COUNTY OF MENDOCINO

Economic Development Analysis



PREPARED BY BEACON ECONOMICS

Founded in 2007, Beacon Economics, an LLC and certified Small Business Enterprise (SBE) with the state of California, is an independent research and consulting firm dedicated to delivering accurate, insightful, and objectively-based economic analysis. Leveraging unique proprietary models, vast databases, and sophisticated data processing, the company specializes in services like industry analysis, economic policy analysis, economic impact analysis, and real estate market analysis. Beacon Economics equips its clients with both the data and analysis required to understand the significance of on-the-ground realities and make informed business and policy decisions.

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West Business Development Center is a nonprofit 501(c) (3) established in 1988. The West Business Development Center supports Mendocino County small business owners and the communities they serve so they may thrive in the decades ahead.

The contents of this report are based on information derived from carefully selected sources we believe are reasonable. We do not guarantee its accuracy or completeness and nothing in this document shall be construed to be a representation of such a guarantee.

PREFACE

The County of Mendocino engaged Beacon Economics to undertake an analysis of the Mendocino Economy with a focus on key industry clusters in Mendocino County and strategies for inclusive growth and resiliency to guide the economic recovery.

With the support of West Business Development Center, the key goals in commissioning this report include identifying priority issues for policy makers in the County and recommending action items for the County of Mendocino's consideration in enhancing the industry's regional competitiveness as it evolves post-pandemic.

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Executive Summary

The devastating and indiscriminate impacts of the COVID-19 pandemic highlighted vulnerabilities far and wide in America – from its largest cities and metropolitan areas to far-flung rural and tourismbased communities. These effects have been uniquely felt at the local level, as the downturn of consumer-driven government revenues left local jurisdictions in tremendous financial distress. Additionally, the nearly year-long battle with the virus has kept many jobs sidelined through the end of 2020.

In the coming years, recovery will be the primary focus of Mendocino County as it moves past the current pandemic-induced recession. An economic reimagining centered around the concepts of diversity and growth will ensure that the future is characterized by resilience in the face of economic shocks. The County of Mendocino can facilitate resilience by first improving on its economic development ecosystem and then tackling its adverse prevailing challenges.

KEY TAKEAWAYS

- ♦ A common theme globally, the COVID-19 pandemic has brought Mendocino County's long-standing economic issues to the forefront of public concern.
- ♦ Despite aggregate readings for the State of California, the general economic experience at the county level is direr for Mendocino.
- Mendocino is undergoing significant demographic change, at rates that outpace the state overall; outmigration and age dynamics are leading to stagnation and more recently, depopulation.
- Mendocino's labor force and job base has experienced suboptimal growth following the decline of timber-focused manufacturing.
- ♦ A lack of growth and diversification in traded, export-oriented industries will continue to diminish Mendocino over the long-run.
- ♦ Staunch existential challenges ranging from wildfires to housing affordability to broadband connectivity – are also working toward the county's detriment.
- Despite having many agents, the local economic development ecosystem is severely fragmented. Meanwhile, there exists the grave need for a concerted effort toward the tackling of the county's basal issues. Moreover, there needs to be the commitment of resources toward economic development.

RECOMMENDATIONS

- Bolster the county's economic development infrastructure through the commitment of resources and the creation of a public-private partnership formed to preside over economic planning and development.
- Ensure the support of Mendocino's small business and entrepreneurship environment through the development of economic emergency assistance plans.
- Work toward turning the tide of the county's workforce erosion through the creation of talent pipelines and career pathways and through the facilitation of digital, financial, and technological literacy.
- During community and stakeholder engagement aimed at confronting housing affordability and development constraints, prioritize the dialogue around 1) assessing regional housing-needs; 2) changing regulation and barriers around development; and 3) exploring alternative housing tenure and types.
- ♦ Expand the region's broadband access in an effort to better integrate its residents with the internet.



Introduction

Apprehension regarding Mendocino's economic and demographic issues has crescendoed over the last year – mainly because the global pandemic was preceded by years of decaying infrastructure, demographic blight, wildfires, and muted economic growth. As such, these impacts have prioritized the resilience discourse in jurisdictions experiencing ongoing decline. The pandemic pushed long-standing, systemic vulnerabilities and the forefront of public concern. Specifically, many jurisdictions and their residents are assessing whether they possess the ingredients to withstand recurring natural disasters and economic cycles.

Pre-COVID conditions were not conducive to long-run prosperity. Mendocino's economy has tracked a downward trajectory over the past twenty years following the decline of timber-focused manufacturing. Population growth has stalled as well. In 2020, the population stood at 87,491 – a mere 1.0% growth from 2000 and the fourth straight year of decline. Much of the depopulation is being driven by a substantial decline in net migration, which once reflected lively, positive growth in the county.¹ Consistent negative net migration has persisted since the mid-2000s, as groups of residents continue to leave the County. The county also suffers from an aging population, unrepaired roads, subpar broadband connectivity, and the increasing severity of wildfires

This report provides a framework to assess the county in its current form, and to conceive appropriate steps toward a more resilient future. The County of Mendocino has little protection from continued losses brought on by external trauma. The goal of this report is to illustrate this idea, and to articulate avenues by which future losses can be mitigated.

¹ Net migration is the difference between inbound and outbound residents during a period of time.

Part 1: Economic Conditions and Challenges

The first part of this report expands on the economic conditions in Mendocino County with special focus applied to demographics, its flagship industries, and additional existential challenges. Mendocino's challenges are first framed through its existing assets. As a whole, the section aims to provide context for the following sections where recommendations for these challenges are made.



Demographic Analysis

Mendocino's population has become stagnant. The county experienced annual population loss six times between 2010 and 2020 after peaking in the mid 2000's (Figure 1). The stalling out of Mendocino's population reflects the cumulative effect of domestic outmigration and (more recently) declining rates of natural increase.² The underlying determinant for the trend could likely be traced to the precipitous decline of timber in Mendocino. Manufacturing was once the county's flagship industry and robust provider of jobs, until timber mills underwent sweeping closures throughout the 1990s, catalyzed by declining log supply, government regulations, and international and out-of-state competition. There's been a lack of comparable economic prospects in the aftermath, spurring a feedback loop of outmigration and labor force contraction. Historically, Rust-Belt cities have endured great socio-economic hardship in the wake of industry decline, and rural depopulation is a globally prominent and recurring theme whose initial stages feature much of what Mendocino is experiencing.

² The rate of natural increase refers to the pace at which countywide births have over countywide deaths.

Figure 1: Population Growth in Mendocino County, 1971-2019





Outmigration and declining natural increase are relatively new events in Mendocino County, but are nonetheless warning signs of things to come. Mendocino's long-run decline of its labor force - which by May of 2020 had dropped 24% from its most recent peak in 2020 – (Figure 2) suggest that a significant share of the working age population have either left the County or stopped seeking employment altogether.³ In 2019, SNAP (Supplemental Nutrition Assistance Program) participants in Mendocino amounted to 13% of the county's population – elevated but still within one standard deviation of the 58-county average. Social Security Income (SSI) for aged individuals, as a share of total population, actually declined in Mendocino from 2009 to 2019. Therefore, it's likely that a lack of labor force participation is driven more by wealthier retirees than from those who are simply not working and honoring their financial obligations with social assistance.

³ The labor force is defined as the sum of workers employed and workers unemployed but actively looking for work.







The demographic shifts towards an aging population is both a reflection of and a contributor to Mendocino's struggling economy. The share of Mendocino's population 65 years and older rose eight percentage points to reach 23% between 2009 and 2019 – more than double the statewide pace (Table 1). Mendocino's older-age cohort as a share of total population is larger than most of its neighbors'. As such, Mendocino is virtually older than Shasta, Sonoma, Napa, Humboldt, and Del Norte Counties. In the long-run, these dynamics will only serve to exacerbate the county's shrinking labor force, as swaths of residents will age out of it. In the short-run, the aging population is a propitious source of demand for health care, albeit a fleeting source absent an increased inflow of working and reproductive-age adults.

Table 1: Share of Population by Age in Mendocino County and California, 2009-19

	MENDOCINO		CALIFORNIA	
	2009	2019	2009	2019
Under Age 24	31.5%	28.9%	35.6%	31.8%
Ages 25 to 34	11.1%	9.7%	14.5%	15.3%
Ages 35 to 44	11.8%	12.4%	14.1%	13.4%
Ages 45 to 54	14.0%	12.1%	14.1%	12.6%
Ages 55 to 64	15.9%	13.4%	10.4%	12.1%
Age 65 and Over	15.8%	23.4%	11.2%	14.8%

Source: U.S. Census American Community Survey. Analysis by Beacon Economics

Despite the likely increase of wealthier retirees, Mendocino's population is still predominantly lowskill and low-to-middle income. Nearly half of households earned incomes of less than \$50,000 in 2019 (compared to 32% of households in the state overall) and over three guarters of the population had less than a Bachelor's degree compared to 65% for the state (Table 2). Further, 23% of households in Mendocino had incomes of less than \$25,000 compared to the state at 15% that same year. Such dynamics translate to poorer socioeconomic conditions. To illustrate this point, consider that the vast majority of new jobs in the region (with the exception of some in the Health Care & Social Services sector) do not require qualifications beyond an Associate Degree (Table 3). This means such jobs are mainly low-paying and require only low- to middleskilled labor. As a result, younger residents interested in higher education are likely to pursue higher-wage employment elsewhere due to a lack of local opportunities. Further, the lowerskilled population that remains in the County, where professional development and upskilling opportunities are lacking, are not well-positioned to create or contribute to the kind of innovation ecosystem that would incentivize higher-skilled workers to stay in the County or attract new ones from across the region. In surveys from the most recent Comprehensive Economic Development Strategy for the region, 44% of respondents noted that students are not adequately prepared to the enter the workforce due to the quality and accessibility of local educational institutions.⁴

^{4 2016} Sonoma-Mendocino Comprehensive Economic Development Strategy

Table 2: Share of Population Age 25 and Older by Educational Attainment in Mendocino County and California, 2009-19

	MENDOCINO		CALIFORNIA	
	2009	2019	2009	2019
Less than High School	16.0%	16.4%	19.4%	16.0%
High School Diploma	23.3%	22.4%	20.9%	20.6%
Some College or Associate Degree	39.3%	37.9%	29.8%	28.4%
Bachelor's Degree	13.3%	14.6%	19.1%	21.9%
Graduate/Professional Degree	8.1%	8.7%	10.7%	13.1%

Source: U.S. Census American Community Survey. Analysis by Beacon Economics

Table 3: Projected Demand for Middle-Skill Occupation Groups in the North Bay Region,* 2014-24

Occupation Group (Occupations)	Projected Job Openings	Median Annual Wage	
Teaching			
Childcare Workers	1,270	\$30,844	
Teacher Assistants (Middle Skill)	2,130	\$31,382	
Elementary School Teacher	2,480	\$71,525	
Logistics			
Light Truck/Delivery Driver	1,240	\$32,627	
Heavy Tractor/Trailer Driver (Middle-Skill)	1,380	\$47,726	
Purchasing Agents	370	\$68,808	
Health Care			
Personal Care Aides	6,130	\$25,676	
Medical Assistants (Middle-Skill)	1,370	\$41,506	
Physical Therapists	500	\$102,204	
Licensed Vocational Nurse (Middle Skill)	1,270	\$56,322	
Nurse Practitioners	280	\$117,870	
Home Health Aides	1,140	\$25,225	
Nursing Assistants (Middle Skill)	1,240	\$31,995	
Registered Nurses	5,630	\$114,905	

Source California Employment Development Department, Projections of Employment 2014-2024. Total projected job openings are the sum of new and replacement job openings. Occupational Employment Statistics Wage Survey, updated to 1st Q, 2017. Analysis by Beacon Economics

* Includes (Lake, Marin, Mendocino, Napa, Solano, and Sonoma counties

Industry Analysis

Mendocino's economy mirrors many with respect to industry composition; its top private-sector employers are Health Care & Social Services, Retail, Accommodation & Food Services, Manufacturing, and Agriculture/Forestry (Table 4). That said, following the decline of Manufacturing, there are no burgeoning or particularly thriving niches within the labor market. Essentially, there is nothing resembling Logistics in the Inland Empire, Tech in the Bay Area, or even Construction in Sacramento. In light of this, Mendocino's top five employing industries, none of which are attracting workers into the county, require protection and fortification against economic shocks and further declines. Much inline with local demographic trends, the county's employment base has been relatively stagnant over the past twenty years, with employment trends exhibiting significant variation between industries. A lack of broad-based industry growth in the face of manufacturing decline has contributed to increased economic vulnerability, particularly to recessions and natural disasters (Figure 3).

Figure 3: Fluctuation in Private Sector Employment, 2000-19



Source: U.S. Bureau of Labor Statistics. Analysis by Beacon Economics

Table 4: Mendocino County Private Sector Employment and Wages by Industry, 2000-19

	Employment		Average Annual Wages	
		Growth from		Growth from
	2019	2000	2019	2000
Total All Industries	25,266	3.3%	\$43,919	92.2%
Health Care and Social Services	5,726	82.3%	\$40,600	74.2%
Retail Trade	4,788	7.0%	\$36,226	87.2%
Accommodation and Food Services	3,933	17.2%	\$22,934	123.4%
Manufacturing	2,284	-47.0%	\$57,324	84.6%
Agriculture, Forestry, Fishing, Hunting, and Mining	1,524	-12.4%	\$45,756	175.9%
Construction	1,416	21.1%	\$57,736	123.4%
Administrative Support Services	1,132	75.6%	\$51,070	176.1%
Wholesale Trade	715	16.3%	\$50,596	89.6%
Other Services	676	-49.6%	\$34,085	111.6%
Professional/Scientific/Technical Services	562	5.2%	\$49,830	82.9%
Finance and Insurance	526	-4.2%	\$60,520	86.5%
Real Estate Rental and Leasing	523	5.5%	\$37,504	165.2%
Logistics	473	2.8%	\$48,278	71.0%
Arts, Entertainment, and Recreation	408	-47.4%	\$16,597	9.7%
Management of Companies	205	-32.3%	\$60,942	90.6%
Information	201	-53.3%	\$45,615	37.4%
Educational Services	173	55.2%	\$31,009	69.4%

Source: U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages. Analysis by Beacon Economics

COVID-19 IMPACT: JOBS AND SMALL BUSINESS

Mendocino employment reached its lowest point in May of 2020 after peaking in March. On aggregate, the County of Mendocino lost over 4,800 jobs during that two-month period. Due to the broad-based reopening efforts that followed, jobs began to recover slowly in June, fluctuating throughout the rest of year in-line with periods of viral resurgence and retrenchment. On the whole, total industry employment ended the year 17% recovered to peak-levels – meaning that there's still a great deal of ground to cover.

Table 2: Employment Change in Mendocino County (2020)

	Employment		Average Annual Wages			
				Jobs		Percent
	Peak	Trough	Jobs Lost,	Recovered,	December	Recovered,
	Employment	Employment	Peak to Trough	Trough to	Employment	Trough to
				December		December
Total All Industries	33,036	28,220	-4,816	841	29,060	17%
Educational and	5,835	5,370	-465	137	5,507	30%
Health Services						
Retail Trade	4,785	4,126	-659	122	4,248	19%
Leisure and Hospitality	4,446	2,617	-1,829	366	2,983	20%
Manufacturing	2,320	2,104	-216	64	2,167	29%
Professional and	1,987	1,745	-242	23	1,768	9%
Business Services						
Total Farm	1,432	1,236	-196	96	1,332	49%
Construction	1,398	1,193	-205	51	1,245	25%
Transportation,	740	671	-69	19	690	28%
Warehousing, and Utilities						
Other Services	732	599	-133	10	609	7%
Wholesale Trade	728	703	-25	14	717	56%
Mining and Logging	370	210	-161	20	230	13%
Indormation	210	193	-17	3	196	17%

Source: California Employment Development Department; Analysis by Beacon Economics

Note: Excludes Government and Financial Activities, declining industries with employment troughs in December

That the vast majority of Mendocino's economy is supported by businesses with fewer than 20 employees (which as of 2018 accounted for nearly 89% of the 2,465 businesses in the County) is both a testament to its residents' entrepreneurial spirit as well as a vulnerability for economic stability. The pandemic and subsequent economic downturn caused 31% of all small businesses countywide to shutter their doors by the end of 2020 (Figure 4) contributing to a 28.5% drop in overall small businesses revenue (Figure 5). Among the County's largest sectors, small businesses were concentrated in Retail Trade (with 373 establishments), Accommodation and Food Services (272), and Health Care & Social Services (204). Manufacturing businesses trended towards being larger (23% of the sector 124 firms employed 20 workers or more) while the Agriculture sector was more representative of the County with 90% of its 67 firms with under 20 employees.



Figure 4: Percentage Change in Number of Open Small Businesses in Mendocino County, January to December 2020 Source: Opportunity Insights

Figure 5: Percentage Change in Small Businesses in Mendocino County, January to December 2020



Source: Opportunity Insights

HEALTH CARE & SOCIAL SERVICES

Health Care and Social Services is Mendocino's largest private-sector employer, providing 5,650 jobs in 2019. A cornerstone of the county's economy, the industry accounted for over a fifth of total private sector employment in 2019, up 12 percentage points from 2000 (Figure 6). The industry also contributes the third most to countywide output behind Real Estate and Retail Trade.⁵ Impressive job growth during the mid-2010s came mostly by way of a labor code reclassification that saw elderly and disabled services jobs increase substantially, along with a commensurate decline in Other Services employment. Still, the growth of Health Care and Social Assistance is a bright spot for the entire economy of Mendocino and should continue to be leveraged in charting a more resilient path forward.

Indeed, Health Care and Social Services is currently among Mendocino's most valuable assets, as it is for many economies. Generally, the health care industry is less sensitive to economic shocks and is relatively quick to reverse job losses. This is virtually true at all levels of the U.S. economy; national Health Care and Social Services rarely sheds jobs – having only recorded two negative months (and no negative guarters) in the aftermath of the Great Recession. This makes the industry reliable in the long run, able to weather economic downturn when other sectors are struggling. The industry's performance within Mendocino coheres with this phenomenon. Therefore, it is important to foster growth and leverage this innate strength. Unfortunately, a stagnant population growth in the County poses concern for the long-run growth of the demographic-driven industry. Large demand exists in the short run, though, given the county's aging population.





Source: U.S. Bureau of Labor Statistics. Analysis by Beacon Economics

⁵ Output is defined as the difference between an industry's revenues and the costs incurred in generating those revenues. See: https://www.bea.gov/help/faq/184

TOURISM

The economic impact of tourism in Mendocino County is considerable. Tourism to Mendocino generated over \$966 million in travel-related spending through 2018 and 2019 combined, with 60% occurring at Food & Beverage and Accommodation establishments, and almost \$90 million becoming state and local tax revenue. Tourism is also a key employer in the region, with well over 6,000 of its residents working tourism-related jobs. As a foundational sector, the jobs and resources that it provides are key to Mendocino's economic vitality.

Unfortunately, tourism and tourism-related spending are highly sensitive to economic shocks. This is true for Mendocino County as much as it is for any region, but these effects are amplified for tourism-dependent economies reliant on outside (visitor) resources. In essence, non-discretionary spending fuels tourism spending that often faces sharp reduction in the face of economic hardship. This can yield two very severe effects, if carried out on a wide scale. First, a feedback loop between job and output loss will materialize within the tourism industry; and second, a multiplier effect will occur within the region, spilling over into other economic sectors, leading to more job and output loss. The ultimate result is a broad-based decline in economic activity.

More recently, the rigid public health mandates of the pandemic are a prime example of tourism's economic precarity. Mendocino's Leisure and Hospitality employment sector contracted by 40% in April of 2020, as a result of closures. Employment recouped almost a third of its losses by June, though, before moderating through the rest of the summer. Employment remained 31% below pre-pandemic levels by the beginning of fall.

Yet, the ongoing challenges faced by the Tourism industry weren't created by the current pandemic; much like the rest of the county's economy, the challenges are ongoing. In fact, Accommodation and Food Services employment in Mendocino has recovered only modestly from the Great Recession – far behind the nation and the state (Figure 7). This sluggish recovery can be traced to muted job growth at Mendocino's eating and drinking establishments, which employ the majority of workers in Accommodation and Food Services. It's likely the supply and demand of service workers were severely damaged in the aftermath of the Great Recession.





Source: U.S. Bureau of Labor Statistics. Analysis by Beacon Economics

Mendocino's Arts, Entertainment, and Recreation jobs have not at all recovered from the Great Recession. In fact, jobs in this sector were in decline prior to the Great Recession, likely due to the closure of one or more principle employers – most likely amusement, gambling, and/or recreation facilities. Interestingly, economic output in Arts, Entertainment, and Recreation has more than doubled since 2000, indicating an increase of value-add beyond contributions from employment. That said, it's not been a robust source of employment for the working-age residents of Mendocino County.

MANUFACTURING

Mendocino's manufacturing industry, another leading employment sector in the county, is in severe decline (Figure 8). Both economic output and employment are below levels of the early 2000s, which has been driven by the steady, long-run decline in Wood Products manufacturing. This subsector of Manufacturing went from comprising about half of the industry's total employment base in 1990, to just over a third by 1999, and finally to a fifth by 2019. In fact, total Manufacturing jobs fell 47% from 1999 to 2019, and losses in Wood Product manufacturing were responsible for half of the overall decline. Closures of sawmills, as well as wood preservation and millwork facilities are the key determinants, resulting in an average loss of four establishments per year over and a total loss of 1,080 jobs over the last two decades. Breaking in to niche markets, such as wood pellet production, could ameliorate some of the loss in Manufacturing. However, this would effectively boost economic output, and perhaps not move the needle much in the way of curbing job loss, which is likely to blame for much of the county's labor force decline.

Wineries have been the lone bright spot for Mendocino's Manufacturing industry. Surpassing Wood Product employment levels in 2008, Wineries make up the largest subsector in Mendocino's manufacturing industry, providing over 800 jobs in 2019. There are twelve American Viticultural Areas within Mendocino along with more than 180 wineries (as of 2019).⁶ Also, the number of wineries within county lines has more than doubled since 1990, and has increased by 45% over the last two decades. This trend is consistent with the growth of U.S. wine consumption, which totaled 966 million gallons in 2018, up 440 million gallons from twenty years prior. National wine consumption has moderated in recent years, however, probably owing much to the rise of the hard seltzer market. Mendocino's manufacturing industry could face renewed challenges as a result, if it has not begun to already. If the wine industry at-large can adapt to the tastes of the younger drinking-age cohort (i.e. millennials), concerns regarding the demand for wine will be assuaged, boding well for bastions of viticulture and winemaking like the North Coast of California.







⁶ American Viticultural Areas (AVAs) are federally-recognized grape-growing regions, often printed on wine bottle labels. See: https://www.ttb.gov/wine/american-viticultural-area-ava

AGRICULTURE

Despite being one of Mendocino's leading employers, Agriculture and Forestry has undergone pronounced contraction over the last two decades, with jobs down 12% over the last two decades (Figure 9). Wages in the industry have risen above the countywide average, though, and economic output has recovered from the Great Recession (having fallen 50% from peak to trough) - another indication of industry gain being realized beyond contributions from employment. The divergent trends could be due to technological advancement, which is favorable for industry output and efficiency. However, a flagship industry shedding jobs over the long-run exacerbates the ongoing, systematic decline of the county's labor force if the jobs aren't redeployed elsewhere in the economy. Still, Mendocino's countywide output is three times more concentrated in Agriculture relative to California as a whole. This points to the relative importance the industry carries in Mendocino – an industry that produced more than \$270 million worth of gross value in 2018.

Mendocino County's leading agricultural commodities are timber and wine grapes. In 2018, 44% of the county's agricultural value came from wine grapes while 43% came from timber. That year, Mendocino was a statewide leader in timber value, second only to neighboring Humboldt County.

Moreover, the \$84.4 million in value was greater than neighboring Siskiyou and Shasta counties despite producing markedly less volume (Mendocino's timber production has declined dramatically over the last thirty-five years). Mendocino was also ninth with respect to statewide wine grape valuation (nearly \$138 million in Mendocino County), which was consistent with harvest and crop yields that year.



Figure 9: Indexed Employment Change for Agriculture Sector in Mendocino County, 2000-19





CANNABIS CULTIVATION

As one of three counties that are often collectively referred to as the Emerald Triangle, Mendocino's reputation as a cannabis cultivation mecca is well-deserved. Reported taxable sales from the County's approximately one thousand permitted grows outpaced those in neighboring Humboldt by a factor of two between 2016 and 2019 (Figure 10). That said, it is hard to determine to what extent this is a success story or whether the sector's growth potential will ever be fully realized. One factor contributing to the inability to assess how well the sector is doing is the fact that a "cannabis sector" is not officially recognized by the U.S. government nor is it included in the National American Industry Classification System; this presents challenges in accessing reliable data and employing traditional indicators to gauge sector performance.⁷

⁷ The Mendocino County Board of Supervisors recognizes this issue and recently convened in December of 2020 to explore whether cannabis cultivation should be classified as a subsector of the Agriculture sector. See: Maxwell, K.B. (2020, December 7). Mendocino supes will consider reclassifying cannabis as ag at Dec. 8 meeting — will hold town hall, Dec. 16 discussing cannabis cultivation permits. The Mendocino Voice. Retrieved from: https://mendovoice.com/2020/12/mendocino-supes-will-consider-reclassifying-cannabis-as-ag-at-dec-8-meeting-will-hold-town-hall-dec-9-discussing-cannabis-cultivation-permits/

Figure 10: Growth in Reported Taxable Cannabis Sales for Unincorporated Mendocino* and Humboldt Counties, 2016-19 Source: California Department of Tax and Fee Administration. Analysis by Beacon Economics



^{*} Unincorporated areas account for 68% of Mendocino County

Complicating the analysis further is that much of the economic activity surrounding cannabis occurs on the black market. Although California produced approximately 17.3 million pounds of cannabis in 2019, much of which is supplied by an estimated unlicensed 9,000 grows operating in Mendocino County, it is estimated that 16.0 million pounds were diverted to illicit markets statewide or exported out-of-state,⁸ Many observers blame a combination of aggressive tax regimes and complex, costly, and protracted licensing processes that not only penalize cultivators who play by the rules but also incentivize other would-be market participants to remain outside the system.⁹ As officials at the state and local levels continue to remediate policies and adjust tax rates, the outlook for cannabis producers remains in flux. There is merit in monitoring the evolution of the sector statewide and limiting local regulations to help fledging enterprises, but framing an economic development strategy around the anticipated rise of a functioning and lucrative cannabis sector may be premature.

⁸ Hudock, C. (2019, November 11). "U.S. Cannabis Cultivation in California." New Frontier Data. Retrieved from: https://newfrontierdata.com/cannabis-insights/u-s-cannabis-cultivation-in-california/

⁹ Staggs, B. (2019, December 5). In second year of legal weed, California's cannabis industry still struggles. The Orange County Register. Retrieved from: https://www.ocregister.com/2019/12/05/in-second-year-of-legal-weed-californias-cannabis-industry-still-struggles/

LOOKING AHEAD

Ultimately, each industry shoulders the burden. Whether the matter concerns the Health Care & Social Services sector and demographic shifts; Tourism and economic shocks to consumer demand; Agriculture and climate change; or Manufacturing and systematic decline - the county and its industries face profound existential challenges. Yet, the most significant constraint on Mendocino's growth trajectory is an industry composition that favors local consumption over external markets. What makes a sector a key contributor to growth is not simply its size but the extent to which it drives innovation, cluster development, and increased investment in the region. Generally, this is determined by whether a sector is traded or nontraded and how specialized that sector is.¹⁰ The challenge Mendocino faces is that its three largest private-sector industries - Health Care & Social Services, Retail Trade, and Accommodation & Food – are all

considered nontraded sectors and are not reliable drivers of sustainable growth (even those sectors ostensibly serving tourism. Between the County's two largest traded sectors, the Manufacturing industry as a whole is unlikely to see a resurgence in the region as a major employment base. This leaves the Agriculture sector as solely responsible for supporting and expanding Mendocino's economy, which is problematic for two reasons: (1) employment will continue to contract due to consolidation, technology adoption, and rising operational costs; and (2) the industry is very susceptible to economic shocks and environmental hazards, as evidenced by the impact of COVID-19 and the increased frequency and severity of wildfires. A lack of diversification in export-oriented sectors will all but ensure the County remains on precarious economic footing for the foreseeable future.

¹⁰ Traded sectors produce goods and services locally but are primarily exported (or "traded") and consumed by people outside of the region. Conversely, nontraded goods and services are primarily consumed by a region's residents from what are generally considered support sectors These two types of industries play a very different role in a region's economic vitality. For example, most revenue generated by crop production in made in Mendocino County is from consumers across the county, which pays the wages to local farm workers, processors, and distributors involved in bringing products to market. These wages are then spent in the region, generating demand for local services (or nontraded sectors) such as grocery stores or restaurants.

Additional Challenges

In addition to the challenges facing key sectors, several other factors account for Mendocino's economic stagnation. Indeed, examining the operating environment in which the County's core industries are situated yields a broader understanding of the economic landscape and existing limitations on growth potential. Only by acknowledging these issues as they relate to development can stakeholders begin to create the conditions that may lead to a brighter economic outlook. This section highlights additional areas of concern that must be addressed for the County to shift from a flat-lining economic trajectory to one that is once again growth-oriented.

POOR ECONOMIC DEVELOPMENT ECOSYSTEM

On paper, Mendocino County appears to have a robust network of public-private partnerships, local institutes, and nonprofit organizations that feed into and maintain a strong economic development infrastructure. Yet the collective impact of these entities and the degree of coordination among them is unclear. Given the County's dependency on tourism, many workers in the leisure and hospitality industry report that Visit Mendocino County- which is the de facto tourism board and operates out of Ukiah, CA rarely collaborates with local businesses and is doing little to actually bolster economic activity. The Economic Development and Financing Corporation has been diligent in administering loans, conducting quarterly analyses, and

convening stakeholders at annual summits, but few of these efforts have led to countywide progress towards setting and/or realizing development targets. Nonprofit organizations oriented towards workforce development like the West Business Development Center and Workforce Alliance of the North Bay have had success in expanding programming and access to undeserved parts of the County, but they operate independent of a broader strategic economic development framework. What is needed is a coordinating body that can develop and implement such a framework while leveraging assets like Mendocino College in the service of a shared vision of what economic development means for the County.

HOUSING AFFORDABILITY

Similar to other parts of California, Mendocino County residents face significant challenges with housing affordability. The median prices for all single-family homes in Mendocino was \$415,000 as of 2019, which was well below the \$607,000 median home price in California but significantly higher compared to neighboring Humboldt and Lake counties (Table 6). Median prices for existing single-family homes in the County increased by 146% from \$161,000 in 2000 to \$398,000 in 2019. While such trends bode well for residents who have remained in their homes for the past two decades, such movement has caused displacement and increased the barriers for new homeownership. The minimum qualifying income to purchase a home in Mendocino outstrips median household income by nearly \$30,000, placing residential real estate far out of reach for first-time homebuyers.

Increasing the housing supply would go a long way in moderating prices, but the 2008 financial crisis dampened new residential housing construction substantially. From 2000 to 2009, the County permitted on average 279 single family permits per year but only permitted 100 single family permits per year on average over the next decade. New multifamily housing construction fared worse dropping from 31 permits between 2000 and 2019 to only three between 2010 and 2019. As of 2019, 43.3% of households with a mortgage and rental households pay more than 30% of their gross income on housing costs (and are considered "housing burdened"). Should such conditions continue indefinitely, the lack of affordable housing may well drive out residents participating in an already stretched labor force.

	MEDIAN HOME PRICE	MONTHLY PAYMENT (INCLUDING TAXES & INSURANCE)	MINIMUM QUALIFYING INCOME
California	\$607,000	\$3,050	\$119,600
Sonoma County	\$656,300	\$3,230	\$129,000
Mendocino County	\$415,000	\$2,040	\$81,600
Humboldt	\$325,000	\$1,600	\$64,000
Lake County	\$275,000	\$1,350	\$54,000

Table 6: Housing Prices in Mendocino County Compared to Select Jurisdictions, 2019

Source: California Association of Realtors. Analysis by Beacon Economics

BROADBAND ACCESS

Fast and affordable broadband access remains out of reach for many Mendocino County residents, and a "digital divide" (where a lack of access prevents the development of digital literacy) continues to widen as educational, workforce, and commercial activity increasingly moves online. The Broadband Alliance of Mendocino County has made progress in advocating for increased investment in broadband infrastructure, yet over 17,000 residents in the County do not have access to any wired internet and roughly 20,000 do not have access to internet with speeds of at least 25 megabits per second (Mbps). For those households that are online, the average cost per megabit of \$0.39 is higher than in each of the five largest cities in

the country by as much as \$0.11, which can be a barrier to adoption in lower-income communities that otherwise could be serviced by any one of the County's eight providers (Figure 9). Reliable access is needed for small businesses that require internet access for daily operations, students now learning in an online environment, and for enterprises that depend on remote training and collaboration tools. Given that broadband infrastructure investment is heavily contingent upon funding by state and Federal resources, economic development efforts tied to promoting advanced technologies and entrepreneurial innovation across the County will be harder to implement.

Figure 9: Comparison of Broadband Cost and Speed between Mendocino County and Select Cities as of January 22, 2021

Source: Broadband Now. Analysis by Beacon Economics



(a) Cost per Mbps

(b) Download Speed by Mbps



TRANSPORTATION

Mendocino County's public roadway conditions constitute a major barrier to growth by inhibiting the efficient distribution of goods across (and out of) the region. The 2018 California Statewide Local Streets and Roads Need Assessment classified the state of the County's road network as "poor" and was ranked as the seventh worst in California. For an economy dependent on agricultural exports, this is concerning and has a cascading effect on downstream sector employment. The Logistics sector (which is composed of transportation and warehousing firms), for example, grew only 2.8% between 2000 and 2019 and accounts for fewer than 500 employees in the County. And given that poor road infrastructure causes delays and increases costs, exporting firms can only expand so much due to bottlenecks. The County has taken steps to address road conditions by annually allocating \$3.5 million in repairs – indeed, the County showed marked improvement compared to the 2016 assessment – but unmet pavement needs as of 2018 are estimated to be \$526 million and may take decades to address.

WATER SUPPLY AND DISTRIBTUTION

As with many counties across California, water scarcity is a perennial issue in Mendocino County. The Upper Russian River watershed experienced its third driest conditions on record in 2020, and demand throughout the County outpaced the rate reserves could be replenished.Despite new approaches to water management, such as Forecast Informed Reservoir Operations system deployed at Lake Mendocino, droughts, seawater incursion, consumer demand, and commercial requirements will continue to introduce uncertainty and place strains on existing water supplies. The impact of an unreliable water supply disproportionately affects the Agriculture sector, where shortages and limits on water usage place restrictions on how the industry grows as well as the types of crops that can be grown. Although the sector has successfully increased water efficiency over the years through technological advancements, firms will ultimately have less maneuverability in the face of market changes (consumption changes) during prolonged dry periods.

CLIMATE CHANGE

The impact of climate change is being increasingly felt in Mendocino and will play a pivotal role in determining the trajectory of the County's development. Environmental hazards such as wildfires and droughts (and their role in precipitating mudslides during rainy seasons, degrading air and water quality, contributing to soil erosion and land loss) in particular are devastating to the agrarian- and tourism-based economic engines. Nearly the entire County is deemed at elevated risk of fire (or in the case of Willets, "extreme risk") by the California Public Utilities Commission (Figure 10), and the intensity of these events is rising from year to year. The 2018 Mendocino Complex Fire, which burned through nearly 460,000 acres and destroyed 280 structures, was recorded as the largest fire in California's history at the time but was surpassed only two years later by the August Complex Fire that spread across over a million acres and flattened 980 structures. Along with the loss of life, the economic costs (as well as the public health costs resulting from wildfire-induced air pollution) are great. In Mendocino County alone, the 2018 complex fire incurred over \$282 million in total damages (\$51.6 million in capital losses, \$217.6 million in health costs, and \$13.8 million in indirect losses) and disrupted economic activity for months to follow given the County's dependence on farming, wine production, and (increasingly) cannabis cultivation. With extreme heat, drier conditions, and the subsequent lengthening of the wildfire season due to climate change, the County's economic, infrastructure, and health care costs may extend out into the billions of dollars over the next few decades.



Figure 10: Wildfire Risk in Mendocino County, 2019

Source: California Public Utilities Commission



CLOSING

The previous information is dire, but there exists the opportunity to carve out strategies that prepare the county to face its challenges. Indeed, pushing the resilience discussion requires the collaboration of local institutions and is a challenge in and of itself. The following section prescribes a way to bring stakeholders together, and follows with specific action items aimed at tackling those challenges that are tangible, and manageable by the county.



Part 2: recommendations

Despite the many barriers to growth facing Mendocino, there is reason to be optimistic. Innovations in the use of mass timber for green building, the reuse of wildfire-damaged wood to produce renewable energy resources, and the development of advanced agriculture technology (Ag-Tech) provide a glimpse into what as reinvigorated Mendocino County economy may look like over the coming years. Yet for such a future to come to fruition, stakeholders (which include but are not limited to public sector agencies, economic development organizations, nonprofits, firms, workers, community-based organizations, and residents) need to agree upon a shared vision and establish common goals before attempting to change. Based on the preceding analysis of the County's economic trends and current challenges, any viable long-term strategy will need to incorporate four fundamental elements defined below:

- Diversification: Cultivating industry specializations and foster cross-sectoral collaboration helps the overall economy expand employment opportunities, absorb external shocks, minimize adverse effects, and recover faster
- Entrepreneurship and Small Business Support: Public Investment in new ideas and firms can seed new industries, create new opportunities for existing businesses, and foster and attract new talent
- Technology Adoption and Innovation: Long-term development is dependent on expanding digital connectivity to all and adopting advanced industry technologies and processes to increase competitiveness
- Green Jobs and Infrastructure: Faced with a changing climate, public and private partnerships that can drive efforts to build a green economy and create new jobs while safeguarding natural lands and communities

Combining these elements together suggests one potential path forward: to establish a broader economic base by fostering new businesses and bolstering existing ones through the adoption of and adaptation of new technologies that can help the County both mitigate and leverage evolving conditions for long-term sustainable growth and development. Over the short- to medium-term, expectations for rapid, transformative growth should be kept in check; understanding industry capabilities and needs, marshaling resources, and supporting growth will take time and cannot be fast-tracked. To embark on this ambitious path towards reinvention and growth, Mendocino County needs to first plant the seeds of a multifaceted economic development ecosystem. The following recommendations provide an interim roadmap for how to do so.

RECOMMENDATION #1: BOLSTER THE COUNTY'S ECONOMIC DEVELOPMENT INFRASTRUCTURE

Although there are many ongoing economic development projects and programs underway – whether through city governments or led by local and regional organizations – Mendocino needs a formal mechanism that can guide, coordinate, and support countywide economic development activity. The impact of these activities – which include but are not limited to workforce development, small business assistance, cluster development and business recruitment, regional marketing and branding, and infrastructure investment – can be amplified if the County is able to align efforts and curate a dynamic economic development ecosystem.

Objective 1: Create a public-private partnership charged with countywide economic planning and development.

Establish a Mendocino County Office of Economic Development tasked with developing and implementing a Comprehensive Economic Development Strategy (independent of Sonoma County), serving as an information clearinghouse, and helping stakeholders secure funding for regional, local, and community projects, programs, and initiatives.

Act as a steward and broker between industry sectors and among the private, public, and nonprofit sectors to build new connections, strengthen existing networks, pursue joint initiatives, and address risk.

Explore ways to establish a pool of grant funds through public, private, and philanthropic partnerships that stakeholders could apply towards advancing collective economic development initiatives.



Objective 2: Ensure Mendocino County's economic development ecosystem is resilient in the face of evolving challenges

- ♦ Identify chronic stresses and potential shocks to the regional economy and develop safeguards to mitigate the effects of economic downturns on the ecosystem.
- Conduct workshops led by the Economic Development Advisory Board with industry stakeholders, nonprofit organizations, and community groups to identify systemic vulnerabilities and barriers to development.
- ♦ Sponsor a formal study examining the economic impacts of COVID-19 and recent wildfires in Mendocino County and assessing future risks.
- Develop county resilience strategies (and encourage local jurisdictions to do the same) to support important but vulnerable sectors and vulnerable communities during times of prolonged economic disruption.
- Strengthen partnerships regional, state, and federal development agencies, and link local long-term planning with their strategic goals to access funding, technical expertise, and other resources from public sector agencies outside the County



RECOMMENDATION #2: STRENGTHEN SMALL BUSINESS AND ENTREPRENEURSHIP ENVIRONMENT

The County should institute policies that foster entrepreneur development (skills development, mentoring, and incubator activities), networking (industry events, digital conferences, and outreach), capital acquisition (local financing options, philanthropic grants, and state funding), a productive local business climate (appropriate regulation sensitive to operating environment and responsiveness to business needs).

Objective 1. Ensure that the region has a robust support structure for small business development and entrepreneurship.

- Survey the local business community to assess the existing business assistance infrastructure and identify bottlenecks, service gaps, and opportunities (such as accessing external markets, establishing an online presence, or securing loans) to further support small business development.
- Work to increase bank relationships and participation with the small business community, and partner with an existing lender to develop special loan products to increase lending to rural areas.
- Review regulations and check for conflict between County and municipal departments, and streamline permitting and other regulatory processes.
- Leverage County resources to create internal and external markets by prioritizing local procurement and developing a Mendocino "brand" that can be used to market local businesses (especially those in the Tourism sector) outside Mendocino.
- Create and maintain a countywide online business development hub that can serve as an information clearinghouse (regarding regulatory environment, educational materials, and industry-specific research and analysis) and knowledge sharing platform.

Objective 2: Work with local economic development organizations and businesses to develop an economic emergency assistance plans to mitigate the impact of economic disruptions.

- ♦ Establish a local relief fund with a blend of financing options, and be prepared to halt or defer financial burdens placed on small businesses as needed.
- Provide enhanced support to businesses applying for Federal Small Business Administration and California Infrastructure and Economic Development (i-Bank) loans during times of crisis.



RECOMMENDATION #3: BUILD, SUPPORT, AND RETAIN A ROBUST & ADAPTABLE MENDOCINO COUNTY WORKFORCE

Educational attainment in Mendocino County currently lags behind that of California, and many of its high school graduates are not ready for collegiate level coursework. For students not currently in school, many lack the essential skills considered to be successful in the workforce.

Objective 1: Create talent pipeline for high school and college students through curricula and experiences geared towards more advanced opportunities in local industries.

- Provide, expand, improve, and maintain technical, vocational, and trade classes for non-college bound students in order to help them prepare for careers in the trades and/or transition into community college-level technical programs. There should be emphasis on at-risk individuals and those from low-income communities.
- Partner with local businesses and connect them with high school students to provide these students opportunities to intern and shadow at these businesses. Medium Priority Action. Timeline: On-going
- Retool existing Career and Technical Education (CTE) programs to reflect both anticipated labor market opportunities and the education that leads to them.
 Scope out, develop, and deploy intensive career development opportunities that begin no later than middle school. Medium Priority Action. Timeline: On-going

Objective 2: Foster adult career pathways for individuals who are interested in pursuing higher paying jobs outside of agriculture or hospitality and tourism.

- Partner with local businesses, and Workforce Investment Board to increase the number of adults who obtain relevant job experience. Special emphasis should be placed on up-skilling low-skilled, low-income, veterans, underemployed, and unemployed individuals. High Priority Action. Timeline: On-going
- Provide ancillary support such as childcare, transportation, and counseling services and for low-income, underemployed, and unemployed population who need such services, to help facilitate program completion by those enrolled in training and education courses.
- Enable progressive skills development through education and training programs, using multiple entry and exit points, so that each level of skills development corresponds with a labor market payoff for those being trained or educated.

Objective 3: Improve tech, digital, and financial literacy training for small businesses and the workforce.

- Partner with broadband providers and county libraries to develop and expand digital and wi-fi hotspots throughout the County, particularly in unincorporated areas, low-income communities, and rural areas.
- Introduce, reintroduce financial literacy and home economics courses in high-schools and community colleges; consider incentivizing schools to make such coursework a mandatory graduation requirement.



RECOMMENDATION #4: ADDRESS HOUSING AFFORDABILITY AND BARRIERS TO NEW DEVELOPMENT

There is not enough affordable housing to accommodate especially low-income households and housing costs are simply too high for many households. Many of these households who fall under these categories work in low-paying jobs in the Agriculture and Tourism sectors, which is also seasonal by nature. For the region to rise up, special and additional needs that alleviate housing costs should be prioritized.

Objective 1: Foster dialogue and cooperation on housing needs and housing issues through active communication, regional working groups between all stakeholders inclusively.

- Establish joint Housing Committee with an emphasis on including renters and socioeconomically disadvantaged households that have traditionally been underrepresented in community discussions to bring proponents and opponents of new development to facilitate discussion and goal-setting.
- ♦ Conduct at least two working groups annually to be responsible for implementation and monitoring of collective goals and priority areas.
- Conduct outreach and education workshops to stakeholders and the public so that potential applicants and local communities better understand the rules and regulations governing housing.



Objective 2: Promote alternative housing tenure and/or housing types for seasonal workers over the next five years to stabilize the agriculture and tourism & hospitality workforce.

- ♦ Ease local restrictions and barriers that encourage new development while avoiding excessive natural working lands conversion.
- ♦ Allow affordable housing to be built by right on land currently zoned for commercial or public uses and on church-owned lands.
- ♦ Facilitate the development of Accessory Dwelling Units (ADUs) by considering the reduction of ADU impact and permit fees, disseminating public information, and establishing lender products for ADU new construction and rehabilitation.
- Identify and eliminate barriers for the development of employer-sponsored housing while ensuring that the development is built to allow for future conversion to multi-family should the employer sell the property.
- Partner with local businesses to develop a workforce housing pilot program to test viability and investigate and pilot the use of innovative emergency housing types for seasonal, migrant workers such as mobile homes.

Objective 3: Change regulations to remove barriers, streamline processing, and reduce costs for the development of housing.

- ♦ Encourage local jurisdictions to proactively collaborate with affordable housing developers and develop solutions that remove site-specific land use barriers whenever possible.
- ♦ Establish agreements between counties and cities that allow for contiguous, unincorporated county land to connect to city infrastructure to facilitate development of housing.
- ♦ Encourage local jurisdictions to identify and evaluate current land use and zoning and when appropriate, re-zone properties to create additional sites for affordable housing.
- Relax restrictions on the residential use of agriculturally-zoned land in unincorporated county areas that restrict on-farm residential development.

RECOMMENDATION #5: EXPAND THE REGIONAL BROADBAND ACCESS.

The COVID-19 pandemic shed light on the extent of the digital divide in the region, and it is becoming ever-increasingly apparent that broadband accessibility is critical to the County's economic growth and development. More so than any other capital investment project, Mendocino should work with providers, regional authorities, and state and Federal agencies to prioritize and fast-track the installation of broadband infrastructure across all inhabited parts of the County.

Objective 1: Expand broadband access and infrastructure.

- ♦ Coordinate with state agencies (California Broadband Council and the Governor's Office of Broadband and Digital Literacy) to help execute the 2020 Broadband for All plan.
- Adopt a "Dig Once" initiative in the region to offset costs by installing a conduit and fiber during construction projects, which in turn makes it less costly for service providers to offer broadband to rural regions.

Objective 2: Eliminate the student digital divide by ensuring all K-12 students have access to online distance learning infrastructure.

- Encourage local school districts to designate officials to create, implement and harmonize an outreach strategy aimed at increasing digital literacy among parents and guardians
- Develop instructional videos and curriculum on digital literacy aimed at helping parents and students with their specific needs (*instructional videos should aim for equity by ensuring access in the language spoken at home
- Expand public and mobile WiFi hotspot infrastructure and allocate funds to provide hot spot devices for low-income families to ensure access for students who cannot use bus WiFi or easily access library services when at home.

Conclusion

Mendocino is contending with alarming challenges to its economic prosperity. Many of these challenges are mammoth in extent, practically unmanageable, and have accumulated years and years of increasing momentum. The decline of timber-focused Manufacturing was likely among the first in the chronological order of economically diminishing events, followed by years of outmigration, economic shocks, and increasingly devastating natural disasters. Running concurrent to these events were a decaying infrastructure, an aging population, declining housing affordability, and the propagation of a dysfunctional economic development ecosystem.

Yet, in the midst of these challenges, there is cause for positivity. Indeed, current issues ranging from economic and workforce development resilience, broadband connectivity, and housing have relatively straightforward remedies. The challenge therein lies in garnering community support, and orchestrating a concerted effort among economic development stakeholders – which is what the county lacks and sincerely needs. Tackling these issues first will lay the practical and intellectual groundwork for the transformation of Mendocino's economy. The resulting constitution, however long it takes to form, may not reflect a return to Timber and Agriculture prestige, but will likely be a unique amalgamation of its blossoming strengths – viticulture, cannabis, AgTech, tourism, and health care, to name a few.

Ultimately, no economy is insulated from external trauma, but resilience mitigates losses through a robust response system. This system needs to be built and supported upon a firm foundation of economic and demographic players able to rally and meet challenges head-on. Essentially, the seeds of future success need to be planted today, but that begins with recognizing the need for change.



