



EDCC DRIVE – LEAD – SUCCEED

INDUSTRY CLUSTERS

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CHIEF ECONOMIST, MDEDCC





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Cluster-Based Economic Development

“Clustering can enhance the **competitive advantage** of a region by enhancing the sectors that show great potential for **growth and diversification**, to become a strong base of the economy.

Clusters usually develop and grow as a result of specialized amenities and support services that are available in a particular region, including:

- Support firms,
- Network of financial institutions or venture capitalists that specialize in providing capital to firms operating in the cluster, and
- Major research university that supports the cluster through specialized research and academic programs.”

Source:

International Economic Development Council. *Introduction to Economic Development*. 2015.



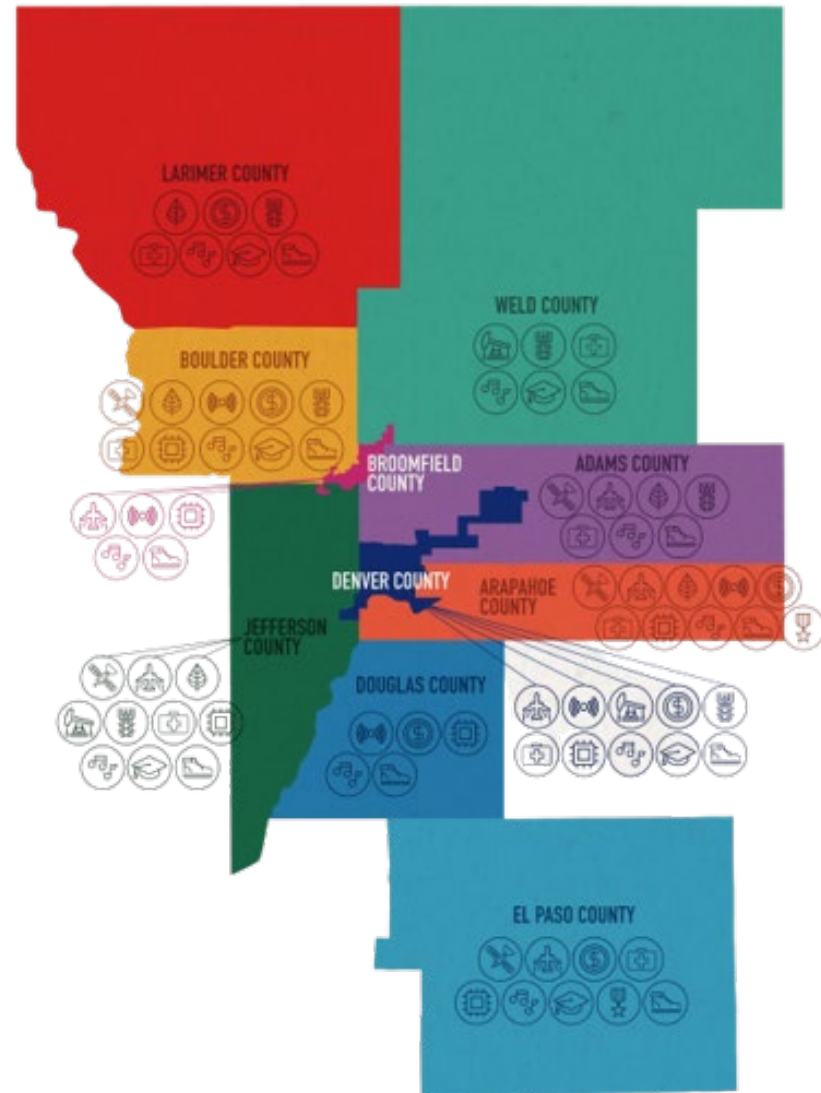
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METRO DENVER
EDC REGIONAL
OVERVIEW

10 Counties Covered – 9 Counties in Clusters

- Adams County
- Arapahoe County
- Boulder County
- City and County of Broomfield
- City and County of Denver
- Douglas County
- [El Paso County](#)
- Jefferson County
- Larimer County
- Weld County





About Metro Denver



Square Miles	4,532
Population 2021	3,244,165
Population 2026*	3,390,167
Population 2031*	3,577,472
Labor Force	1,842,469
Nonfarm Employment	1,706,700
Average Wage	\$79,322
Median Age	37.7

*Projected

Population

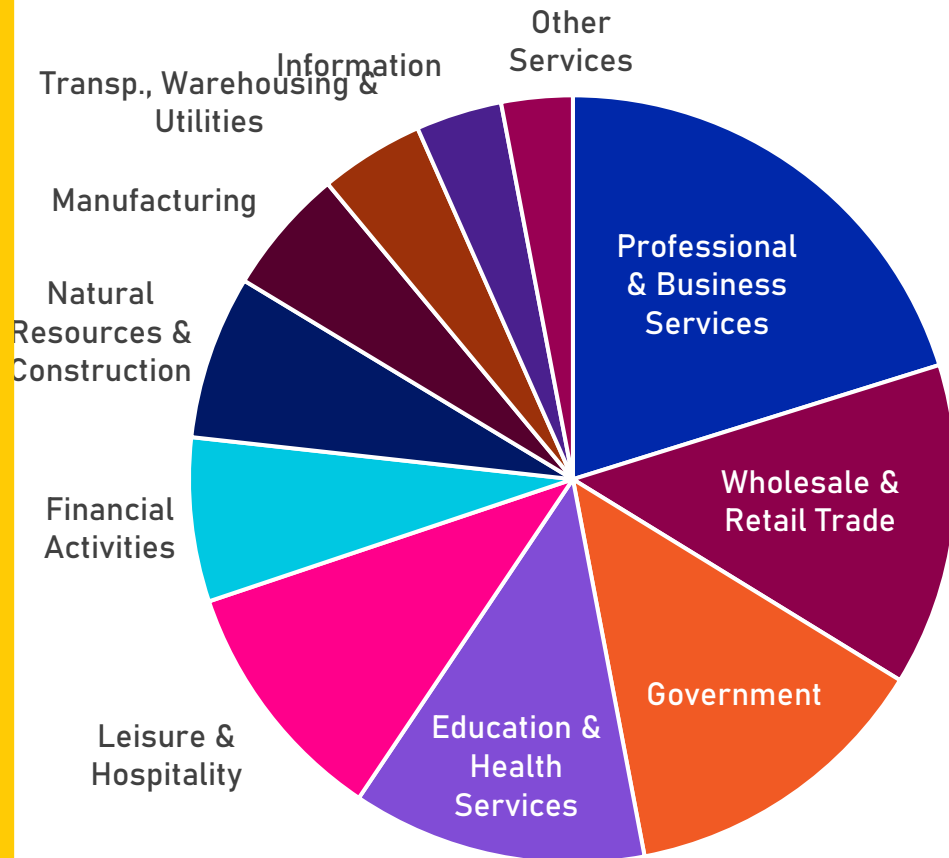
July 1 Projections

	<u>2023</u>	<u>% Change</u>
Colorado	5,913,110	0.9%
Adams	532,715	1.1%
Arapahoe	663,562	0.7%
Boulder	331,428	0.3%
Broomfield	76,884	0.5%
Denver	725,568	0.6%
Douglas	381,529	1.2%
Jefferson	582,367	0.3%
Metro Denver	3,294,053	0.7%

Source: Colorado Division of Local Government, State Demography Office.



Employment



Supersector

Employment

Professional & Business Services	352,674
Wholesale & Retail Trade	237,243
Government	231,302
Education & Health Services	216,717
Leisure & Hospitality	182,288
Financial Activities	120,611
Natural Resources & Construction	120,539
Manufacturing	92,991
Transp., Warehousing & Utilities	76,781
Information	63,371
Other Services	52,454

Source: Bureau of Labor Statistics, QCEW 2022





	<u>Metro Denver</u>	<u>Colorado</u>
Total	1,889,761	3,200,625
Employed	1,834,250	3,103,531
Unemployed	55,511	97,094
Unemployment Rate	2.9%	3.0%

Source: U.S. Bureau of Labor Statistics

Average Wages, 2022

	Weekly	Annual
<u>Colorado</u>	<u>\$1,430</u>	<u>\$74,360</u>
Metro Denver	\$1,602	\$83,304
Adams County	\$1,312	(-)
Arapahoe County	\$1,573	(-)
Boulder County	\$1,693	(+)
Broomfield County	\$2,078	(+)
Denver County	\$1,777	(+)
Douglas County	\$1,543	(-)
Jefferson County	\$1,405	(-)

Source: Colorado Department of Labor

LABOR FORCE

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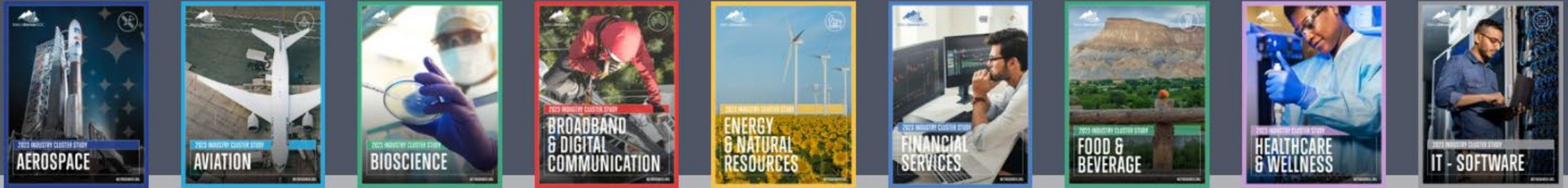
WHAT & WHY
OF INDUSTRY
CLUSTERS



Industry Clusters & Lifestyle Verticals

	<u>Metro Denver*</u>	<u>Colorado</u>
<u>Industry Clusters</u>		
Aerospace	29,539	36,868
Aviation	24,108	27,247
Bioscience	20,218	24,299
Broadband & Digital Communications	42,401	44,096
Energy & Natural Resources	61,290	88,275
Financial Services	109,283	137,414
Food & Beverage Production	24,341	32,566
Healthcare & Wellness	246,849	340,904
IT-Software	89,439	99,956
<u>Lifestyle Verticals</u>		
Arts & Culture	~70-80k	~95-105k
Outdoor Recreation	~20-30k	~50-60k

*9 County Metro Denver



MDDED Cluster Reports:

<https://www.flipsnack.com/metrodenveredc/2023-industry-cluster-studies-c8wcv2lpma/full-view.html>



LARGEST EMPLOYERS - 2022

Rank	Company	Product/Service	Industry Cluster	Emp.
1	UCHealth	Healthcare, Research	Healthcare & Wellness	13,190
2	Amazon	Retail	-	12,360
3	HealthONE Corporation	Healthcare	Healthcare & Wellness	12,160
4	Centura Health	Healthcare	Healthcare & Wellness	10,740
5	Intermountain Healthcare	Healthcare	Healthcare & Wellness	10,000
6	Lockheed Martin Corporation	Aerospace & Defense Systems	Aerospace	9,320
7	Comcast	Telecommunications	Broadband & Digital Communication	8,080
8	United Airlines	Airline	Aviation	7,130
9	Kaiser Permanente	Healthcare	Healthcare & Wellness	7,100
10	Children's Hospital Colorado	Healthcare	Healthcare & Wellness	7,000
11	DISH Network	Satellite TV & Equipment	Broadband & Digital Communication	6,300
12	Ball Corporation	Aerospace, Containers	Aerospace, Food & Beverage Production	6,150



LARGEST EMPLOYERS - 2022

Rank	Company	Product/Service	Industry Cluster	Emp.
13	Lumen Technologies	Telecommunications	Broadband & Digital Communication	6,100
14	United Parcel Service	Logistics	-	5,640
15	Southwest Airlines	Airline	Aviation	4,740
16	Charter Communications	Telecommunications	Broadband & Digital Communication	4,000
17	FedEx	Logistics	-	3,950
18	University of Denver	University	-	3,760
19	Wells Fargo	Financial Services	Financial Services	3,670
20	UnitedHealthcare	Insurance	Financial Services	3,620
21	Charles Schwab	Financial Services	Financial Services	3,490
22	Empower Retirement	Ins. & Retirement Savings Svcs	Financial Services	3,040
23	Frontier Airlines	Airline	Aviation	2,980
24	Xcel Energy	Utilities	Energy & Natural Resources	2,940
25	Medtronic PLC	Medical & Surgical Technologies	Bioscience	2,600



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IDENTIFYING &
DEFINING
CLUSTERS



How do you identify clusters in your region?

1. Location Quotient

$$\frac{\text{Local employment in cluster} / \text{Total local employment}}{\text{National employment in cluster} / \text{Total national employment}}$$

2. Employment growth trends in industry
3. Average wages
4. Contribution to GRP
5. Competitiveness in industry



Aerospace Industry Cluster Definition

From DRP

NAICS Code*	NAICS Description
336414	Guided missile & space vehicle mfg.
541715	(P) Research & development in the physical, engineering, & life sciences (except nanotechnology & biotechnology)
336415	Guided missile & space vehicle propulsion unit & propulsion unit parts mfg.
336419	Other guided missile & space vehicle parts & aux. equipment mfg
334511	Search, detection, navigation, guidance, aeronautical, & nautical system & instrument mfg.
333314	(P) Optical instrument & lens mfg.
927110	Space research & technology
331512	(P) Steel investment foundries
331524	(P) Aluminum foundries (except die-casting)
331529	(P) Other nonferrous metal foundries (except die-casting)
332313	(P) Plate work mfg.
332111	(P) Iron & steel forging
332112	(P) Nonferrous forging
332813	(P) Electroplating, plating, polishing, anodizing & coloring
332993	(P) Ammunition (except small arms) mfg.
332993	(P) Ammunition (except small arms) mfg.
334220	(P) Radio & television broadcasting & wireless communications equipment mfg.
339113	(P) Surgical appliance & supplies mfg.
927110	Space research & technology
517919	(P) All other telecommunications
423860	(P) Transportation equipment & supplies (except motor vehicle) merchant wholesalers
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CLUSTER DEFINITIONS – AN ART AND A
SCIENCE



Challenges with Industry Cluster Analyses

1. Which NAICS are the right NAICS?
2. Do you use the total employment count for the NAICS or a portion of it if the code covers other related industries?
3. How do you define subclusters?
4. How do clusters compare to local or regional partners?
5. How do you know a company is actually within the cluster you think it is?
6. What else?

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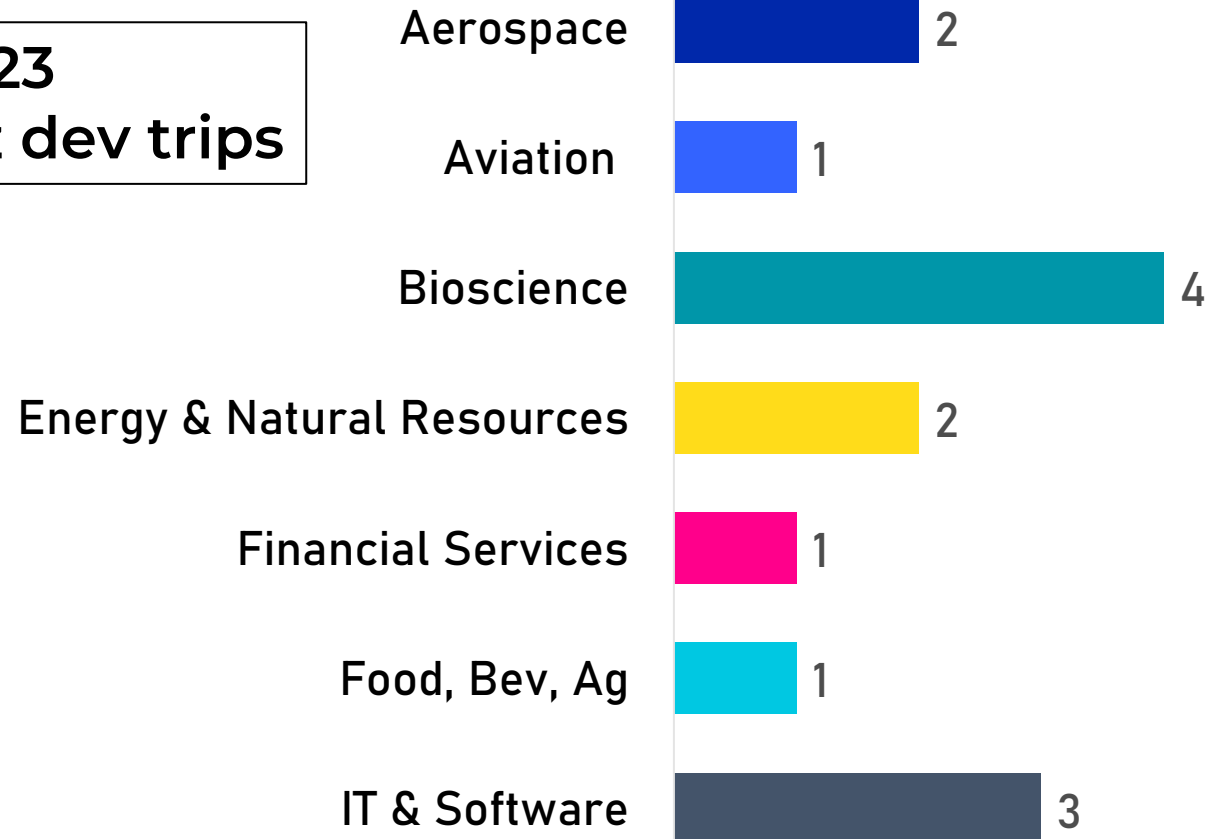
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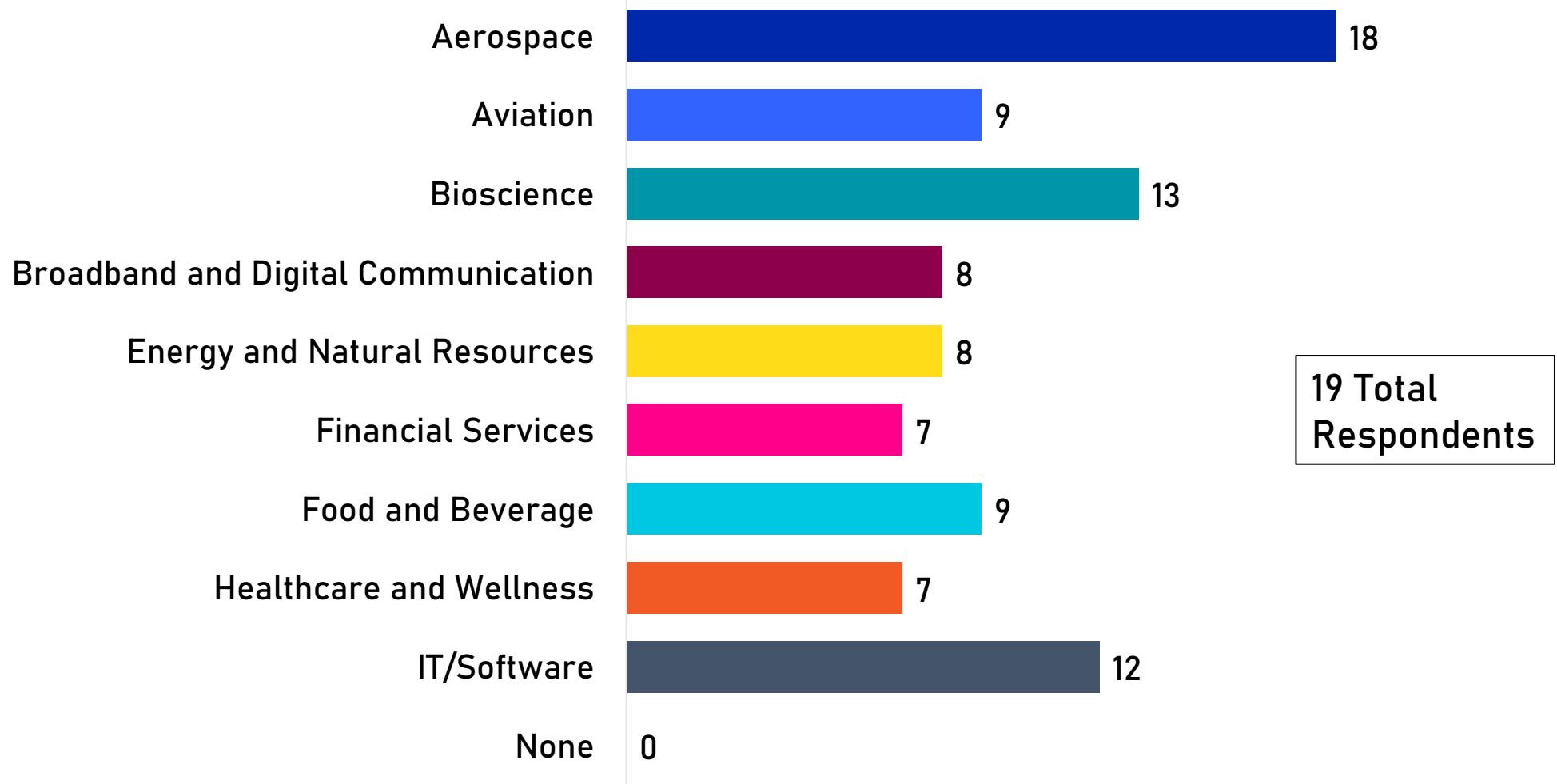
HOW ARE
CLUSTER
REPORTS USED?

MDEDDC BIZ DEV TRIPS + CLUSTERS



2023
13 total biz dev trips





USE OF MDEDCC CLUSTER REPORTS BY LOCAL PARTNERS



Cluster-Based Coalitions

MDEDC convenes stakeholder groups of economic development, private sector, public sector, philanthropic, and staff representatives to discuss issues regarding some of our clusters:

- Colorado Space Coalition
- Colorado Investment Services Coalition
- Arts & Culture Coalition
- OREC Coalition

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TOWN OF
FREDERICK
CLUSTER
ANALYSIS



Implementing Clusters for Communities

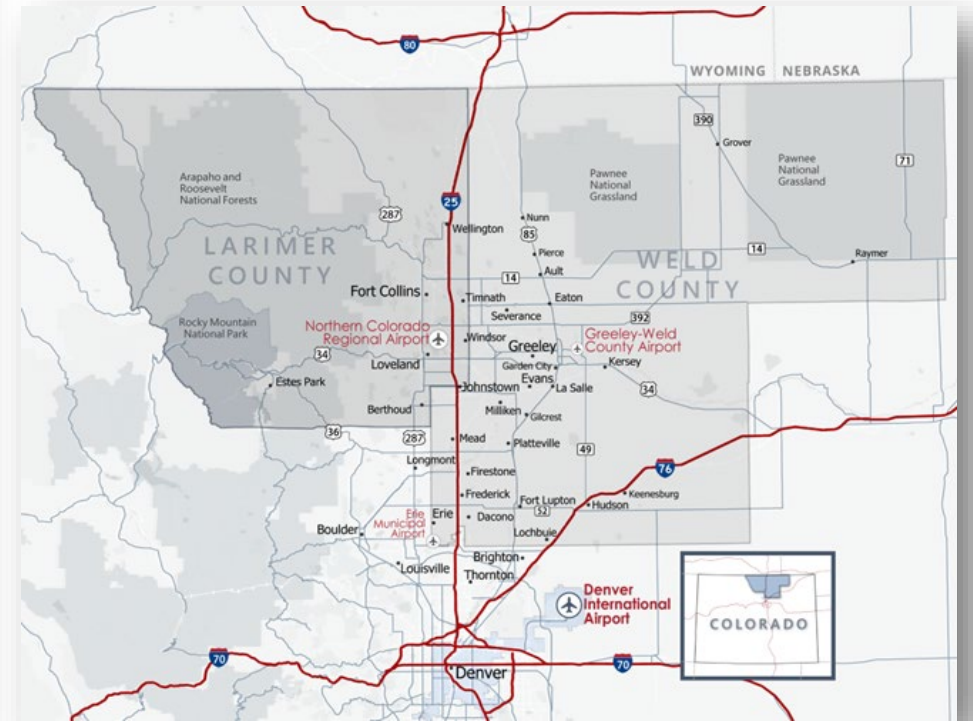
Max Daffron, Economic Development Manager
October 19, 2023

BUILT ON WHAT MATTERS





Why Would Frederick do its own Cluster Analysis?



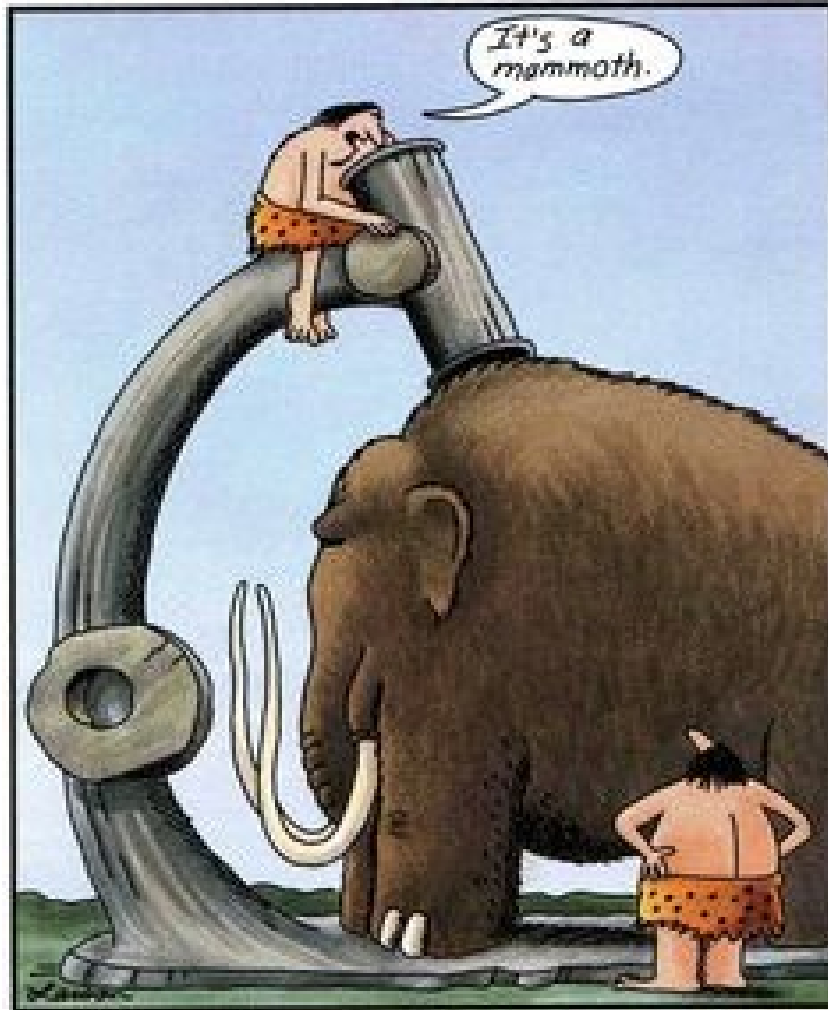


Regional Industry Clusters

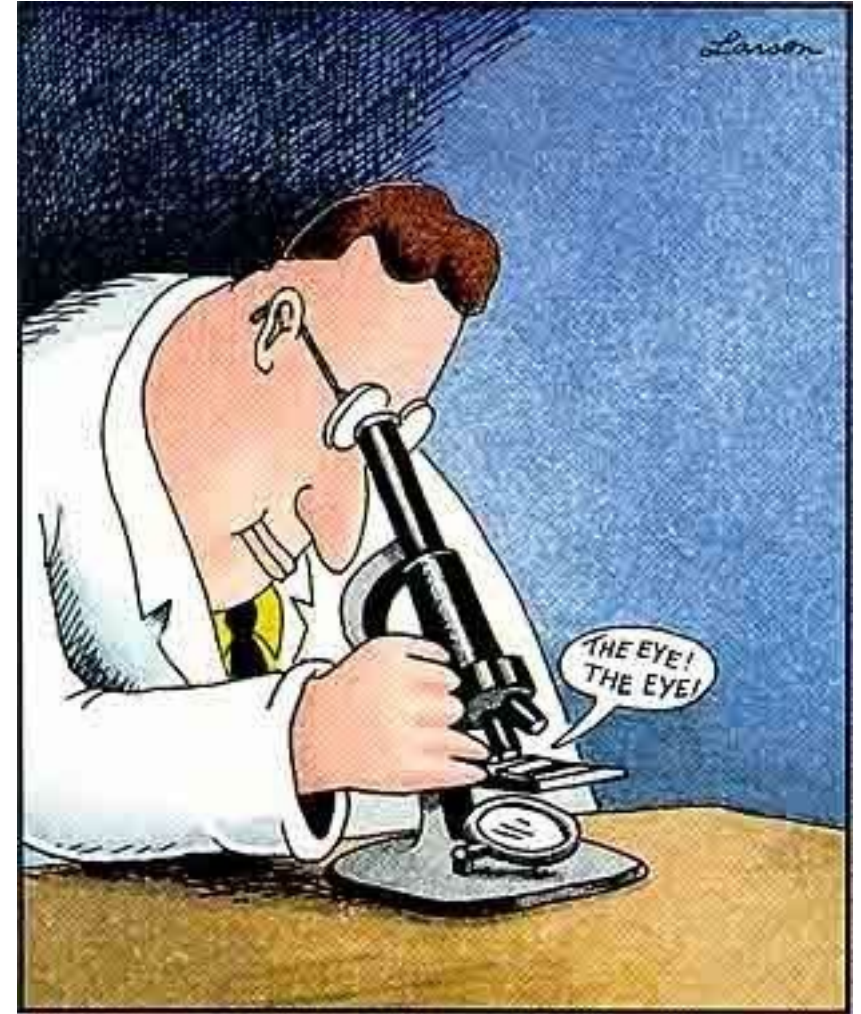
NAICS	Industry	Metro Denver	NoCo REDI
	Aerospace	X	
	Aviation	X	
	Bioscience	X	X
	Broadband/Digital Communications	X	
	Distribution & E-commerce		X
	Energy/Natural Resources	X	
	Fabrication & Production Technology		X
	Food Processing & Manufacturing	X	X
	Healthcare/Wellness	X	
	Information Technologies (Software)	X	X
	Medical Devices		X
	Plastics		X

Built on What Matters.

Sometimes it helps to take a closer look



Early microscope



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A “Micro” View of Clusters

- *Regional Clusters may not fit with your specific community*
- *Many factors can influence your ability to attract/retain business*
 - *Water availability*
 - *Community sentiment*
 - *Zoning*
 - *Workforce or supply chain issues in your immediate area*
- *Some industry clusters are composed of many subsections that may better fit your community*



Biotechnology Product Manufacturing

- *Frederick's largest employer, Agilent Technologies, is actively engaged in this industry.*
- *Classified as a subsector of the MDEDC and NoCo REDI "Bioscience" Industry cluster.*
- *Several other businesses, such as Hirsh Precision Products, HS Design, Inc., and other small operations are also actively engaged in this space.*





Identify Barriers to Success



- *Identify barriers to success during the cluster formation process*
 - *land use or code requirements causing issues?*
 - *How is their supply chain?*
 - *Infrastructure Issues?*
 - *Nontraditional factors that could influence business?*

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Be in the Know



COLORADO
BIOSCIENCE
ASSOCIATION

- *Become THE subject matter expert on your target industries*
 - *Are you involved in the proper trade organizations?*
 - *Are you familiar with the strains on your market?*
 - *Implement an “early warning” system on what is affecting your industries.*

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Build Your Network

- *Engage Your Business Community!*
 - *An opportunity to utilize BRE as a business attraction tool.*
 - *Your Businesses know their supply chains better than you.*
 - *Linkages exist where you least expect them.*
 - *Don't be afraid to partner with your businesses!*



You're Invited!
Business Roundtable
Hosted by the Town of Frederick Economic Development Office
March 29, 2023
8:30-9:30am
Doors Open at 8:00am
Breakfast Provided (Please RSVP)

Halleck-Willard Inc.
7097 Colorado Blvd

RSVP To the Email Below

720.382.5537 EcoDevo@frederickCO.gov



Don't Exist in a Vacuum



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