

May 26, 2016

National Western Center



Economic Study Project Findings

Draft

AECOM

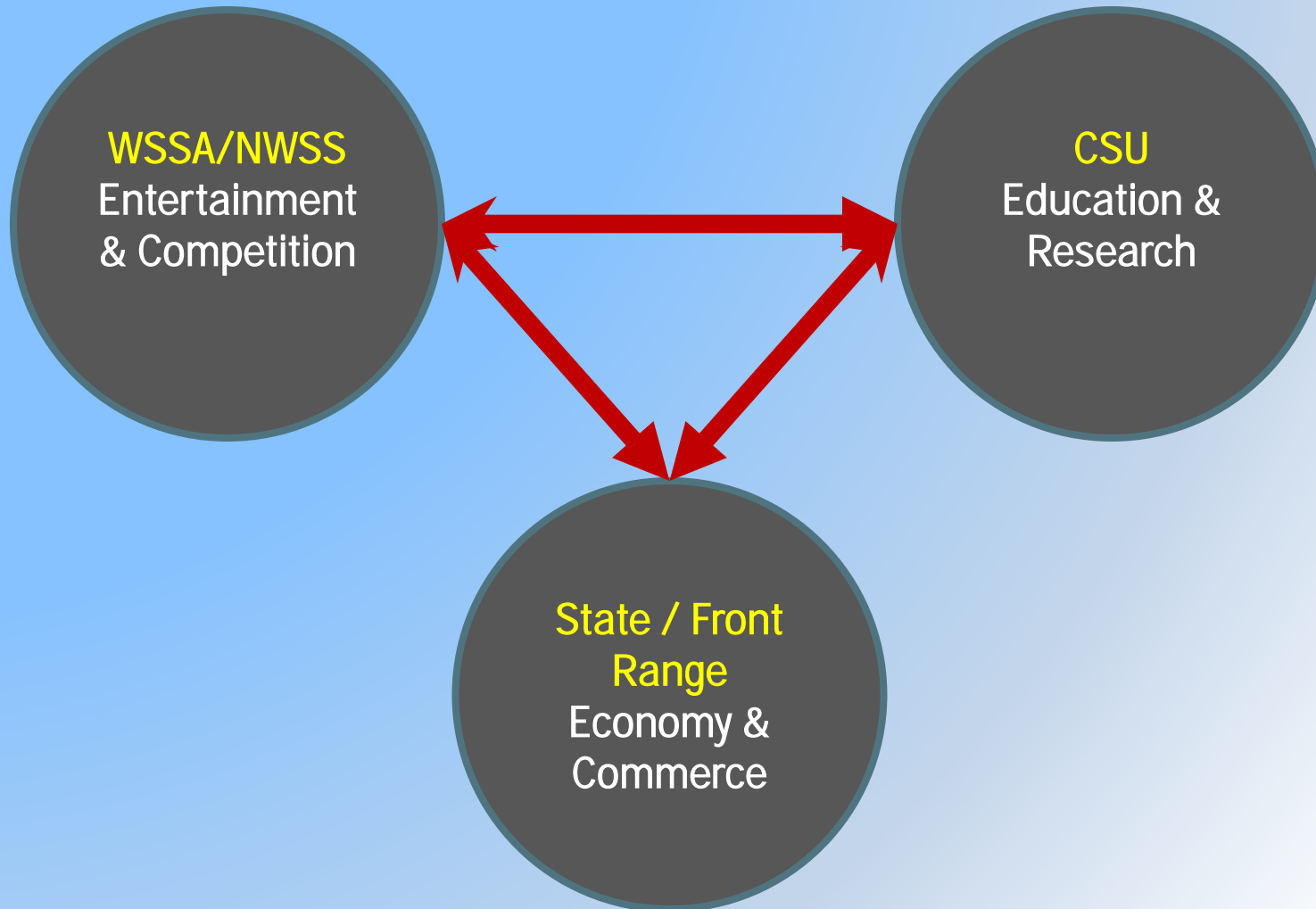


Initial Vision

Local Impact – Global Reach



Initial Vision: Project Anchors



Initial Vision: Key Questions

Opportunity for Success (Strategy)

- 4 What sectors? What is the competition?
- 4 What makes us unique? Which resources and strengths matter?

How to bring it together (Order)

- 4 What comes first and how much?
- 4 What is our story? (Who can/needs to do it?)

What do we need (Resources)

- 4 Marketing and recruitment
- 4 Tools and Financing for moving, growing and starting
- 4 Space, type and location

Evolving Framework



Framework: Economics

- 4 Leverage NWC agriculture-related innovation to drive job growth and economic opportunity
- 4 Leverage infrastructure reinvestment to facilitate infill redevelopment
- 4 Develop new revenue streams to address project capital and operating needs

Framework: Vision

- 4 NWC: Focal Point for Colorado Agriculture
- 4 Animal Health: CSU "One Health" Strategy
- 4 Water
- 4 Food Safety & Security
- 4 Food Nutrition, Quantity, Quality, Affordability
- 4 Technology & Innovation
- 4 Silicon Valley of Agriculture
- 4 Freight and logistics

Framework: Markets

Global Opportunities

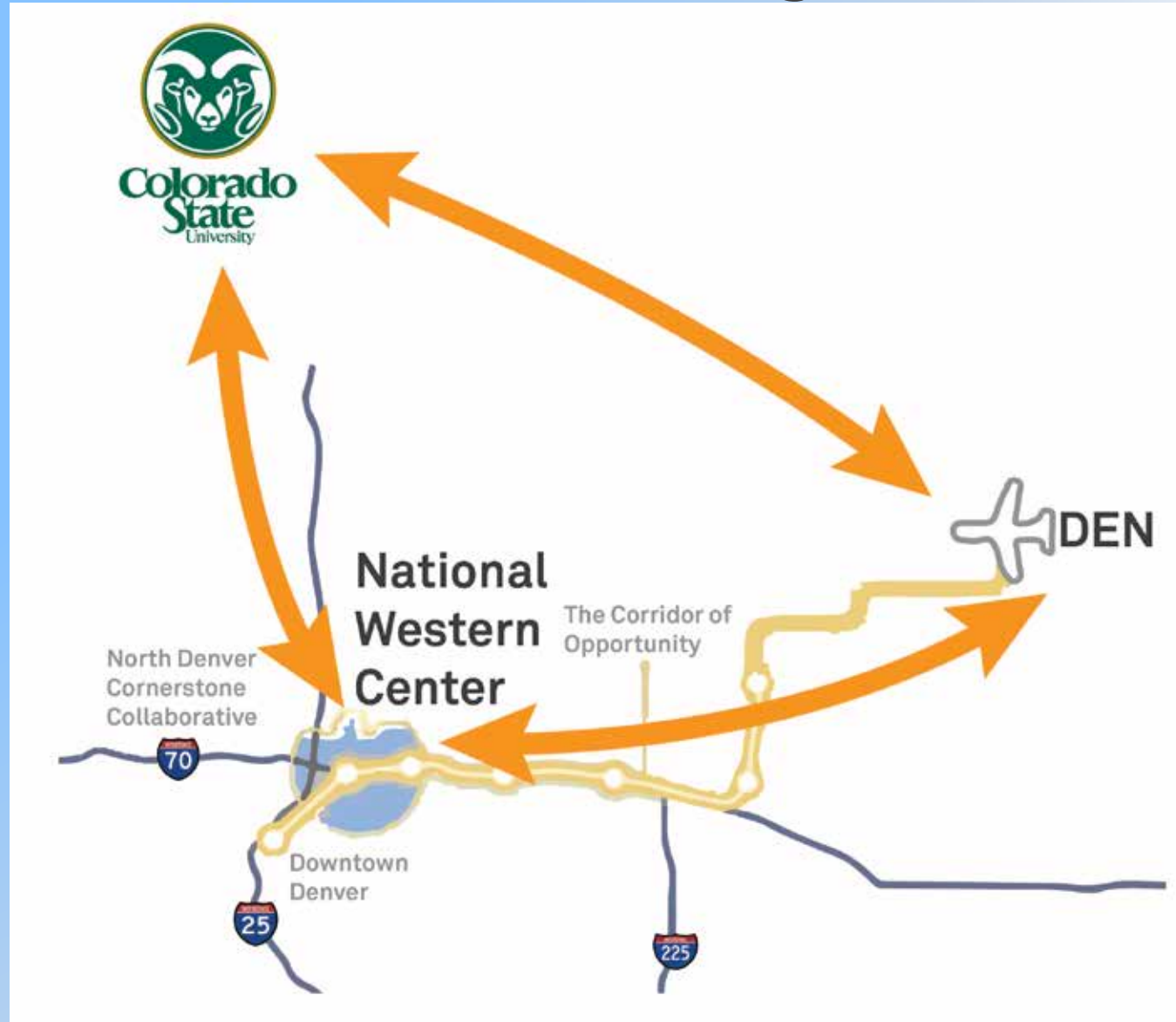
- 4 Growth of "Global Middle Class"
- 4 Global debate: food affordability/availability
- 4 Lower commodity prices = lower input costs
- 4 Shifting US consumer tastes

Framework: Markets

Local Opportunities

- 4 The Front Range-a Top 20 growth market
- 4 Growth in agriculture-linked venture capital
- 4 CSU / Denver “Water Innovation Center” partnership initiative
- 4 Leverage the Agriculture Innovation Triangle

The Agriculture Innovation Triangle



Framework: Markets

Positive Outlook Ag-related Sectors:

- 4 Water: Infrastructure, Testing, Management
- 4 Animal Health, Nutrition, Herd Management
- 4 Food Protein (USA positive but slowing; global positive and growing)
- 4 Agriculture Information Systems
- 4 Sensors, Testing, Analytics, Quality & Bio-Safety

Framework: Markets

Global Constraints

- 4 Global commodities are in a down cycle
- 4 Strong US Dollar limits near-term exports

Local Constraints

- 4 Weather and water
- 4 Local real estate markets

Framework: Markets

Agriculture Sectors Strong in Colorado

4 Cattle ranching

4 Animal production

4 Beverage manufacturing

US Federal Policy Factors

4 Federal passage of the Food Safety
Modernization Act (FSMA)

4 Broader global debate about GMOs

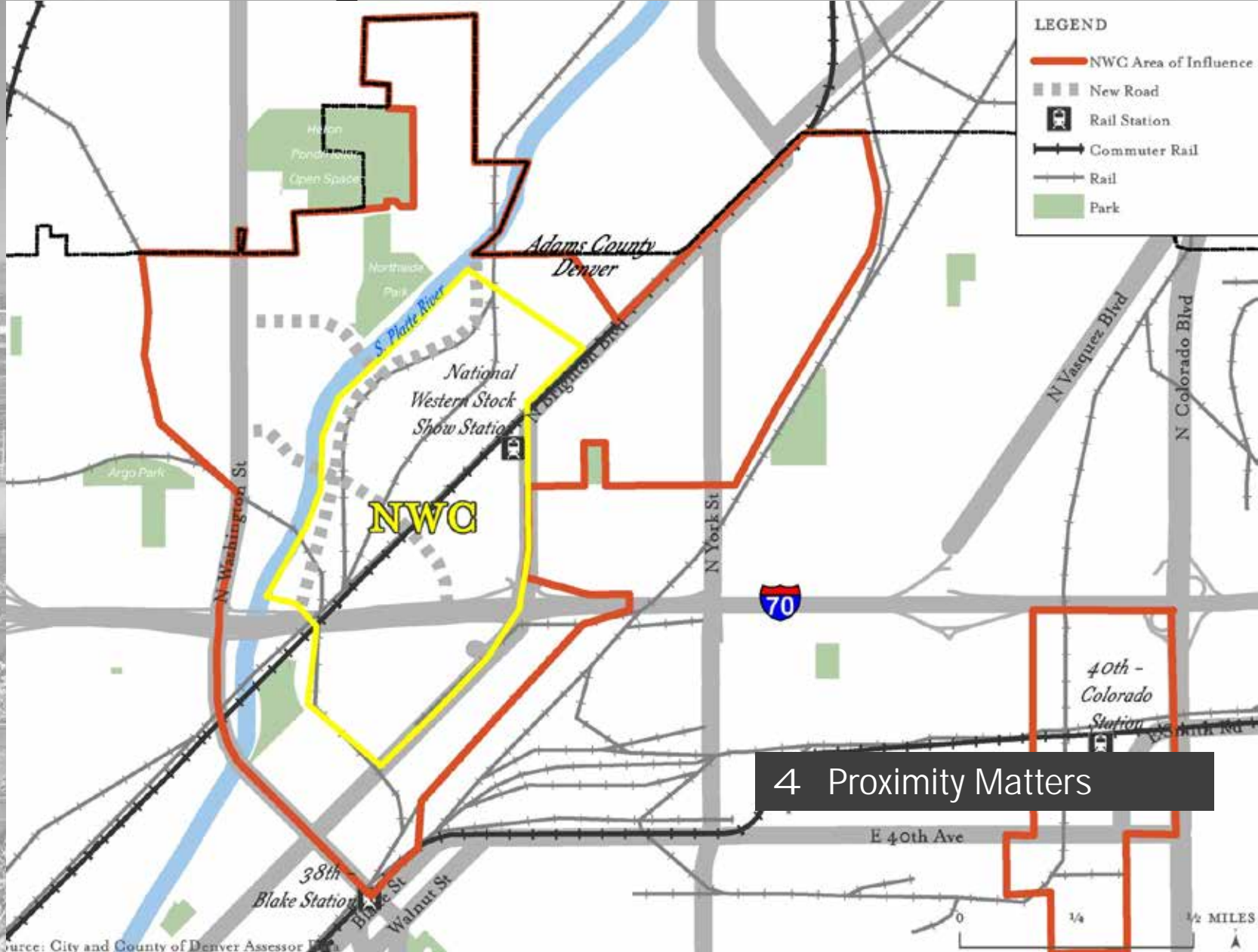
Critical Ingredients



Critical Ingredient: Innovation

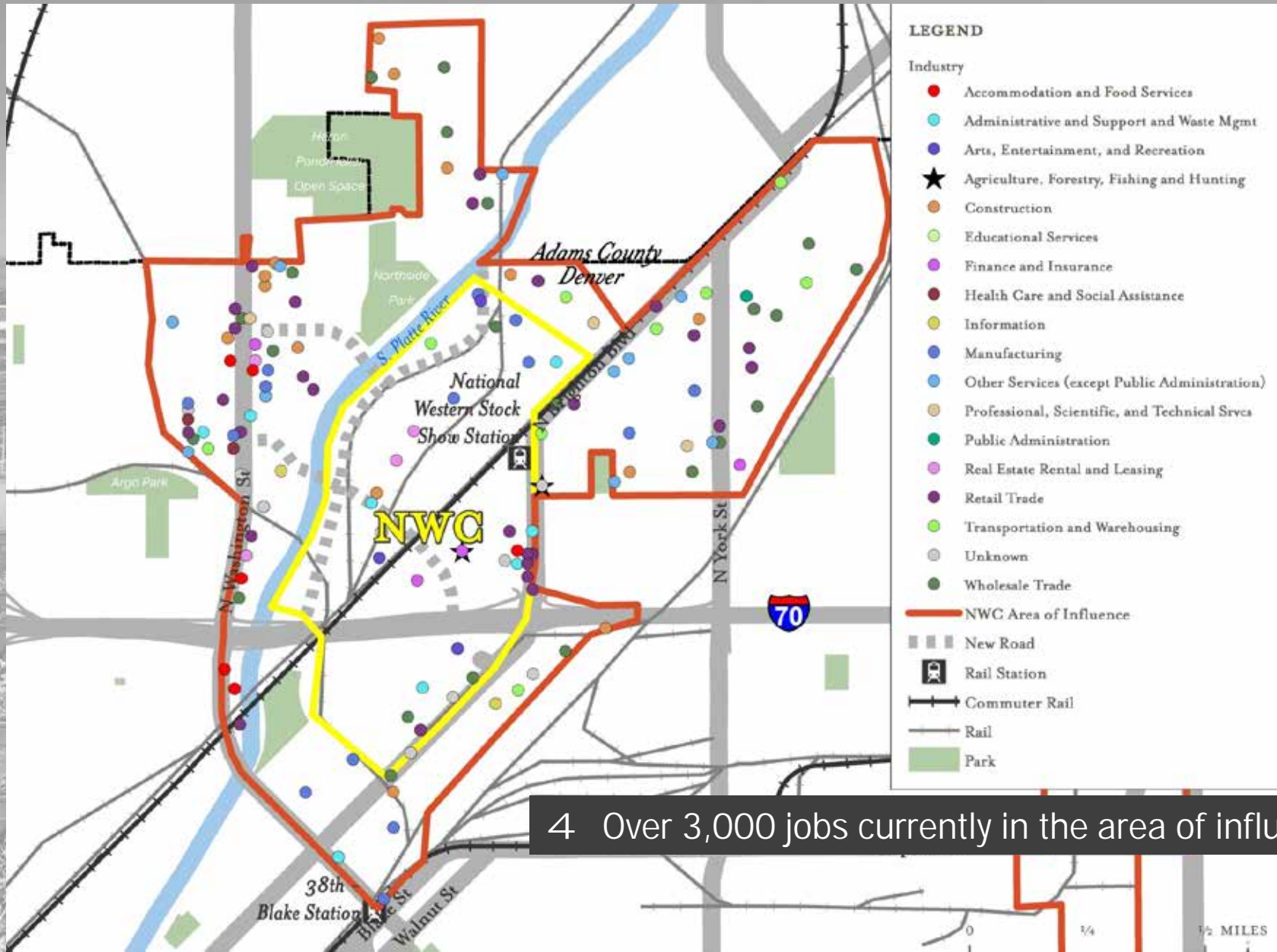
- 4 Convergence: Agriculture, plant and life sciences, information technology, software, energy, aerospace, advanced manufacturing and bioinformatics
- 4 Innovation drives need for “accidental collisions” between people in knowledge-based & technology-driven sectors
- 4 Companies must be in these locations to compete for Talent

Critical Ingredient: Area of Influence



4 Proximity Matters

Critical Ingredient: Local Companies



NWC Cluster Opportunities



Clusters of Opportunity

Our Approach

- 4 Start with traditional industry sectors and companies in those sectors
 - 4 Agriculture / Ag-related
- 4 Identify and leverage interconnections between companies; pivot from "Sectors" to "Clusters"
- 4 Pivot from companies to jobs
- 4 Connect jobs with real estate (office, lab, production)

NWC 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

NWC Cluster Opportunities

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

**ANIMAL HEALTH / RESEARCH & LAB
OFFICE / LAB**
20,400 FRONT RANGE JOBS

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

**SOFTWARE &
BIOINFORMATICS**
500 FRONT
RANGE JOBS

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

NWC Cluster Opportunities

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

WHOLESALE FOOD
12,600 FRONT RANGE JOBS

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

**SUPPORTING
RETAIL & SERVICES**

TBD

**CONVENTION &
EXHIBITION
SERVICES**

TBD

Next Steps



Next Steps

- 4 Refine clusters, link with companies,
- 4 Identify growth opportunities
- 4 Summarize comments
- 4 Complete final report
- 4 Understand public and private partnerships
- 4 Inputs flow into NextGen efforts