F4R™: FEWSION™ for Community Resilience Curriculum

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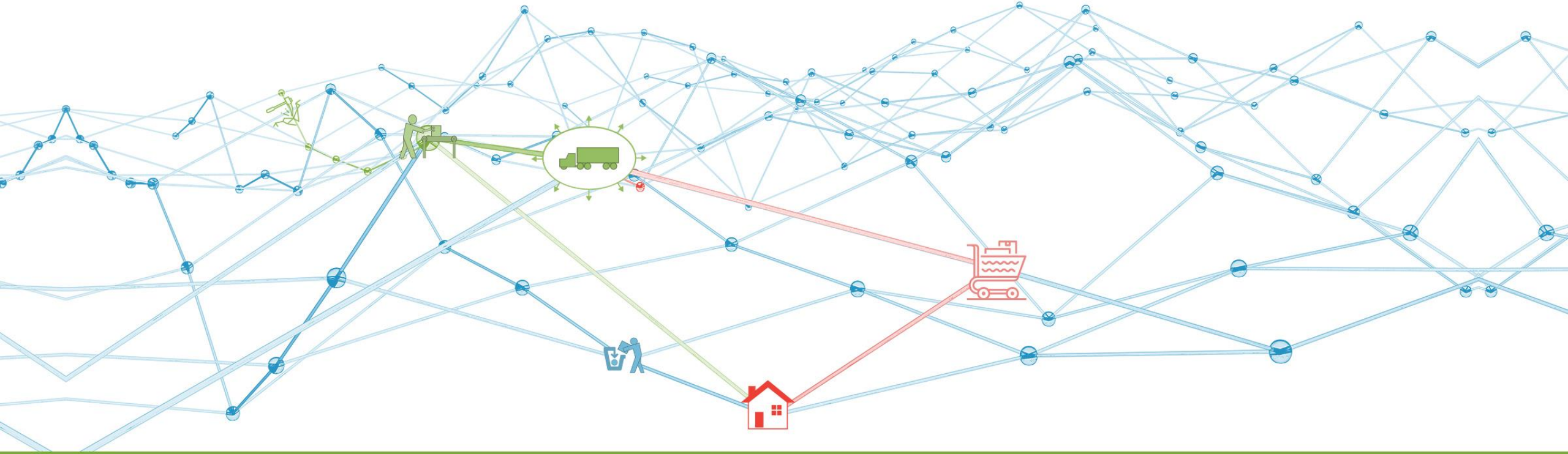

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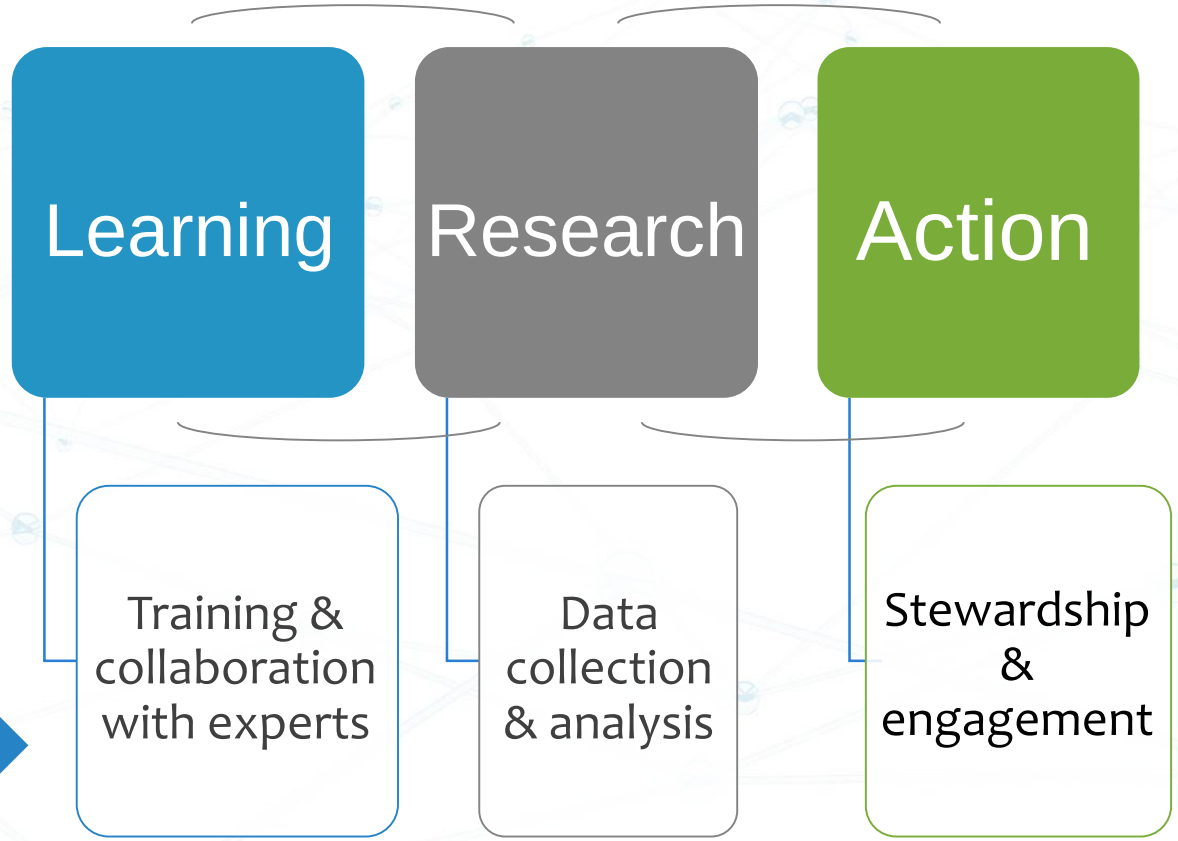
What is FEWSION™ for Community Resilience (F4R)?

F4R is a data-driven research project

- F4R leverages the power of citizen researchers
- F4R builds a community's capacity for RESILIENCE through...

(F4R™ or F4R Network™)



F4R Was Founded on the Premise That…

"All of us are inherently connected through the food we eat, the water we drink and use in our daily lives, the electricity that powers our homes and businesses, the products we buy, and the ecosystems and environments that sustain our lives and our communities"

First sentence of the announcement for the March 22nd, 2016 White House Water Summit

FEW is Important Locally and Globally:

Food, Energy, and Water

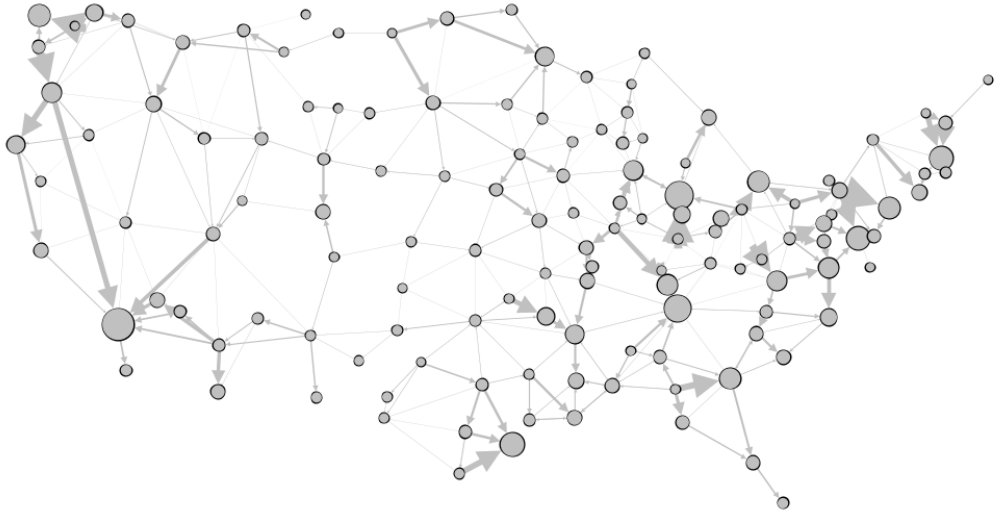
- Are Critical for Human Health and Quality of Life
- Have Intangible Values (e.g. Social and Cultural)
- Have Huge Footprints
- Must be Affordable for All

https://www.un.org/sustainabledevelopment/sustainable-development-goals/
https://www.linkedin.com/pulse/whats-special-food-energy-water-ben-ruddell/

F4R: Connecting National and County Data to Local FEW

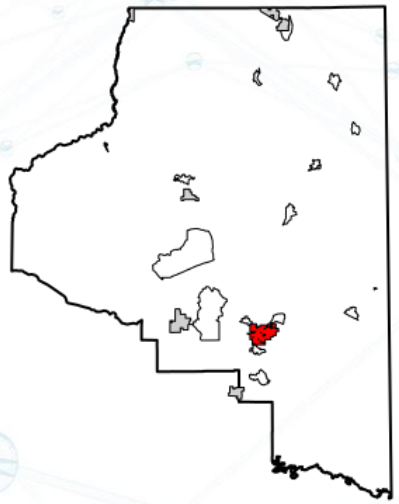
https://fewsion.us

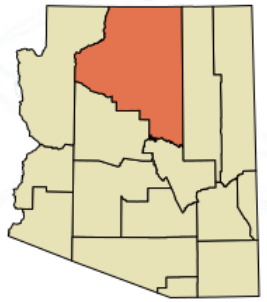
FEWSION™
(Mesoscale FEW Data)



Researchers

Citizen Scientists and Stakeholders

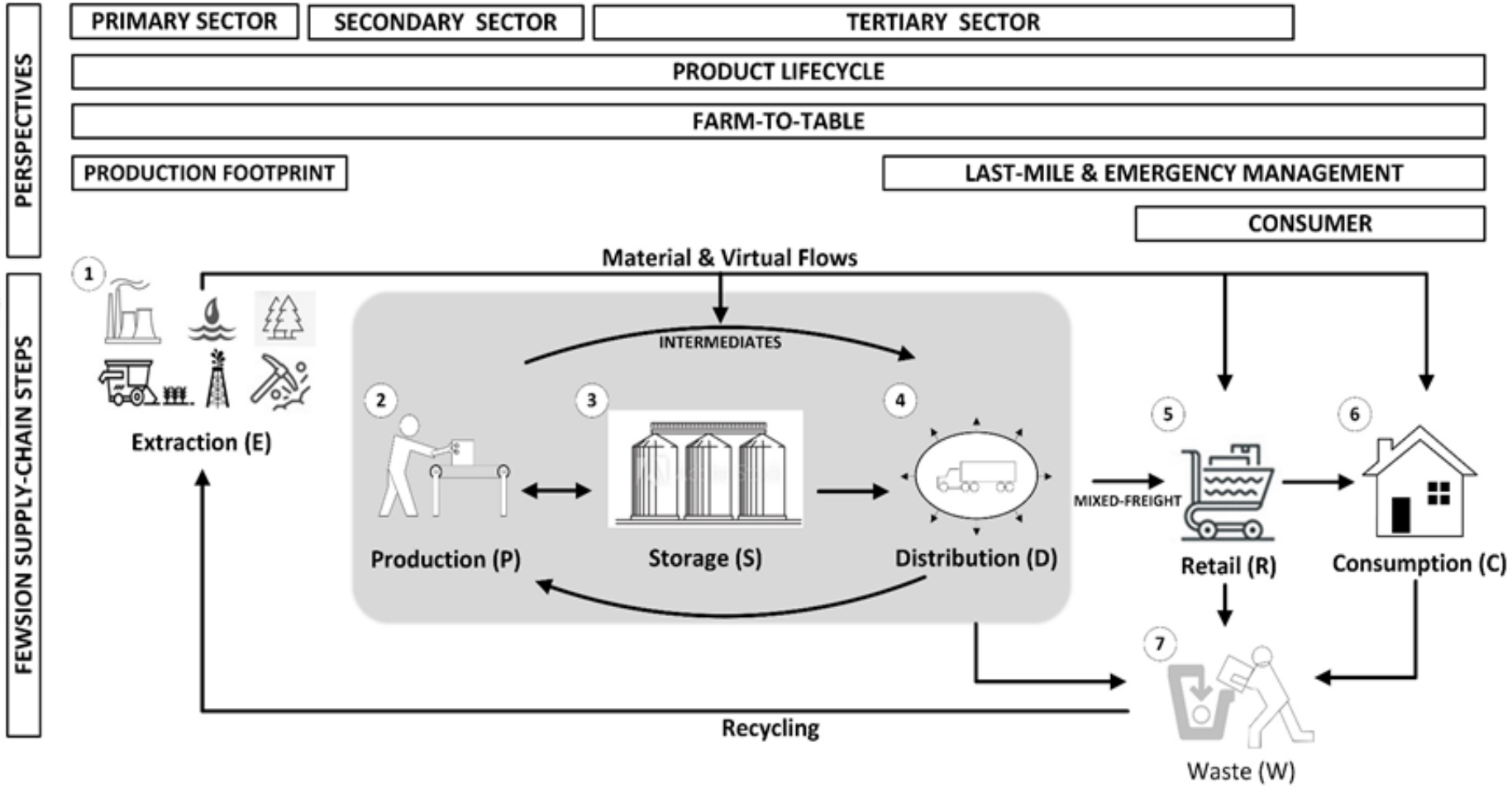




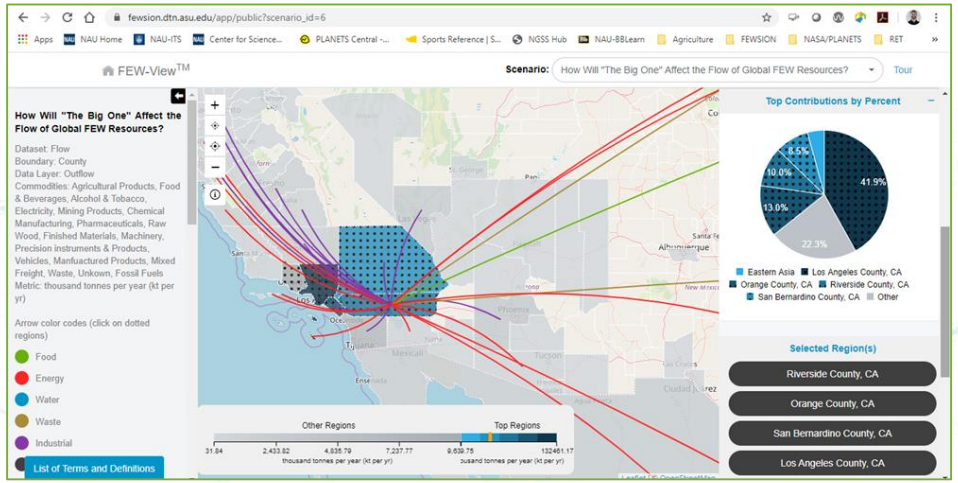
F4R
(Local Data)

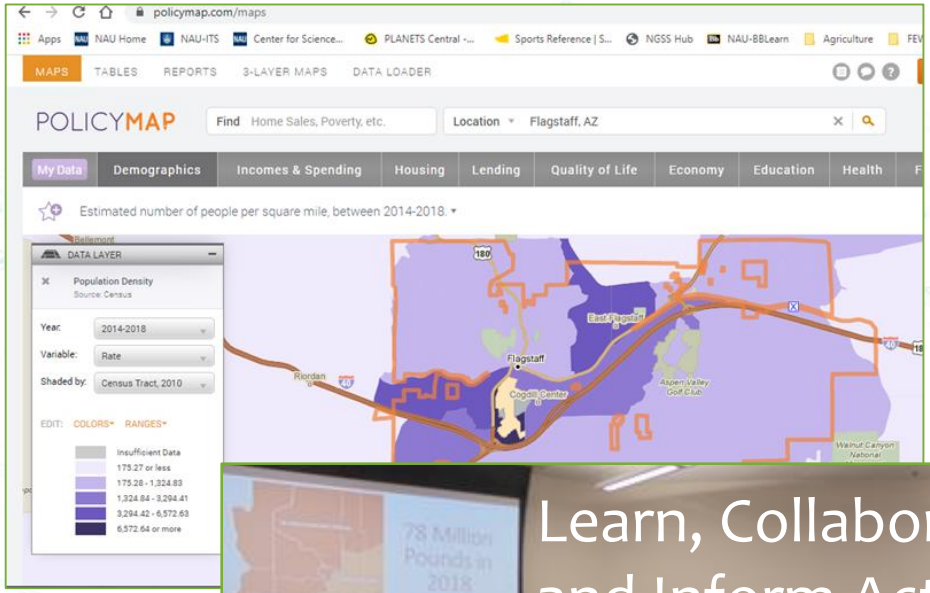
FEWSION™ is A Big Data Fusion project to Create and Exploit the First Complete Mesoscale Map of the U.S. Food, Energy and Water (+everything) System

F4R Approach: Understand Supply Chains to Inform Decisions About FEW

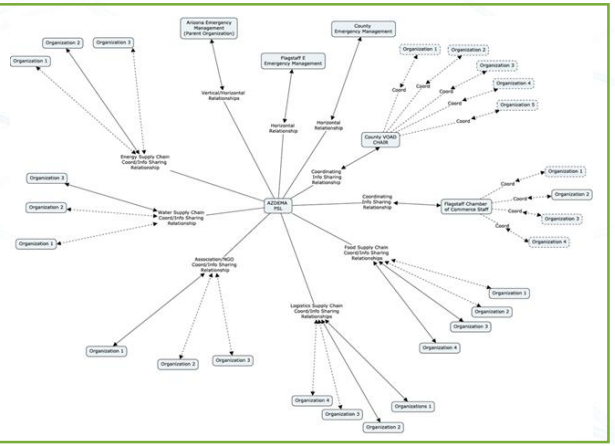


F4R Provides a Way to Visualize Data and Create Community Reports





Make connections in the community network



Contact your local coordinator to check the commitment level and needs for your community.

F4R Expectations

F4R is a collaborative process that involves time, opportunities for shared teaching and learning, collaboration, and work.

Be an Active Contributor

- Ask questions
- Share your experience and skills
- Help get your community started today

Logistics, Questions, and Next Steps

*Your **F4R Principal Investigator** is:*

Dr. Benjamin Ruddell, Benjamin.Ruddell@nau.edu

*Your **Lead Data Scientist**:*

Dr. Richard Rushforth, Richard.Rushforth@nau.edu

*Your **F4R Training Coordinator** is:*

Sean Ryan, M.S., Sean.Ryan@nau.edu, 928.523.0990

Methods and Approach for F4R

Systems Thinking - Improving community resilience in FEW is too complex to apply basic models. A systems approach is necessary to identify key connections and patterns in the FEW nexus.

Big Data and Network Analysis - Computational, evidence-based framework that leverages technology to help identify patterns and provide metrics for FEW. Social networks also provide insight for engagement and data collection.

Data Visualization - "A picture is worth 1,000 words." Visualizations are critical for communicating the complex data linking Food, Energy, and Water.

Citizen Science - Citizens can best access and understand community data and needs. Local understanding and problem solving can not be achieved without being driven by the community.

References

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