



Growth Lab

# Identifying local opportunities: Eddy County

January 2025

# Key Takeaways on Eddy County's Economic Snapshot

*The first part of this presentation provides an economic snapshot of the county. The following key takeaways stand out.*

- **Economic cluster:** Eddy County, in the southeastern corner of New Mexico and part of the Permian Basin, has two main activity hubs. One is in the southern part around Carlsbad, and the other is in the northern part around Artesia. The latter geographic cluster extends across county lines to include a small part of Chaves County.
- **Long-term trajectory:** Until 1960, Eddy County's trajectory of population growth was similar to that of the largest urban counties in New Mexico, except Bernalillo, and was among the biggest counties in the region with oil and gas activity. The 1960s marked a turning point, and the county has experienced lower population growth since, far below previous growth rates.
- **Recent economic performance:** Recently, Eddy County has begun a new period of growth. Like other counties with a strong oil and gas production growth, its county output has increased substantially. This growth acceleration began a few years later than in neighboring Lea County and other counties in the region in other states. Eddy County's income growth is currently among the highest in New Mexico.
- **Underlying economic engines:** The notable economic expansion after 2008 has been mainly driven by the oil and gas boom. Other sectors that have consistently outpaced average growth include trade, transportation, and warehousing. Manufacturing and agriculture, smaller sectors, are notable for their recent expansion after a steep decline.
- **Housing dynamics:** The housing stock has grown by about 15%, which is higher than in peer counties. However, this increase also includes mobile homes, boats, RVs, and other types of housing. The vacancy rate remains above 10%, and prices have risen by approximately 18% (higher than in other counties but not the worst-case scenario).
- **Conclusion:** Despite a notable expansion of opportunities, concentrated around the oil and gas boom, the number of permanent residents has not increased at a comparable pace. This suggests that Eddy County's economic growth may be limited by its ability to attract and accommodate residents. The challenge is associated with the availability of housing, as well as the quality of other public services and perceived amenities.

# Observations on Eddy County's Diversification Opportunities



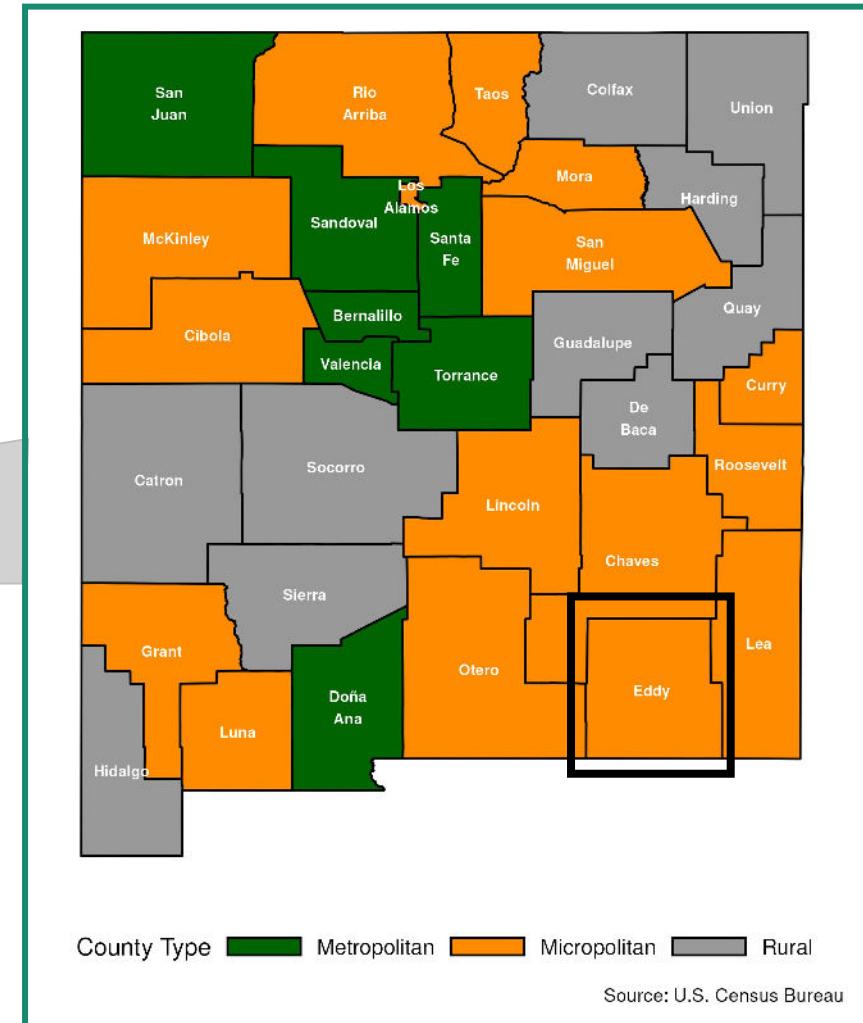
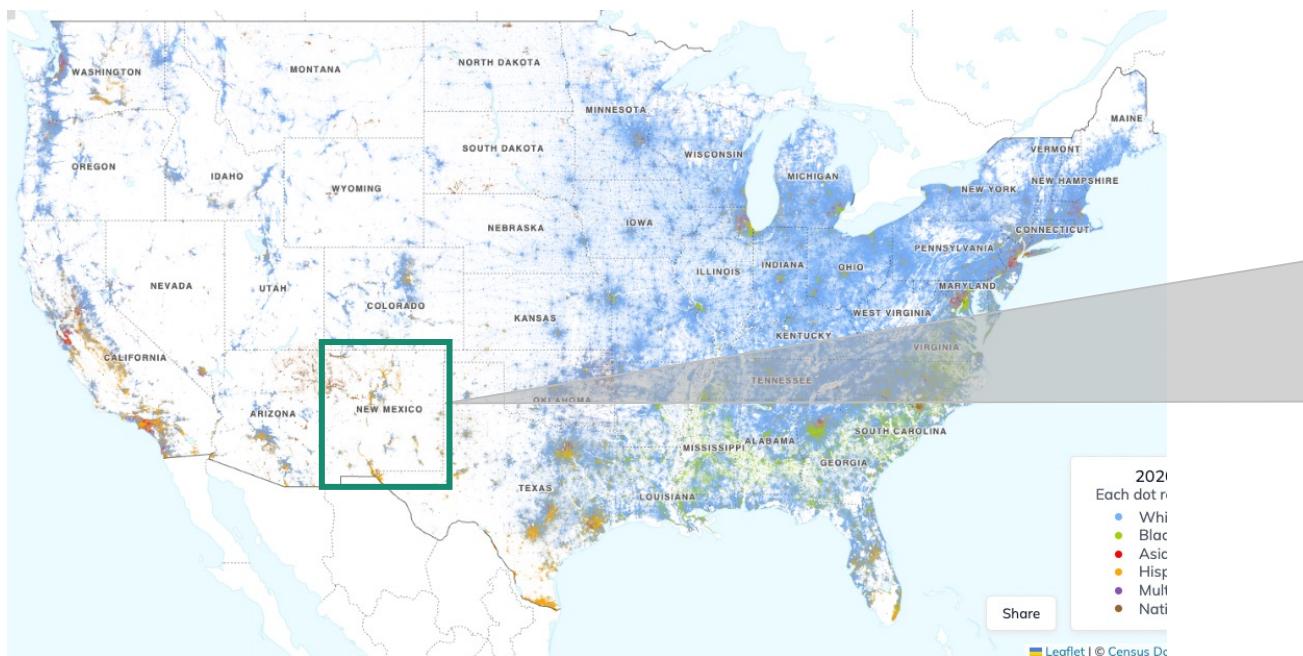
*The second part of this presentation provides an analysis of diversification opportunities grounded in an economic complexity approach. This analysis is meant as an input for local strategy rather than a conclusive list. Several observations are noteworthy that may warrant local investigation.*

- **Construction is an important growth sector.** The construction sector's growth has decelerated from nearly 10% annually to less than half that. Developing new construction industries, such as "Industrial Building Construction", could complement the established "Oil and Gas Pipeline and Related Structures Construction" and "Power and Communication Line and Related Structures Construction".
- **As Eddy County recovers its manufacturing base, it could examine the local factors hindering the development of new activity clusters.** In 2001, manufacturing made up nearly 20% of the economy but its fell to less than 5% over the next decade. Since then, the sector has seen above-average growth, and promising industries in other areas could further support this recovery. For example, the "Chemicals" cluster presents several opportunities, such as "Asphalt Shingle and Coating Materials Manufacturing" and "Nitrogenous Fertilizer Manufacturing," for which the county's close proximity to necessary inputs offers an advantage. One obstacle to developing these opportunities is the high utility and space demands of such industries.
- **Agriculture is a small, recovering sector of the economy with linkages to other industries.** The agriculture sector is relatively small and recovering from a steep decline. It has accounted for less than 5% of Eddy County's economy. Economic activity in this sector is linked to other industries in the food cluster, primarily through the provision of necessary inputs and, more broadly, through the sharing of other productive capabilities. For example, "Grain and Field Bean Merchant Wholesalers" and "Meat Processed from Carcasses could benefit from adjacent economic activity.

# County economic snapshot

*Unpacking population and economic patterns*

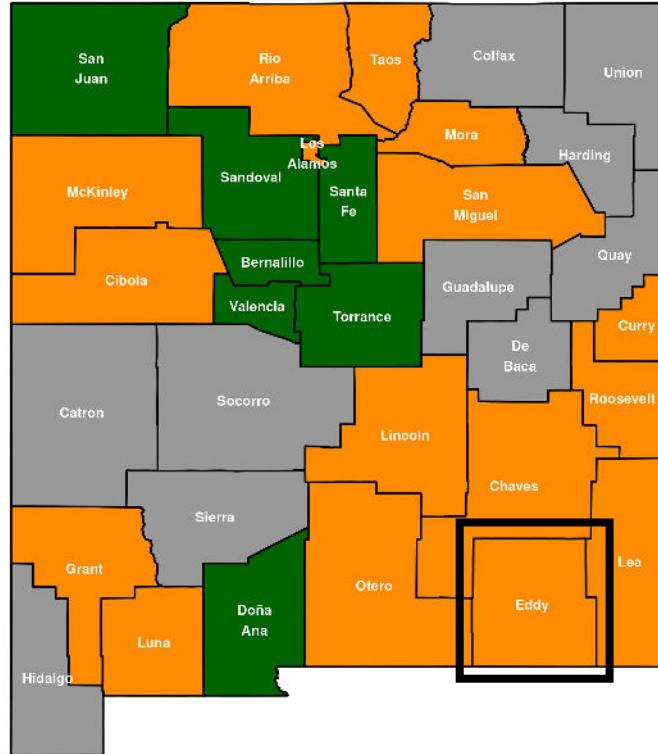
# Eddy county location



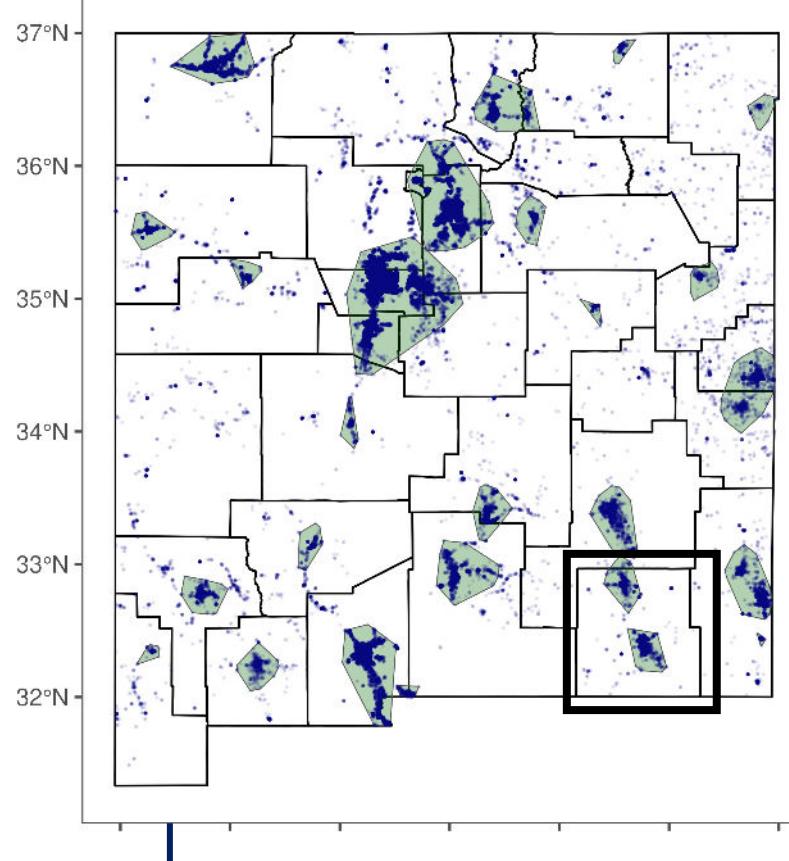
Note: Full map: <https://www.censusdots.com/race/new-mexico-demographics>

# Economic cluster – Firms in Eddy county & New Mexico

Map of Counties and Statistical Areas in New Mexico



New Mexico Firms' Location



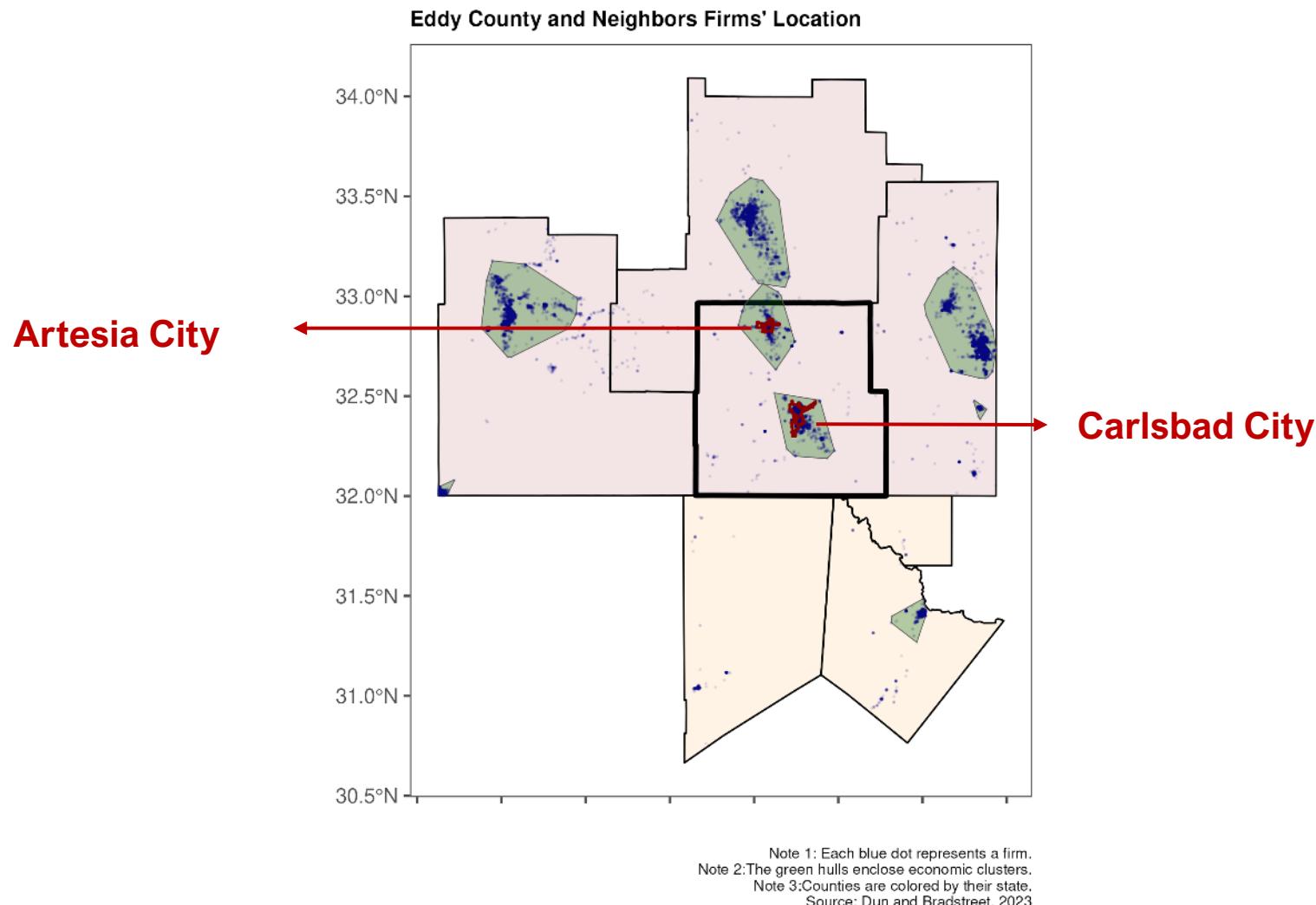
County Type    Metropolitan    Micropolitan    Rural

Source: U.S. Census Bureau

The county type definitions are based on the size of local population centers and their connection to larger urban areas. Metropolitan and micropolitan areas differ by the size of their core community, with a threshold of 50,000 residents. In contrast, rural areas do not have a population center with at least 10,000 residents.

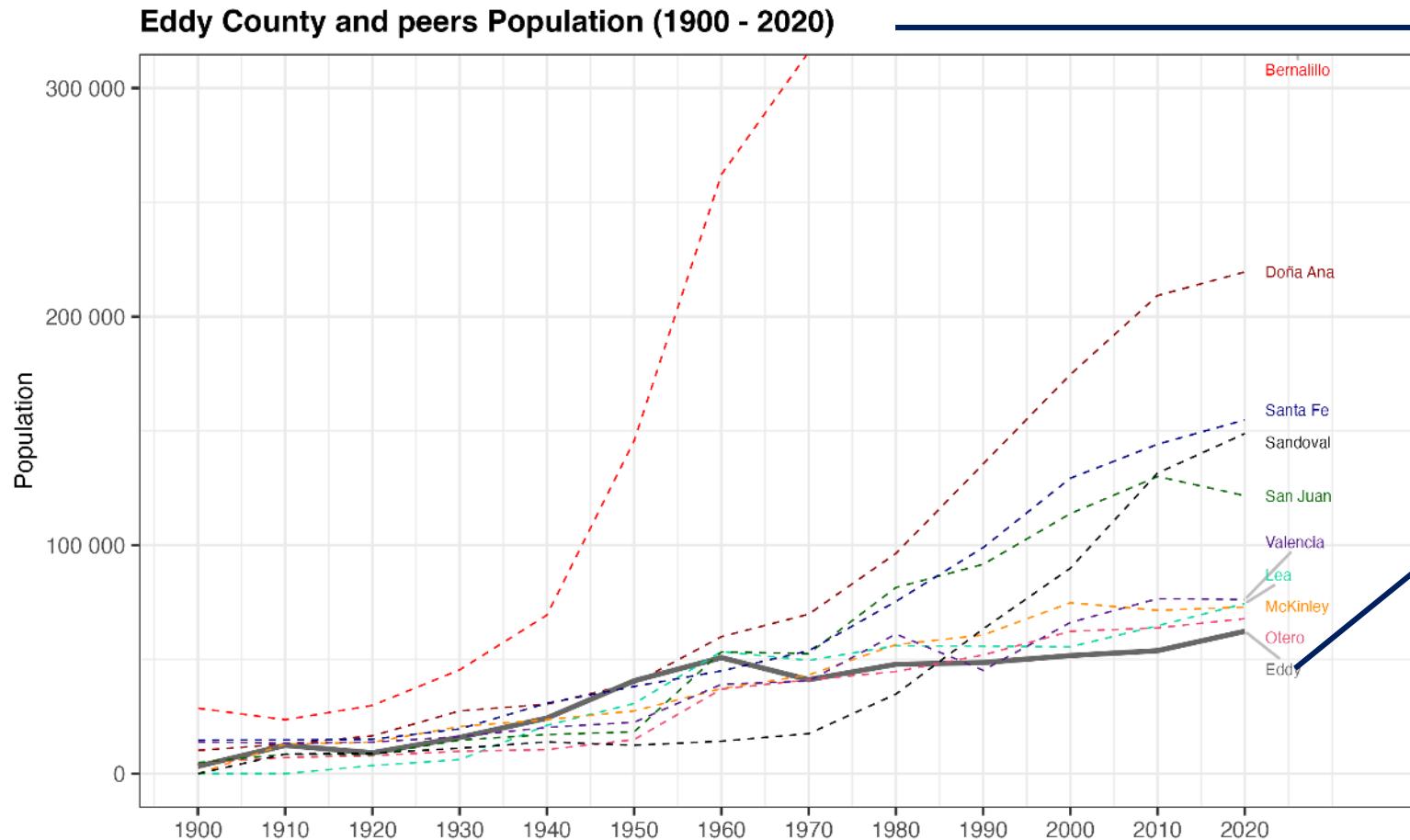
The clusters of economic activity (shown by the green outlines) are defined by the proximity of firms (blue dots). These clusters reveal connections between counties, both within the state and across state borders.

# Economic cluster – Firms in Eddy county and adjacent counties



Eddy County has two main clusters of economic activity: one to the south around Carlsbad, and the other to the north around Artesia. The northern cluster slightly crosses the county borders but does not merge with the cluster in Chaves County.

# Long-term trajectory – Population growth among New Mexico's counties

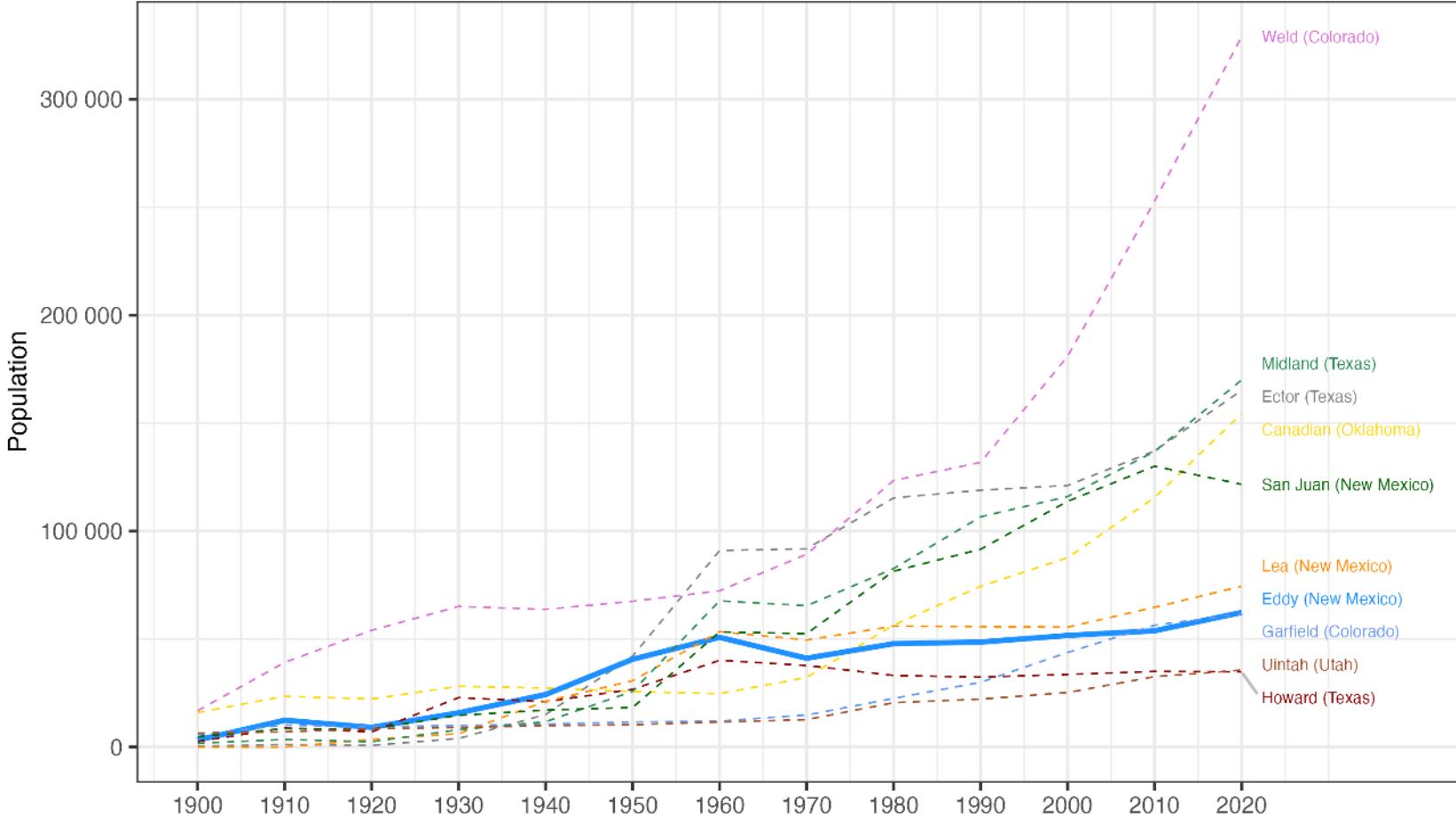


Understanding Eddy's economy requires looking at the county's long-term evolution. Demographic and economic trends are closely connected: job opportunities attract people and drive population growth, while job losses can lead to outmigration. At the same time, the size and skills of population influences which new economic activities, as critical mass of knowhow and networks enable economic activity.

Eddy's long-term population growth is shown alongside New Mexico's other largest counties. (Bernalillo County, not shown for scale, has a much larger population of around 680,000.)

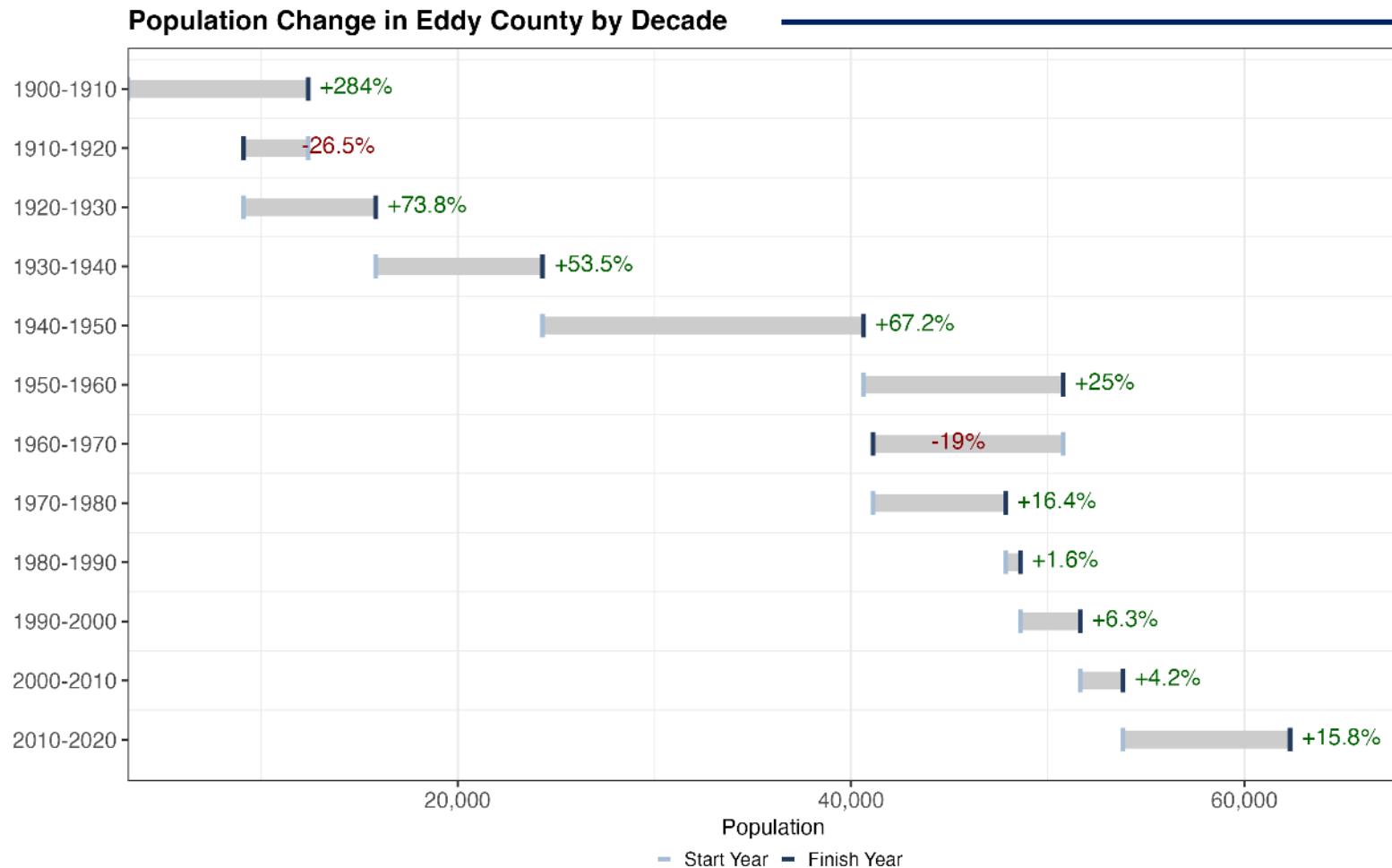
# Long-term trajectory – Population growth among peers

Eddy County and Peer Counties in Neighboring States Population Evolution



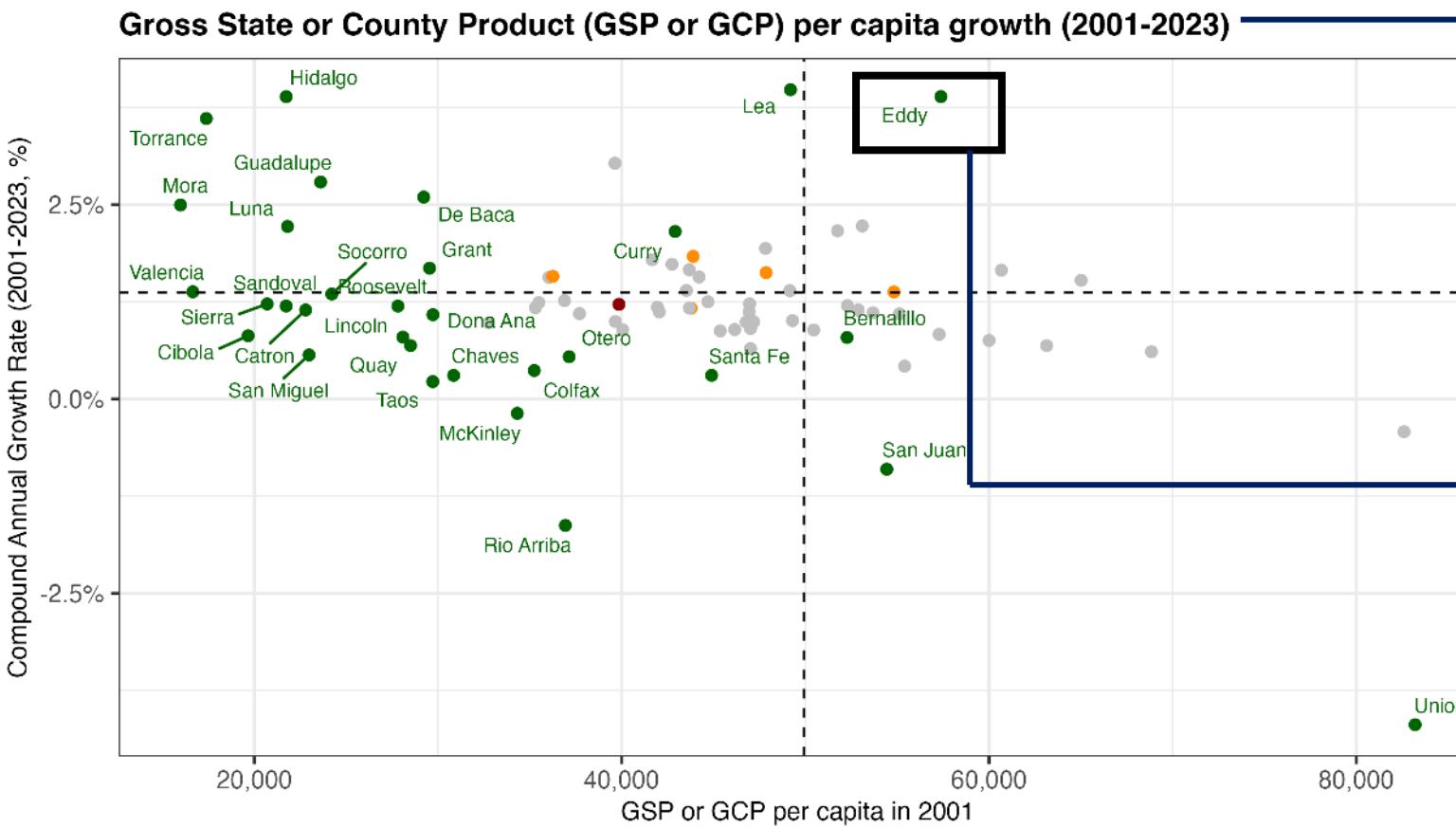
The previous slide compared Eddy's long-term population growth with other large counties in New Mexico. To give further context, the following analysis looks at a set of peer counties across New Mexico and neighboring states (Colorado, Oklahoma, Texas, and Utah). These counties were selected because of their oil and gas activity

# Long-term trajectory – Population growth by decade



Now, the focus shifts from comparing long-term trends to examining Eddy's population changes decade by decade. This graph shows the population at the start and end of each decade, as well as the total growth rate during each period.

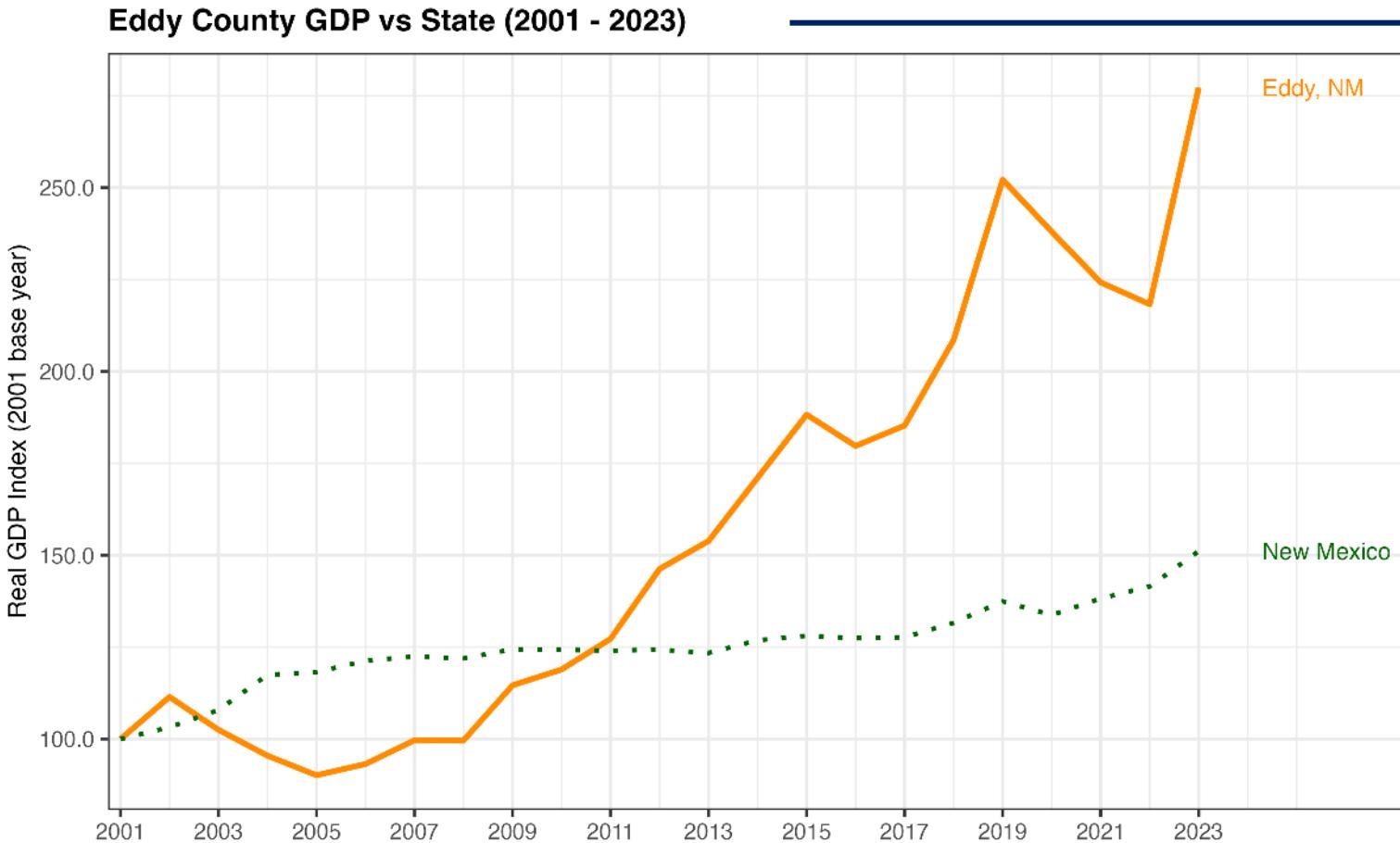
# Recent economic performance – Income level growth



Demographic trends offer a long-term perspective on Eddy's economy. For a closer look at more recent decades, Gross County Product (GCP) provides annual data going back to 2001, capturing the value of economic activity produced within the county's borders. Dividing GCP by the local population gives a per capita figure, which serves as income level, a useful benchmark for comparing overall standards of living between places.

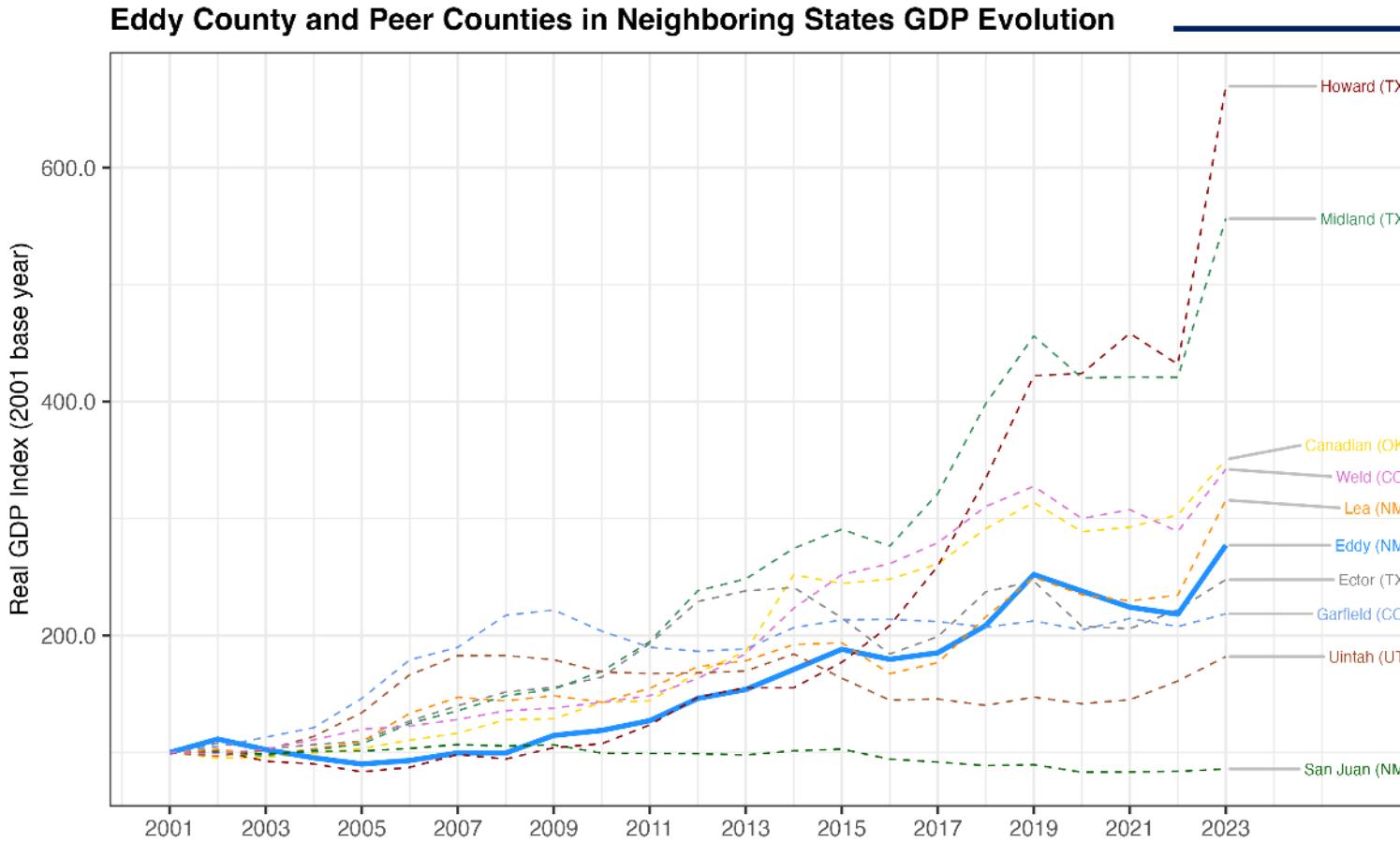
Eddy's average income growth rate is shown here alongside New Mexico's 32 other counties, the state average, and neighboring states.

# Recent economic performance – Gross County Product



Shifting from per capita measures to total GCP levels gives a sense of the overall size of the local economy, based on everything produced within the county's borders. To make comparisons between places clearer, GCP is shown as an index using 2001 as the base year. This approach allows for easy tracking of economic trajectories across places of different sizes and helps highlight specific periods when significant changes or challenges occurred. Eddy's economic trajectory is shown alongside that of New Mexico as a whole.

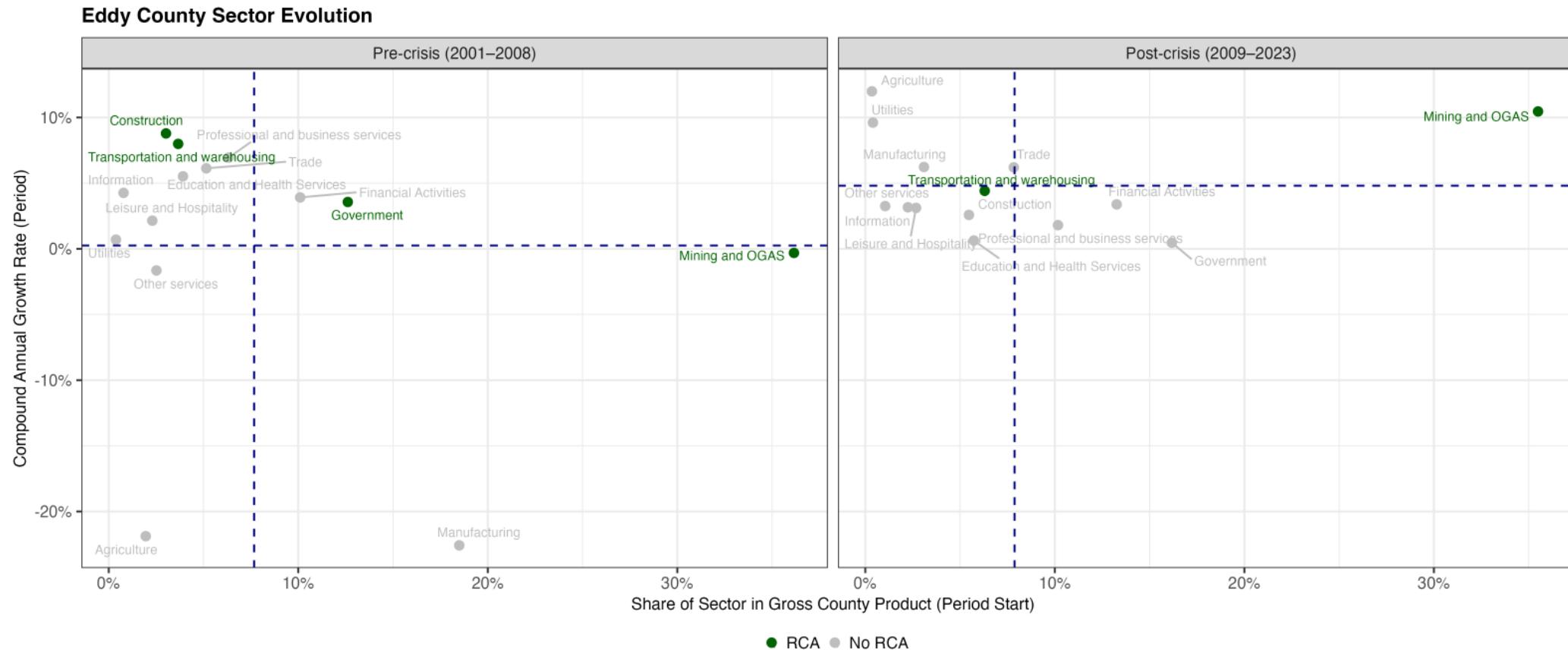
# Recent economic performance – GCP trajectory relative to peers



This graph uses the same set of peer counties as in the population comparison but now focuses on economic trends. As with the previous comparison to the state, each county's GCP is indexed to 2001, making it easier to spot major changes and differences in trajectory over time. Eddy's GCP is shown alongside that of its peer counties.

# Underlying economic engines

GCP can be broken down into the sectors that drive the local economy. The following graph does this by showing each sector's average growth rate and share of the economy before and after the financial crisis. Each dot is a sector; its position reflects both its average growth and its importance to the county's economy.

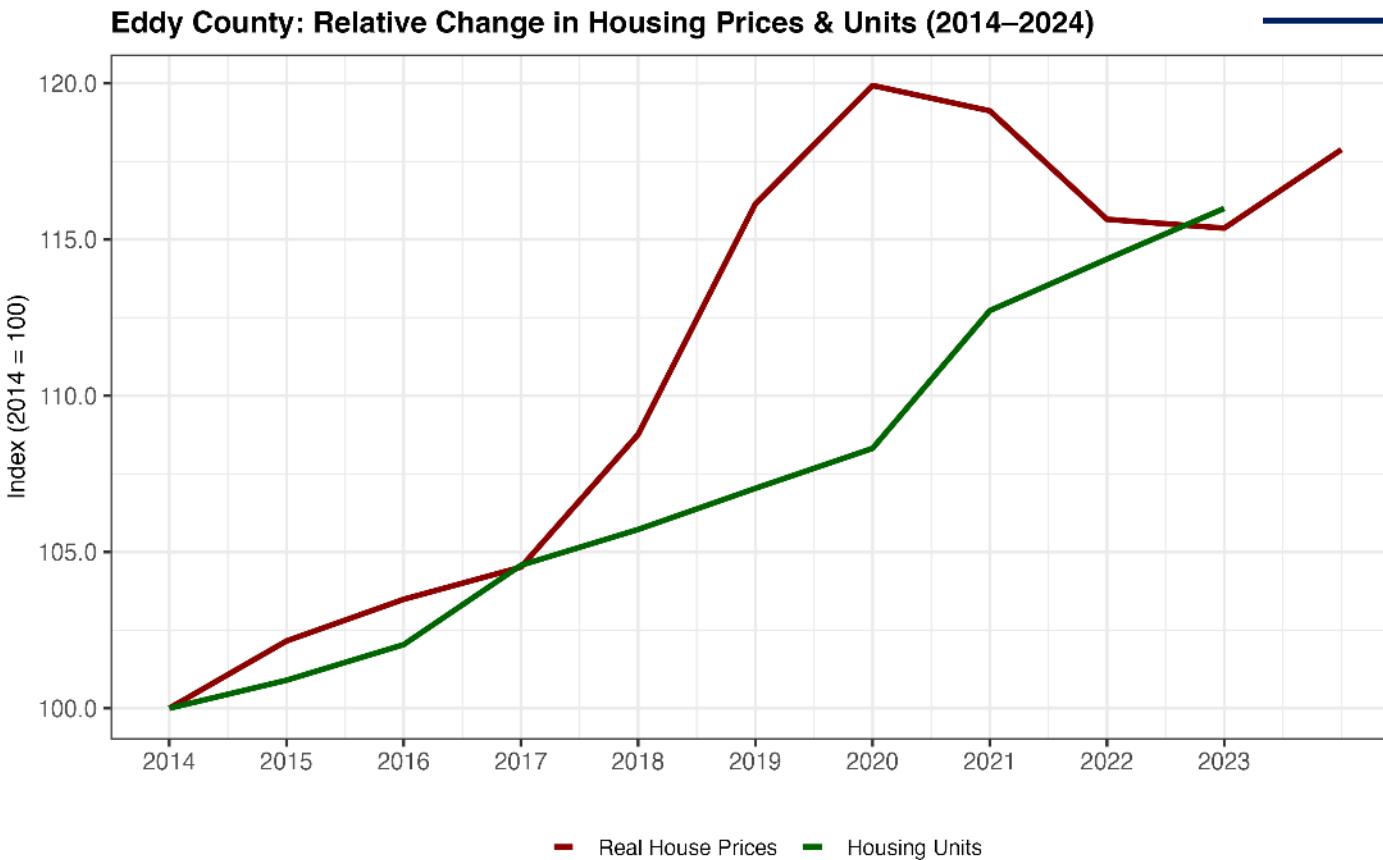


Source: Bureau of Economic Analysis (BEA)

Note: This RCA is comparing the county's share vs US to identify the distinctive sectors for the county.

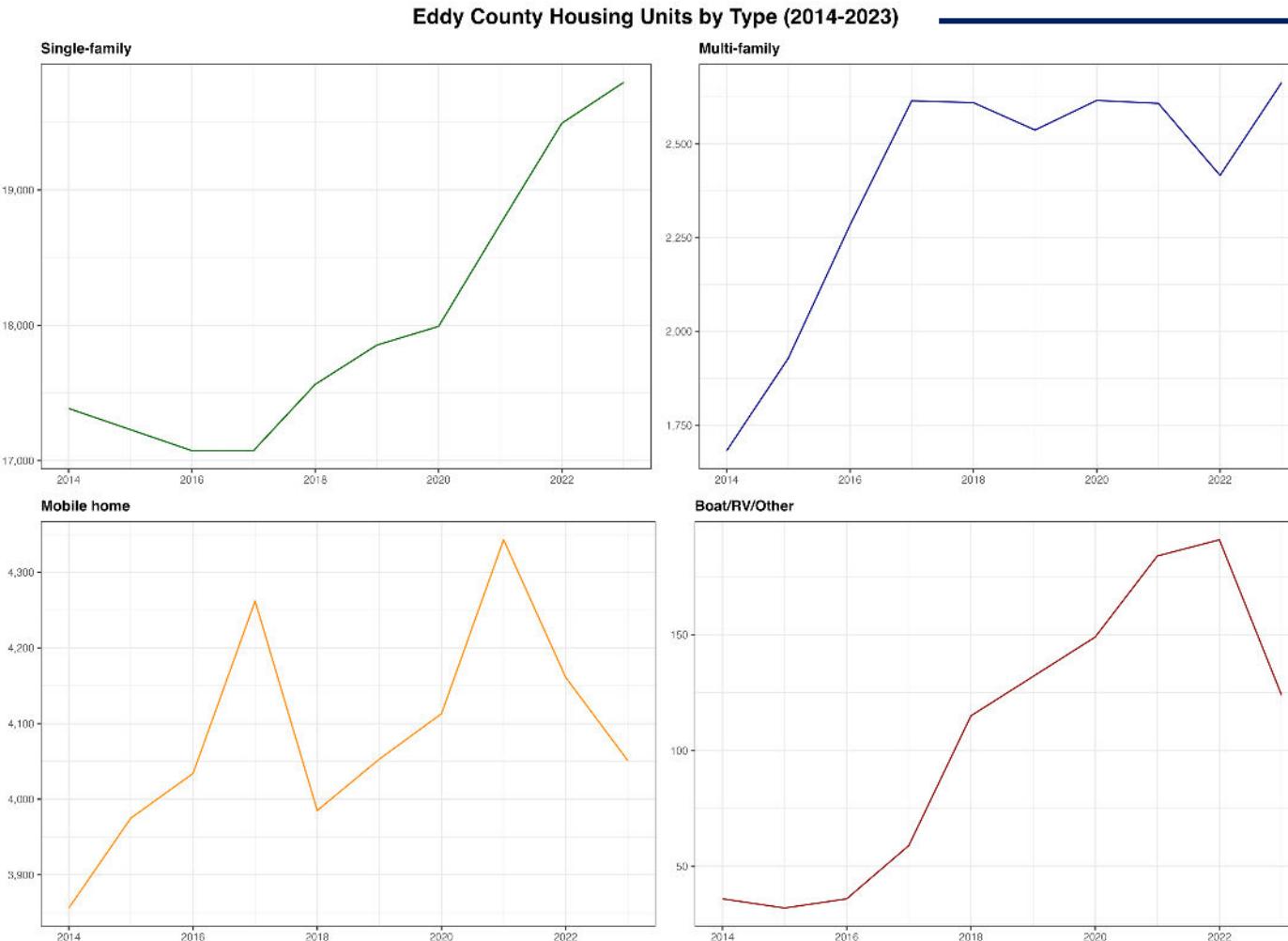
Note 2: Some sectors are not included in both graphs due to data availability

# Housing dynamics – local prices and housing supply



So far, the analysis has focused on economic activity as a driver of growth. However, as noted earlier, people are not only drawn by job opportunities, but also by the overall quality of life a place can offer. Factors such as amenities, public services, and housing availability all play a role in where people choose to live. While this analysis doesn't cover every factor, it offers some insight into a community's ability to attract and retain talent by examining trends in housing demand and supply.

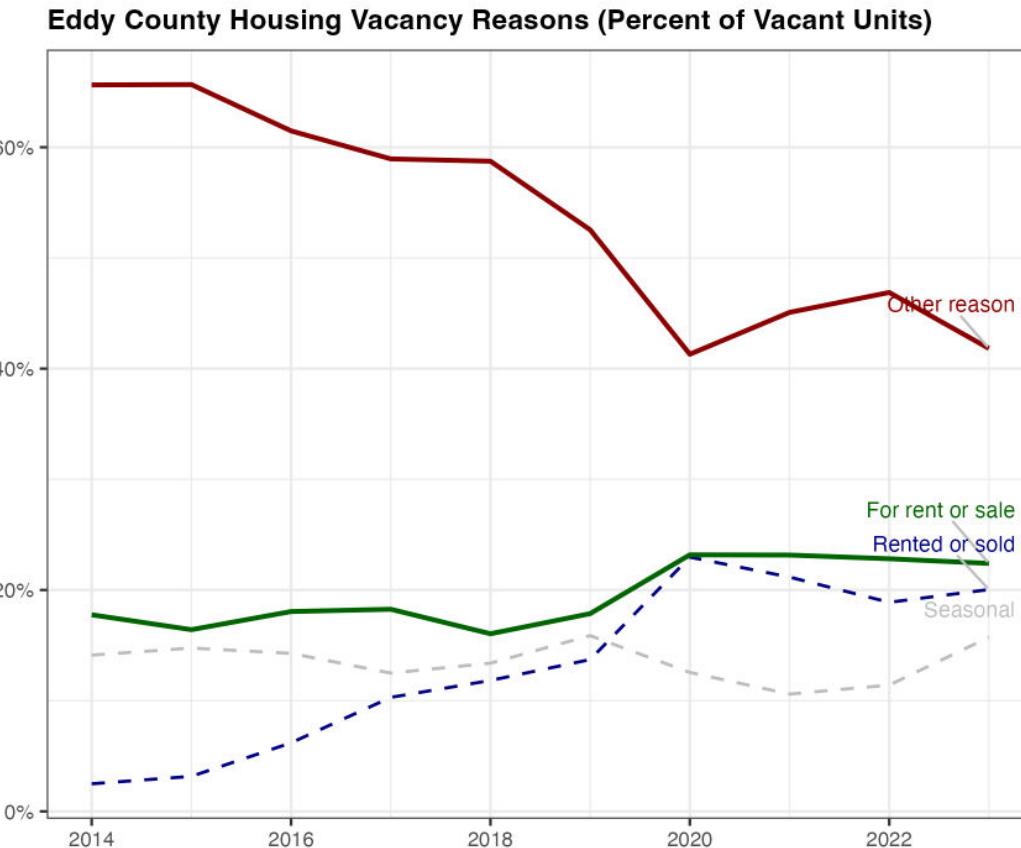
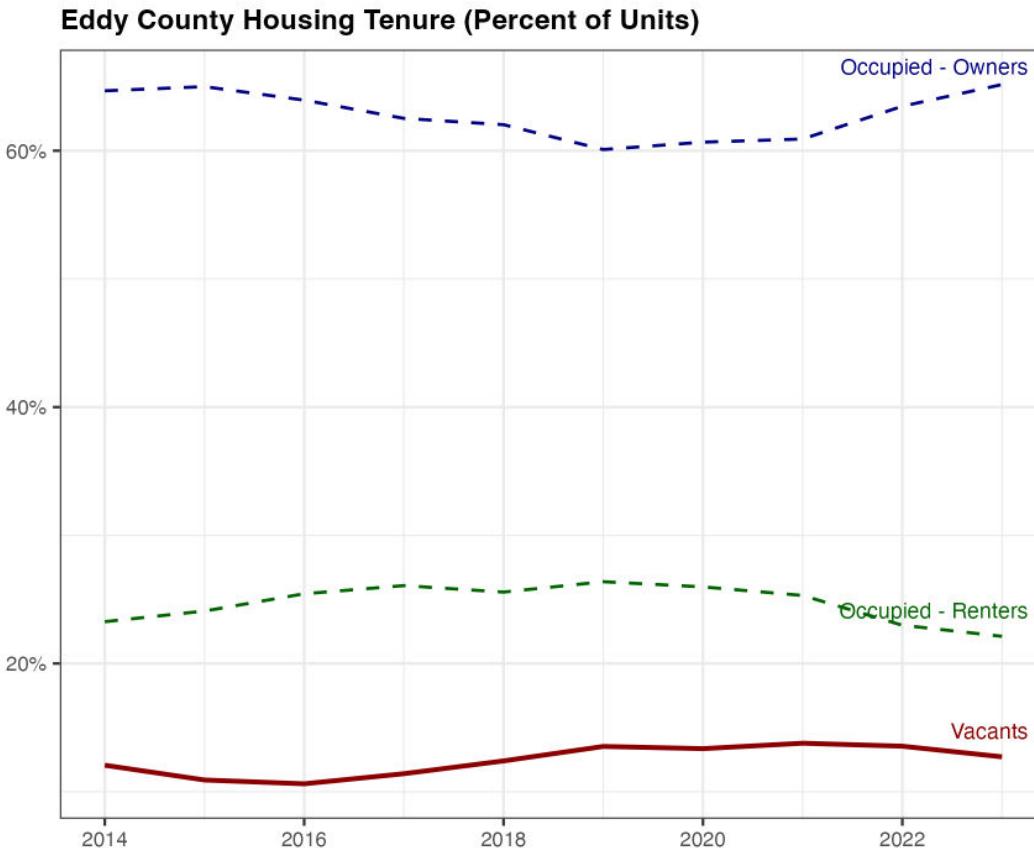
# Housing dynamics – Breakdown of housing supply



The U.S. Census Bureau classifies the housing structure according to how many units it has: one, two, three and so on. This analysis uses four main categories: Single-family (only one unit), Multi-family (two or more units), Mobile homes and Boat/RV or other types of housing.

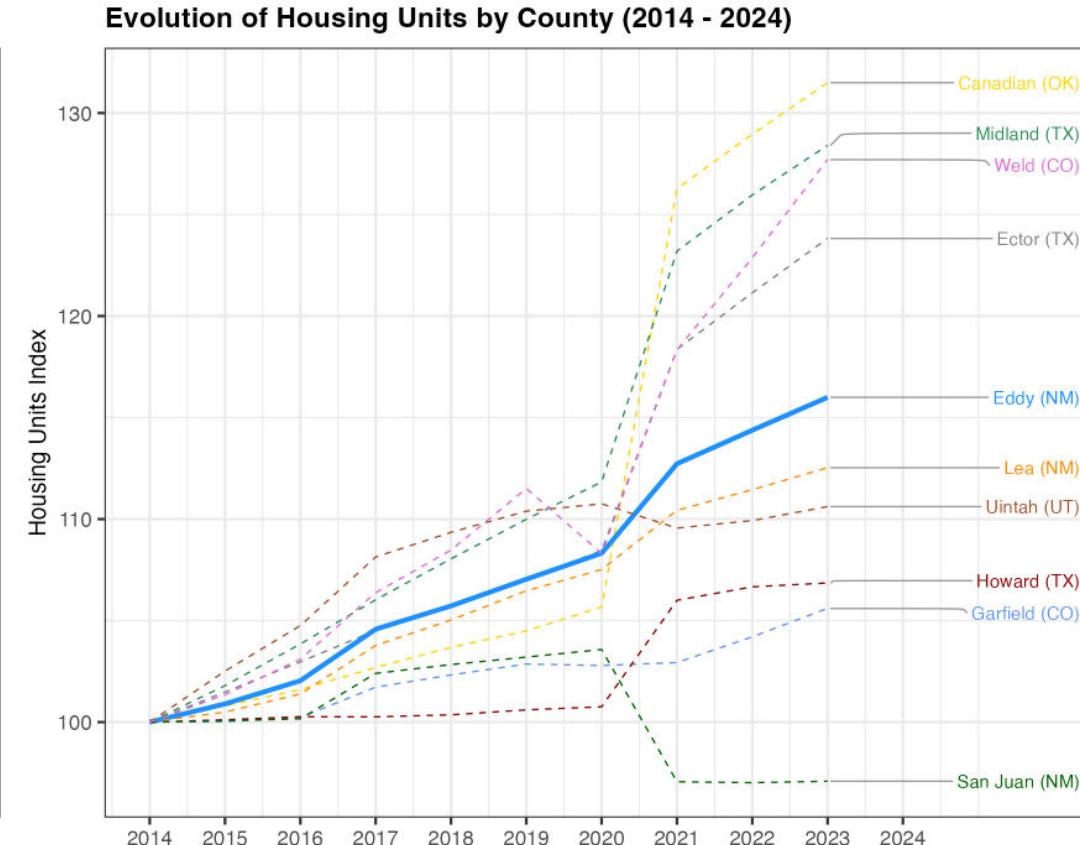
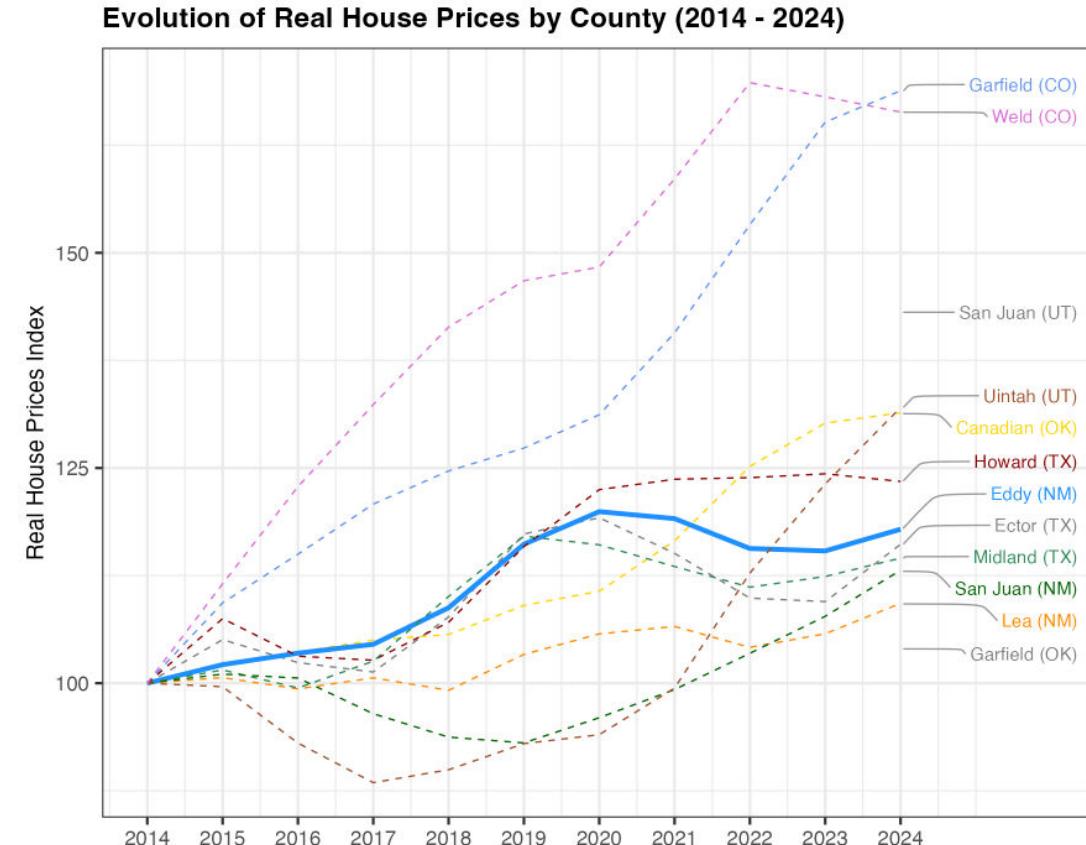
# Housing dynamics – Tenure and vacancy

Housing units can be occupied by either owners or renters, while some remain vacant for various reasons. Some vacant units are already taken and are awaiting new residents, while others are actively on the market for rent, for sale, or available seasonally. The most concerning are those listed as vacant for “Other” or unclear reasons.



# Housing dynamics – Comparison with peers

The previous slides examined Eddy County's housing supply and demand on its own. The following graphs add context by comparing these trends to the same peer counties used earlier



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# Diversification opportunities

*Which industries are better positioned to fuel Eddy County's economy?*

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# Overview of the selection of promising industries

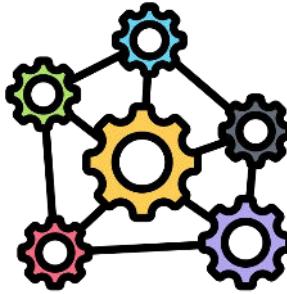
- **Background.** The prior section, “County Economic Snapshot,” provided a preliminary diagnosis of the county’s current situation by examining main population and economic trends. This analysis helps clarify whether the county faces greater challenges in fostering economic activity or in attracting and retaining workers for future growth. Regardless of these constraints, every community can benefit from identifying which industries are best positioned to bring new jobs.
- **Complement to local knowledge.** While local stakeholders often have valuable insights into which industries could thrive, the sheer number of possible options, over 1,000 industries at the 6-digit NAICS level, means there is room to complement local knowledge with data-driven observations, including some that may not be immediately obvious as a local fit.
- **Selection.** From the whole universe of potential industries, the analysis first identifies the industries the country is already good at and, second, other industries that require similar capabilities to these. Finally, it focuses in on which of these are tradable industries. Within tradable industries that align with the region’s existing capabilities, there are two key groups. “Already Competitive” industries have a strong local presence and serve as current economic strengths. “Potential Opportunities” are industries that are either smaller or not yet established locally, but whose growth requirements closely match the local economy’s current mix of know-how, skills, infrastructure, and other inputs (productive capabilities). These industries may offer pathways for future job creation and diversification.
- **Building blocks.** These groupings are based on an approximation of the local productive capabilities (knowhow, skills, infrastructure and other inputs) and how well these match the needs of different industries. By examining both the mix of existing industries and their broader relationships, the analysis highlights which industries the local economy is best equipped to support, either by reinforcing established strengths or by fostering new sources of job growth.

# Our analysis is built on three cornerstones

## Local Capabilities



## Industries Relatedness



## Tradable Income



**What is Eddy good at?**

Revealed Comparative Advantage (RCA) or Location Quotient (LQ) as key metric

**How interconnected are industries with one another and with Eddy's capabilities?**

Proximity and Density as key metrics

**Which industries can bring external income to Eddy?**

Tradable or base industries that export goods and services

# Our analysis is built on three cornerstones

## Local Capabilities



*What is Eddy good at?*  
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## Industries Relatedness

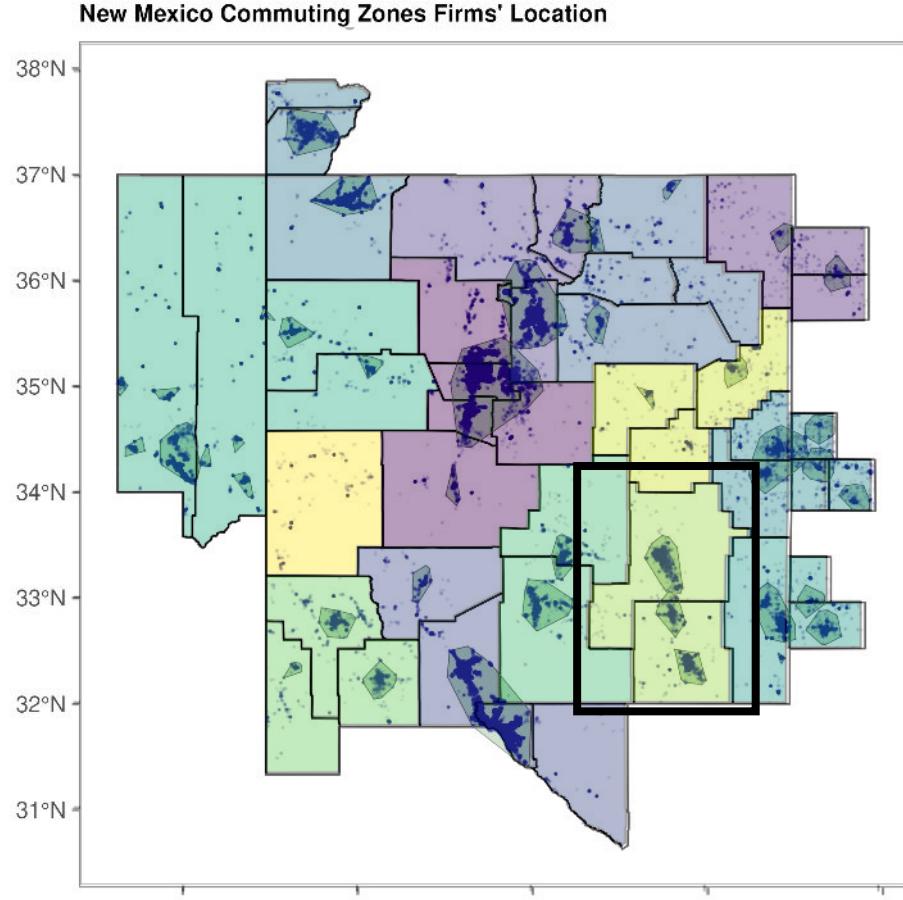


## Tradable Income



# What is considered “local”? Beyond administrative borders

## ► *We think of the local economy as a commuting zone (CZ).*



Workers often commute beyond the administrative boundaries of towns and cities. To capture this, the USDA defines commuting zones across the country, grouping areas based on where residents travel for work.

Eddy's commuting zone, highlighted by the black square on the left map, includes Chaves County (NM).

The analysis in this document focuses on Eddy's commuting zone (CZ), so references to Eddy refer to its CZ

# Which are Eddy capabilities? Looking for signals

▶ *Productive capabilities could be collective knowhow, skills, infrastructure and other inputs. We cannot observe all, but the current economic activity gives us a hint of which industries they can support.*

## Key metric:

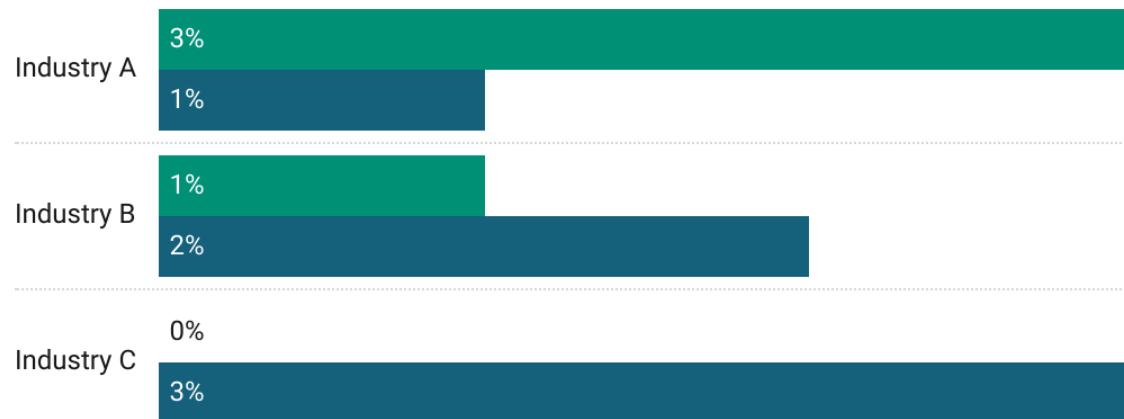
$$RCA = \frac{\% \text{ of CZ Jobs in industry } i}{\% \text{ of US Jobs in industry } i}$$



*By comparing an industry's presence in the CZ relative to its presence nationally, it tells us what is Eddy good at.*

## For example:

County share   U.S Share



**RCA = 3 (RCA > 1, Competitive edge).** The CZ has the capabilities to excel in this industry.

**RCA = 0.5 (RCA < 1, Not competitive).** The CZ has some capabilities to participate in the industry

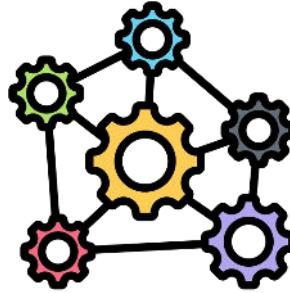
**RCA = 0 (No presence).** The industry is not currently active, but it could be developed in the future

# Our analysis is built on three cornerstones

## Local Capabilities



## Industries Relatedness



*How interconnected are industries  
with one another and with  
Eddy's capabilities?  
Proximity and Density as key metrics*

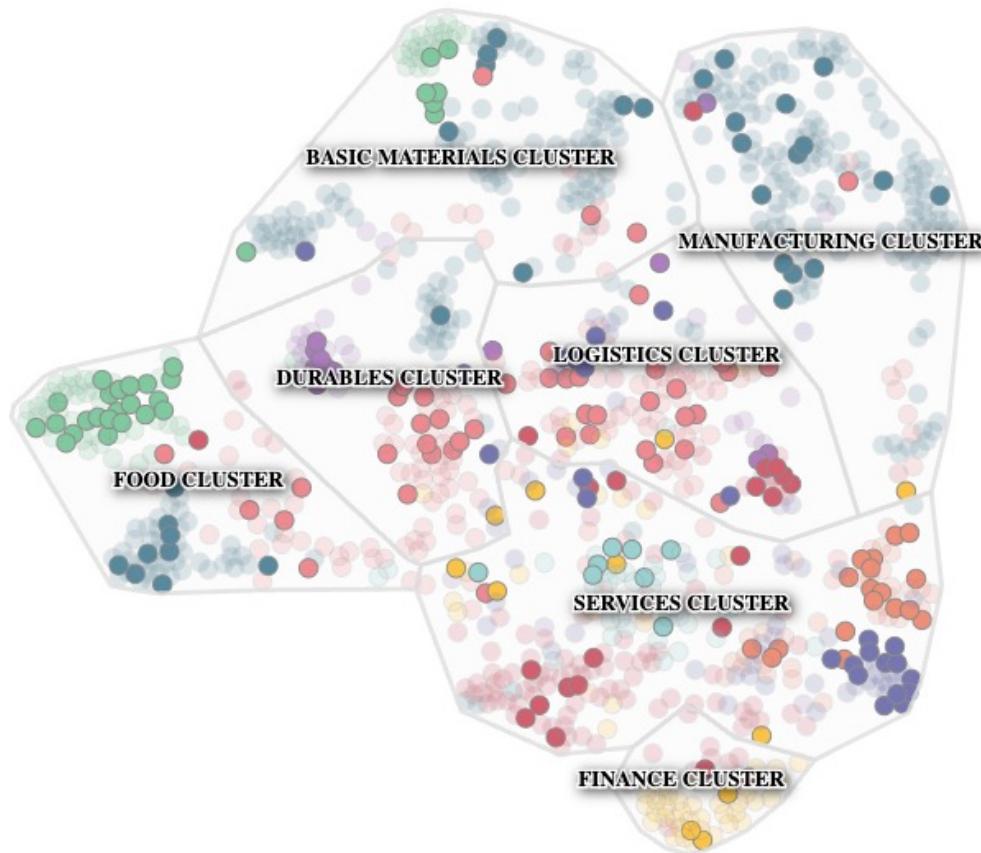
## Tradable Income



# What else could Eddy capabilities support? Let's start by looking at the relationships between industries



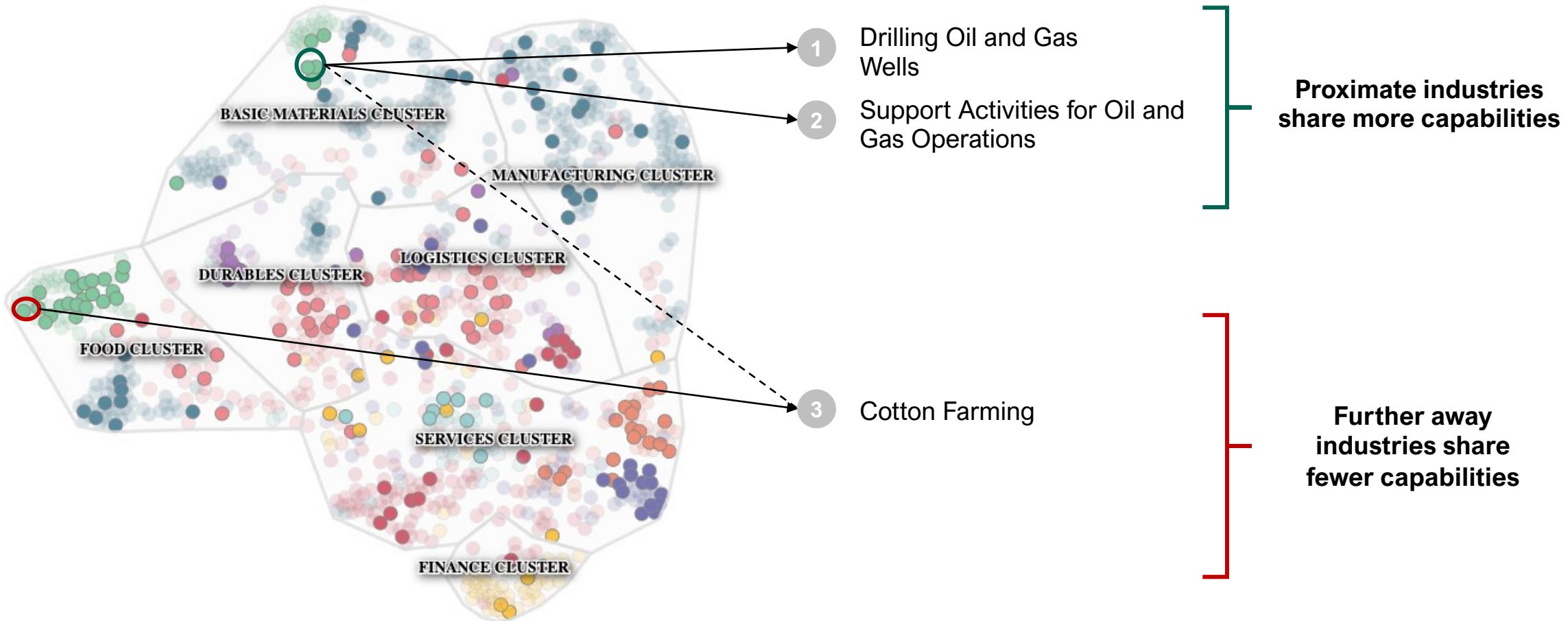
➤ ***The industry space is the visual representation of the relatedness between all the existing industries.***



- Each dot represents an industry.
- Each color represents an economic sector
- Each area outlined in grey represents a cluster of economic activity. In each, industries from different economic sectors require similar capabilities.
- The stronger colored dots are industries with a significant presence in Eddy County commuting zone relative to the rest of the US (RCA > 1).

# Which industries are more alike? It's all about their position

▶ **Proximity tells us how similar two industries are.**



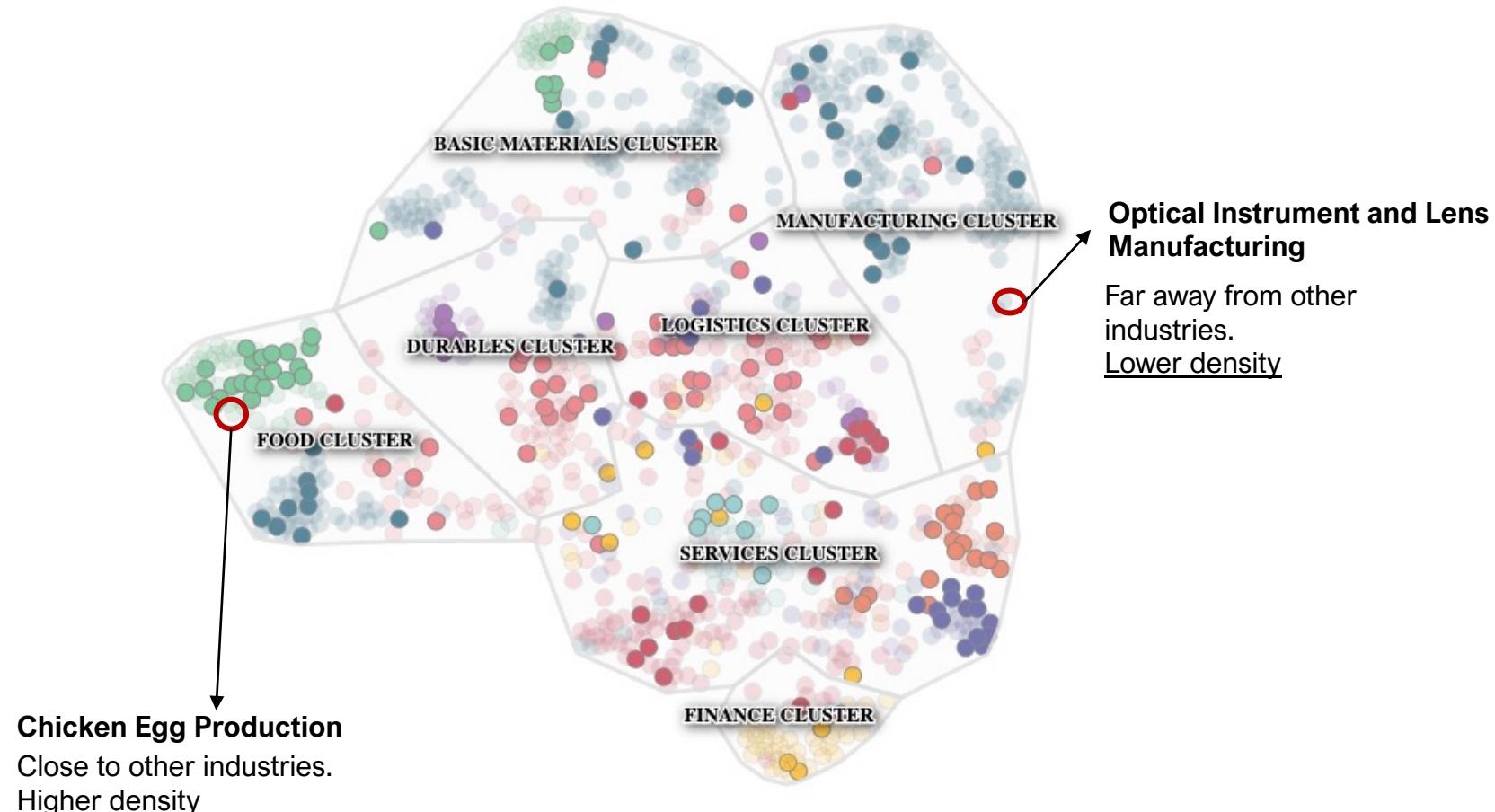
# What industries require similar capabilities as those found at Eddy?

Depends on their proximity to current industries

► *Density considers the connections between an industry and the CZ's current economic activity. It provides a notion of which other industries the productive capabilities could support.*

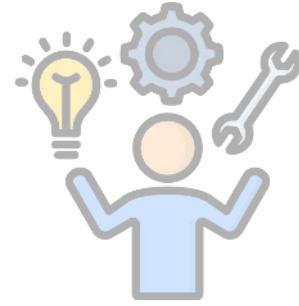
When thinking about new industries, development will be easier if the industry is located in a part of the industry space where Eddy already has significant economic activity and strong capabilities. Regions typically grow by developing these

Eddy already has significant economic activity and strong capabilities. Regions typically grow by developing these



# Our analysis is built on three cornerstones

## Local Capabilities



## Industries Relatedness



## Tradable Income

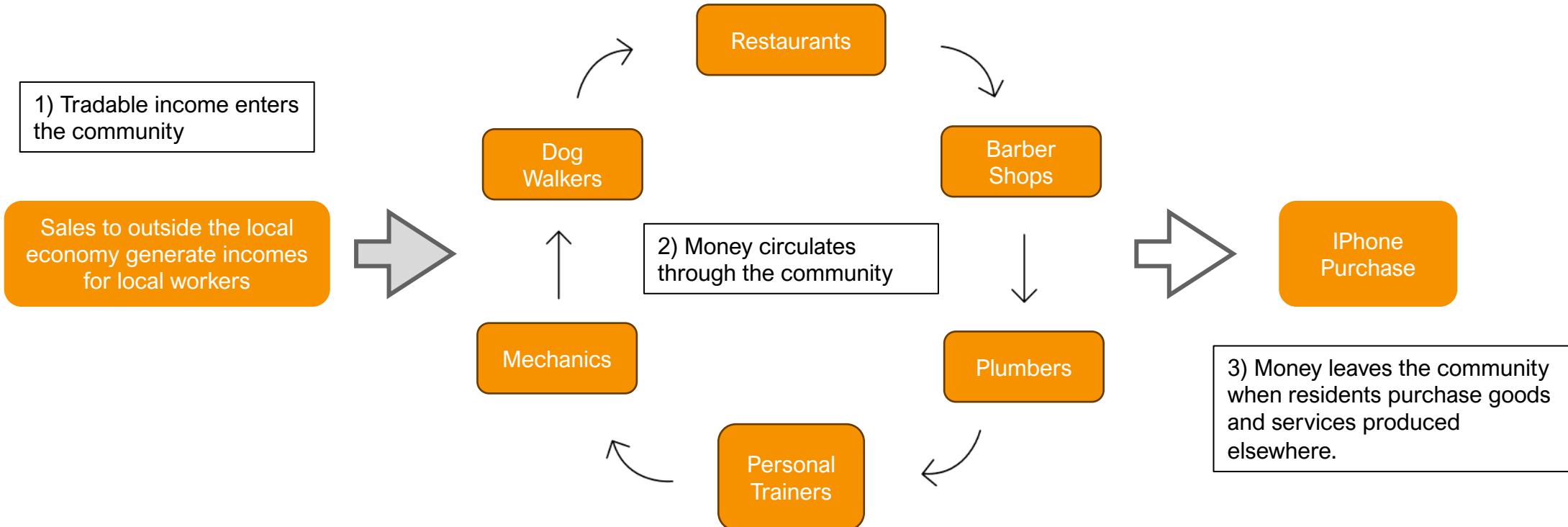


***Which industries can bring external income to Eddy?***

*Tradable or base industries that export goods and services*

# What are the industries that could bring external income to Eddy? The relevance of tradable income

➤ **Tradable income is jargon for money generated from stuff that a local economy sells beyond its borders. It is essential for economic survival as it allows to purchase goods and services that are not produced locally and creates local jobs.**



There are 1012 industries (6-digit NAICS 2022 code). Using County Business Pattern (CBP) dataset from Eckert et al. (2021), Growth Lab research has determined that 52% of them are tradable.

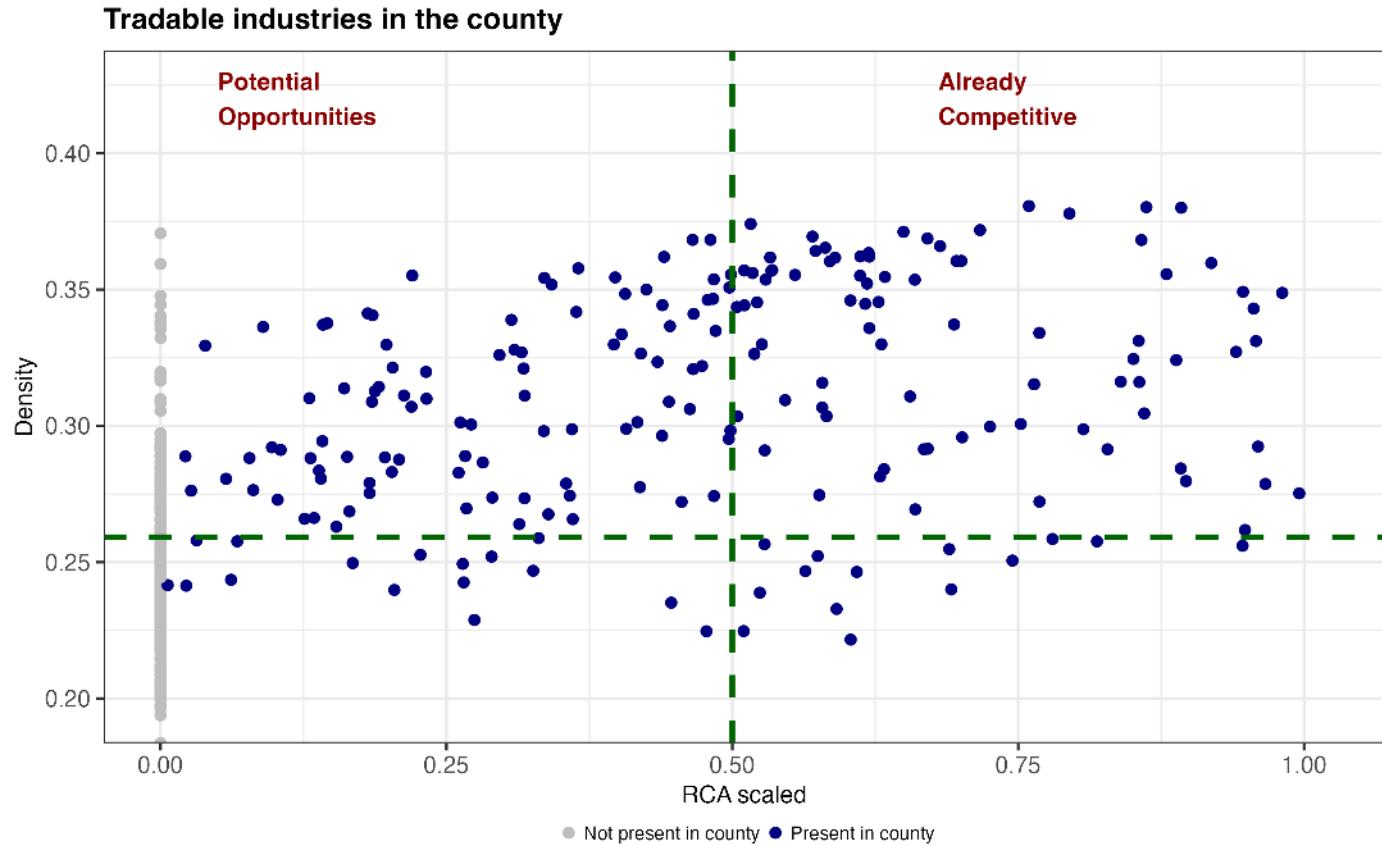
# What are the opportunities in the tradable sector? RCA and Density as criteria

Remember:

1 **RCA.** What is Eddy good at?

2 **Density.** How close is an industry to the Eddy's existing capabilities?

**Defining the groups.** The first threshold for group definitions is set at  $RCA = 1$  (or 0.5 on the scaled horizontal axis), separating industries with relatively larger and smaller local presence. The second threshold uses the median density among all tradable industries to identify those most similar to the local productive capabilities. The focus is on industries above the median density, as they are more closely aligned with existing capabilities.



Source: Dun & Bradstreet

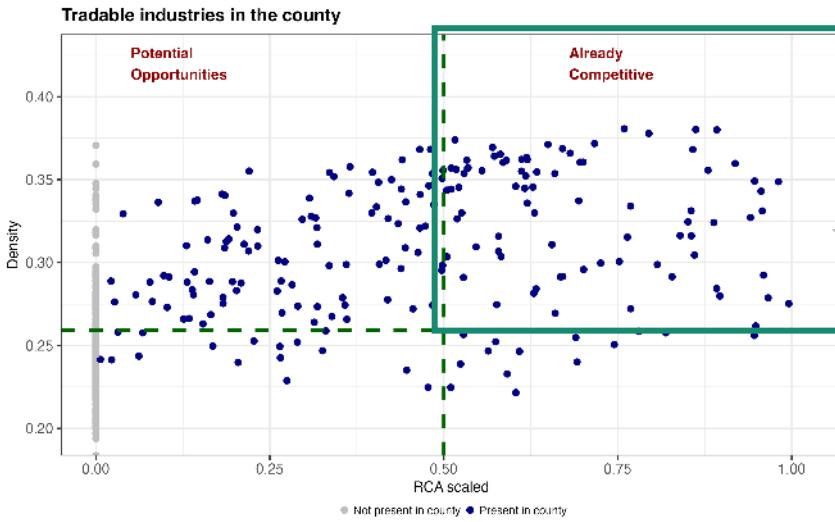
Note about RCA scaled formula:  $RCA \text{ scaled} = \frac{RCA}{RCA+1}$ .  $RCA=1$  is represented as 0.50 in the horizontal axis

# How to start exploring promising industries

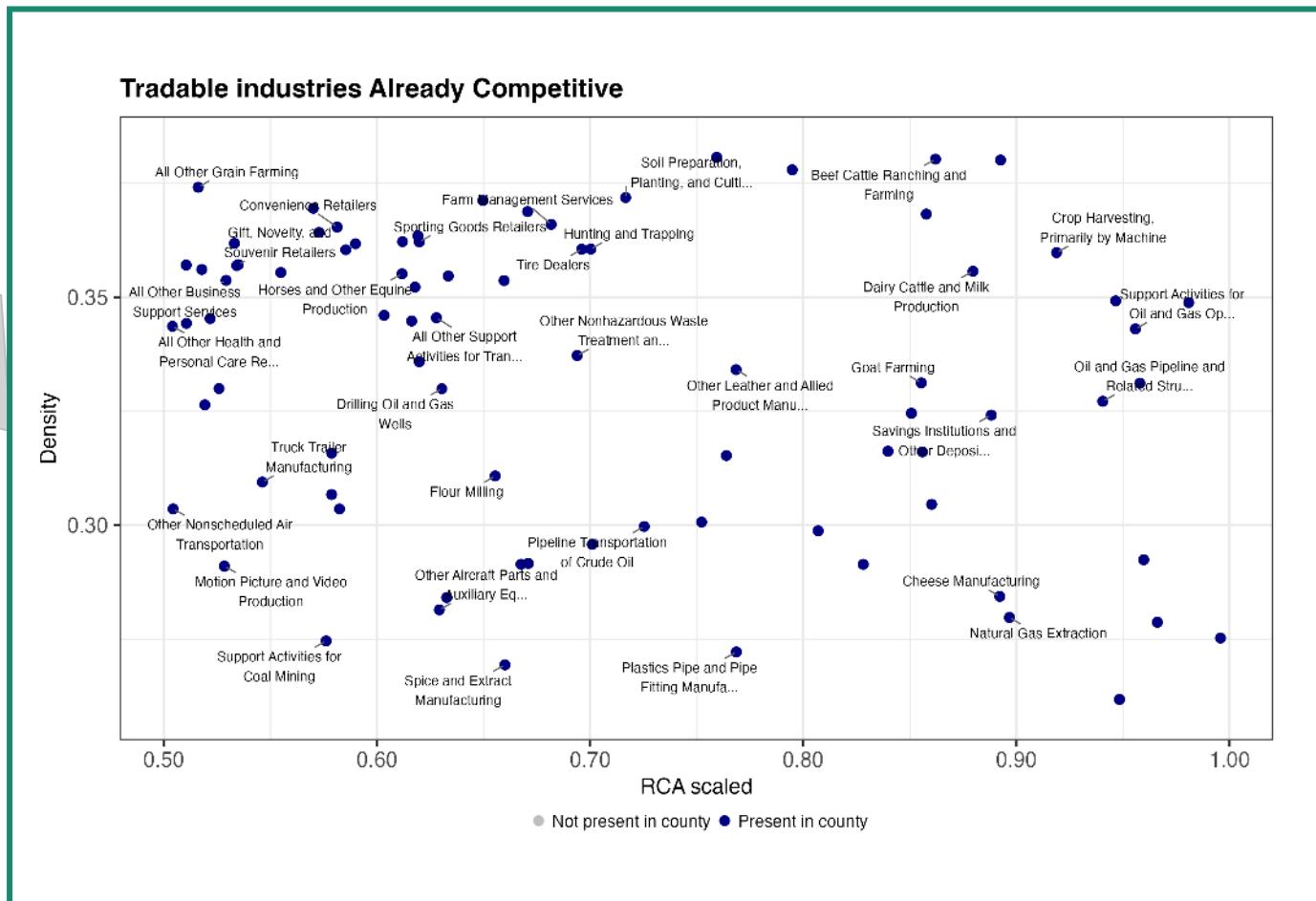
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- **Wide set of possibilities.** The analysis highlights over 200 potential industries for growth (either by supporting industries already established locally or by creating conditions for new ones with potential to thrive). Ultimately, choosing which industries to pursue depends on local priorities, assets, and experience. The following slides and the attached dataset offer multiple ways to explore these opportunities. There is not a unique way of using these resources.
- **First pass.** If you're unsure where to begin, start by reviewing the visuals that display all opportunities by category (Manufacturing, Trade, Services, and Natural Resources) to get a sense of the landscape. Alternate between the visuals and the dataset, and make note of any industries that immediately catch your attention for further exploration. The dataset provides several variables for each industry, but at this stage, simply flag those that seem particularly relevant or interesting for your context. You can later assess which of these options are most practical or realistic based on the specific conditions required for development.
- **Exercise caution with opportunities that feel off.** Promising industries are identified based on their similarity to the local economy's capabilities, but a perfect fit is uncommon: some capabilities (skills, infrastructure, or inputs) may still be missing, especially for new or emerging sectors. The next step is to identify and assess these gaps with input from local firms and industry partners. In some cases, missing capabilities (like climate conditions for "Cotton Ginning") or unfavorable market conditions (as with "Support Activities for Coal Mining") mean the opportunity isn't realistic or practical. It is recommended to set aside options that clearly do not fit local conditions and instead focus on opportunities that align better with community strengths and potential.

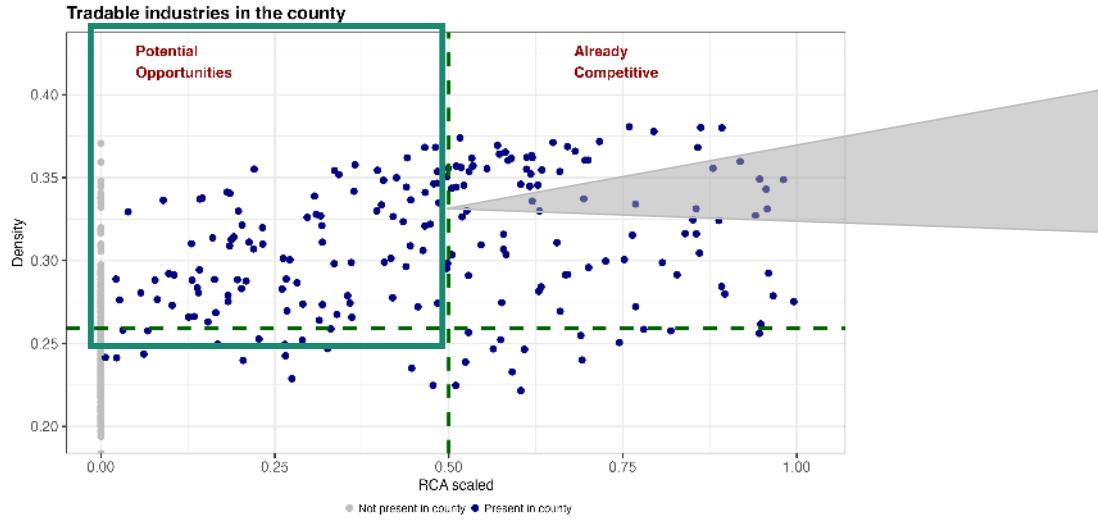
# Already competitive industries in Eddy's commuting zone



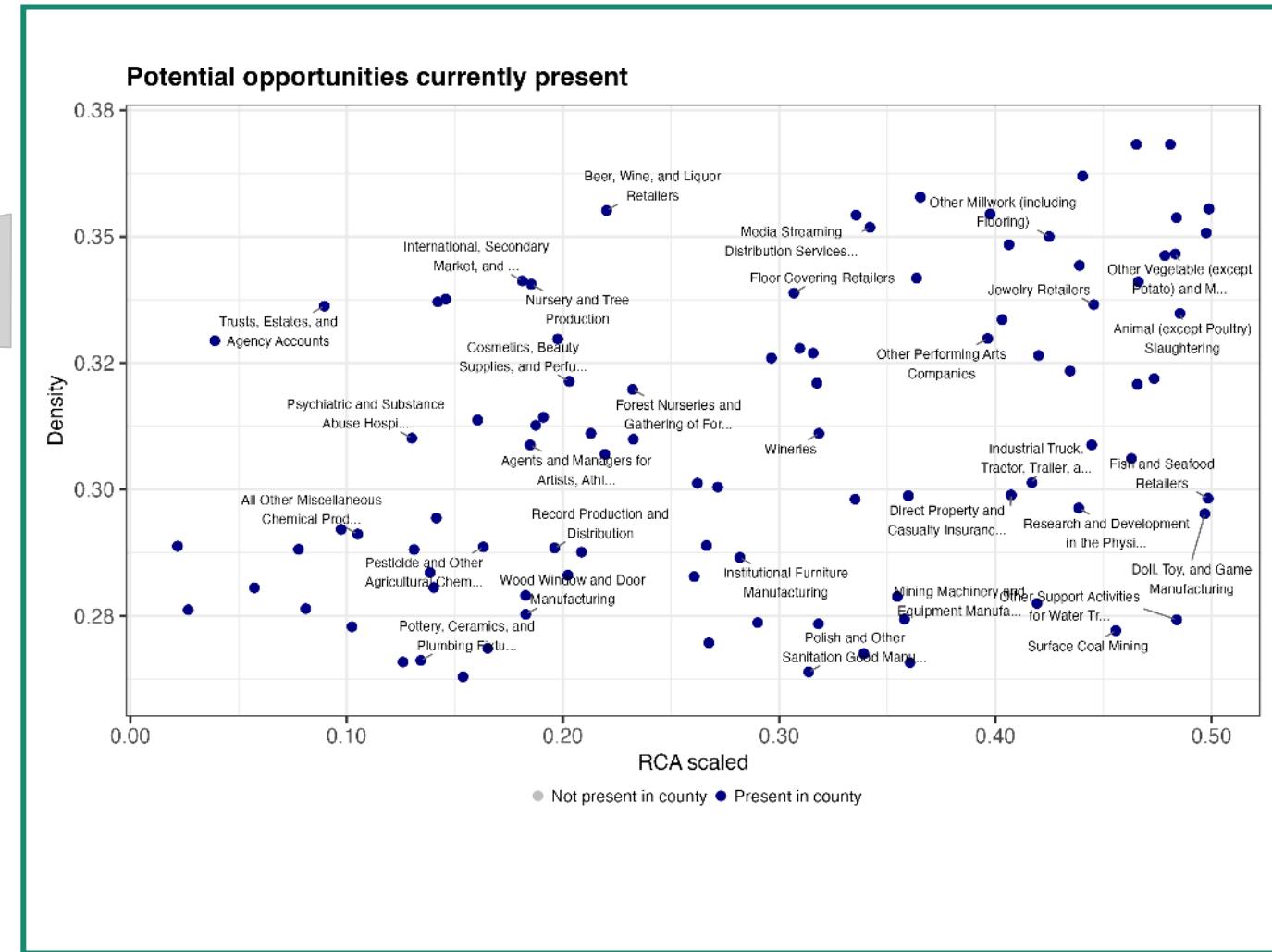
Industries in the top-right quadrant already have a strong foothold in Eddy (RCA > 1 or RCA scaled > 0.5). A development strategy could focus on creating the right conditions – such as infrastructure, skilled workforce, and supportive policies – to help them grow and thrive even further.



# Potential opportunities currently present in the county

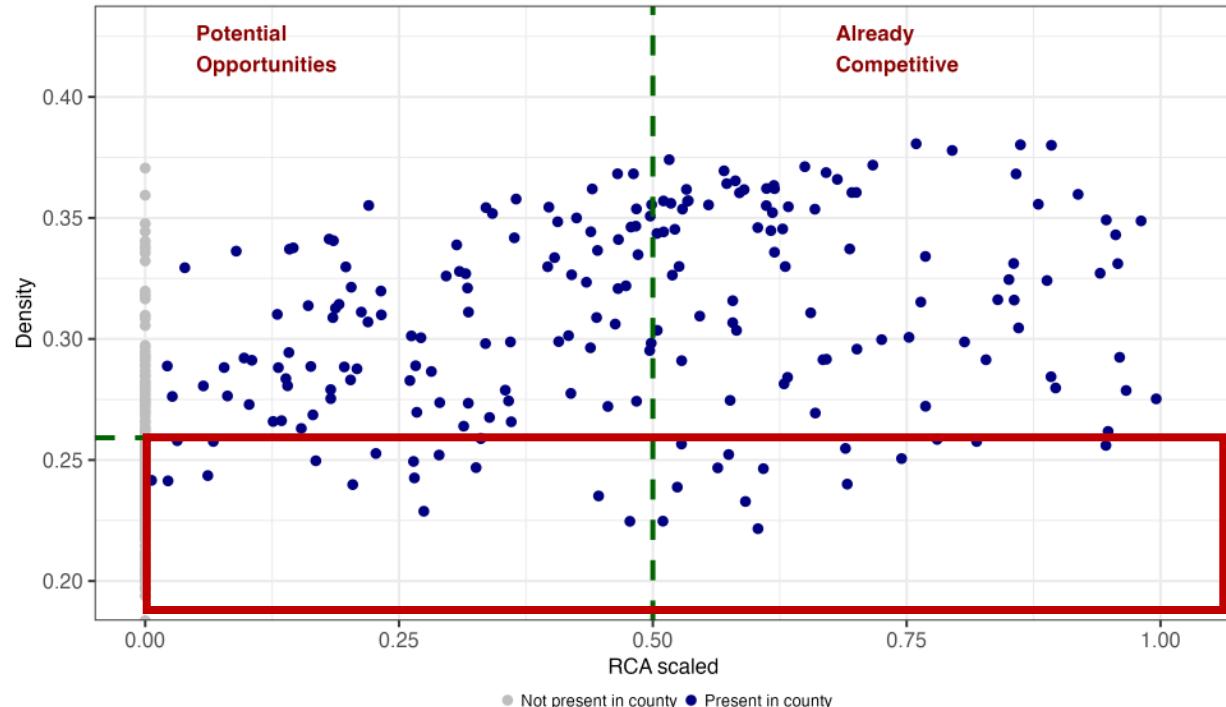


Industries in the top-left quadrant are particularly relevant for the county's development strategy because they already have some presence and are closely related to existing capabilities. In other words, they hold significant potential for growth. A development strategy could focus on creating the right conditions to help these industries flourish.



# Industries further away from Eddy's capabilities

Tradable industries in the county



The analysis does not focus on this set of industries because their requirements are not closely aligned with Eddy's current capabilities. Industries with little local presence are unlikely to take root, while those with a larger footprint but a weak fit are more likely to shrink or eventually leave the community.

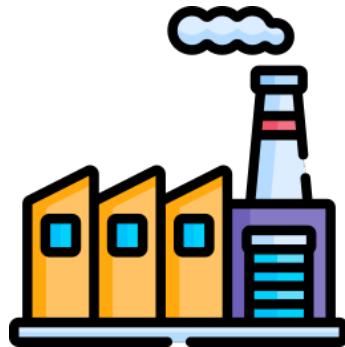
# We identify 181 industries with potential opportunities.

## Four major categories.



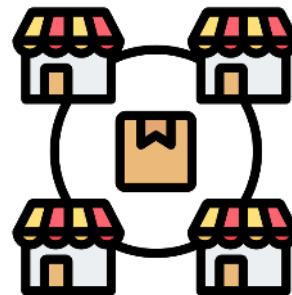
*Several industries in Eddy offer emerging and new promising opportunities for increased tradable income. While these industries are not yet as competitive in Eddy as in other parts of the U.S., they share capabilities with industries that are already strong locally. This means they could expand relatively easily if the right conditions are in place.*

### Manufacturing



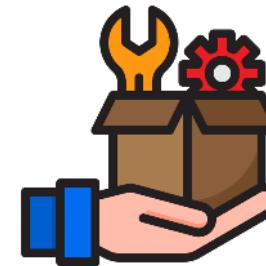
*85 industries as potential opportunities*

### Trade



*27 industries in retail and wholesale*

### Services



*36 industries across different sectors*

### Natural Resources



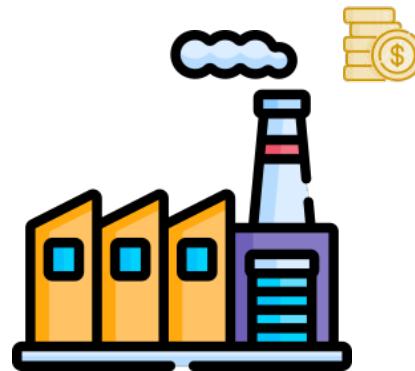
*33 industries in Agriculture and mining*

# Potential opportunities with high and medium level wages. 130 industries across categories



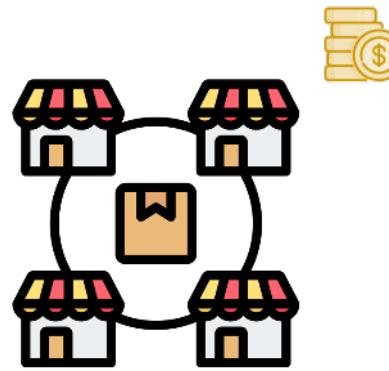
*Industries are grouped by wage levels using U.S. averages: the top 25% are classified as high-wage, the bottom 25% as low-wage, and the rest as medium-wage. The analysis focuses on high- and medium-wage industries, as these are more likely to provide quality jobs and stronger economic benefits for the community.*

## Manufacturing



*79 industries as potential opportunities*

## Trade



*12 industries in retail and wholesale*

## Services



*29 industries across different sectors*

## Natural Resources

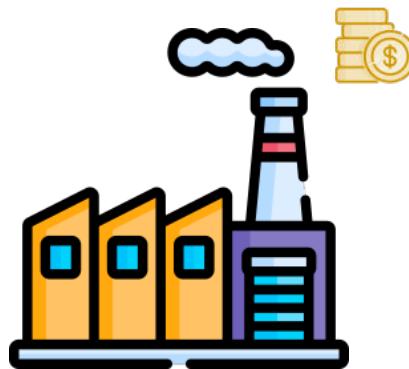


*10 industries in Agriculture and mining*

# Potential opportunities with high and medium level wages. 130 industries across categories

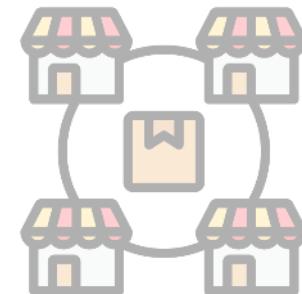
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## Manufacturing

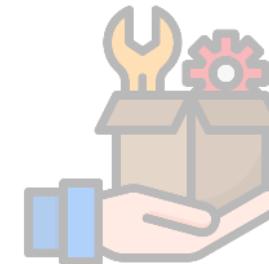


*79 industries as potential opportunities*

## Trade



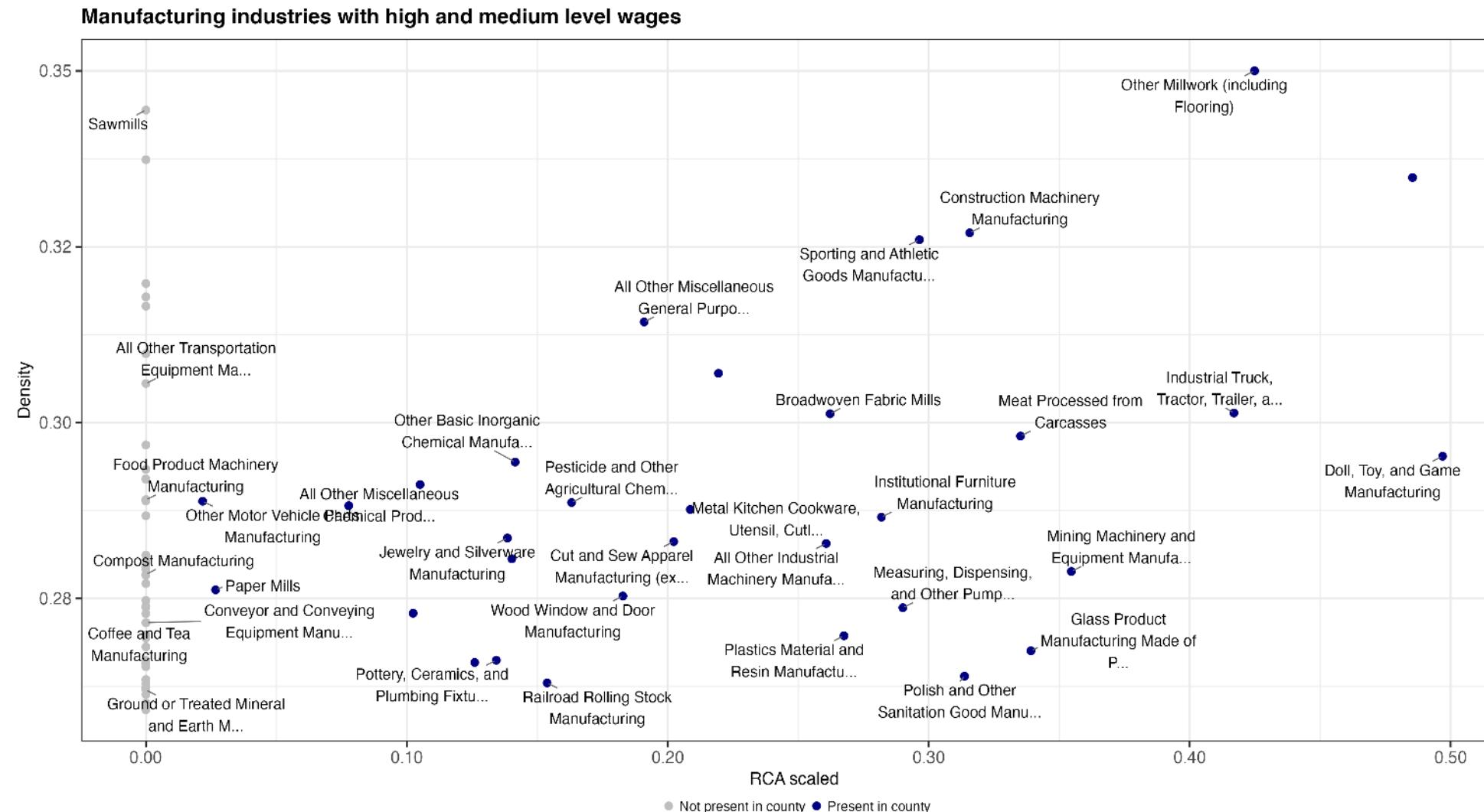
## Services



## Natural Resources



# High and medium wages opportunities. 79 manufacturing industries



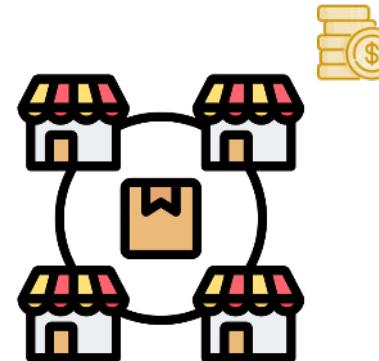
# Potential opportunities with high and medium level wages. 130 industries across categories

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## Manufacturing

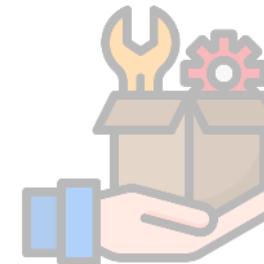


## Trade



*12 industries in retail and wholesale*

## Services

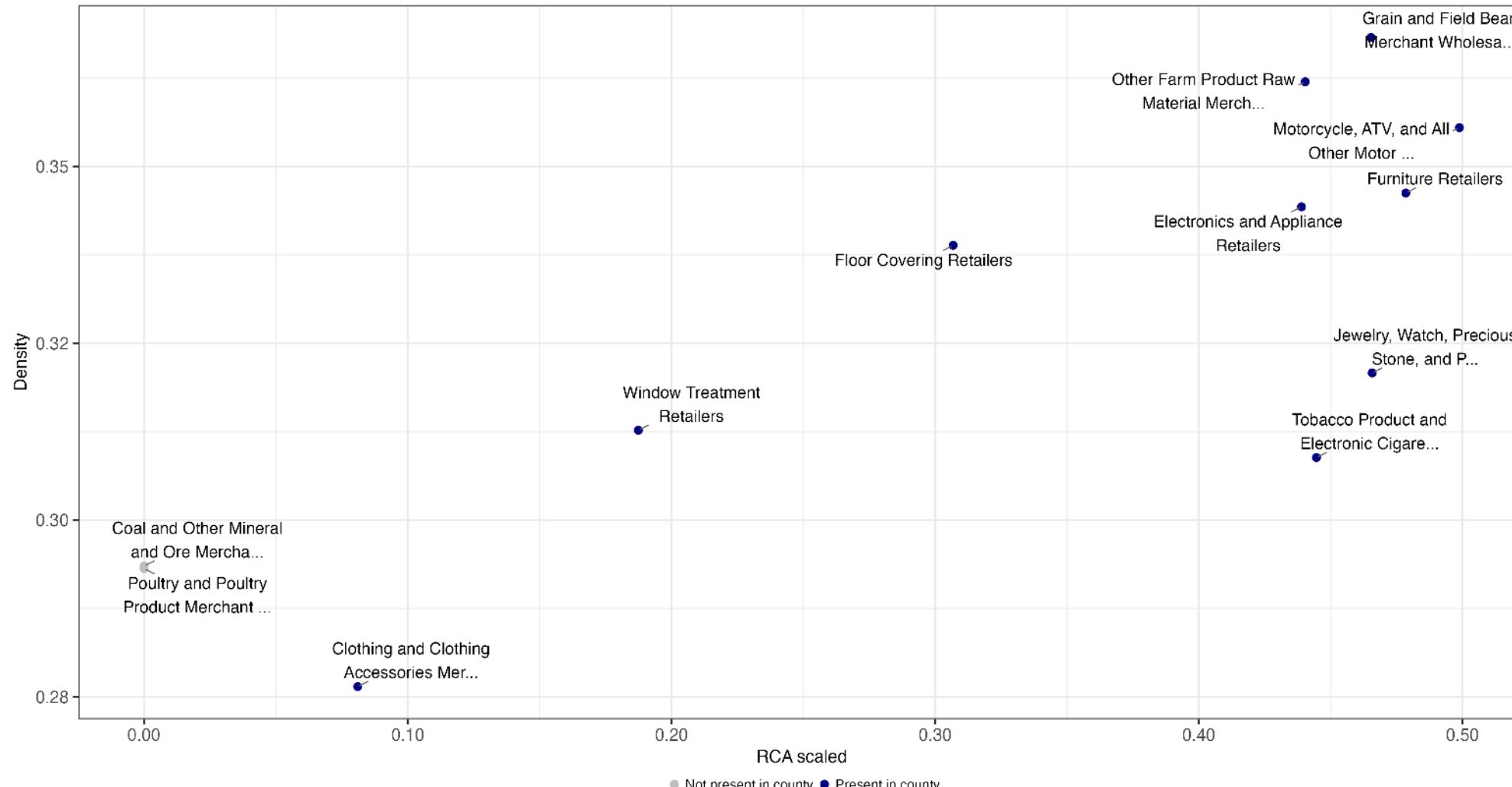


## Natural Resources



# High and medium wages opportunities. 12 retail and wholesale trade industries

Retail and Wholesale industries with high and medium level wages



Main sources: Bureau of Economic Analysis (BEA) and Dun & Bradstreet.

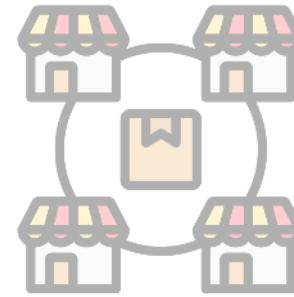
# Potential opportunities with high and medium level wages. 130 industries across categories

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## Manufacturing



## Trade



## Services

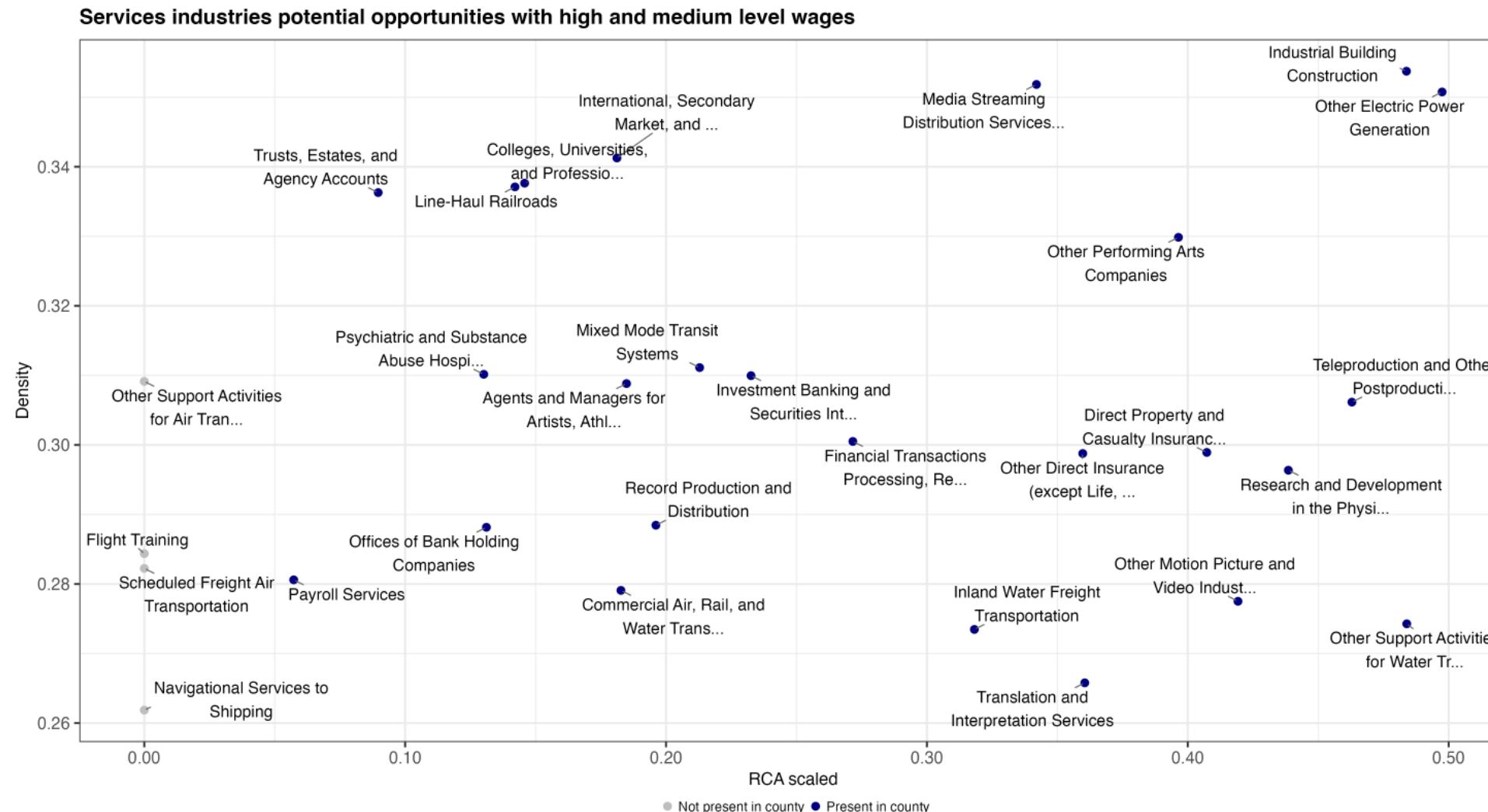


*29 industries across  
different sectors*

## Natural Resources



# High and medium wages opportunities. 29 services industries



# Potential opportunities with high and medium level wages. 130 industries across categories

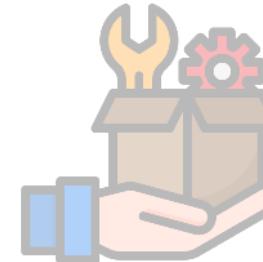
## Manufacturing



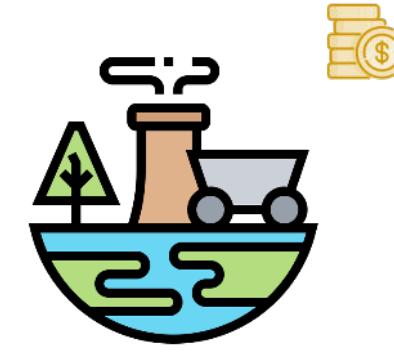
## Trade



## Services

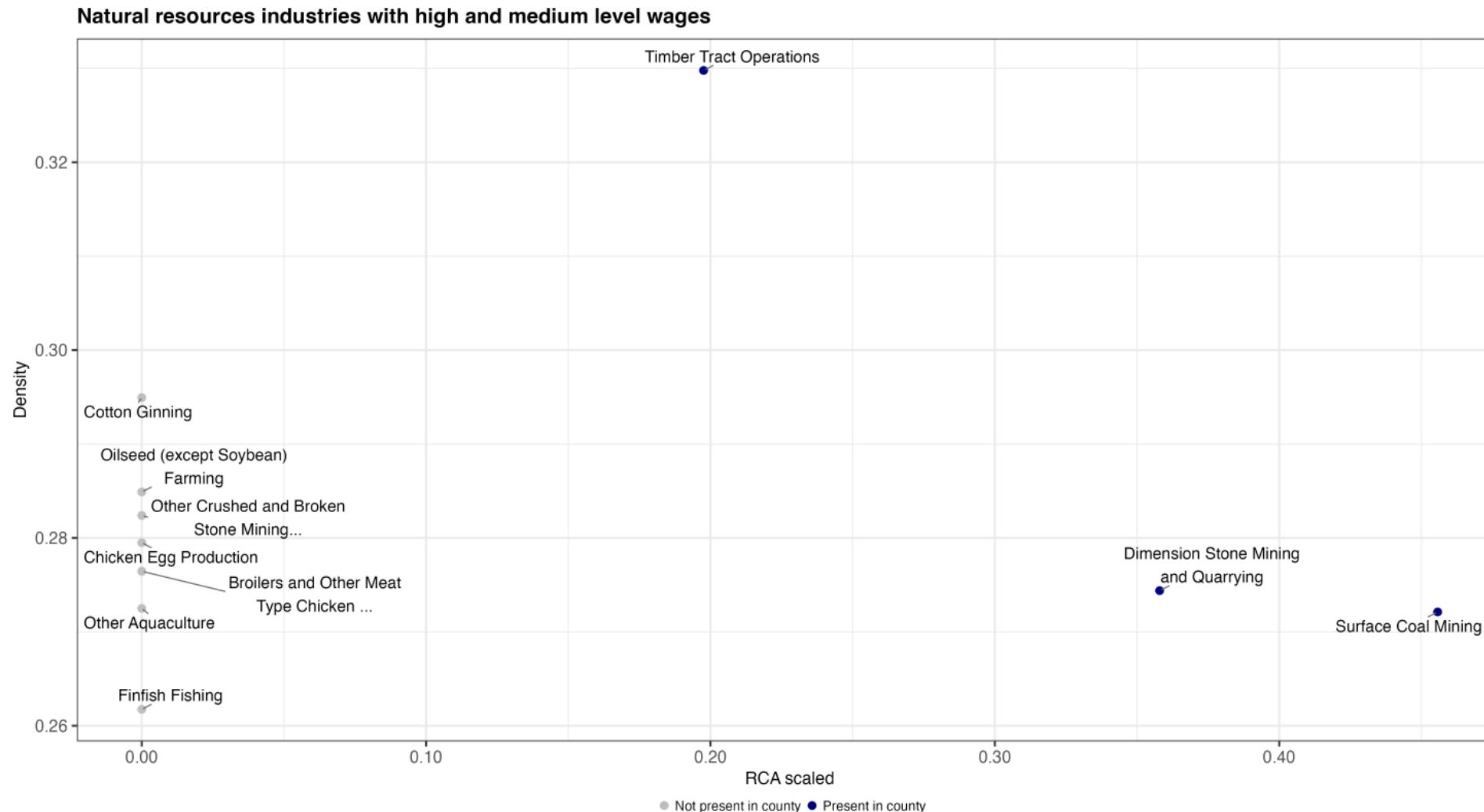


## Natural Resources



*10 industries in  
Agriculture and mining*

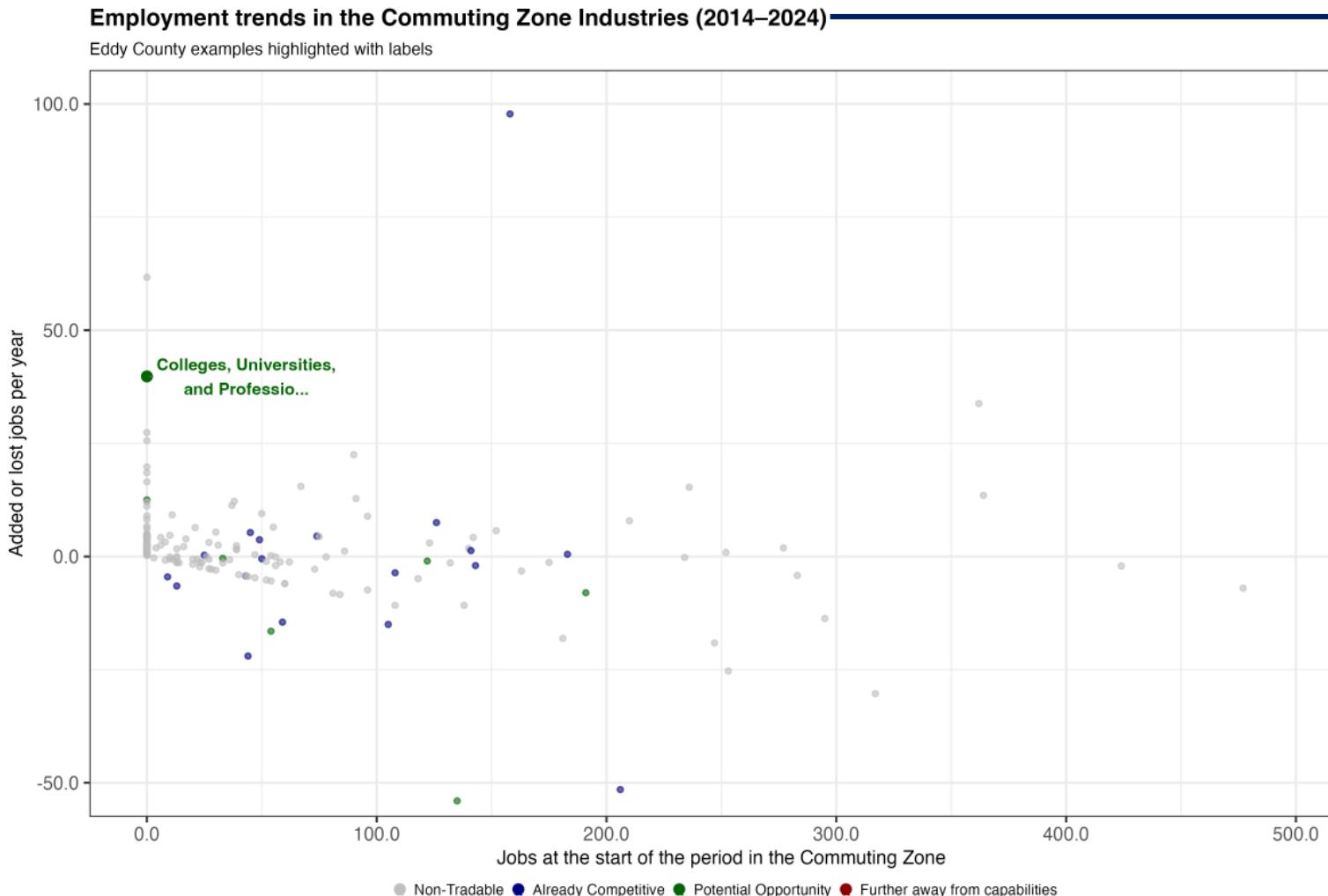
# High and medium wages opportunities. 10 extractive industries



# How to further assess the selected options

- **Background.** After selecting a list of industries that feel particular relevant or attractive, the next step is to figure out which are the missing capabilities and what can be done, if anything, to provide them.
- **Dataset as a reference.** The dataset provides useful information about potential gaps in productive capabilities, such as electricity needs or supply chain positioning, but it is not meant to offer all the answers. Instead, it serves as a starting point for further questions and discussions among local stakeholders. For instance, while the data show which industries have added or lost jobs in recent years, understanding the underlying reasons requires local and industry insights.
- **Examples as guidance rather than prescription.** External analysis cannot replace local insight or dictate which industries to target. The following slides highlight selected industries and explore various dimensions of each, not to prescribe priorities, but to demonstrate how to use the dataset's variables to prompt questions and guide decision-making. The examples focus on "Potential Opportunities" with medium or high wages that already have some local presence. The industries are drawn from sectors highlighted in the previous section, and Manufacturing because this sector offers additional variables to consider.
- **Review process.** The examples start by comparing job trends at the local, regional, and state levels to provide an overview of growing industries and to prompt consideration of the factors enabling or hindering growth. For some industries, job data may not be available. In these cases, reaching out, perhaps with help from the local Economic Development Organization (EDO), to firms already active in the industry can offer valuable qualitative insight. The examples then explore additional variables that assess industry attractiveness and specific requirements.
- **Build your own story.** Apply this approach to other industries of interest by examining all available variables in whatever order makes the most sense for your context. Engage local partners early and often to provide further insight and complement the analysis. The aim is to use this process to spark productive questions, identify the most promising opportunities, and guide actionable next steps for supporting industry growth in the community.

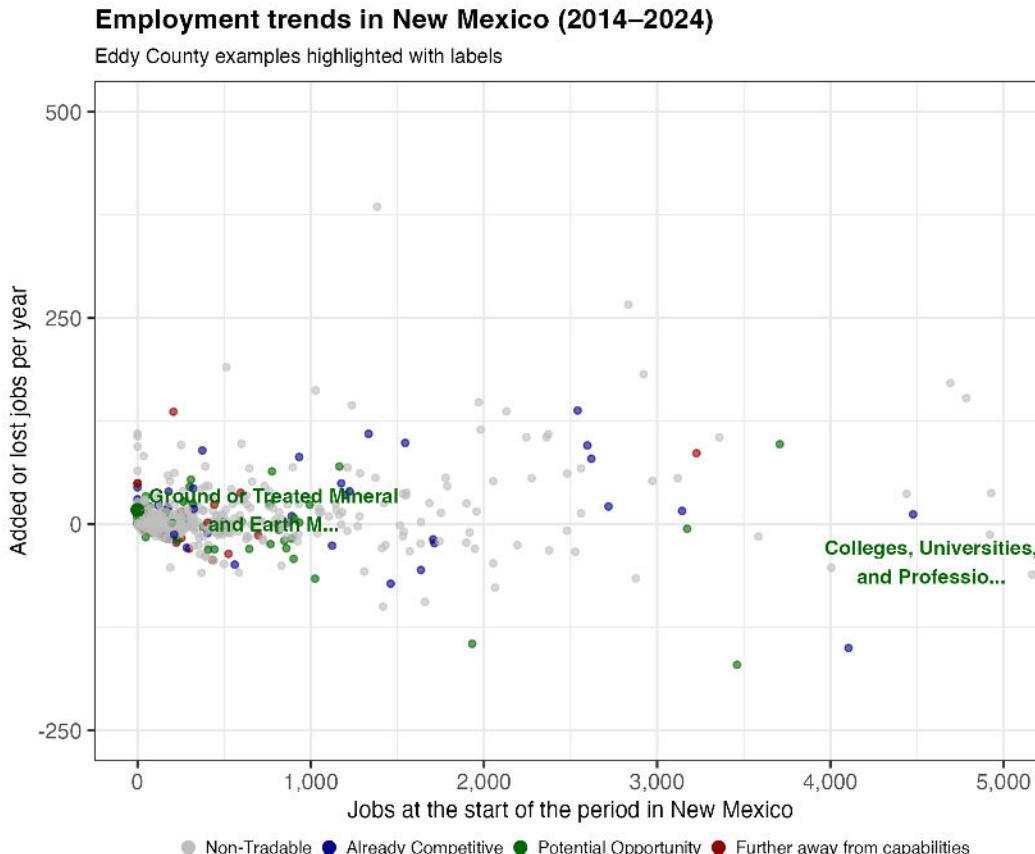
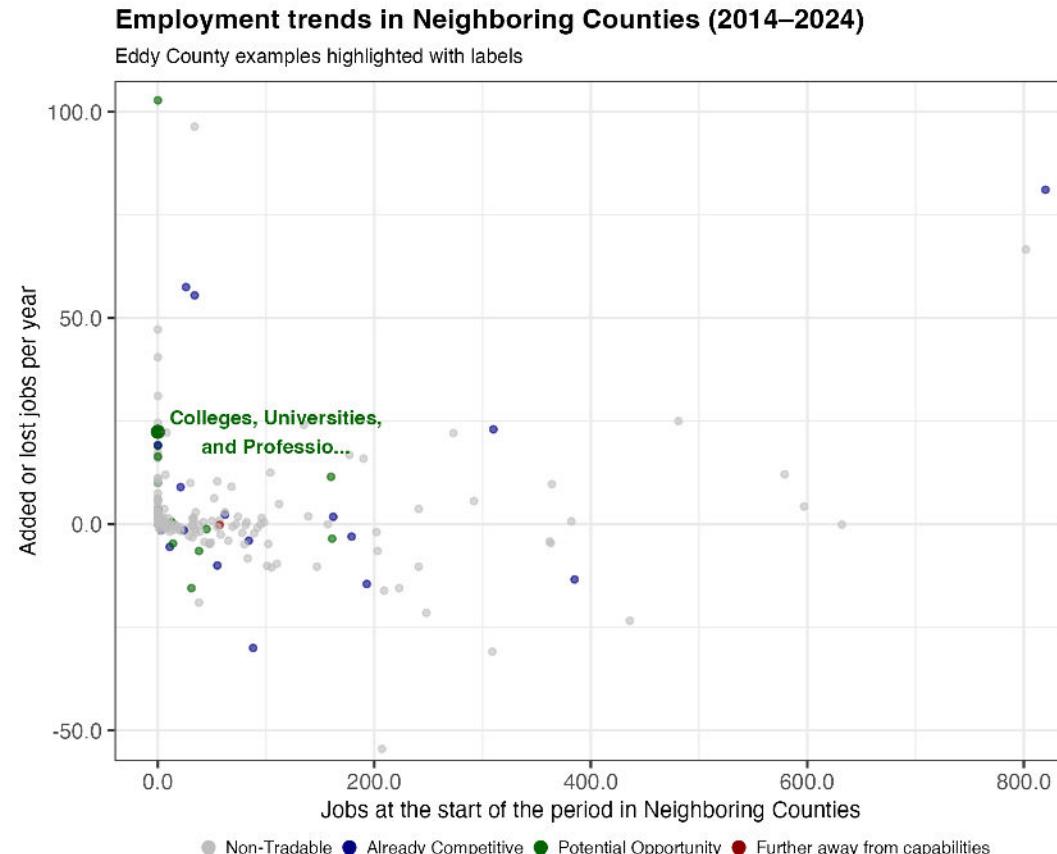
# Are local conditions favorable or holding this industry back?



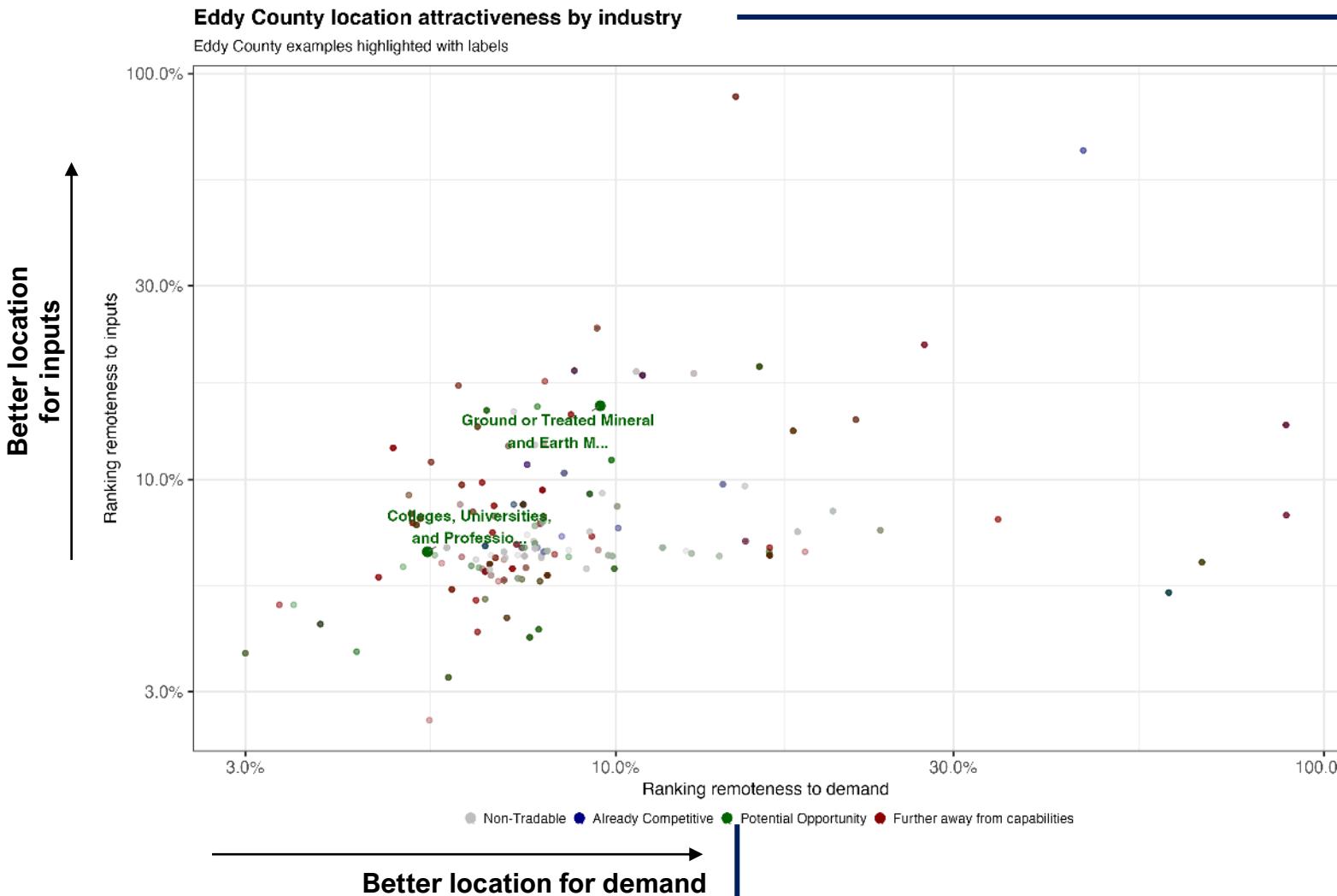
In this graph, the x-axis shows the number of starting jobs in each industry, providing a sense of the industry's initial size and its potential contribution. The y-axis displays the average number of jobs added or lost per year, rather than growth rates, since several industries began with zero employment. The total was divided by the number of years between the earliest and latest data points for each industry. The axes were capped to improve visualization.

# Is the industry facing a different situation elsewhere?

Same axes as the previous graph but for different regions. For neighboring counties, only those that share a border, whether in-state or out-of-state, and are not part of the commuting zone were included. In this case, the selected counties are Lea and Otero in New Mexico, and Culberson, Reeves and Loving in Texas. While barriers to grow may not be obvious for every industry, they could be more evident in some cases than in others.



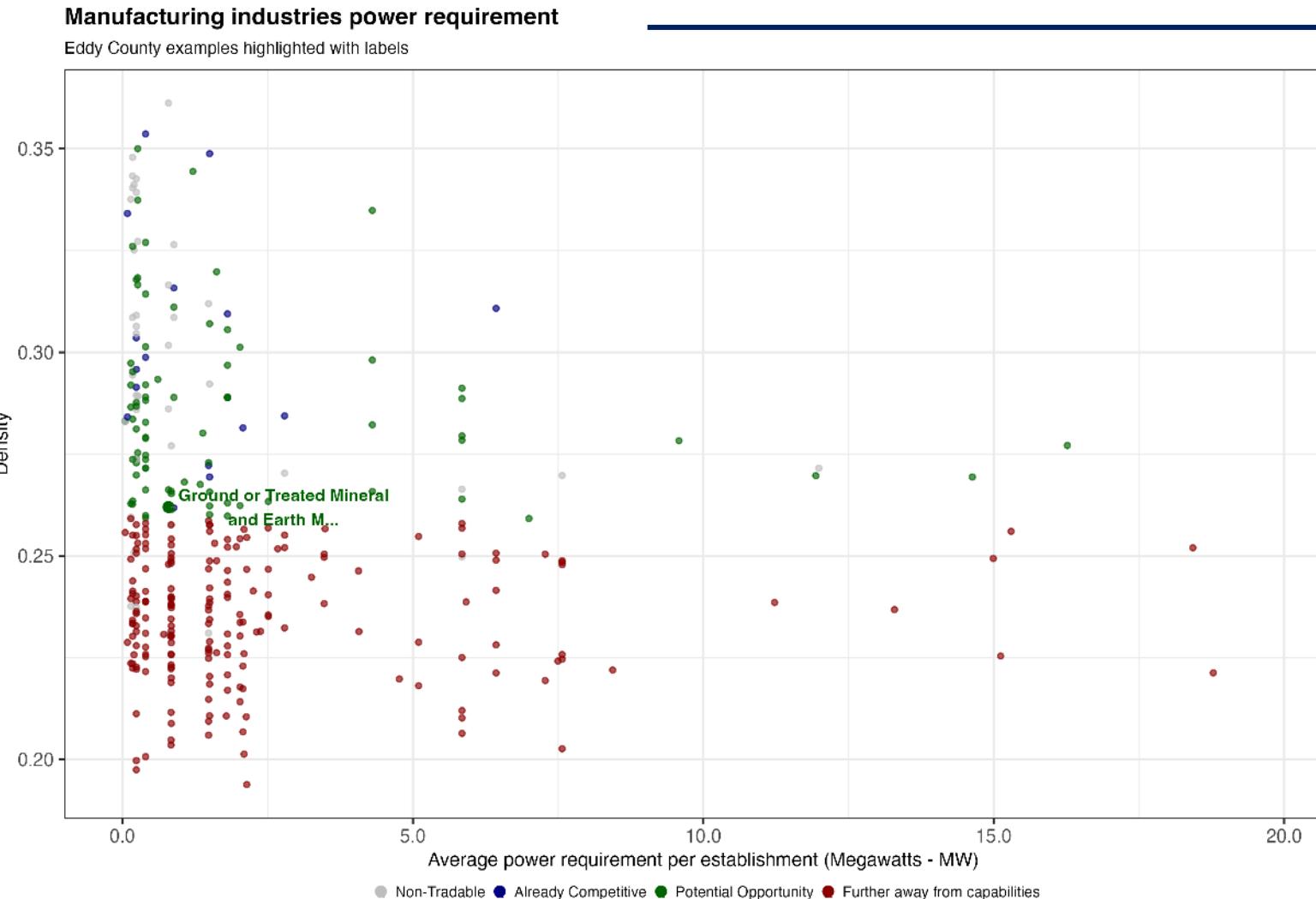
# How attractive is Eddy's location for the industry?



The competitiveness of some industries depends more on proximity to inputs, while others rely on being close to consumers. By identifying each industry's main inputs and where they are produced and then calculating the driving time from the county to those locations, a "remoteness to inputs" score is created. A similar score for demand is based on the location of main consumers. Together, these scores allow the county's position to be ranked relative to others in terms of access to both inputs and markets.

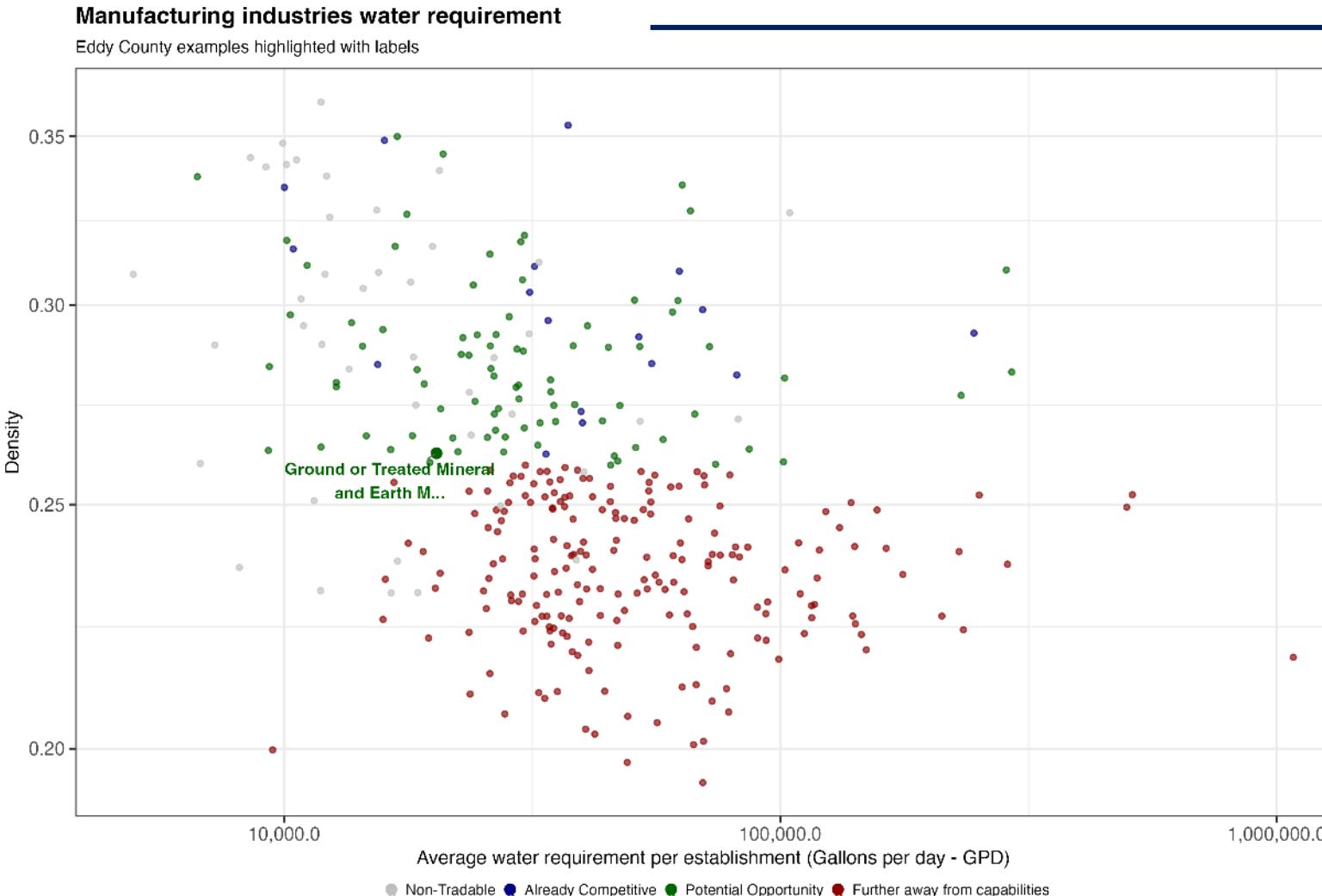
Eddy's commuting zone is closer to the required inputs for "Ground or Treated Mineral and Earth Manufacturing" than almost 15% of U.S. counties, and closer to the demand than 10% of other counties.

# Can Eddy meet the electricity needs of the manufacturing industry?



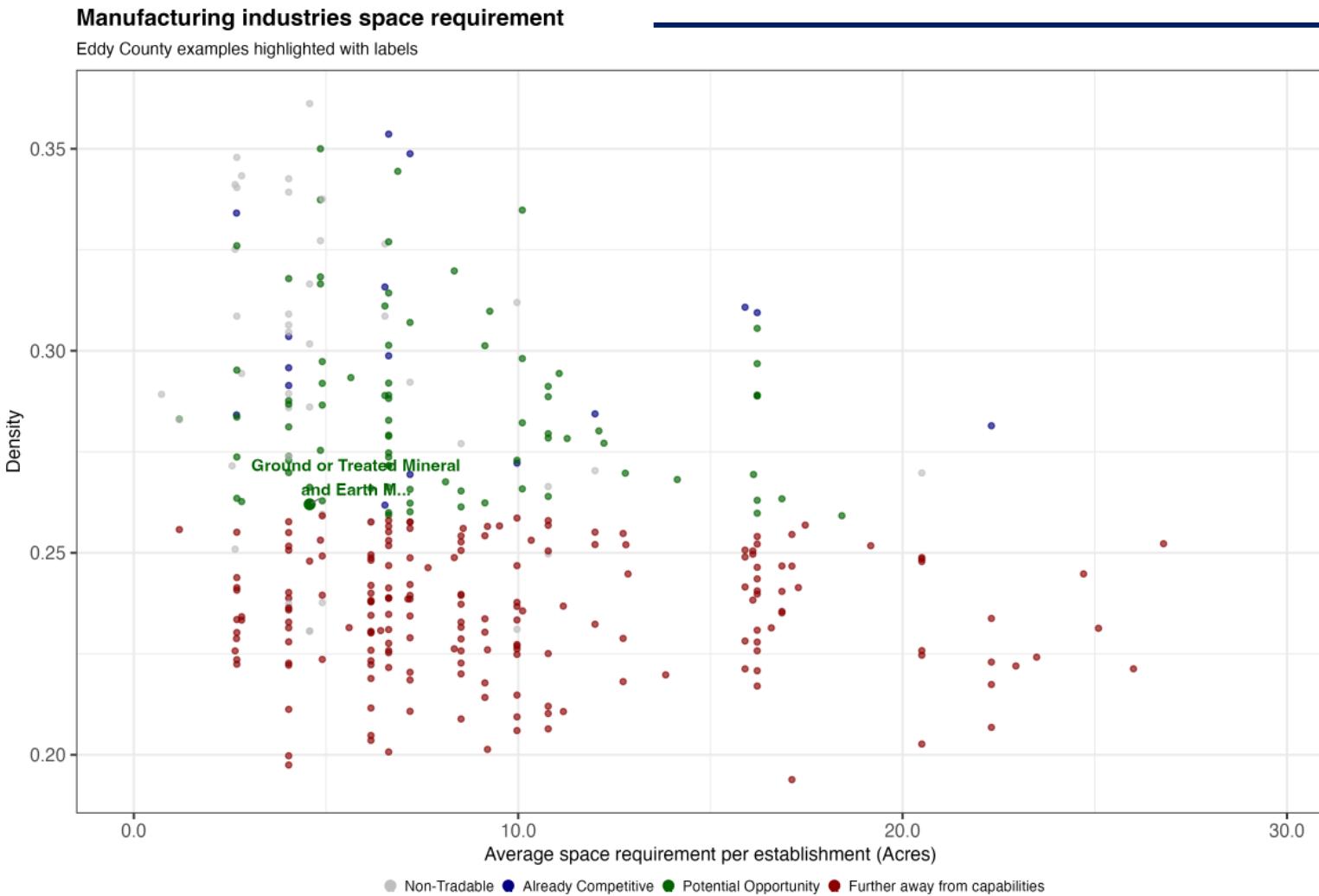
The x-axis shows the average power demand per establishment (in megawatts) for each manufacturing industry. Measuring in MW provides a standard metric to compare how much electricity a typical facility would draw from the grid during operating hours. Only manufacturing industries are included due to data availability. Some industries may be feasible with existing capacity and others could require major upgrades or entirely new infrastructure.

# Is Eddy equipped to supply the manufacturing industry with enough water?



Source: Dun & Bradstreet, EPA Flow Sector Attribution (FLOWSA)

# Can Eddy provide the necessary space for the manufacturing industry?



The x-axis shows the average land needed per establishment (in acres) for each manufacturing industry. These estimates assume low-density facilities, typically single-story buildings that are more spread out and need extra space for parking, trucks, and outdoor operations. Beyond utilities, communities must have suitable sites ready to host new or expanding businesses, with the right access to essential services.



Growth Lab

# Identifying local opportunities: Eddy County

January 2025