

YC-EPN SUMMIT · SESSION 3

Systems Thinking for Workforce & Economic Development

Mapping Stakeholders, Boundaries, and Barriers

July 28, 2026 · 10:00 AM – 3:00 PM · Yavapai College, Verde Valley Campus

THE DAY AT A GLANCE

Agenda for the Day

MORNING

9:00 Check-in, Breakfast & Networking

10:00 Opening Comments & Welcome Address
Dr. Marylou Mercado & Supervisor Nikki Check

10:15 Recap & Session Overview
Dr. Megan Hanna

10:20 Systems Thinking Concepts
Dr. Megan Hanna

10:45 Case Study: WED in Practice
Mr. Brent Hickey

11:15 Table Discussion
Dr. Megan Hanna

AFTERNOON

12:00 Lunch & Networking

12:30 Mayor Panel: Community Perspectives
Verde Valley Mayors, Mr. Jack Smith, and Mr. Richard Hernandez

1:00 Table Reflection: Multiple Perspectives
Mr. Richard Hernandez and Dr. Megan Hanna

1:30 Systems Mapping Activity
Dr. Megan Hanna

2:15 Gallery Walk
Dr. Megan Hanna

2:30 Group Share-Out
Dr. Megan Hanna

2:45 Closing Comments
Dr. Megan Hanna & Supervisor Chris Kuknyo

Yavapai County Economic Prosperity Network

Opening Comments

Dr. Marylou Mercado

VP of Workforce Development, Health Sciences & Public Services, Yavapai College



Yavapai County Economic Prosperity Network

Welcome Address

Supervisor Nikki Check

Yavapai County Board of Supervisors

Where We've Been, Where We're Going

1–2

SESSION

Seeing the System

Shared context, wicked problems, and how perspective shapes decisions.

3

SESSION

Today: Mapping the System

Stakeholders, boundaries, and barriers — a structured look at perspectives and constraints.

4

SESSION

How the System Behaves

Cause and effect, reinforcing and balancing feedback loops, delays.

5+

SESSION

Toward Coordinated Action

Identifying leverage points and designing interventions together.

Today builds toward the leverage points and coordinated action of later sessions.

TODAY'S GOALS

What We're Here to Do

A day for structured analysis of perspectives and constraints. Not solving the county's challenges but seeing the system more clearly.

1

Stakeholders

Identify key stakeholders and the perspectives they bring to the system.

2

Boundaries

Explore how the boundaries we draw shape decision-making.

3

Barriers

Expose the structural barriers that influence collaboration.

FACILITATOR: DR. MEGAN HANNA

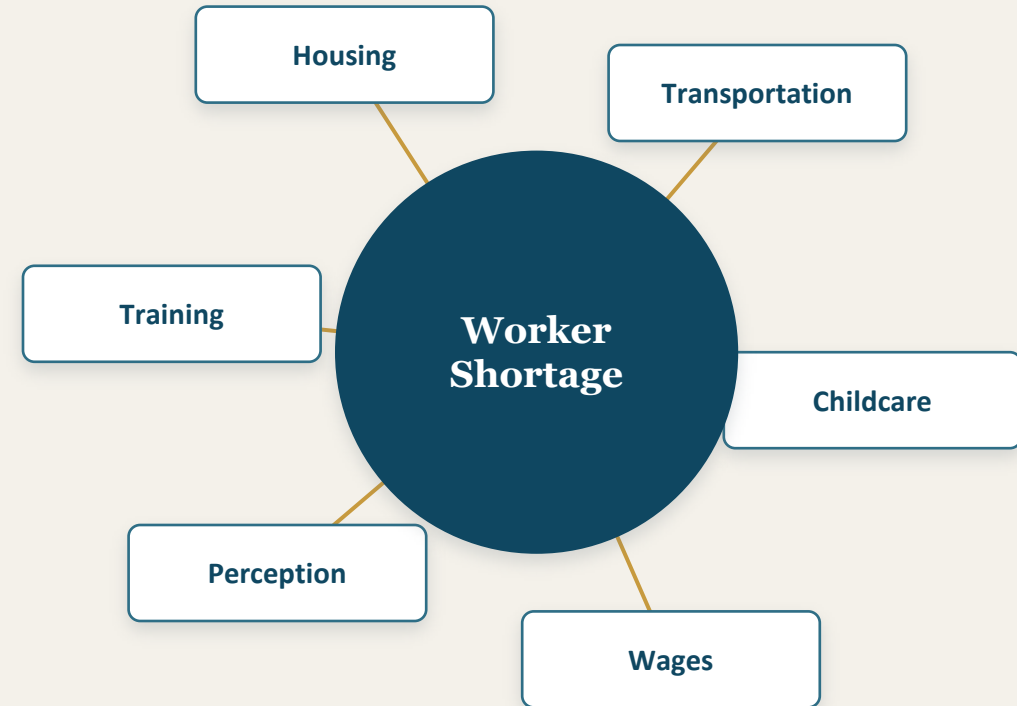
Systems Thinking Concepts

A shared vocabulary for the day —
boundary critique, the DSRP framework, and barriers as system structure.

A Worker Shortage Is Never Just One Problem

On the surface, a shortage of qualified workers may look like a ***training*** problem.

Russell Ackoff called these “**messes.**”



Ackoff (1999); Meadows (2008)

A KEY DISTINCTION

Complicated Is Not the Same as Complex

COMPLICATED

Many parts, but knowable

- Understood, mapped, and reliably predicted with enough expertise
- Cause and effect are visible to the right expert
- Rewards expertise: fix the parts, fix the system

Like an aircraft engine or a tax code

Ackoff (1999); Glouberman & Zimmerman (2002)

COMPLEX

Many interacting agents

- People, markets, and policies whose relationships constantly shift
- Cause and effect separated in time and space
- The whole behaves in ways the parts alone can't explain

Like raising a child

Workforce and economic development are firmly complex — which calls for different tools and a different mindset.

BOUNDARY CRITIQUE

Every Boundary Decides Who's In and Who's Out

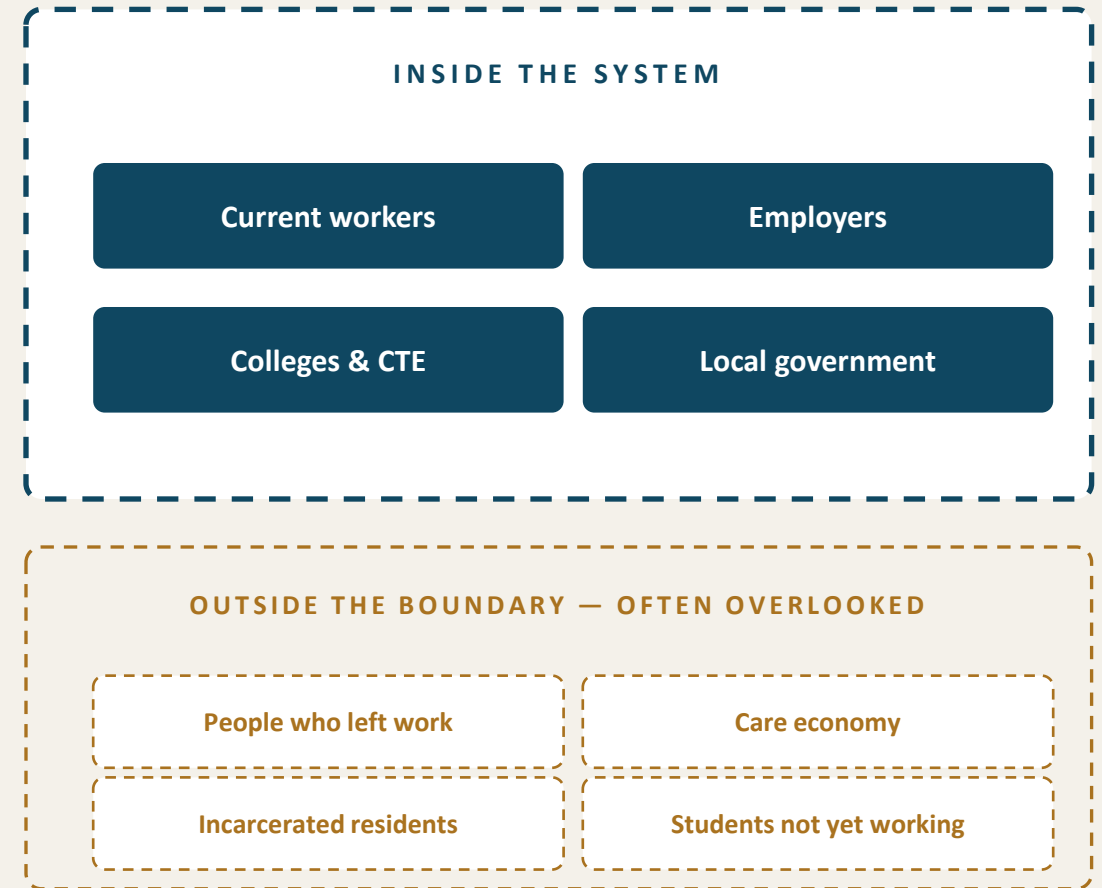
Every time we define a system, we draw a boundary.

Boundary critique asks us to make those choices visible and deliberate.

Meadows (2008); Ulrich & Reynolds (2020)

Questions worth asking:

- Is “the workforce” only current workers, or also those who left the labor market, are incarcerated, or still in school?
- Does “the economy” include the informal and care economies?
- Whose knowledge counts as expertise — and who isn't in the room?



Four Habits of Systems Thinking



Distinctions

What is this thing — and what is it not? Every label draws a boundary.



Systems

What are the parts, and what whole do they belong to? Wholes and parts.



Relationships

How do things affect one another? Often where the real insight lives.



Perspectives

From whose point of view? Change the vantage, change what's visible.

You'll find yourself asking these instinctively — that's systems thinking in practice.

Barriers Aren't Just Problems — They're Structure

Seen through a systems lens, barriers are structural elements that shape how the whole system behaves. Naming them is the first step to working with them.

1

Policy Constraints

Rules that limit what any actor can do

2

Funding Limitations

Money that shapes what's possible

3

Institutional Silos

Organizations that don't connect

4

Communication Gaps

Information that stops flowing

5

Competing Incentives

Goals that pull in different directions

THE POWER OF MULTIPLE PERSPECTIVES

No One in the Room Has the Full Picture

“What any of us knows is a model” — always partial. Meadows urged us to make our mental models visible and invite others to challenge and build on them.

Meadows (2008); Senge (2006)



CARRY THESE INTO THE DAY

Listen for These Concepts

As the case study, panel, and mapping unfold, notice where each pattern shows up.

Distinctions

Systems

Relationships

Perspectives

Boundaries

Barriers

CASE STUDY

Workforce & Economic Development in Practice

Mr. Brent Hickey

Republic Land Investment

We're not evaluating the idea — we're using it to practice seeing the system.

Look at the Case Through a Systems Lens

The goal isn't to agree or disagree with the case. Use it to notice the broader workforce and economic development system.

Stakeholders

Who are the primary stakeholders you identified?

Perspectives

Which perspectives were represented — and which may be missing?

Boundaries

Where are the system's boundaries? Who's inside, who's outside?

Barriers

What barriers or challenges emerged?

Assumptions

What surprised you or challenged your assumptions?

One Insight

What will your table share with the room?

LUNCH & NETWORKING

Lunch & Conversation

Sit with someone new, or someone from a different organization, role, or sector. Keep the morning's ideas going — informally.

- What perspective did you hear this morning that was new to you?
- Which stakeholder do you understand differently now?
- What connections are you noticing across the county's system?

Jot down one insight to carry into the afternoon.



MAYOR PANEL

Community Perspectives on Workforce & Economic Development

A FACILITATED PANEL WITH

Mr. Jack Smith · Mr. Richard Hernandez
Mayors Ann Shaw, Holli Ploog,
Marie Moore & Robyn Prud'homme-Bauer

Listen for how each community defines the system — and where their boundaries differ.



Multiple Perspectives

Reflect on the panel through a systems lens. Look for examples of each pattern — you don't need to cover them all.

D Distinctions

What issues did different speakers emphasize most?

S Systems

What connections emerged across housing, education, healthcare, and jobs?

R Relationships

Which stakeholder partnerships seemed most essential?

P Perspectives

How did each community's context shape what leaders stressed?

B Boundaries

How did each speaker define their sphere of responsibility?

B Barriers

What structural barriers surfaced across communities?

Making a System Visible

In small groups, create a poster that maps a workforce or economic development system. This isn't a test of who knows the most — it's a chance to put the day's concepts to work. A partial map that surfaces good questions beats a tidy one that hides them.

YOUR MAP SHOULD INCLUDE

Stakeholders

Who is part of this system?

Relationships

How do they influence one another? Use arrows.

Boundaries

Where does the system begin and end?

Missing Voices

Which perspectives aren't represented?

Structural Barriers

What constraints shape what's possible?

Opportunities

Where could redrawing boundaries help?

You Don't Need to Know the Whole System

No one can see an entire system — that's the condition systems thinking was built for. **The goal is an honest map, not a complete one.** Its gaps are real findings: they show where understanding depends on people not yet at the table.

Solid outline

What we know

Someone here can speak to it firsthand.

Add a “?”

What we think we know

Believed, but secondhand, dated, or unverified.

Dotted outline

What we know we don't know

We know it exists but can't yet describe it.

Reserve a corner of your poster for **“Who we need in the room”** — the roles, organizations, or lived experiences that could fill your gaps.

Your Facilitator Assigns Your Group a System

Systems are assigned so that, together, the room covers a substantial part of the county's workforce and economic landscape.

1

**Skilled Trades
Pipeline**

2

**Workforce
Housing**

3

**Healthcare
Workforce**

4

**Childcare as
Infrastructure**

5

**Transportation &
Access**

6

**Youth Retention
& Brain Drain**

7

**Small Business
Formation**

8

**Water &
Development**

9

**Tourism &
Hospitality**

10

**Manufacturing
Readiness**

11

**Adults Re-
Entering Work**

12

**K-12 & Career
Awareness**

Gallery Walk

Groups post their maps around the room. Circulate, read each other's work, and leave sticky-note comments, questions, and observations.

LOOK FOR



Common stakeholders

Names that appear across many maps



Different boundaries

How groups defined their systems differently



Shared barriers

Structural barriers that repeat



Collaboration openings

Where maps connect to one another

Two Things From Each Group

01

One insight that emerged while building your own map.

02

One thing you learned from another group's poster on the walk.

Highlighting common themes — and how different perspectives shape our understanding of complex systems.

What Today Explored

Today was about seeing **who is part of the system and how it is structured** — before rushing to solve. The value comes from learning together first.

1

Boundaries shape sight

Where we draw the line decides what we can see and act on.

2

Perspectives add up

No single view is complete; together they build a fuller picture.

3

Barriers are structural

They shape system behavior — and can be named and worked with.

4

Gaps are findings

What a map can't show tells us who needs to be in the room.

Session 4: How the System Behaves Over Time

Today we asked who is in the system and how it's structured. Next, we turn to how it behaves — the loops, delays, and surprises that play out over months and years.

Reinforcing loops

Amplify change in one direction — for better or worse.

A strong training program earns employer trust, which brings resources, which strengthens the program.

Balancing loops

Resist change and push toward a set point.

Raising wages in one sector triggers workforce movement that partly offsets the intended gain.

Also:

delays
unintended
consequences

We'll map the feedback loops driving Yavapai County's workforce and economic system.

Yavapai County Economic Prosperity Network

Closing Comments

Supervisor Chris Kuknyo

Yavapai County Board of Supervisors

THANK YOU FOR JOINING US · DR. MARYLOU MERCADO

See You Next Session

SAVE THE DATE

To Be Announced Soon – Stay Tuned!

Resources from this and past sessions: www.yc.edu/wfs

Dr. Megan Hanna

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SOURCES & FURTHER READING

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