

# Ord Comparative Performance Analysis

## An Entrepreneurial Community

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## Background and Introduction

During our HomeTown Competitiveness (HTC) work, Milan Wall with the Heartland Center for Leadership Development created the **Hierarchy of Community Impacts** evaluation framework. Don Macke with e2 (formerly the Center for Rural Entrepreneurship) has employed the hierarchy extensively both as a performance evaluation framework and as a progress benchmarking tool. The highest level (Level 5) within the hierarchy is “indicators of transformative change.” Within Level 5, we are looking for indicators in the secondary data that our development interventions are creating desired positive changes in performance indicators like population, population structure, employment, income, and wealth.

### Transformative Change

Fundamental change occurs over time in communities and regions. Central to our position that Ord and its region are undergoing positive transformative change is rooted in the macro socioeconomic changes now measured through well-respected secondary data sources. The development journey for Ord that we have been capturing covers decades from the community’s transition from crisis to its search for solutions to investing in a smart set of strategies to a decade of performance and impact. What we have found is strong evidence, through the secondary data, of transformative change for Ord and Valley County based on trend data in comparison with selected peer counties in Nebraska, Kansas, and South Dakota and Ord/Valley County’s peer places.

Our analysis also provides a contextual piece on community performance with the realities of North America’s Great Plains Region. Regional socioeconomic performance directly impacts the ability of communities within the region to thrive. This paper is organized into three sections, including three sets of analysis to explore **Level 5 impacts**:

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## Ord and Valley County, Nebraska Analysis

Applying the [Hierarchy of Community Impacts framework](#), our comparative analysis has evaluated Ord’s socioeconomic performance employing standard indicators. The following provides performance for Ord beginning with population and demographic health indicators.

### Demographic Health

**Long-Term Demographic Performance.** In the Great Plains, distressed communities and regions manifest their distress through outmigration of residents or depopulation. In other parts of the country, community distress is often reflected in rooted poverty, high unemployment, chronic underemployment, and “at-risk” behavior such as crime or opioid abuse. By and large, most rural communities in the Great Plains have remained viable, resulting in higher education attainment rates and a more mobile population. Check out our allied paper **Ord’s Development Chronology** [LINK](#) for more information.

**Figure 1 – Population Profile for Valley County and Ord, Nebraska**

Valley County, Nebraska	Ord, Nebraska
<p>1871 – Formed                      1873 – Officially Recognized as a County                      1880 Census – 2,324                      1890 Census – 7,092  <i>This represents a 205% population increase.</i>                      1920 – Peak Population – 9,840                      2000 Census – 4,629                      2010 – 4,260                      2019 Estimated Population – 4,158  <i>Net Loss of 5,682 or -58% from Peak</i></p> <p>While county level depopulation continues the rate of decline is moderating compared to the rest of rural Nebraska.</p>	<p>1874 – City Platted                      1880 Census – 181                      1980 Peak – 2,658                      2000 Census – 2,259                      2010 – 2,112                      2020 Estimated Population – 2,076  <i>Net loss of 582 or -22% from Peak</i></p> <p>With agricultural automation and consolidation (fewer farmers), surplus countryside population moved to communities like Ord. It is typical in the Great Plains for rural communities to grow for several decades or more following county peak population before community population begins to decline.</p>

Source: Population data from U.S. Census Bureau for city and county geographies. August 2020.

**Indicators of Demographic Renewal.** The Valley County and Ord demographic trends are typical for rural Great Plains communities. However, there is growing statistical evidence that the rate of change is slowing, and the potential exists for population stabilization and even moderate growth.

- Esri population change estimates for Ord for 2020 through 2025:
  - Population Average Annual Rate of Change – (0.36%)
  - Household Average Annual Rate of Change – (0.26%)
  
- Esri population change estimates for Valley County for 2020 through 2025:
  - Population Average Annual Rate of Change – (0.28%)
  - Household Average Annual Rate of Change – (0.18%)

While these projected values are slightly negative, they suggest an improving demography and slowing of the decline. It is not unusual for similar rural communities to be experiencing declines between 0.5% to even 1% per year. The lower loss rate for households compared to population reflects demographic restructuring. Household change is a leading indicator of change and population is a lagging or confirming indicator of change. Based on the 2020-2025 projections, both population and household change are stabilizing in Ord and Valley County.

Ben Winchester with the University of Minnesota and Randy Cantrell with the University of Nebraska have completed a nationwide demographic analysis focusing on changes in age cohorts across Census decade periods. Figure 2 summarizes the “Cohort Change” data for Valley County. Soon we will have 2010-2020 cohort change data. Given the lower reliability of data for mid-Census years, Dr. Winchester does not recommend employing interim Census data to calculate cohort change. With that said, other indicators strongly suggest that Valley County is doing a comparatively better job in stabilizing and growing its population.



## Ord Region Compared to Rural Nebraska

Between 2010 and 2020, rural Nebraska (as measured by non-metropolitan counties) experienced a 11.9% population loss or over 1% loss per year on average. The Ord Region (check out our paper **Defining Ord the Community** [LINK](#) for more detail on the Ord Region) lost less than 1% of its population for the same period over the entire decade. The population loss in rural Nebraska was 16.3 times greater when compared to the Ord Region. This is a remarkable differential, and it reflects the overall positive socioeconomic performance of Ord and its region.

As noted in this paper and in our other stories focused on Ord, population and household change is a powerful bottom-line vitality performance indicator. For rural communities in the Great Plains Region, decades of severe and chronic depopulation is one the gravest threats to community success. From a development standpoint, stabilizing and returning to modest population growth becomes a paramount goal. The fact the Ord community is realizing this goal underscores the importance of the Ord development story.

### The Challenge of the Long Term

Demonstrating cause and effect in community economic development is challenging. There are so many possible variables shaping change. But the process of transformative change occurs over the long-term and in Ord’s case this has been a 20-year turnaround story. Rarely do we track a story long enough to capture transformative change in a community.

Next, we explore how the Ord community is doing with respect to age cohort change and performance. Central to demographic health is strengthening younger age cohorts offsetting historic youth outmigration and community aging common in the rural Great Plains.

**Figure 2 – Cohort Change Analysis for Valley County, Nebraska**

<b>Valley County, Nebraska Population Cohort Change Analysis</b>			
Cohort	1990-2000	2000-2010	Notes
10-14	+8.5%	+6.6%	Children
<i>During this period average household size was impacted by historic net outmigration of younger child-bearing adults. Despite these macro trends, there continued to be a net gain in 10- to 14-year-olds.</i>			
15-19	-20.6%	-22.7%	Late Teens
20-24	-64.0%	-55.9%	Youngest Adults
25-29	-38.3%	-39.1%	There is a dramatic increase in 30- to 34-year-olds and a strong increase in 40- to 44-year-olds. This is a very important demographic.
30-34	+16.7%	+53.6%	
40-44	+6.1%	+9.5%	
<i>Few rural counties in the Great Plains (unless they are adjacent to a growth hub) have 30- to 34-year-old net growth over 50%. This suggests not only higher retention and return of residents but attraction of new residents to the community because of economic opportunities and perceived quality of life.</i>			
55-59	-1.2%	+1.7%	From negative to positive.
<i>After younger adults (25- to 45-year-olds), the second most important cohort demographic are retiring Boomers. The 55- to 59-year-old age cohort is a leading indicator of younger Boomers. For this cohort, Dr. Winchester found a transformation from -1.2% change in 1990-2000 to a positive 1.7% for 2000-2010.</i>			



## Role of Commuters

The immediate region in which Ord and Valley County are located is rural and agriculturally based. The closest employment hub, Grand Island, Nebraska, is over one hour away (65 miles with estimated commute time of 1 hour and 14 minutes on average). According to the U.S. Census for 2017, Valley County has the following worker commuter patterns:

**Inbound Workers** – 650 or 40.5% of Workers (live outside of the County and commute in for work)

**Resident Workers** – 953 or 59.5% of Workers (live and work in Valley County)

**Outbound Workers** – 794 or 45.4% of Workers (live in Valley County and work outside of the County).

There is a new group of outbound commuters who actually live and largely work in their home county but are part of the remote and outsourced economy. This segment of workers is likely to grow over time. See the full Census Commuter Report [here](#).

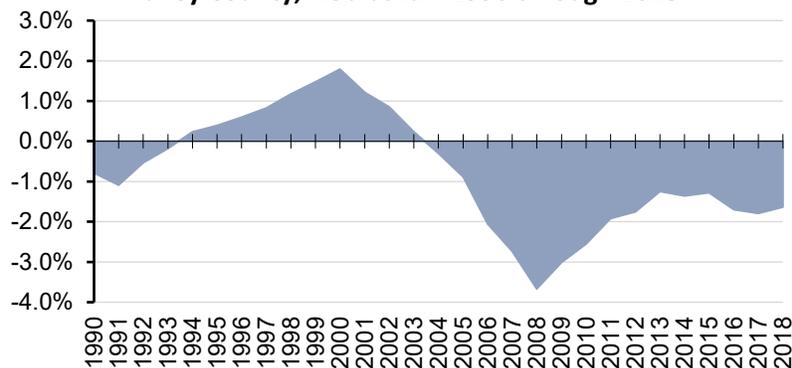
### Commuting in the Great Plains

Following World War II, roads and motor vehicles improved, and commuting expanded rapidly for work, shopping, health care access, and entertainment. It is not uncommon for worker commuters to travel 30, 60, and even 90 miles for work. Choosing to live in one community and working in another community, these commuting workers engage in a much larger labor market. Consequently, tracking worker commuter performance indicators is important in our comparison analysis.

This pattern of a growing area economic linkage is captured in U.S. Bureau of Economic Analysis household personal income flows as shown below (amounts in 2019 dollars; data from the U.S. Bureau of Economic Analysis, August 2020):

- Inflow Personal Income Trends (Live in the County and work outside of the County):
  - 1990: \$5.9 million or 3.22% of Total County Personal Income
  - 2000: \$12.2 million or 7.11%
  - 2018: \$12.0 million or 6.14%
- Outflow Personal Income Trends (Live outside of the County and work in the County):
  - 1990: \$7.3 million or 4.01%
  - 2000: \$16.6 million or 6.66%
  - 2018: \$15.1 million or 7.76%

**Figure 3 – Net Residential Adjustment as a Share of Total Personal Income  
Valley County, Nebraska – 1990 through 2018**



Source: Headwaters Economics employing U.S. Bureau of Economic Analysis.

This data suggests two important trends. First, after significant growth in both outbound and inbound personal income between 1990 and 2000, growth in these trends has contracted slightly between 2000 and 2018. Second, Valley County is becoming an employment hub. The inflow and outflow net change has flipped. Between 1993 and 2003 more County residents were deriving income from work outside of the county (see Figure 3). Now more income is generated by non-county residents coming into the county to work, contributing to a stronger overall economy.

Becoming an employment hub speaks to the growth, diversity, and strength of Ord’s economy, now drawing workers and human talent from a larger geographic region. As an employment hub, Ord stabilizes and strengthens an entire rural region in Nebraska.

**Retail Trade Capture**

Traditional “main street” retail trade has been challenged since the first Sears and Roebuck catalogue. Today there is intense external pressure on locally owned retailing coming from franchises, box stores, and now eCommerce. Esri estimates of retail trade data for 2020 suggest this community is doing remarkably well with net retail trade surpluses. This is uncommon for similar rural counties in the Great Plains.

**Figure 4 – 2020 Retail Performance Indicators (in Millions of Dollars)**

Geography	Demand	Supply	Gap/Surplus	Ratio
Ord Zip Code	\$42.71	\$74.33	+\$31.61	74%
Valley County	\$66.85	\$79.67	+\$15.28	23%

Source: ESRI, July 2020 Estimates

Not many years ago, Ord had a net retail leakage or gap. In addition to being a regional employment hub, today Ord is also a retail hub, servicing communities in a multi-county region of North Central Nebraska. Yet even these economic factors fail to sufficiently capture the impact of key services like health care. Given Ord’s remarkable health care complex, its drawing power is significantly increased. Compared to other communities of similar size and circumstance (not adjacent to major federal highways and interstates), these are remarkable retail trade surpluses reflecting Ord’s growing array of competitive retail ventures. There is a powerful connection between retail activity and one of Ord’s governmental funding sources, the local option sales tax. This sales tax supports Ord’s business development efforts, including capitalizing its gap financing fund addressed in our core story.

Increasing retail activity, particularly related to non-county consumers, has demonstrated to Ord’s taxpayers that smart economic development can expand the base and pay for the cost of this additional sales tax. Continuing with our focus on venture performance indicators, we next examine nonfarm proprietorships which is the foundation of most rural communities in America.

**Leading and Lagging Indicators of Transformative Change**

Within the Hierarchy of Community Impact framework and Level 5 impacts relating to indicators of transformative change there are demonstrated leading and lagging indicators. **Leading indicators** include changes in employment and personal income. **Lagging indicators** include changes in population and household wealth. The leading indicators are said to “bend the trend lines” of household wealth



accumulation and population stabilization/growth. Given that transformative change often takes years to document, we are particularly interested in these leading and lagging indicators of change.

**Employment – A Leading Indicator of Transformative Change**

The employment changes for Valley County contained in Figure 5 demonstrate the progression of this community’s transformation from crisis and decline to positive change despite contemporary challenging headwinds like the Great Recession and Agricultural Recession. Total employment declined from a relatively strong 7.78% between 1970 and 1980 to 4.61% between 1980 and 1990 to a negative 7.44% for the decade of 1990 to 2000 reflecting the fallout of the 1980s Agricultural Crisis. Ord’s smart and strong economic development efforts beginning in the late 1990s and into the 2010 manifest as a strong rebound in total employment with a net gain in employment of 8.34% between 2000 and 2010. Net employment change remains positive despite moderation between 2010 and 2018 most likely due to the dampening effects of the Agricultural Recession. The annualized rate of growth is +0.43% per year for the 2010 to 2018 period compared with +0.83% per year for 2000 to 2010.

**Figure 5 – Employment Change for Selected Periods – Valley County, Nebraska**

<b>Employment Type</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2018</b>
Total Employment	2,598	2,800	2,929	2,711	2,937	3,038
Total Proprietor Employment	1,168	1,113	990	964	1,007	1,049
Total Wage & Salary	1,430	1,687	1,939	1,747	1,930	1,989
Nonfarm Proprietor	517	586	493	509	675	733
Farm Proprietor	651	527	497	455	332	316
<b>Percent Change:</b>		<b>1970-1980</b>	<b>1980-1990</b>	<b>1990-2000</b>	<b>2000-2010</b>	<b>2000-2018</b>
Total Employment		7.78%	4.61%	-7.44%	8.34%	3.44%
Total Proprietor Employment		-4.71%	-11.05%	-2.63%	4.46%	4.17%
Total Wage & Salary		17.97%	14.94%	-9.90%	10.48%	3.06%
Nonfarm Proprietor		13.35%	-15.87%	3.25%	32.61%	8.59%
Farm Proprietor		-19.05%	-5.69%	-8.45%	-27.03%	-4.82%

Source: U.S. Bureau of Economic Analysis. September 2020.

Next, we share some long-term job creation trend lines by type again employing U.S. Bureau of Economic Analysis data for Valley County to illustrate the drivers and patterns of employment change in the Ord community. Per our earlier point, employment change is a leading indicator of transformative change within our entrepreneurial community change model.

Figure 6 provides the long-term total employment change for Valley County from 1969 to 2018. Total employment includes wage and salary workers, farm proprietorships and nonfarm proprietorship employment. What Figure 6 illustrates is the relatively strong growth from 1969 to about 1985, then the decline associated with structural changes and the 1980s Farm Crisis between the mid-1980s into the late 1990s and then the return to positive growth to 2018. There are periods of volatility reflecting the



influence of agriculture, boom years in agriculture, the Great Recession and now the deepening Farm Recession.

**Figure 6 – Valley County Total Employment Illustrated, 1969-2018**

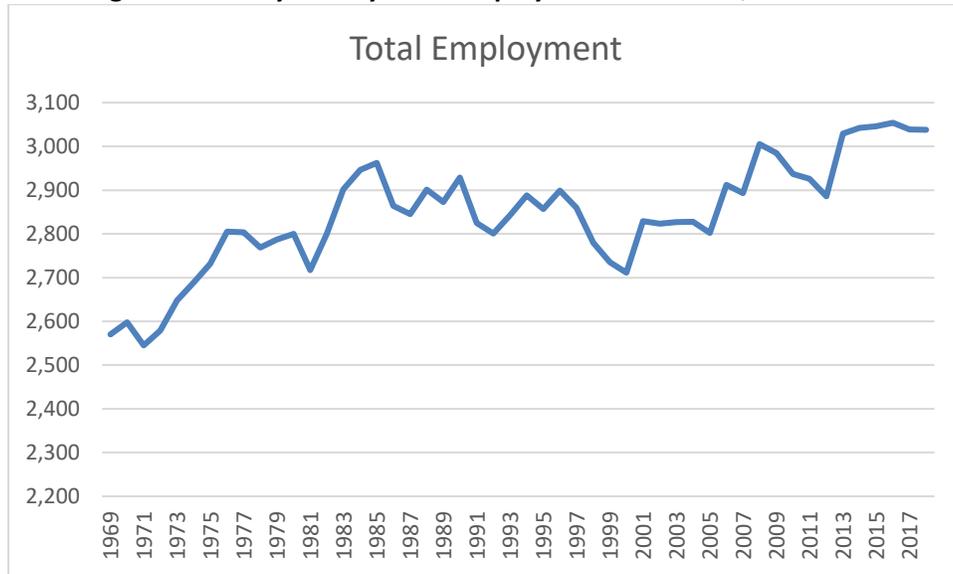


Figure 7 provides the long-term employment with farm proprietorships for Valley County documenting the rather severe loss of employment from 1969 to the mid-2000s. This decline is part of longer-term trends associated with automation and off-farm employment from the farm to the larger economy.

Note that since the mid-2000s the employment trend line has stabilized. We are seeing this in farming dependent counties throughout the Great Plains Region suggesting that the influences of automation and “off farming” as key activities are abating for now.

### **Automation, Industrialization and Consolidation of Production Agriculture Off Farming of Activities and Employment**

Chances are the reader has not heard the term “off farm” or “off farming.” The term refers to the trend of off-farm service providers doing activities once done on the farm with on-farm labor. As farming and ranching have introduced more and more technology resulting in farm industrialization, automation, and consolidation (e.g., increasingly larger farm operations) the demand for farm labor is reduced. Automation directly displaces farm labor and consolidation decreases the number of small to medium farms which depend more heavily on farm labor. Agricultural services, transportation, warehousing, wholesale trade and other value-added activities are all now off-farm activities. The overall result is fewer, but educated workers engaged in production agriculture. Sound familiar? This trend is impacting everything from manufacturing to fast food cafes. During recessionary periods there is typically increased substitution of capital for labor further driving these trends. In most cases overall production and productivity is increasing with these trends.

**Figure 7 – Farm Proprietorship Employment for Valley County, 1969-2018**

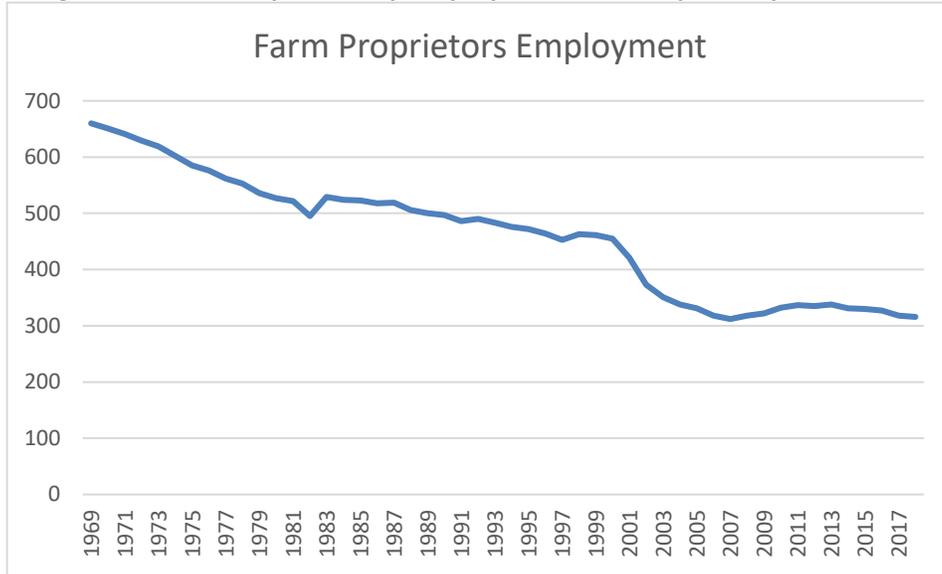
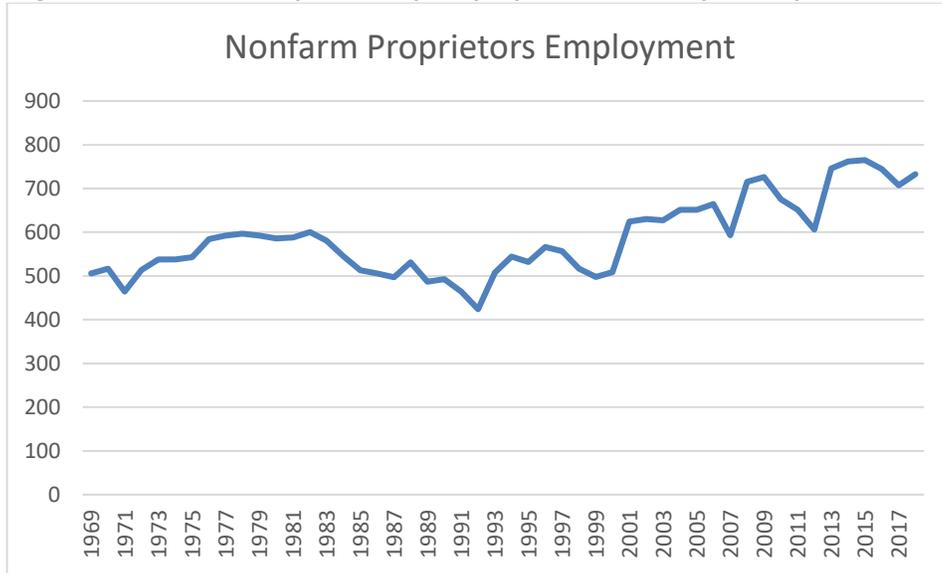


Figure 8 provides the long-term employment associated with nonfarm proprietorships for Valley County. There was modest growth between 1969 and the early 1980s followed by a period of decline coinciding with the worst of the 1980s Farm Crisis. Since the early to mid-1990s, there has been overall growth with periods of expansion and contraction connected with the farm economy, the Great Recession and now the Farm Recession. From valley to peak nonfarm employment has grown from 424 workers in 1992 to 733 workers in 2018 or by 309 workers representing an increase of 73%.

**Figure 8 – Nonfarm Proprietorship Employment for Valley County, 1969-2018**



**Figure 9 – Total Proprietorship Employment for Valley County, 1969-2018**

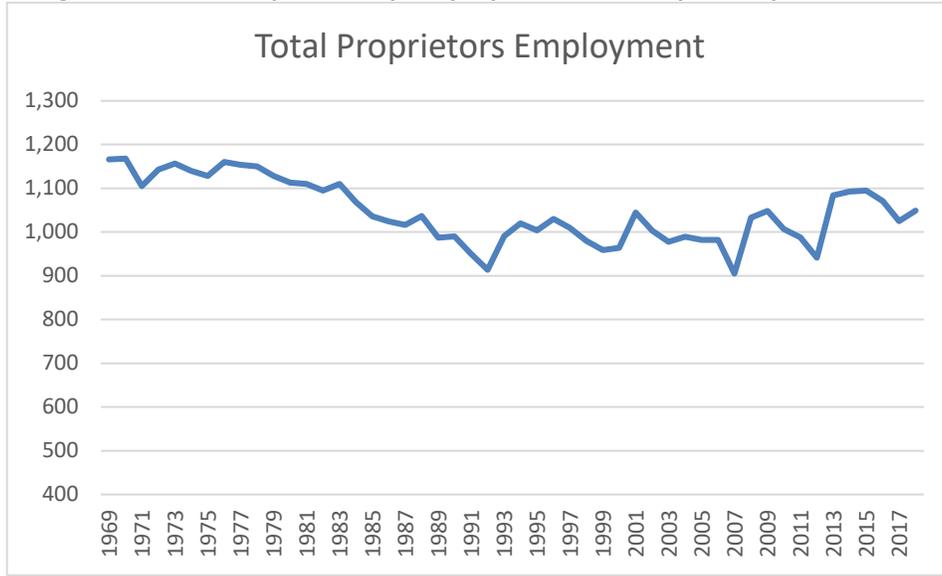
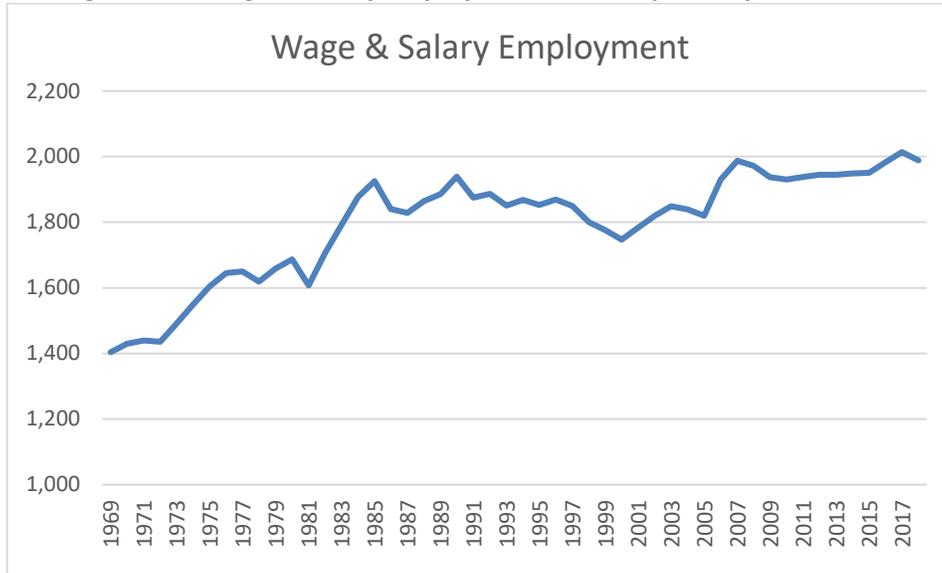


Figure 9 provides total proprietorship employment (i.e., both farm and nonfarm) for Valley County between 1969 and 2018. Clearly the loss in farm related employment has had its effect on overall proprietorship related employment for this period. Between 1969 and 2018 total proprietorship related employment in Valley County has gone from 1,166 to 1,049 representing a loss of 117 works or -10% for this extended period. Much of this loss is due to farm industrialization, automation, and consolidation.

**Figure 10 – Wage & Salary Employment for Valley County, 1969-2018**



**Proprietors and Entrepreneurship – Deeper Dive**

One of our development theories is that in the new economy, rural communities having higher rates of entrepreneurial behavior will do better both economically and socially compared to communities that remain rooted in the more traditional economies of commodity agriculture and lower value manufacturing. The following data from the U.S. Bureau of Economic Analysis highlights “proprietorship” establishments (both agriculture and non-agriculture). Proprietorships are a strong



indicator of locally owned entrepreneurship in rural communities. Figure 11 provides current proprietorship data for Valley County.

**Figure 11 – Proprietorship Employment Analysis for Valley County, Nebraska**

Year	Employment	Change	Notes
1970	1,168		The 1970-2000 period reflects the loss of farm and ranch units and general main street decline. The reversal in proprietorship employment is notable.
2000	964	1970-2000: -204 or -18%	
2018	1,049	2000-2018: +85 or +9%	

*While the Great Recession was devastating the U.S., much of farm-based rural America was experiencing record commodity prices and amazing net farm income levels. The Agriculture Boom is one reason for the 2000-2018 turnaround as farm spending made its way to main street and other allied ventures. However, our peer analysis and deeper comparative and analysis with Valley County's peer community explored later in this paper suggests that the Agriculture Boom did not manifest itself universally, suggesting other factors at play in Valley County.*

Source: Headwaters Economics employing U.S. Bureau of Economic Analysis data. August 2020.

The 1970 to 2000 period reflects the economic distress Valley County was experiencing driven by farm and ranch consolidation, the 1980s agricultural crisis, and chronic and severe depopulation, posting a scary 18% net loss in nonfarm proprietorship related employment. For most rural communities, nonfarm proprietorships are core to these economies including rooted, locally owned, and operated businesses. The 2000 to 2018 period reflects the economic turnaround with net growth of nine percent. Over the longer 50-year period (1970 to 2020), the net change in proprietor employment is a strong 27%. From the ranks of the generally rooted and locally owned smaller businesses, including farms and ranches, come leaders and community builders central to the capacity of a community to develop itself. Deep ownership creates a powerful self-interest to see the community prosper or put at risk what might be one's life work and wealth.

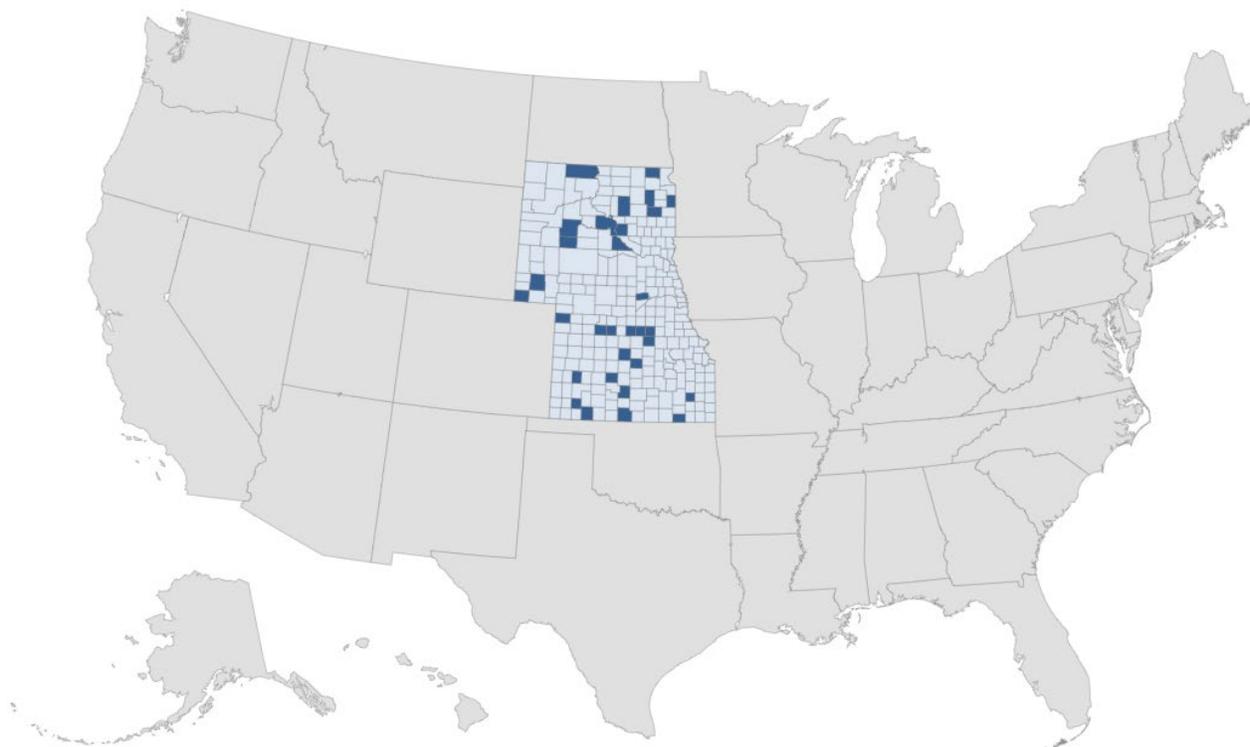
Now we turn to our multicounty peer analysis to demonstrate how Valley County has differentiated itself compared to peer counties in the Central Great Plains Region.

## Nebraska, South Dakota, and Kansas Peer Community Analysis

The Great Plains region is vast, running from the prairie provinces in Canada into Mexico. It is a diverse region largely dominated by agriculture. For parts of this region, energy (e.g., oil, natural gas, coal, wind, and solar) shape these economies. The adoption of hydrological fracturing technology has greatly increased both oil and natural gas production in several regions ranging from West Texas to Northeast Colorado to the Bakken Region of North Dakota. For purposes of our peer county comparative analysis, we selected like-sized and situated farm-dependent rural counties in Kansas, Nebraska, and South Dakota with limited energy development and production influences.

**Peer County Analysis.** One way we can test for Level 5 impacts is using peer communities. In this application, we are using county level data for the peer analysis. We drew peer counties from Nebraska, Kansas, and South Dakota. All these counties are firmly positioned in the rural Great Plains Region. We also worked to make sure that these counties had similar levels of isolation from urban growth centers. Our peer group includes nine counties from Nebraska, 11 counties from Kansas, and 11 from South Dakota, for a total of 31 counties. We aggregated the counties in each state and generated composite metrics for each state that in turn is used for comparative analysis with Valley County.

**Figure 12– Map of Peer Counties**



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This comparative macro-indicator-level analysis provides potential insights as to why Valley County may be outperforming the aggregate peer communities.

Employing the most recent U.S. Bureau of Economic Analysis data, Figure 13 provides macro indicators for Valley County and its peer counties in Nebraska, Kansas, and South Dakota.

**1970-2000 Period.** During the 1970 through 2000 period, we did not find any differentiating metrics for population, employment, or personal income change. Valley County had either comparable values or values that were moderately lower or higher when compared with the peer groups.

**2000-2018 Period.** For the more recent period of 2000 through 2018, we begin to see some significant differentiation. Population change in Valley County is the second lowest among the four groups. South Dakota is lower, and one explanation for this difference is there are a larger number of “ranches” versus “farm” rural counties in the South Dakota peer group. Ranching counties within the Great Plains have reached a “population steady state,” moderating overall depopulation rates. There is no clear difference with personal income. In part, the agricultural commodity price and income boom has inflated all personal income values for this period. The big takeaway is the strong employment growth in Valley County during this period.

**Employment Differential.** The comparative analysis shows a significant differential in employment change, with Valley County outperforming the peer regions. Valley County over this 18-year period is averaging an annual job growth rate more than five times greater than the next best performer, South Dakota. Over time, this higher rate of growth creates large positive socioeconomic impacts.

**Figure 13 - Macro Indicators for the Three-State Peer Community Analysis**

	1970	2000	2018	Annual % Change	
				1970-2000	2000-2018
<b>Valley County, NE</b>					
Population	5,739	4,649	4,190	-0.63%	-0.55%
Employment	2,598	2,711	3,038	0.14%	0.67%
Personal Income	\$125,473	\$153,715	\$194,985	0.56%	1.49%
<b>Nebraska Peers</b>					
Population	52,670	41,757	36,696	-0.52%	-0.67%
Employment	23,251	24,325	23,505	0.12%	-0.19%
Personal Income	\$1,145,941	\$1,427,805	\$1,789,190	0.61%	1.41%
<b>Kansas Peers</b>					
Population	60,838	49,517	42,437	-0.62%	-0.79%
Employment	31,457	30,369	29,308	-0.12%	-0.19%
Personal Income	\$1,621,441	\$1,708,180	\$2,069,491	0.18%	1.18%
<b>South Dakota Peers</b>					
Population	55,342	45,723	43,837	-0.58%	-0.23%
Employment	25,017	24,971	25,563	-0.01%	0.13%
Personal Income	\$1,162,310	\$1,586,549	\$1,974,906	1.22%	1.36%

Source: Headwaters Economics employing U.S. Bureau of Economic Analysis and Census data.

Note: Personal income is shown in 2019 dollars.

## Proprietor Employment

Probing the job creation differential, we explored employment changes associated with both farm and nonfarm proprietorships. Proprietorships are a mainstay of venture activity in rural Great Plains communities and are an important indicator of performance.

**Figure 14 - Comparative Proprietorship Employment Analysis**

	1970-2000 Period		2000-2018 Period	
	Change	% Change	Change	% Change
Valley County	-205	-17.5%	85	8.8%
Nebraska Peer Counties	-799	-8.0%	-855	-9.3%
Kansas Peer Counties	-1,667	-12.2%	489	4.1%
South Dakota Peer Counties	-1,555	-13.2%	211	2.1%

Source: Headwaters Economics employing U.S. Bureau of Economic Analysis. August 2020.

For the 1970 through 2000 period, Valley County actually experienced a deeper net loss of jobs associated with self-employed proprietors operating locally owned farm and nonfarm ventures.

However, in the more recent period of 2000 through 2018, Valley County experienced a net proprietor growth rate more than double than the next best performer, Kansas. This was a dramatic turnaround for Valley County in nonfarm proprietorship employment. Between 1970 and 2000 Valley County lost nearly 18% of its jobs in this business class reflecting the distress impacting the county. But in the next nearly 20-year period (2000 to 2018) Valley County posted a net gain of 8.8% topping the performance of its central Great Plains peer counties.

**Additional Resources.** The following additional resources are available that have been used to support this analysis:

- [Valley County Headwaters Socioeconomic Profile](#)
- [South Dakota Peer Communities Headwaters Socioeconomic Profile](#)
- [Kansas Peer Communities Headwaters Socioeconomic Profile](#)
- [Nebraska Peer Communities Headwaters Socioeconomic Profile](#)

### Employment of a Peer Community

For purposes of the deeper analysis, we identified a county similar to Valley based on location and socio-economic indicators in 1970. Comparing changes over a two generation or 50-year period can provide insight into just how each community navigated development over an extended period. We are not disclosing Ord's peer community out of respect for this community and its challenges.

### Deeper Comparative Analysis with Ord's Peer Community and County

From all the identified peer counties evaluated in the previous section of this paper, we selected a single peer community and county from the region for a deeper analysis. Our intent is to address two basic questions: (1) are Ord and Valley County doing better? and (2) why are these two communities experiencing divergent trend lines?

**Founding Stories.** Both Ord and its peer community were founded in the 1880s, but reflecting that settlement came earlier to the peer county, the peer community had a larger (2.5x) population in 1880. In 1970, our benchmark year for selecting a peer community and county for analysis, both communities had relatively similar populations but Valley County, compared to its peer county had a significantly smaller population (28% smaller). Both counties peaked in population in the 1920s with the post-War I farm crash, drought, and Dust Bowl years. Ord peaked in 1980 or three decades later than its peer community which peaked in 1950. Starting from a larger population base for both the peer community and county, the rates of population loss were greater from peak years and the 1970s to present periods.

One differentiating factor was Valley County's aggressive adoption of irrigation in the late 1970s (moving crop production from dryland to irrigation) and the 1980s associated boom and benefits of the Virginia Smith Dam and Calamus Reservoir development.

By the 2000 Census, Ord posted a larger population when compared to its peer community, an advantage Ord has not given up. In 2019, Ord's population is now 13% larger when compared to its peer community. While this transformation and current population difference may not seem significant, it is demonstrating how Ord has differentiated itself over time employing population performance indicators. The peer county reached a peak population 35% larger when compared to Valley County. Over the intervening years, both counties now have nearly comparable populations.

**Figure 15 – Valley and Peer Counties Comparative Analysis**

Indicator	Ord Municipality	Peer Community Municipality	Valley County	Peer County
Founded	1874	1875	1871	1860*
Population:				
1880	181	458	2,324	4,235
Peak Year	2,658 (1980)	3,227 (1950)	9,823 (1920)	13,236 (1920)
1970	2,439	2,779	5,783	7,404
2000	2,269	2,055	4,647	5,057
2010	2,112	1,957	4,260	4,500
2019	2,076	1,807	4,209	4,275
Decade Change:				
Peak Year-2019	-22%	-44%	-57%	-68%
1970-2000	-7.0%	-26%	-20%	-42%
2000-2010	-8.8%	-14.3%	-8.3%	-11.0%
2010-2019	-1.7%	-7.7%	-1.2%	-5.0%

Source: U.S. Census Bureau, August 2020

\*Settlement came earlier to the peer county, posting a Census population of 22 in 1860.

### Macro Socioeconomic Performance

Based on our population scenario work in the Great Plains, the difference between weak demographic health and poor-to-chronic demographic health is defined by a small number of residents. The story of Valley and its peer county illustrates this point. Over the last 18 years, employing average annual rates of change, Valley County is doing moderately better demographically than its peer county. Net annual population loss for the peer county is 46.5 residents while it is 25.5 residents for Valley County. While both counties are experiencing net annual losses, the peer county’s losses are nearly 30% higher compared to Valley County. (Figures 9 and 10 provide additional details on population and employment changes).

Change in overall employment is even more telling. Job creation for the counties flipped between the 1970-2000 and 2000-2018 periods. The peer county went from positive job creation to negative while Valley County went from job losses to net job creation. The question is what happened locally that contributes to these rather dramatic changes?

Change in personal income also tells an important story illustrating how these two communities have divergent trend lines. With basically the same population, the Valley County economy is producing significantly more personal income. The 1970 to 2000 period was impacted by irrigation development, including the Calamus Project, and improved comparative production agriculture that generated spillover impacts on main street.

**Figure 16 - Macro Socioeconomic Performance – Valley and Peer Counties Compared**

	Change				% Change			
	1970 – 2000		2000 - 2018		1970 - 2000		2000 - 2018	
	Valley County	Peer County	Valley County	Peer County	Valley County	Peer County	Valley County	Peer County
Population	-1,091	-465	-459	-837	-23%	-10%	-10%	-17%
Employment	-978	390	327	-671	-38%	14%	12%	-21%
Personal Income	+\$25 million	+\$38 million	+\$41 million	+\$48 million	21%	26%	27%	28%

Source: Headwaters Economics employing U.S. Bureau of Economic Analysis data. August 2020.

### Macro Socioeconomic Indicators

In our work at e2, we have embraced three key performance indicators we call the “macro socioeconomic” indicators of **population, employment, and personal income**. The U.S. Bureau of Economic Analysis provides a high-quality county-level data series from 1969 through 2018 (most current data) allowing us to look at both trend and comparative performance. In the rural Great Plains employment change tends to be the leading indicator followed by changes in personal income and ultimately population as lagging indicators. Personal income as a performance indicator must be smoothed, removing the volatility created by boom-and-bust cycles in farm-dependent counties.

**Figure 17– Annualized Components of Population Change – 2000 through 2019**

	Valley County	Peer County
Births	48	47
Deaths	56	68
Natural Increase (B-D)	-8	-21
Migration		
Domestic	-30	-42
International	4	6
Migration Change	-26	-36
Total Change	-34	-57

Source: Headwaters Economics employing U.S. Census data.

Figure 17 provides annualized components of population change for the two decades since 2000. This data helps explain how over time one community can perform better than another. Employing county-level data, births are nearly comparable, but deaths are materially higher each year on average (e.g., 17% higher), contributing to the difference in performance. Net outmigration also illustrates the cumulative effects of change (40% higher each year on average). Combining both natural change and migration, Valley County is doing a better job sustaining its population over this 20-year period when compared to its peer county. As noted earlier in this analysis, while 2000 was the pivotal year for the Ord community, population as a lagging indicator did not stabilize until the 2010-2020 period.

Our theory is that Valley County is doing better because it has (1) more aggressively pursued community economic development than other communities and (2) places a strong focus on entrepreneur-led economic development, resulting in a more diverse and larger locally rooted venture sector. Figures 18 and 19 illustrate why we believe this may be true. In a later section we discuss how Ord’s intentional recruitment of younger cohorts results in a different trajectory from the worldwide pattern of rural aging and depopulation.

We consider job creation to be the leading indicator of positive change followed by the lagging indicators of personal income and then population. Data in Figure 18 focusing on proprietorship employment demonstrates the lead edge of progress for Valley County and the deteriorating economy for the peer county. Between 1970 and 2000 the peer county had a net employment gain of 11.3% or 143 jobs compared to Valley County’s 17.5% loss or 204 jobs. These metrics flipped for the 2000 to 2018 time period with Valley County gaining net proprietorship jobs by 8.8% with the peer county experiencing significant loss of 502 jobs for net decline of 35.6% for the period.

### Farming and Personal Income

Personal income is foundational in a consumer-driven economy like ours in the United States. But for farm and ranch dependent rural communities and counties, while personal income is one of our macro indicators, it creates challenges. The wild boom and bust cycles in production agriculture cause volatility in the personal income indicator use. In more diversified economies where agriculture is not the underlying industry, is it more useful as an indicator.

**Figure 18 - Comparative Proprietor Indicators – Valley and Peer Counties**

	Proprietor Employment	Share of Total Employment	Net Change	Percent Change
<b>1970</b>				
Valley County	1,168	45.0%		
Peer County	1,267	40.4%		
<b>2000</b>			<b>1970-2000 Change</b>	
Valley County	964	35.6%	-204	-17.5%
Peer County	1,410	43.4%	143	11.3%
<b>2018</b>			<b>2000-2018 Change</b>	
Valley County	1,049	34.5%	85	8.8%
Peer County	908	35.2%	-502	-35.6%

Source: Headwaters Economics employing U.S. Bureau of Economic Analysis data.



**Figure 19- Proprietor Employment Relative to Total and Wage & Salary Employment 2000-2018**

	Net Change in Jobs		Percent Change	
	Valley County	Peer County	Valley County	Peer County
Wage & Salary	242	-169	13.9%	-9.2%
Proprietors	85	-502	8.8%	-35.6%
Total	327	-671	12.1%	-20.6%

Source: Headwaters Economics employing U.S. Bureau of Economic Analysis data.

The U.S. Bureau of Economic Analysis data in Figures 18 and 19 again illustrate a significant change in economic performance between the 1970 and 2000 and the 2000 and 2018 timeframes. During the 1970 through 2000 period, Valley County experienced a nearly 18% decline in proprietor employment while the peer county experienced an 11% increase. Conversely, during the 2000 to 2018 period, Valley County saw a net increase of nearly 9% while the peer county witnessed a nearly 36% loss.

Overall employment data for the 2000 through 2018 period (see Figure 19 illustrate across-the-board net gains for Valley County and net losses for its peer county. Clearly, the two economies were performing very differently, helping to explain other differentiating trend lines. One reason for these differences is how well each of the two economies are capturing locally available retail spending. We address this next.

### Proprietorship and Wage and Salary Jobs

In smaller rural economies, proprietorship-related jobs dominate. But as rural economies become bigger and more diversified, there are increasing numbers of wage and salary jobs. Referring to data in Figure 19, the combined 2000-2018 improvement in all kinds of jobs represents a 33% swing between Valley County (+12.1%) and its peer county (-20.6%).

### Retail Trade Performance Comparisons

Valley County has moderately higher demand reflective of higher household disposable income and household net worth differences. Retail supply, or the amount of retail goods provided by vendors within the county, are significantly different. Valley County retail supply is \$31.5 million (38%) higher. The net local job difference is between 190 and 210 positions (assuming one retail job is created for every \$70,000 in retail supply).

**Figure 20 - 2020 Estimated Retail Trade Indicators**

	Total Value (\$million)		Per Household (\$)	
	Valley County	Peer County	Valley County	Peer County
Demand	\$66.8	\$62.8	\$34,709	\$31,322
Supply	\$82.1	\$50.6	\$42,644	\$25,228
Net	\$15.3	-\$12.2	\$7,935	-\$6,094

Source: Esri Retail MarketPlace Profile.

## Household Wealth Comparisons

Household disposable income is a leading indicator of the ability of households to meet their needs but also their ability to accumulate wealth and grow an estate. A bottom-line metric is household current net worth, which along with equality considerations shows the ability of an economy to create a more distributed wealth profile.

**Figure 21 - 2020 Estimated Community Household Current Net Worth Comparisons**

	Ord	Peer Community	Difference
Median	\$79,527	\$74,181	7.2% Higher
Mean	\$436,945	\$280,577	55.7% Higher
Total Wealth	\$559.39 million	\$305.27 million	83.2% Higher
Mean to Median Ratio*	5.49	3.78	67% Higher

Source: Esri Net Worth Profile.

\*The mean-to-median household current net worth ratio provides a rough estimate of household wealth equality. The lower the value the greater the equality.

This powerful indicator of community performance or household wealth provides a stark comparison between Ord and its peer community in 2020. Mean or average household wealth in Ord is nearly 56% higher when compared to its peer community. Total household wealth (i.e., average wealth times the number of households) is over 83% higher. Bottom line, over the years Ord has not only progressed on a number of important fronts but has become a much wealthier community compared to its peer community.

**Figure 22 – Household Wealth Change Model**

Pre-Transformation	Hollowing of the Middle Class	Increasing Community Prosperity	Increasing Distributed Wealth	Prosperity Community
At this stage the community overall is relatively poor both in terms of household income and wealth.	Economically declining communities tend to see a hollowing out of the middle class.	With increasing community prosperity owners of ventures experience rising wealth.	As prosperity grows and continues wealth is distributed to investors and workers.	In a prosperous community household wealth is more widely distributed to more households.
Poorer communities tend to have a wealth profile with a relatively small number of affluent households, a large majority of lower wealth households and a relatively small middle wealth group of households.		As a community becomes more prosperous the wealth gains of affluent households continue to grow but there is also wealth growth among middle class residents due to better jobs and opportunities for equity within thriving ventures. Without intentional strategies there can be persistent but reduced poverty.		
<b>Mean to Median Ratio</b>				
As the ratio between mean and median household wealth increases the wealth gap also increases. Our goal should be an economy that over time narrows this gap extending the benefits of prosperity to more residents.				

Ord does have a higher mean-to-median wealth ratio (67% higher compared to its peer community), suggesting wealth inequality. While this is one interpretation of this ratio, it also means that Ord’s economy is generating a much stronger middle class with growing estates.

**Figure 23 - 2020 Estimated County Household Current Net Worth Comparisons**

	Valley County	Peer County	Difference
Median	\$91,200	\$95,099	4.1% Lower
Mean	\$467,351	\$300,847	55.4% Higher
Total Wealth	\$900.70 million	\$603.20 million	200% Higher
Mean to Median Ratio*	5.12	3.16	62% Higher

Source: Esri Net Worth Profile. July 2020.

\*The mean-to-median household current net worth ratio provides a rough estimate of household wealth equality. The lower the value the greater the equality.

Referring to the data in Figure 23, we see a comparable differential between Valley County and its peer county. In 2020, Esri is estimating that county-level total household current net worth is 200% higher now in Valley County compared to its peer county.

**Figure 24 – 2020 Ord Household Wealth Distribution (Current Net Worth)**

Wealth Ranges		Ord	Peer Community
Little Wealth	Under \$15,000	28.5%	28.1%
Low Wealth	\$15,000 to \$50,000	13.9%	14.8%
Some Wealth	\$50,000 to \$100,000	12.1%	13.3%
Middle Income	\$100,000 to \$499,000	33.2%	36.0%
Moderate Wealth	\$500,000-\$1,499,999	7.8%	5.6%
High Wealth	\$1,500,000-\$1,999,999	0.8%	0.4%
Super High Wealth	Greater than \$2 Million	3.7%	1.8%

Source: Esri Net Worth Profile. July 2020.

Data in Figure 25 helps explain the huge wealth differential between Ord and its peer community. Both communities have comparable wealth profiles in the Middle Income to Little Income cohorts. But Ord now has 12.3% of its households in the High or Super High wealth categories compared to its peer community with 7.8%.



**Figure 25 – 2020 Valley County Household Wealth Distribution (Current Net Worth)**

Wealth Ranges		Valley County	Peer County
Little Wealth	Under \$15,000	26.7%	24.4%
Low Wealth	\$15,000 to \$50,000	13.2%	13.9%
Some Wealth	\$50,000 to \$100,000	11.9%	12.5%
Middle Income	\$100,000 to \$499,000	34.7%	39.6%
Moderate Wealth	\$500,000-\$1,499,999	8.8%	7.5%
High Wealth	\$1,500,000-\$1,999,999	0.8%	0.3
Super High Wealth	Greater than \$2 Million	3.9%	1.6%

Source: Esri Net Worth Profile. July 2020.

In Figure 25, we have a comparable household wealth distribution for Valley County and its peer county. We see a similar pattern as influenced by these counties’ lead communities. Stronger and more diverse economies create conditions where there is greater opportunity to realize earning and grow estates. Bottom line, Valley County, when compared to its peer county, has become a foundationally wealthier community.

While the comparative community analysis provides much good news as to Ord’s success, Figures 24 and 25 do point to an area of some concern for the future, especially concerning the recruitment of new “help” for lower skilled jobs. The share of households at the “low” to “some” wealth levels (\$50,000-\$99,000) in both Ord and Valley County is higher than in the comparative community. So, while “middle wealth” households appear to have had greater success in moving to higher wealth levels in Ord and Valley County, the poorer segments have grown. This mirrors the national dynamic where we are seeing the hollowing out of middle-income wage and salary employers and contract workers. We know that locally owned entrepreneurs create rooted wealth not only for themselves, but their investors and in some cases key employees.

### Income and Wealth Inequality in America

The last time the U.S. had levels of income and wealth inequality comparable to what we have today was in the 1920s leading up to the Great Depression. Since the Reagan Administration there has been a continuing trend of increasing income and wealth inequality where the top 10 percent, and particularly the top one percent of American households control ever larger shares of total American household wealth. Real (adjusting for inflation) wages for most working-class Americans has not changed materially since the 1970s. Focusing on the role of a community’s economy to provide meaningful economic opportunities and living wage incomes, addressing the hollowing out of the Middle Class and barriers for lower income Americans to break into the Middle Class is an increasingly universal development issue for Ord and other thriving communities.

**More on Household Wealth.** The social compact that needs to be addressed as entrepreneurs succeed is how to share more of their income and wealth with their employees in labor markets where they are depressed from a compensation and benefit standpoint. We advocate a Wealth Works approach where key employees can acquire equity interests or co-owners in these ventures positioning them for higher



rates of successful transition. Our theory with respect to household wealth as a transformative indicator is:

1. A stronger, entrepreneurially driven economy creates more income and wealth for venture owners and investors driving total household current net worth. This is a leading indicator of change within the wealth indicator group.
2. Middle income households experience better incomes and the ability to create estates. This improves the wealth profile for a community. Better jobs with better benefits and job security, hopefully coupled with equity options can drive this trend.
3. Finally, as the overall economy improves both existing and new residents drive improvement in income and wealth profiles. A key allied indicator here is Labor Force Participation Rates where lower income persons move back into active employment and even entrepreneurship.

As there is more affluence within the venture ownership class, coupled with higher paying and wealth creating jobs, there is greater capacity to enhance the income of secondary ventures within the community and the community’s ability to support great schools, parks and other quality of life amenities enhancing the attractiveness of the community.

## Conclusion

Across rural America, there are so many remarkable communities working hard to ensure their future and vitality. At e2, we wish we had the capacity to capture more of these stories. But the Ord story is unique in that it represents a typical small rural community that has truly transformed itself from crisis and severe decline (e.g., 1980s to 2000) to an increasingly thriving community (e.g., 2000 to 2020). While many commitments and investments by Ord have contributed to this amazing turnaround, growing a robust entrepreneurial economy has been foundational to empowering this change.

**Figure 26 – Ord’s Progression from Crisis to Transformative Change**

<b>1980s Agricultural Crisis</b>	<b>1990s Search for Solutions</b>	<b>2000 Pivot Year Aiming for Success</b>	<b>2000-2010 Investment &amp; Progress</b>	<b>2010-2020 Transformative Change</b>
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This **Comparative Analysis** provides compelling secondary data evidence of how Ord has transformed itself over time, compared to non-metropolitan Nebraska, peer counties in the Central Great Plains, and its unique peer community. In becoming a transformed and more prosperous community that is unique in its success in the rural Great Plains begs the question, “What has Ord done that has enabled its success compared to so many rural communities that have not?” Our other papers provide detailed insight into the strategy, commitments, and investment central to the success of Ord and its Region.

**Figure 27 – Leading and Lagging Indicators of Transformative Change**

Leading Indicators		Lagging Indicators	
Employment	Household Income	Population	Household Wealth

Key: Leading indicators of transformative change are those metrics that first document positive transformative change is occurring. Lagging indicators come later in the progression where there may be a few years to an entire decade before we can document a full range of indicators of transformative change from well accepted secondary data sources.

Ord, Valley County, and now its region is experiencing the full range of indicators of transformative change. It has taken a twenty-year period for these indicators to demonstrate the positive and desired transformative change in employment, household income, population, and now household wealth.

### Ord’s Entrepreneurship Story

This paper augments our primary story [Ord, Nebraska, An Entrepreneurial Community](#). This piece is part of a larger project to capture the Ord story supported in part by the [Ewing Marion Kauffman Foundation](#), [e2 Entrepreneurial Ecosystems](#), the [Heartland Center for Leadership Development](#), and the [Nebraska Community Foundation](#). The Nebraska Community Foundation, the Heartland Center for Leadership Development, e2 Entrepreneurial Ecosystems (then the Center for Rural Entrepreneurship), and the [W.K. Kellogg Foundation](#) were partners with Ord beginning in the early 2000s as part of the HomeTown Competitiveness (HTC) Initiative.

**Additional Analysis Resources.** We have procured and developed five additional analysis resources focused on Ord and Valley County:

1. [Valley County, Nebraska Development Opportunity Profile](#)
2. [Valley County, Nebraska Generational Diversity Profile](#)
3. [Valley County, Nebraska Philanthropic Opportunity Profile](#)
4. Headwaters Economics [Socioeconomic Profile](#) for Valley County, Nebraska
5. Supporting Research via Electronic Library - <https://goo.gl/hv7U8X>

## How e2 Can Help



**e2 Entrepreneurial Ecosystems** helps communities increase prosperity through entrepreneur-focused economic development and ecosystem building. Led by [Don Macke](#), e2 has a national team of practitioners who bring research, coaching, incubation, market intelligence and other expertise to this work.

## What We Do

- ✓ **Mentoring.** We mentor and coach new practitioners seeking to pursue entrepreneur-led development. We provide advice and support for building eEcosystem strategies that work and invite practitioners to join our [National e2 Practitioners Network](#).
- ✓ **Analytics Support.** e2 helps communities and regions understand their entrepreneurial potential through research and data.
- ✓ **e2 University (e2U)** is our online platform for sharing guides, papers, stories, tools, and resources with communities wanting a deep dive into eEcosystem building. Don Macke leads the [e2 University](#) team with analytics support from **Cathy Kottwitz** and report preparation from **Ann Chaffin**. Special recognition for their e2U legacy contributions goes to **Dana Williams** and **Deb Markley**, LOCUS Impacting Investing.
- ✓ **Fostering the eMovement.** We support the national entrepreneurship movement along with our partners including the **Federal Reserve Bank of Kansas City**, **SourceLink**, **Edward Lowe Foundation**, **Kauffman Foundation**, and **NetWork Kansas**. We are a founding member of **Start Us Up: America's New Business Plan**, a coalition dedicated to strengthening entrepreneurship across America. Together, we continue to advance the foundational ideas of building entrepreneurial ecosystems and entrepreneurship-led economic development.

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[NetWork Kansas](#), a 501c3 nonprofit organization dedicated to developing an entrepreneurial ecosystem in Kansas, is the home for e2 Entrepreneurial Ecosystems. NetWork Kansas connects aspiring entrepreneurs, emerging and established businesses, to a deep network of business building resource organizations across the state.

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