark Anthony & Dluzewska, Anna. (2021). Advancing community-based tourism approaches for the sustainable development of destinations. *Sustainable Development*. 1-24. 10.1002/sd.2257.



Objectives

Promote and preserve the Region’s environmental and cultural assets.

Enhance infrastructure and facilities to support sustainable tourism.

Engage local communities in tourism development and benefits.

Implement marketing strategies to attract visitors.

Strategic Actions

1. Cultural Heritage Programs:

Develop initiatives to preserve and promote the Region's diverse cultural heritage, including indigenous traditions, historical landmarks, and local arts. Forge partnerships with cultural institutions to create enriching cultural experiences that attract visitors and educate both locals and tourists about the importance of preserving environmental and cultural assets. These initiatives could include interactive workshops, guided cultural tours, and extensive educational campaigns utilizing both physical and digital informational materials.

2. Eco-Friendly Infrastructure, Transportation, and Accessibility:

Invest in sustainable infrastructure improvements, such as solar-powered facilities and eco-friendly waste management systems, to minimize tourism's environmental footprint. Enhance the Region's accessibility through the development of sustainable transportation options like electric bus services, bike-sharing programs, and well-maintained and covered walking paths to promote low-impact travel options for tourists.

3. Visitor Facilities and Accommodation Development:

Upgrade and expand visitor facilities to include trails, rest areas, eco-friendly hotels, and resorts that adhere to high sustainability standards. Consider developing new RV parks and resort spaces that offer diverse accommodation options to cater to various preferences, ensuring these facilities integrate seamlessly into the natural environment and promote longer stays through attractive local activities and amenities.

4. Create Destination Amenities:

Develop and enhance destination amenities like cultural centers, museums, recreational facilities and art galleries that reflect the Region's unique cultural and natural heritage. Incorporate sustainable design and operations practices in these facilities. Establish thematic tours that showcase the Region's history, culture, and natural landscapes, providing comprehensive and immersive experiences for visitors.

The Sonoran Desert Region is a vibrant cultural hub, significantly influenced by its diverse history and communities. This area is a haven for artists and makers, many of whom draw inspiration from the region's rich heritage. Throughout the year, various events celebrate this artistic vitality, providing creatives with a platform to showcase their work.

In Ajo, the biennial *Ajo Arts weekend* invites both local and international artists, offering a dynamic space for cultural expression and artistic exchange. Additionally, Ajo celebrates the *International Day of Peace*, an event that emphasizes the shared histories and cultures of the local community, neighboring nations, and Mexico.

The Region hosts several street fairs and makers' markets, further enriching its cultural landscape. These events not only highlight the unique artistic contributions of the Sonoran Desert but also attract visitors, enhancing the area's cultural tourism appeal.

5. Community Participation:

Actively involve local communities in the tourism development process to ensure that the benefits of tourism are equitably distributed. Set up platforms for community input and engagement in decision-making, allowing locals to contribute to and shape tourism strategies that affect their lives and livelihoods.

6. Local Business Support:

Enhance support for local enterprises by promoting locally made products and services. Encourage tourists to explore local markets, dine at local restaurants, and visit sites of cultural significance, circulating tourism spending throughout the local economy.

7. Capacity Building:

Implement training and capacity-building programs for community members to equip them with necessary skills for tapping into tourism-related opportunities. These programs include courses on hospitality management, tour guiding, and sustainable conservation techniques.

8. Targeted Marketing Campaigns:

Design and enhance marketing initiatives that highlight the Region's unique environmental and cultural assets, targeting niche markets such as eco-conscious and culturally interested travelers. Use a mix of traditional and digital marketing tools, including social media, travel blogs, and collaborations with travel agencies to reach a global audience.

Current Festival in the Region:

- Ajo Food Festival
- 4th Avenue Street Fair
- Ajo Arts Weekend
- Gila Bend Butterfield Stage Days
- International Day of Peace
- Gila Bend Shrimp Festival
- San Ysidro Festival
- Cactus Fruit Harvest Weekend





4 Economic Resiliency

In addition to the strategies for economic growth discussed throughout this plan, the Region must think about and address economic shocks that can negatively impact the region's communities. Integrating resilience into the CEDS should be undertaken as part of a two-pronged approach:

1. Planning for and implementing resilience through specific goals and actions to bolster the long-term economic sustainability of the region (steady state), and
2. Establishing information networks among the various stakeholders throughout the region to encourage active and regular communications between the public, private, educational, and non-profit sectors to collaborate on existing and potential future challenges (responsive).

Social Vulnerability

External stressors, such as disasters (both natural and man-made) and disease, can cause significant harm to the Region and its communities. The Center for Disease Control (CDC) and Agency for Toxic Substances and Disease Registry (ATSDR) created a *social vulnerability index tool* (SVI) to measure various demographic and socioeconomic factors to predict the susceptibility of the community to these stressors. The index values go from 0 (very low risk) to 1 (very high risk).

Based on these estimates, the Region has a high social vulnerability risk of 0.845¹, with the tracts covering Gila Bend/San Lucy (7233.05) and Sells (9408) having the highest risk levels (see Figure 10). The factors driving the high scores in 7233.05 are Housing and Transportation (with an index score of 0.9775) and Socioeconomic Factors (0.8122). The factors driving the high score in 9408 are Racial and Ethnic Minority (0.9696) and Housing and Transportation (0.9706). Many of these issues were identified and are addressed as strategies within this document. As the Region works on these issues, it can improve these scores and reduce the risks the Region faces in case of disasters and disease.

¹ Calculated using the population weighted average of the census tracts throughout the region using 2020 data. There is no data available for tract 8901.

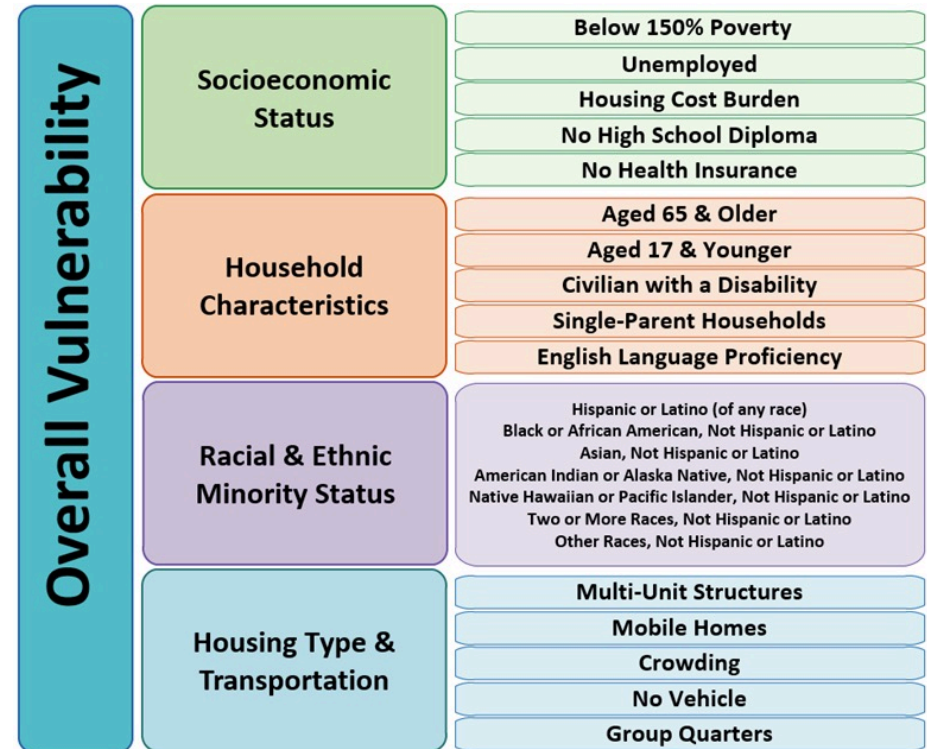
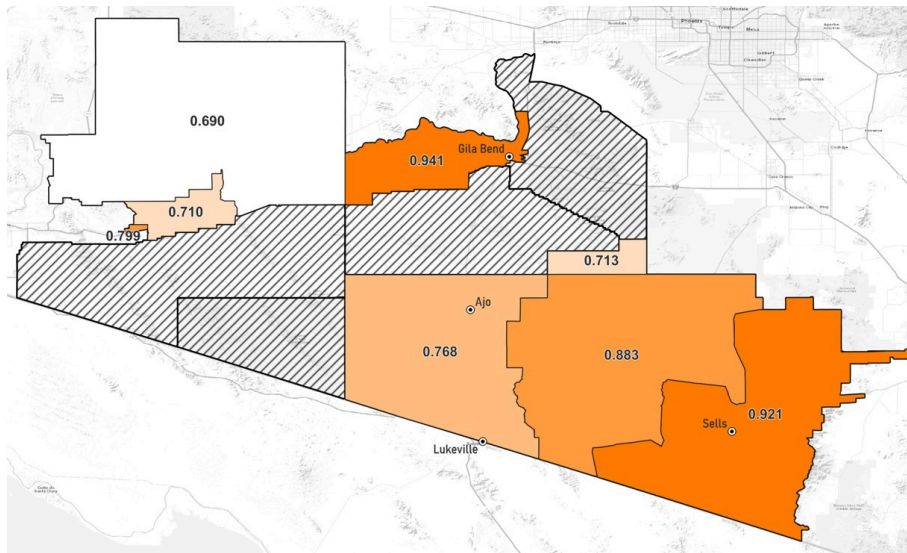


Figure 10—Social Vulnerability Index by Census Tract, 2020



Source: Agency for Toxic Substances and Disease Registry, Center for Disease Control and Prevention

Border Closure

The region's economy is significantly influenced by cross-border labor and tourism. Border crossings have become a significant political issue over the last several years, increasing the risk that the border and specific ports of entry could be closed, either short term or permanently. The Lukeville/Sonoyta border was closed for approximately 1 month, from December 2023 to January 2024, and it has a large impact on tourism and the ability of Mexico-based workers to cross the border to work in Ajo.

Potential border closures pose a substantial threat, as evidenced by the Border Closure impact analysis provided in the Appendix. The reliance on the flow of tourists and labor from border crossings puts local businesses, particularly those dependent on northbound traffic such as restaurants and gas stations, at particular risk, highlighting the need for a diversified economic

base so that the economy can survive if the border were closed long term or if policy was changed at the state or federal level that would impact these activities.

Infrastructure

The Region has a low population density of 1.38 persons per square mile, meaning that the local population is unable to bear the cost of infrastructure maintenance and improvements (roads, electricity, water and wastewater systems, etc.). These costs must be cross subsidized by federal, state, and county resources. Because of this, infrastructure priorities are often slow-moving and difficult to control at the local level. The Region must prioritize infrastructure needs and coordinate together to address critical issues that affect the Region's resilience.

Buildings - As mentioned in the existing conditions section, the median year built of residential units is greater than 50 years. While many residential units can last more than 100 years if maintained well, there are also many units that will be depreciated and/or in dire need of repairs and renovation. This increases the risks of inadequate housing conditions, poor health, and depressed home values.

Commercial buildings should also be a consideration for the sustainability of industry within the region. Many businesses looking to move into the Region must incorporate building improvements into their cost, creating a barrier to entry for small businesses.

Roadways - Quality roads and bridges are critical for economic growth and sustainability. While there have been some improvements to SR 85 just south of Gila Bend, neither of the Metropolitan Planning Organizations have projects specified within the Region over the next several years. Interstate-8 and SR-85 are well maintained roads and do not have any significant issues.

Currently, the roads in greatest needs of maintenance and repair are located on the Nation and are serviced by the Tribal

Transportation Improvement Program (TTIP).

The Arizona department of transportation has a planned improvement to the Lukeville/Sonoyta border crossing, but it is a low priority project in the *Arizona-Sonora Border Master Plan* and would only have a marginal impact on the Region's economy.

Electricity - The Region's electric infrastructure is getting older and depreciating, with many of Ajo's power outages coming from fallen power lines along state route 85, per local stakeholders. The prevalence of outages affects not Ajo, Lukeville, and Why. If electricity is out, it impacts the economic sustainability of these locations and increases business costs due to mitigation and prevention (such as buying a generator to power homes and businesses during an outage) and can discourage visitors and/or residents from wanting to be in the area. Development of local electricity, such as described in this plan, is an important step to ensure the economic sustainability of the Region.

Food Security

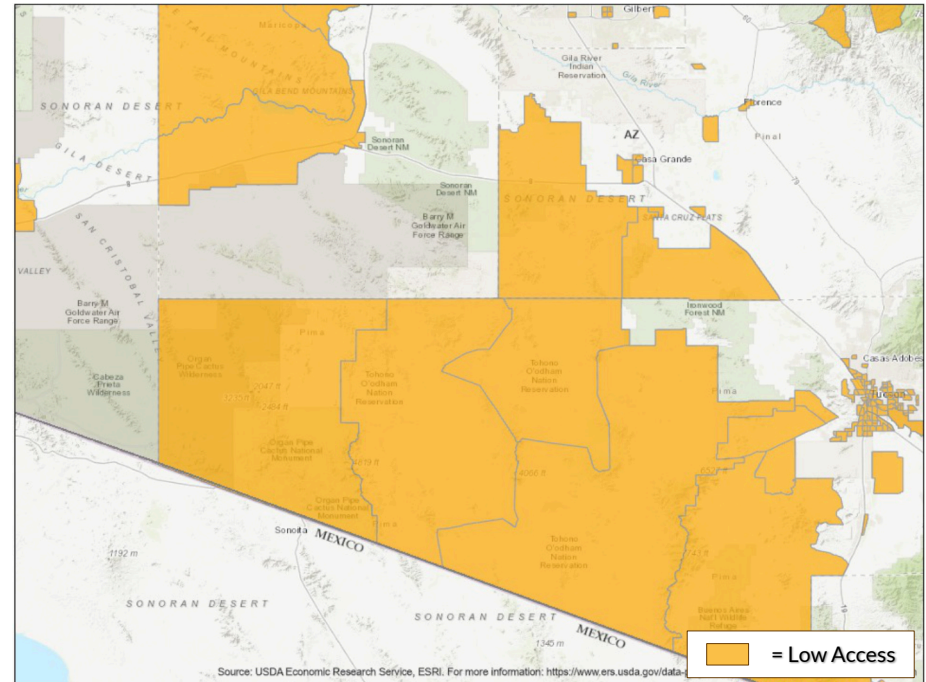
The region currently faces food security challenges related to the location and size of populations throughout. While Arizona prides itself on being one of the largest producers of fresh vegetables and produce (ranking 5th in the U.S. per the *2022 Census of Agriculture*), a large swath of its residents are unable to access nutritious, fresh food. All of the SDBR's populated census tracts are categorized as low access (at least 500 people or 1/3 of the population with poor access to the nearest supermarket, see Figure 11).

While food bank networks aid in food security efforts, the SDBR region contains only one bank in the region that provides emergency food assistance consistently. Residents often rely on gas stations and Dollar stores to purchase their groceries and necessities, decreasing the chances that they have access to quality, nutritious foods.

Poor access means there is limited food security, where supply chain disruptions, road closures, and other events can quickly

lead to famine conditions for the Region's population.

Figure 11—Food Access Map (by Census Tract)



Climate

The Region is susceptible to several climate-related risks, such as flooding, fire, wind, air, and heat. The Risk Factor® for the Region is shown in Table 13 below. The Region's communities are at greatest risk to fire and heat.

Ajo/Lukeville has a moderate risk for fire, with 82% of all properties at risk for being impacted by wildfire. Ajo also has extreme risk from heat, with 97% of homes at extreme risk (the remaining 3% are at severe risk).

Gila Bend has a moderate risk for fire, with 87% of all properties at risk for being impacted by wildfire. The community also has

extreme risk from heat, with 100% of homes at extreme risk.

Pisinemo/Sells has an extreme risk for fire, with 86% of all properties at risk for being impacted by wildfire. The community also has a severe risk from heat, with 52% of homes at extreme risk (another 46% are at an extreme risk of heat).

Both of these issues are expected to worsen over the next 30 years, with climate change leading to a greater number of high-risk temperature days (greater than 100° F). Reducing the number of heat-prone areas and providing amenities to create heat shelters and firebreaks will help reduce community-wide risks and ways to adapt to these challenges.

Table 13—Average Risk Factor by Location

	Flooding	Fire	Wind	Air	Heat
Ajo / Lukeville	Minor	Moderate	Minimal	Minor	Extreme
Gila Bend / San Lucy	Minor	Moderate	Minimal	Minor	Extreme
Pisinemo / Sells	Minor	Extreme	Minimal	Minor	Severe





5 Evaluation Framework

The following tables provide a summarized view of the goals that are provided within the strategic action plan, as well as the strategic actions associated with the goal, proposed metrics to track progress on those items, and the organization/group that will lead the efforts on each task.

This section should be used as the main way of tracking tasks and working with partners on achieving the goals of this 5-year CEDS.



Business

Goal	Strategic Action	Metric	Participating Organizations
Cultivate a dynamic business ecosystem that capitalizes on local strengths and fosters innovation with minimal environmental impact.	Sector-specific workshops and networking events: Organize workshops and events for renewable energy, technology, agriculture, and tourism to provide industry insights and foster collaboration.	Host 4 workshops and networking events annually	Regional Economic Development Agencies, Local Chambers of Commerce, Local Governments
	Business support portal: Develop an online platform for business resources.	Launch the portal by 2026 and achieve 500 registered users by 2028	Local Governments, Regional Economic Development Agencies, Local Chambers of Commerce
	"Open a Business" Resources: Create and distribute materials for new entrepreneurs.	Distribute 100 resource kits annually	Local Governments, Chamber of Commerce
	Succession Planning Forums and Classes: Organize forums and create a database for business succession.	Conduct 2 forums annually; 5 successful business transitions per year	Local Governments, Chamber of Commerce
	Federal Support Advocacy: Engage with representatives to secure funding for tech and renewable sectors.	Increase federal funding by 20% by 2028	Economic Development Agencies, Local Governments
	Incubation/Support Spaces: Invest in incubation spaces in downtown areas.	Establish a new incubation space by 2028	Local Governments, Libraries
	Innovation and entrepreneurship support programs: Collaborate with educational institutions to establish support programs.	Develop a program by 2028; enroll 50 students annually	Economic Development Agencies, Local Governments, Local Universities, Colleges, Vocational Schools,
	Broadband enhancement: Invest in infrastructure for high-speed broadband access.	Achieve 100% broadband coverage by 2029	Local Government, State Government

Education

Goal	Strategic Action	Metric	Participating Organizations
Enhance educational access and focus on skills essential for addressing the Region's unique economic and ecological challenges.	Regional community workforce alliance: Form a broader alliance to identify workforce needs and coordinate training programs.	Establish the alliance by 2026 and conduct 2 meetings annually	ISDA, Educational Institutions, Industry Leaders, Government Representatives
	Regional workforce development plan: Develop a plan to enhance workforce collaboration and expand training opportunities.	Launch the plan by 2027 and increase internship and apprenticeship placements by 20%	ISDA, Local Governments, Workforce Development Agencies, Employers
	Engagement of seasonal residents in workforce training: Leverage the skills of seasonal residents for mentorship and training.	Engage seasonal residents annually in training programs	ISDA, Local Governments
	Industry and academic collaboration: Strengthen partnerships between businesses and educational institutions for technical talent development.	Develop 2 specialized training programs by 2029	Local Universities, Colleges, Industry Partners, ISDA, Local Governments
	Career pathways information for mid-career individuals: Produce informational materials for career transitions and up skilling.	Distribute 200 materials annually and launch a new program by 2028	Local Businesses, Economic Development Agencies, Local Governments
	Expansion of access to adult education and lifelong learning: Increase adult education program availability.	Enroll 50 adults annually in education programs	Community Colleges, Local Libraries, ISDA, Local Governments
	Target funding for critical occupations: Seek funding for training programs in high-demand sectors.	Increase federal funding by 20% by 2029	Local WIBs, State Workforce Agencies, Industry Groups, ISDA, Local Governments

Healthcare

Goal	Strategic Action	Metric	Participating Organizations
Expand healthcare access and focus on comprehensive services, including preventative care and mental health, especially for underserved communities.	Expansion of services offered in clinics: Assess and expand clinic services to include mental health, chronic disease management, and pediatric care.	Introduce a new service per clinic by 2028	Local Health Departments, Local Clinics
	Establishment of healthcare facilities in underserved areas: Construct new facilities targeting underserved regions.	Build at least one new facility by 2029	Local Health Departments, Local Clinics, Local Governments
	Community-wide health promotion and disease prevention programs: Implement programs to address prevalent health concerns.	Conduct health screenings and vaccination campaigns annually	Local Health Departments, Public Health Agencies, Community Organizations, Local Clinics
	Coordinated care network establishment: Establish partnerships for a coordinated care network.	Create the network by 2027	Local Health Departments, Local Clinics, Local Governments
	Health literacy improvement initiatives: Launch initiatives to improve health literacy.	Reach individuals annually through educational programs	Community Health Educators, Libraries, Schools
	Community health worker program: Establish a program to connect healthcare providers and the community.	Recruit and train community health workers by 2027	Healthcare Providers, Community Organizations, Local Government
	Mental health first aid training: Offer training programs for non-healthcare professionals.	Create a training program by 2027	Healthcare Providers, Community Organizations, Local Government

Housing

Goal	Strategic Action	Metric	Participating Organizations
<p>Ensure access to quality, sustainable, and affordable housing to meet the diverse needs of the population.</p>	<p>Housing needs assessment: Commission a study to assess the current housing landscape and future needs.</p>	<p>Complete the assessment by 2026 and update every 5 years</p>	<p>Housing Authorities, Local Governments, Organizations</p>
	<p>Seasonal resident engagement and housing maintenance skills assessment: Engage retirees in housing redevelopment and assess their skills and develop training programs for retirees to mentor young professionals in housing projects.</p>	<p>Conduct engagement sessions annually Launch a new program by 2026</p>	<p>Local Governments, Retirement Communities, Organizations</p>
	<p>Funding strategy and capacity building: Develop a strategy for funding housing projects and conduct capacity-building workshops.</p>	<p>Create a funding strategy by 2027</p>	<p>Housing Authorities, Local Governments, Organizations</p>

Food Security

Goal	Strategic Action	Metric	Participating Organizations
Promote sustainable agriculture and strengthen local food systems to improve food security and resilience.	Food bank distribution networks: Expand food banks with mobile distribution services and local business partnerships.	Establish new mobile distribution units by 2026 and increase food distribution by 20%	Local Food Banks, Local Businesses, Community Organizations
	Community and neighborhood gardens: Develop gardens on county properties and public spaces to enhance local food production.	Create new gardens by 2027	Local Government, Community Organizations, Schools
	Local food production and distribution: Promote local food production through co-ops, farmer’s markets, and farm-to-table programs.	Increase local food sourcing by 20% by 2028 and support new local farmers annually	Farmers, Local Markets, Community Organizations
	Public awareness and education initiatives: Launch campaigns and educational programs on sustainable agriculture and healthy eating.	Conduct educational events annually	Local Media, Schools, Local Governments, Community Organizations

Collaboration

Goal	Strategic Action	Metric	Participating Organizations
Build strong leadership and foster collaboration across communities for effective strategy implementation and resource sharing.	Communication Platform: Develop a regional collaboration portal for seamless information sharing.	Launch the portal by 2026 and achieve 200 active users by 2028	Local Governments, Community Organizations
	Youth Council: Establish a youth council to engage younger generations in regional planning.	Form the council by 2026 and recruit 10 members annually	Educational Institutions, Community Organizations, Local Governments
	Leadership Training and Mentorship Programs: Develop leadership training and mentorship programs in collaboration with local universities.	Conduct a training program and 4 mentorship sessions annually	Local Universities, Colleges, Industry Leaders
	Collaborative Projects and Resource Sharing: Facilitate workshops and initiate joint projects for unified regional action.	Host 2 workshops annually and launch 2 joint projects by 2027	Regional Stakeholders, Local Governments, Community Organizations

Tourism

Goal	Strategic Action	Metric	Participating Organizations
Develop the Region as a sustainable tourism destination that highlights its unique environmental and cultural assets, enhancing both resident quality of life and visitor experiences.	Cultural Heritage Programs: Develop initiatives to preserve and promote the Region's cultural heritage, including interactive workshops and guided tours.	Launch 3 cultural heritage programs by 2026 and engage participants annually	Indigenous Groups, Local Government
	Eco-Friendly Infrastructure, Transportation, and Accessibility: Invest in sustainable infrastructure and transportation options.	Complete 2 infrastructure projects by 2030 and introduce a new sustainable transportation option	Local Government, Environmental Organizations, Transportation Agencies
	Visitor Facilities and Accommodation Development: Upgrade and expand visitor facilities, including eco-friendly hotels and RV parks.	Encourage the development of 2 new eco-friendly accommodations by 2030 and increase average visitor stays by 20%	Local Government, Hospitality Industry, Environmental Groups
	Create Destination Amenities: Develop and enhance amenities like cultural centers and museums, incorporating sustainable design.	Establish a new cultural or recreational facility by 2030.	Local Businesses, Cultural Institutions, Environmental Groups
	Community Participation: Involve local communities in tourism development through platforms for input and engagement.	Host community engagement sessions annually and integrate feedback into new major tourism initiatives	Local Governments, Community Organizations, Tourism Boards
	Local Business Support: Enhance support for local enterprises by promoting locally made products and services.	Increase local business participation in tourism by 20% by 2030	Local Businesses, Chambers of Commerce, Tourism Boards
	Capacity Building: Implement training programs for community members in hospitality, tour guiding, and conservation.	Train community members annually through capacity-building programs	Local Educational Institutions, Hospitality Industry, Environmental Organizations
	Targeted Marketing Campaigns: Design marketing campaigns highlighting the Region's environmental and cultural assets.	Launch targeted marketing campaigns by 2026 and increase potential visitors annually	Local Businesses, Chambers of Commerce, Tourism Boards

6 Appendix



Location Quotient

The last column on the chart on page 16 provides the location quotient analysis, which is a statistical method used to measure the concentration of industries or occupations in a geographic area in relation to its concentration in a larger area (usually a state or a country).

The employment location quotient (LQ) analysis for the Sonoran Desert compares the concentration of employment by industry in the region with the State averages. The LQ is calculated as shown below:

$$\text{Location Quotient (LQ)} = \text{Local Proportion} \div \text{State Proportion}$$

Where the local and state proportions are calculated as follows:

$$\text{Local Proportion} = \frac{\text{Employees in the Region in Industry X}}{\text{Total Number of Employees in the Region}}$$

$$\text{State Proportion} = \frac{\text{Employees in the State in Industry X}}{\text{Total Number of Employees in the Region}}$$

Location quotient analysis is commonly used in economic development, regional planning, and workforce development to identify industry clusters, target industries for growth, and understand the competitive advantages of a particular region or locality.

Agriculture in the Sonoran Desert accounts for 7.3% of total employment – more than seven times the State’s 1.0% share. Additionally, the Sonoran Desert’s Employment Location Quotient indicates it has 7.3 times the concentration of Agriculture as the Arizona averages.

Other industries with high concentrations in comparison to the State include Utilities (LQ = 3.6, meaning that it has 3.6 times the concentration of Utilities as the Arizona averages) and Public Administration (LQ = 2, meaning it has 2 times the concentration of Public Administration as Arizona averages).



Lukeville/Sonoyta Port of Entry Closure Impacts

On December 4, 2023, the Lukeville Port of Entry (POE) closed indefinitely and without warning. It was closed for approximately a month, depressing the Sonoran Desert Biosphere Region’s (SDBR) economy. Despite lasting only one month, the closure stirred border communities’ concerns regarding their dependency on the POE, as well as the impact of the closure on businesses and residents. This study provides insight into how the SDBR was impacted by this closure. Using visitation-travel data, POE border crossing data, and business testimonials, there is compelling evidence that an extended or permanent closure would have catastrophic impacts on the region's economy.

The Lukeville POE serves as a main crossing for those going between the Arizona metro areas and the Mexican coastline. Ajo, Why, Lukeville, several Tohono O’odham Nation districts, and Gila Bend rely heavily on consistent traveler flows to visit gas stations, restaurants, and hotels as a means of revenues. During the closure, various businesses reported devastating impacts on their sales and their ability to stay afloat. Eric Algeria, owner of the *Agave Grill Restaurant* in Ajo, reported a 25% decrease in sales during the closure. Other business owners reported up to an 80% decrease in sales, describing surrounding towns such as Why as ‘ghost towns’ following the closure due to the lack of traffic flows.

In the months following the border closure, *Rocky Point businesses remained impacted*. Restaurant owner Cindi Lowe reflected on the lack of business in March, several months after the port had been reopened and typically a time of high-volume business due to spring break tourist flows. Lowe suspects that the POE closure earlier in the year posed a degree of uncertainty for tourist flows, causing university students to change their typical plans. Rental property owners stated that reservations were either moved or made last-minute. For example, while nights were rented out during spring break, reservations were made just days in advance instead of weeks or months out. The border closure ultimately created an air of uncertainty among businesses and visitors—plans and reservations remained influenced by the potential for

another closure.

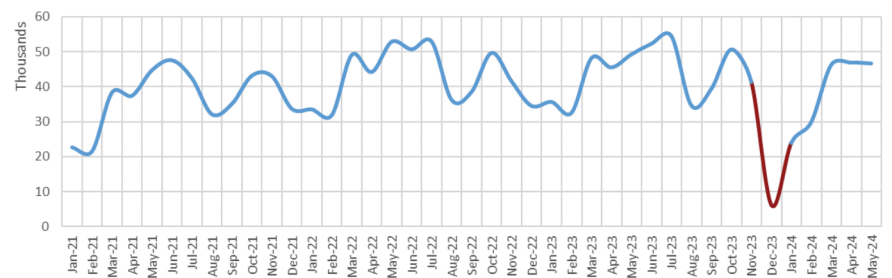
Tourism/Visitation

These news reports largely align with retail foot-traffic data provided for the tourist town of Ajo, AZ. Located about 38 miles from the Lukeville border crossing, Ajo is a common pass-through town and is the only larger community with traveler services close to the POE. Retail foot-traffic estimates refer to the number of individuals that enter a store or location within an area. Comparing the weeks before and after the post closure, Ajo’s retail foot traffic decreased substantially. Ajo experienced a 56% decrease in retail foot traffic in the weeks directly preceding and ensuing the closure (November 20 and December 17). In the week before the closure, Ajo brought more than 11,000 visitors to the town; for the two weeks following the closure, the community experienced a steady decline with an initial drop to 7,400 visitors and then to 4,800 visitors. Tourism traffic data tells a very similar story, with a drop of 78% comparing the weeks preceding and ensuing the closure.

Border Crossings

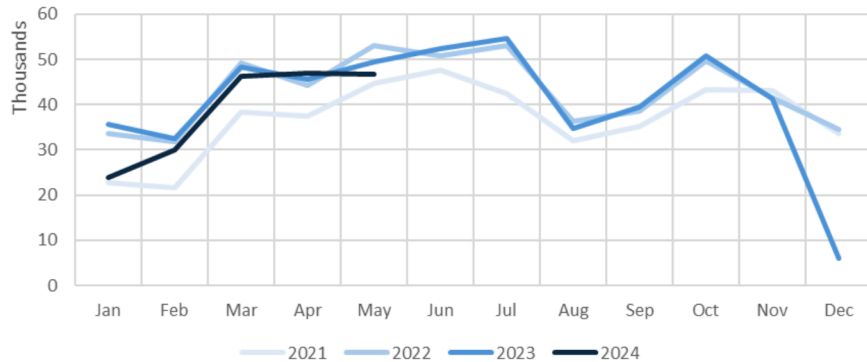
The reports are also collaborated by border crossings. The Lukeville/Sonoyta POE sees an average of 483 thousand crossings into the U.S. a year, or 40 thousand per month. However, this number dropped significantly in December due to the closure (see chart below where the red shade of the line indicates the closure period).

Figure 1—Number of Lukeville Crossings into U.S. by Month



The closure had a significant impact on crossings during the months of December, when crossings weren't allowed through the port export for the first few days. However, the impact on the crossings continued even after the port was re-opened. As shown by the darkest line in the chart below, the number of crossings were slightly lower than 2022 and 2023 crossings in January and still showed some impacts in February. This shows that people became nervous about the port closing again and chose different travel plans until their confidence was restored. In other words, the impact of the closure lasted several weeks after the port was re-opened.

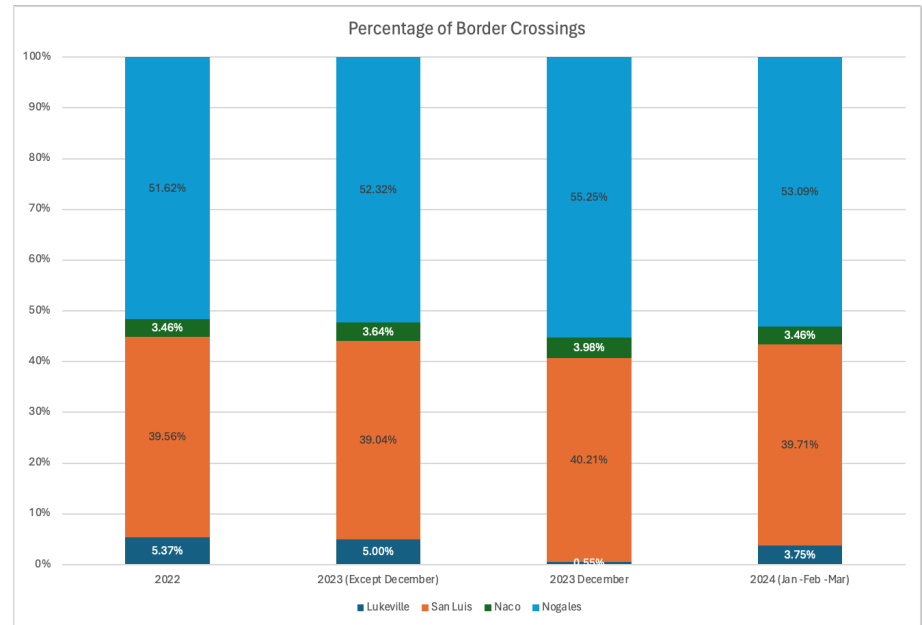
Figure 2—Number of Lukeville Crossings into U.S. by Month and Year



The graphic below shows the percent change in all border crossings at four ports of entry between November to January. Featured on the map are four surrounding ports of entry throughout the state of Arizona: Naco, Lukeville, Nogales, and San Luis. According to 2023 border crossing data, San Luis and Nogales intake close to 90% of total border crossings throughout the state—39% and 52% respectively. Lukeville and Naco contrastingly see 6% and 3% of the total border crossings throughout the state. In the month of December, Lukeville dropped down to receive just 0.55% of the total border crossings throughout the state. This drop in crossings results in a spill-over effect for other ports of entry. San Luis experienced a 1% increase in the number of crossings and Nogales saw a 3% increase in the

number of crossings during the Lukeville port of entry closure.

Figure 3—Percentage of Border Crossings



These data suggest that the Lukeville POE closure contributed to an increase in the number of crossings in other ports. The diversion of resources to other ports also contributed to a diversion of economic activities out of the region and made recovery more difficult following the closure.

Labor Force

The closure also had impacts on the labor force. Interviews with local stakeholders described issues with Mexican-based labor unable to return home, needing to secure accommodations to stay in Ajo during the week and then traveling to the nearest border on weekend to be with family and friends, some of whom need home care services. It increased the commute time for

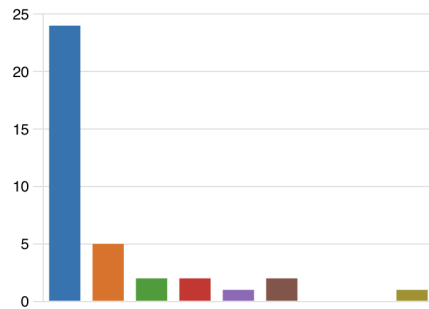
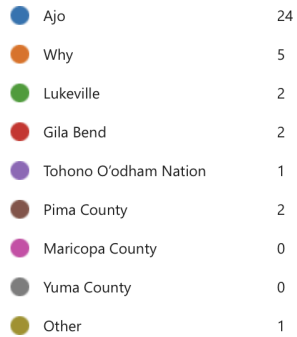
Sonoyta workers from 43 minutes to 5 hours. It also introduced safety risks to workers going from Sonoyta to other ports because they had to travel along routes deemed unsafe and within cartel territory.

Conclusion

The region is highly reliant on the Lukeville/Sonoyta POE, and the closure of the port has significant impacts on businesses and workers. Closure of the port introduces serious risks for the sustainability and resiliency of the region. The region should do what it can to prevent additional closures by working with state and federal agencies to prevent closures in the future.

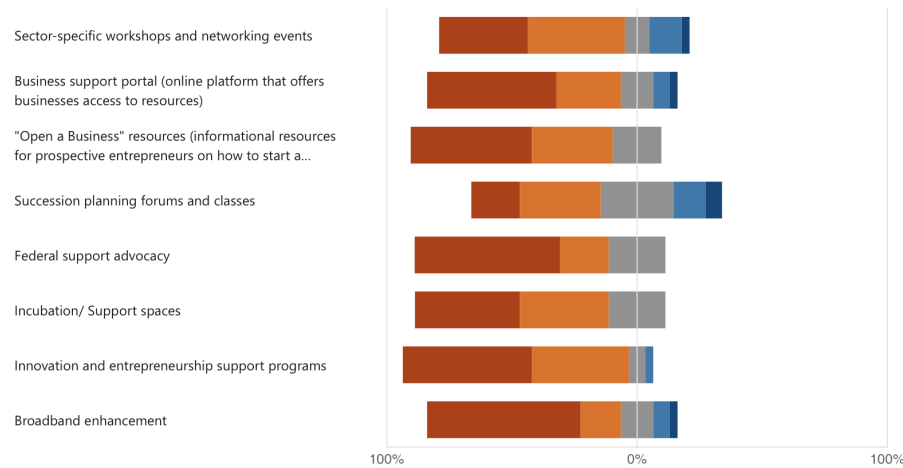
Survey for Prioritization of Strategic Actions

1. Please select the community you are representing in this survey:



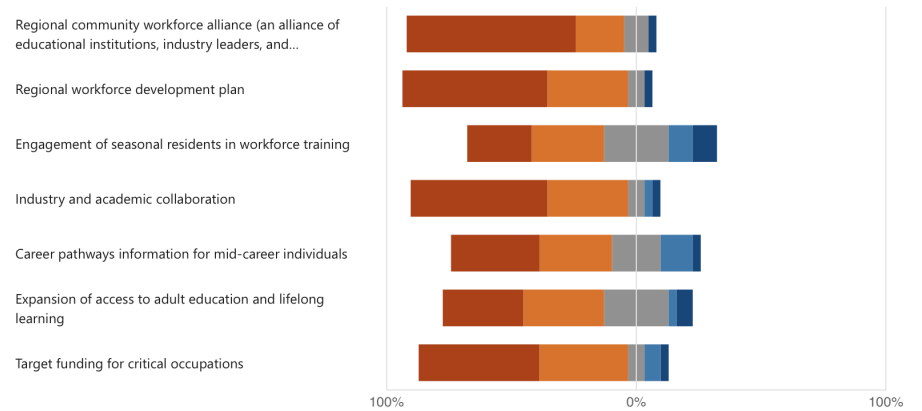
2. Goal 1: Cultivate a dynamic business ecosystem that capitalizes on local strengths and fosters innovation with minimal environmental impact.

Very important Fairly important Neutral Somewhat important Not important



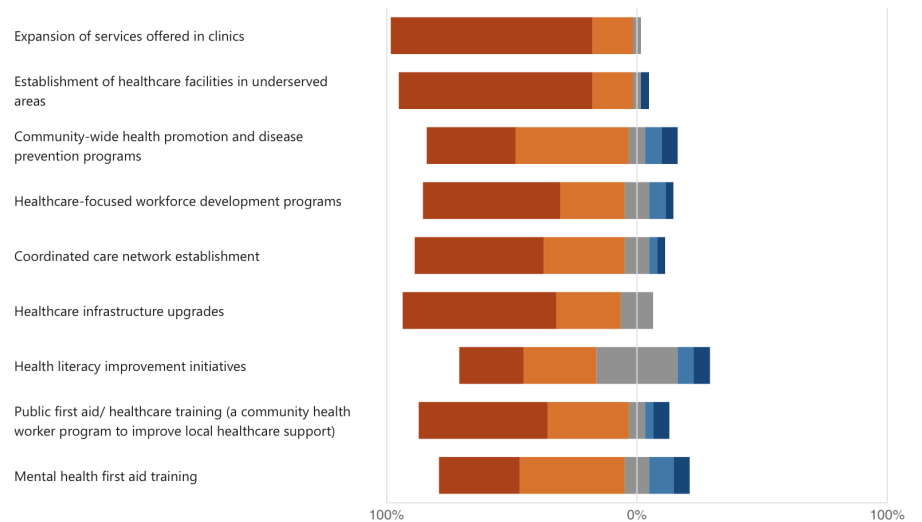
3. Goal 2: Enhance educational access and focus on skills essential for addressing the Region's unique economic and ecological challenges.

Very important Fairly important Neutral Somewhat important Not important



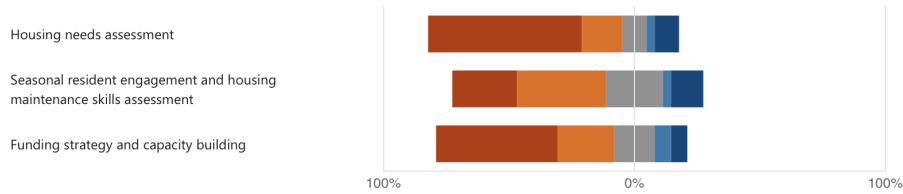
4. Goal 3: Expand healthcare access and focus on comprehensive services, including preventative care and mental health, especially for underserved communities.

Very important Fairly important Neutral Somewhat important Not important



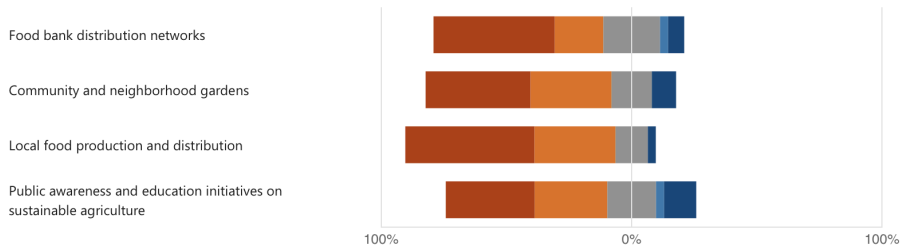
5. Goal 4: Improve access to quality, sustainable, and affordable housing to meet the diverse needs of the population.

Very important Fairly important Neutral Somewhat important Not important



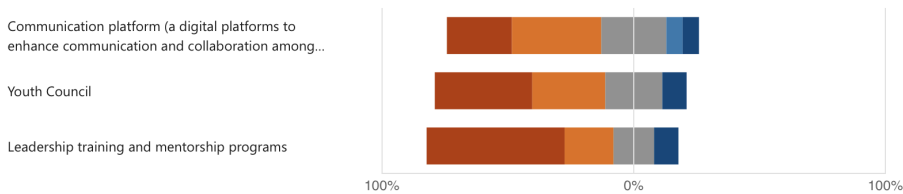
6. Goal 5: Promote sustainable agriculture and strengthen local food systems to improve food security and resilience.

Very important Fairly important Neutral Somewhat important Not important



7. Goal 6: Build strong leadership and foster collaboration across communities for effective strategy implementation and resource sharing.

Very important Fairly important Neutral Somewhat important Not important



8. Goal 7: Develop the Region as a sustainable tourism destination that highlights its unique environmental and cultural assets, enhancing both resident quality of life and visitor experiences.

Very important Fairly important Neutral Somewhat important Not important

