

JUMPSTART 2017

Business, Arts, Workforce
& Aeronautical Services Committee
April 12, 2016

Amy Mueller Edinger
Interim Executive Director and
Chief Operating Officer
Office of Economic Development



SIXTH ANNUAL EDITION, 2012-17

Denver's economy has added 75,000 new jobs
and 5,000 new businesses since 2011

Last year's strategy, JumpStart 2016:

- **Contributed** to the creation of nearly 3,000 new and 7,000 retained jobs
- **Led** to \$111.4 million in capital investment
- **Funded** the creation of 579 affordable homes



JumpStart 2017:

- Five "Pillars"

**ECONOMIC MOBILITY
HOUSING OPPORTUNITY
BUSINESS DEVELOPMENT
BUSINESS INNOVATION
WORKFORCE DEVELOPMENT**

**84 Strategic Initiatives
53 Outcomes
25 Partners**

ECONOMIC MOBILITY

- ✓ **Create** and act on neighborhood economic mobility and anti-displacement strategies for Montbello, Westwood, and Globeville/Elyria-Swansea
- ✓ **Complete** a comprehensive business development strategy to ensure the National Western Center investment is leveraged to provide a springboard for global commerce opportunities – focused on agribusiness opportunities
- ✓ **Implement** a career and employment opportunity strategy based upon the findings from an assessment of residents' skills and career aspirations in key targeted neighborhoods



Vision

Targeted Neighborhoods

Economic Opportunity

HOUSING OPPORTUNITY

- ✓ **Develop and submit**, in partnership with the Denver Housing Advisory Committee, a comprehensive housing plan and strategy for City Council approval
- ✓ **Launch** innovative approaches to fostering density at transit-oriented development sites, including the promotion of mixed-income, for-sale condominium housing in the Five Points and Stapleton neighborhoods
- ✓ **Develop** a public-private financing model with the banking community for the preservation and rehabilitation of expiring, covenant-restricted affordable housing units

New Construction

Housing Finance Innovations

Policy & Information



BUSINESS DEVELOPMENT

- ✓ **Build and maintain** relationships with top influential business partners, and assign OED staff to strengthen these business relationships; with five key businesses, facilitate a specific civic engagement strategy
- ✓ Actively **recruit** national and global targeted companies to choose Denver as a location for their business expansion and investment – including direct outreach and HQ visits
- ✓ **Execute** the Mayor's International Advisory Council's recommendations, including increasing our image as a international Welcoming Community



Retention

Recruitment

International

BUSINESS INNOVATION

- ✓ **Establish** a \$3M Fresh Food Financing Fund in partnership with other community funders, designed to provide gap financing for at least one full-service grocery store each in Globeville-Elyria/Swansea, Montbello and Westwood
- ✓ **Support** the development of a maker's lab, providing a collaborative craft space for entrepreneurs to access manufacturing resources
- ✓ **Assist** small- and minority-owned businesses to access public contracts, including by publishing quarterly reports and hosting quarterly briefings, identifying all major projects to be let by the city in next several years

Access to Capital

Access to Customers

Entrepreneur Support



WORKFORCE DEVELOPMENT

- ✓ **Develop** scalable workforce initiatives to train and employ low-income residents with jobs in the manufacturing, technology, healthcare and construction sectors
- ✓ **Grow** awareness and increase direct experiences of our next generation workforce in career and employment opportunities in Denver's growing and evolving economy
- ✓ **Make** continuous improvements in program and service delivery of training, assessments, and job connections with a goal of increasing successful outcomes for jobseekers and employers



Best-Practice Model

Middle-Skill Employment

Youth Initiatives

DISCUSSION



National Western Center

NextGen Agribusiness

Economic Study Project

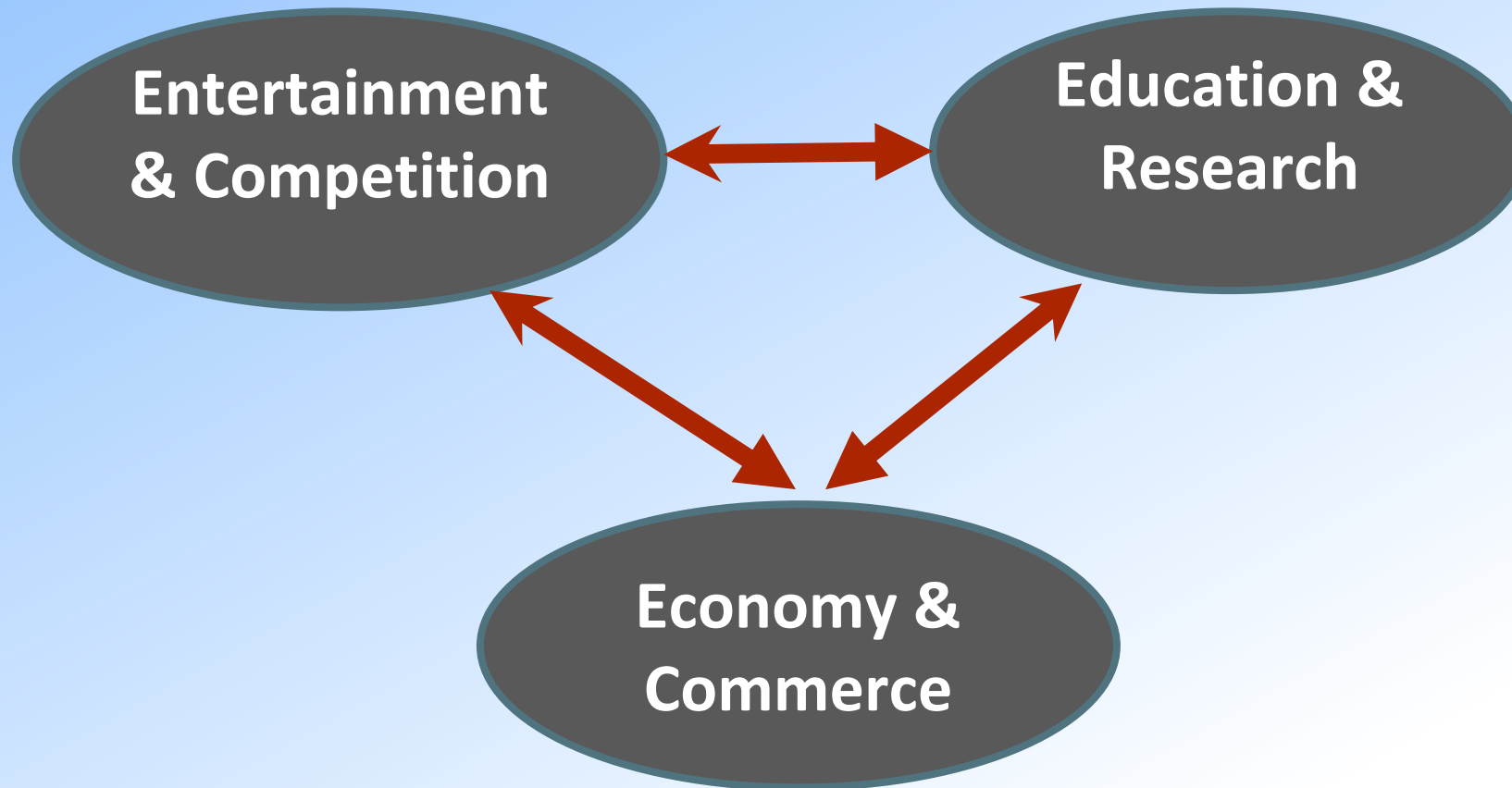
Gretchen Hollrah, Deputy Director
Mayor's Office of National Western Center

Chris Brewer, Vice President – Economics
AECOM

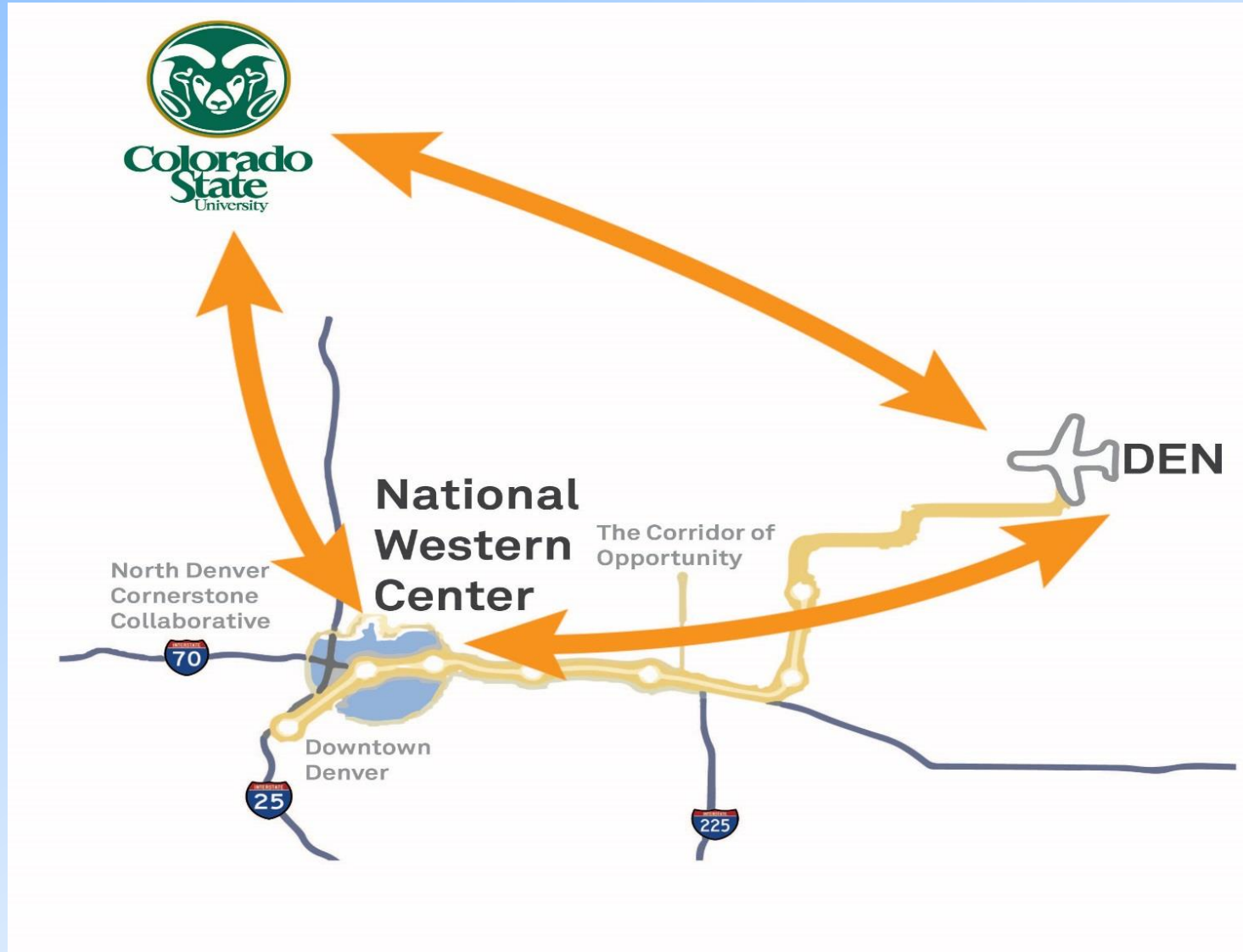
Turid Nagel-Casebolt, Director of Business Development
Office of Economic Development



Build on our existing foundation and investments to stimulate the local, regional and state economy



Agribusiness Innovation Triangle

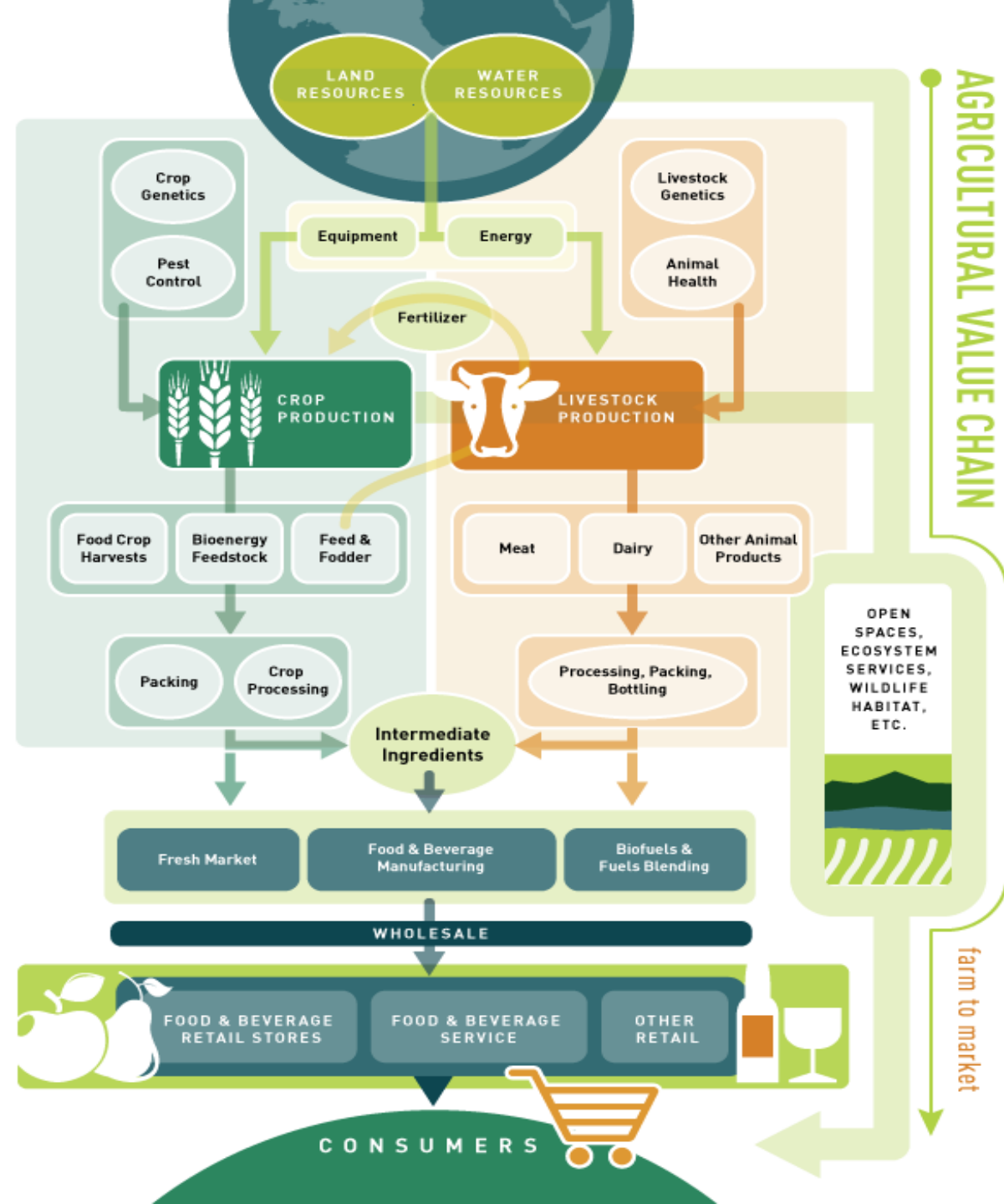


Framework

- ✓ The 2014 CSU study, “Emergence of an Innovation Cluster in the Agricultural Value Chain along Colorado’s Front Range,” forms the analytical basis for this effort
- ✓ A holistic strategy that looks across food-related sectors to identify emerging innovation-linked opportunities
- ✓ Connections across patents and research papers to identify ag-technology linked innovation along the Front Range



- ✓ **Water:** technology, infrastructure, analytics
- ✓ **Soils:** fertility, pest control, plant genetics
- ✓ **Animal health, nutrition, and herd management**
- ✓ **Agricultural information systems, sensors, testing, and analytics for product quality and biosafety**
- ✓ **Bioenergy**
- ✓ **Commodity processing and food manufacturing**
- ✓ **Beverages, and natural, organic, and local foods**



Our Approach: Data-Driven

- ✓ Understand and summarize agriculture industry and consumer market trends
- ✓ Recognize the links between natural resources technology and management and agribusiness
- ✓ Research the NWC as a driver for agribusiness private sector job creation
- ✓ Complete case studies of innovation districts focused on agriculture, the plant and life sciences, and biotechnology
- ✓ Identify sectors, clusters, and end-markets that build on inherent Front Range competitive advantages



Changing Consumer Tastes

Pizza Hut / Taco Bell – remove artificial fillers & trans-fats

General Mills – Remove artificial flavors and colors from all cereals

Nestlé USA - Remove artificial Ingredients from chocolate

Kraft – remove artificial colors from Macaroni and Cheese

Purdue Chicken– stop using antibiotics

The dough conditioner / “yoga mat” chemical

Subway– remove artificial flavors, artificial colors, and preservatives

Tyson Foods – stop using “human” antibiotics

Campbell’s Soup – remove artificial colors, flavors, high fructose corn syrup, and MSG (?)

Kellogg’s– remove artificial flavors, colors, and preservatives



Observations

- ✓ **Low commodity prices have encouraged industry consolidation among traditional companies**
- ✓ **A growing global middle class is demanding higher value food, and creating export opportunities**
- ✓ **Impact of Regulatory Factors: The 2011 Food Safety Modernization Act -- shift from responding to contamination to prevention**
- ✓ **Emergence of Ag-Tech Innovation Funds**
- ✓ **Food production moving closer to geographic end market consumption**



Clusters of Opportunity



Clusters of Opportunity

Geography: Colorado and the Front Range

Start with traditional industry sectors and companies in those sectors

Agriculture / Ag-related

Food production and processing (advanced manufacturing)

Identify and leverage interconnections between companies; pivot from “Sectors” to “Clusters”

Pivot from companies to jobs

*Connect jobs into location/site requirements
(e.g., real estate, space)*



Agribusiness Cluster Opportunities

**WATER,
INFRASTRUCTURE
ENGINEERING**
7,600 FRONT
RANGE JOBS

**MFG -
CATTLE &
DAIRY**
9,500 FRONT
RANGE JOBS

**MFG -
SPECIALTY
FOODS**
8,500 FRONT
RANGE JOBS

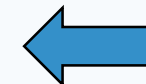
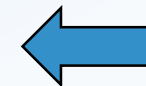
**MFG -
BEVERAGES**
7,000 FRONT
RANGE JOBS

**MFG - URBAN
VERTICAL AG**
3,100 FRONT
RANGE JOBS

Water, Infrastructure, Energy, and Related Engineering

Opportunities include environmental consulting services, water supply and irrigation systems, water testing, and associated infrastructure

Total Colorado Jobs - 2014	91,138
Front Range Share of Jobs	8.4%
New Front Range Jobs: 2009-2014	1,261
Front Range Job Growth Rate	3.7%
Statewide Avg Hourly Wage	\$43
2014 Average Location Quotient	1.82



Beverage Manufacturing

Heavily reliant on water. Soft drinks, ice, and bottled water are mature -- while beer, wine, and spirits have grown significantly since 2009

Total Colorado Jobs - 2014	7,616	
Front Range Share of Jobs	91%	←
New Front Range Jobs: 2009-2014	989	
Front Range Job Growth Rate	5.0%	←
Statewide Avg Hourly Wage	\$21	
2014 Average Location Quotient	1.54	←



Agribusiness Cluster Opportunities

**MFG - CATTLE &
DAIRY**

9,500 FRONT
RANGE JOBS

**ANIMAL
HEALTH /
RESEARCH &
LAB**

OFFICE / LAB
20,400 FRONT
RANGE JOBS

**SOFTWARE &
BIOINFORMA
TICS**

500 FRONT
RANGE JOBS

**MFG -
SENSORS
INSTRUMENTS**
1,600 FRONT
RANGE JOBS

**AEROSPACE
UAV MAPPING**
3,200 FRONT
RANGE JOBS

Cattle and Dairy

Animal and human health, nutrition, and herd management;
sensors, testing, and analytics for product quality/biosafety;
access to water and infrastructure

Total Colorado Jobs - 2014	15,442
Front Range Share of Jobs	61%
New Front Range Jobs: 2009-2014	9
Front Range Job Growth Rate	0.0%
Statewide Avg Hourly Wage	\$19
2014 Average Location Quotient	1.78



Animal Health: Research and Testing

While bio-tech research and development is heavily concentrated along the Front Range, the statewide location quotient is consistent with U.S. averages

Total Colorado Jobs - 2014	59,982	←
Front Range Share of Jobs	34%	
New Front Range Jobs: 2009-2014	1,787	
Front Range Job Growth Rate	1.9%	
Statewide Avg Hourly Wage	\$36	
2014 Average Location Quotient	0.99	←





Aerospace / UAV / Mapping

Drones for agricultural purposes, surveying and mapping services; connections to software and advanced materials

Total Colorado Jobs - 2014	6,454	
Front Range Share of Jobs	50%	
New Front Range Jobs: 2009-2014	1,053	
Front Range Job Growth Rate	8.3%	←
Statewide Avg Hourly Wage	\$44	
2014 Average Location Quotient	2.03	←

Manufacturing – Specialty Foods

Seven processing sectors in specialty foods cluster. Water is important.
Includes firms who process pet food, coffee, confectionaries, and snacks.

Total Colorado Jobs - 2014	5,396	
Front Range Share of Jobs	72%	←
New Front Range Jobs: 2009-2014	818	
Front Range Job Growth Rate	4.8%	←
Statewide Avg Hourly Wage	\$22	
2014 Average Location Quotient	1.02	←



Software Development: Ag-Related



Software is critical in advanced manufacturing sectors;
Front Range data likely underestimates the number of agriculture-related software firms

Total Colorado Jobs - 2014	59,669	
Front Range Share of Jobs	1%	←
New Front Range Jobs: 2009-2014	248	
Front Range Job Growth Rate	14.8%	←
Statewide Avg Hourly Wage	\$52	
2014 Average Location Quotient	1.80	←

Agribusiness Cluster Opportunities

**OFFICE / HQ / PROF
SERVICES**
3,100 FRONT
RANGE JOBS

**WHOLESALE
FOOD**
12,600 FRONT
RANGE JOBS

**SUPPORTING
RETAIL & SERVICES**

TBD

**OFFICE - FINANCIAL
SERVICES**
600 FRONT RANGE
JOBS

**CONVENTION &
EXHIBITION
SERVICES**

TBD

Findings

- ✓ **Sectors of Opportunity**
- ✓ **Agribusiness Innovation Triangle**
- ✓ **Agribusiness Innovation Area**



Sectors of Opportunity

- ✓ Agribusiness supporting
 - Software, Big Data analysis
 - Professional services
 - Financial services
- ✓ Product R & D and manufacturing
 - Sensors/instruments
 - Urban and vertical agriculture
 - Grain and oilseed processing
 - New consumer products/applications
- ✓ Wholesale food
- ✓ Food production (pilots and urban facilities)

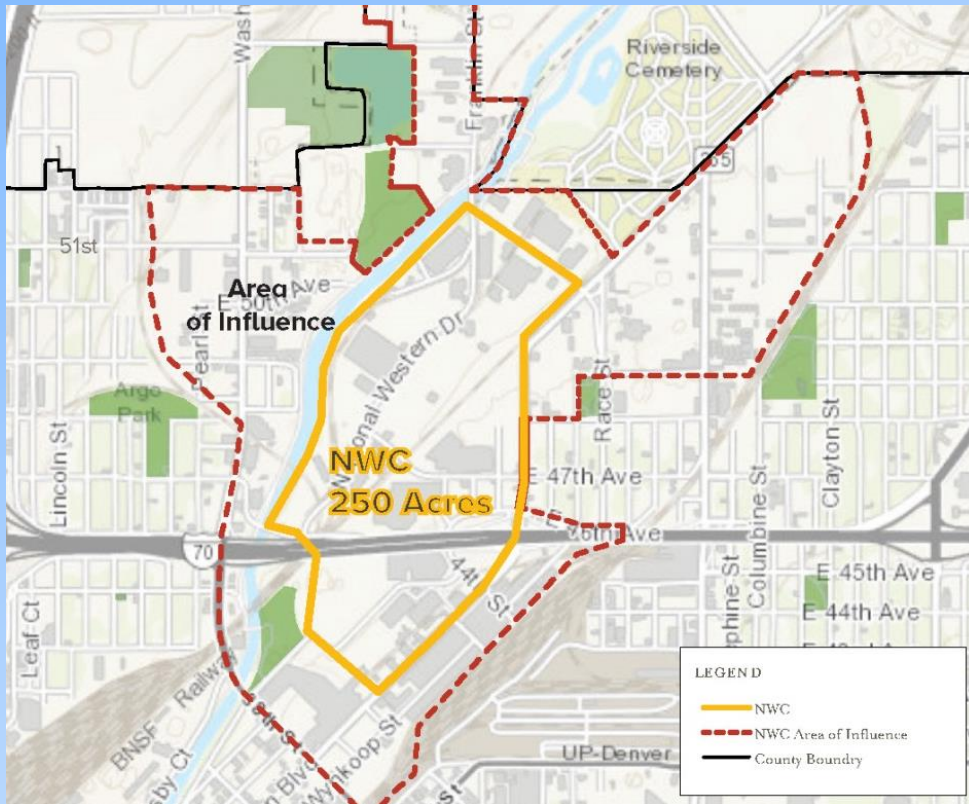


Denver and NWC can play a key role in driving the Agribusiness Economy

- ✓ **Global Marketplace**
 - Safe, secure
 - Finance
 - Information and knowledge
- ✓ **Technology**
 - Development and adaptation of tech
 - Big data research and storage
 - Innovation and “collision ideas”
- ✓ **Health**
 - Eating smarter and obesity research
 - Transferability: Human \leftrightarrow Animal, Plant
 - Natural, organic products



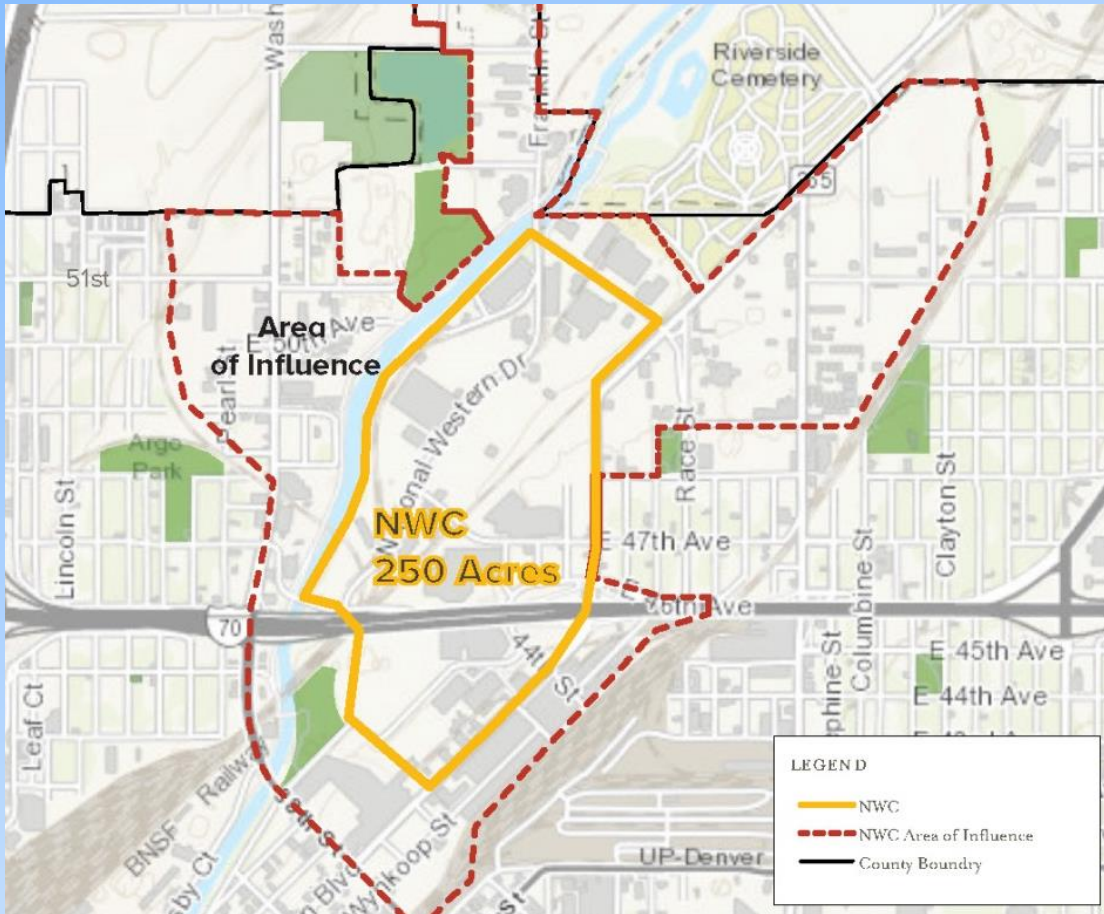
Innovation Areas



- ✓ Mix of office and lab space
- ✓ Urban/neighborhood density
- ✓ Partnership between public, institutional, and private
- ✓ Serendipitous collisions
- ✓ Employers seek out presence of institutional anchors: Health Care / Higher Education



Agribusiness Innovation Area



Outcomes and Benefits

- ✓ Estimated 1-3M square feet of office and lab space
- ✓ Critical driver of future economies
Today – OIL & GAS
Tomorrow - WATER
- ✓ Further diversifies and strengthens our economy

Next Steps

ENGAGE: Active engagement with current and future stakeholders and partners, including elected and appointed officials, institutional anchors, neighborhood residents and organizations, business leaders (local and in identified clusters), and education leaders.

STRATEGIES: Create a comprehensive economic development strategy, with a specific focus, leading to growing an innovative, globally-focused business area. This strategy builds on the economic cluster findings and sets a plan for growing, starting, and attracting firms that would strategically benefit from locating in or working with businesses, researchers, and stakeholders within the envisioned NWC campus.

ANALYSIS: This study explored global, national, state and local economic and demographic data to frame the economic situation and opportunity, investigate current business activity, and identify economic clusters where apparent comparative advantages exist for NWC, the Agriculture Innovation Triangle, and Colorado. The next steps call for an advancing of this analysis, both a continuous updating to ensure data-driven information for decision choices and digging deeper into the data for specific actionable strategies and steps.

IMPLEMENTATION: A business development program that aligns public and private resources should be initiated. Denver OED's city-wide economic development strategy and the JumpStart work plan identify a number of initiatives that are critical for achieving the NWC economic and business success.



JumpStart 2017

- ✓ **Complete** a comprehensive business development strategy to ensure the National Western Center investment is leveraged to provide a springboard for global commerce opportunities – focused on agribusiness opportunities
- ✓ **Support and establish** a business innovation and laboratory center to accelerate the formation and growth of agribusiness, resources technologies and other globally focused businesses
- ✓ **Develop** a 10-year workforce development strategy for GES, linking training and job access to agribusiness and other employment opportunities
- ✓ Many other initiatives, from small business financing to youth career training, from GES neighborhood development (e.g., early child care and education) to supporting employee ownership models of businesses



Thank you!

