

# **SCN** Best Practices and Green Building Workgroup **Meeting**

**September 18<sup>th</sup>**

**Developing a Path to Sustainability**

**[sustainabilitysolutions.asu.edu](https://sustainabilitysolutions.asu.edu)**

# Rob and Melani Walton Sustainability Solutions Initiatives

**ASU** GLOBAL INSTITUTE  
of SUSTAINABILITY

**Walton Sustainability  
Solutions Initiatives**

[sustainabilitysolutions.asu.edu](https://sustainabilitysolutions.asu.edu)

# at the core: solutions, global





# Sustainability Solutions Services

An aerial photograph of a city, likely Phoenix, Arizona, showing a dense urban landscape with numerous buildings, parking lots, and green spaces. In the background, a range of mountains is visible under a clear sky. The image serves as a backdrop for the text overlay.

**Our goal:** to be a **trusted**  
transformational sustainability  
**partner** for our clients.



# Sustainability Solutions Services

An aerial photograph of a city, likely Phoenix, Arizona, showing a dense urban landscape with numerous buildings, streets, and green spaces. In the background, a range of mountains is visible under a clear sky. The image serves as a backdrop for the text overlay.

**Use expert teams** to collaborate with clients on real, practical, effective, **affordable sustainability solutions** to create public & private value.

# the institute is **cross-cutting**



**Global Institute of Sustainability**

W.P. Carey School of Business  
Herberger Institute for Design and the Arts  
Mary Lou Fulton Institute and Graduate School of Education  
Ira A. Fulton Schools of Engineering  
Graduate College  
Barrett the Honors College  
Walter Cronkite School of Journalism and Mass Communication  
Sandra Day O'Connor College of Law  
School of Letters & Sciences  
College of Liberal Arts & Sciences  
New College  
College of Public Programs  
School of Sustainability  
College of Teacher Education & Leadership  
College of Technology and Innovation  
University College  
College of Nursing & Healthcare Innovation



over 250 sustainability scientists  
and scholars



# **The Many Paths to Sustainability**

## **Sustainability Plan**

Visioning, Goals, Actions, Metrics

## **Climate Action Plan**

GHG Inventory, Goal Setting, Actions, Metrics

## **Resiliency Plan**

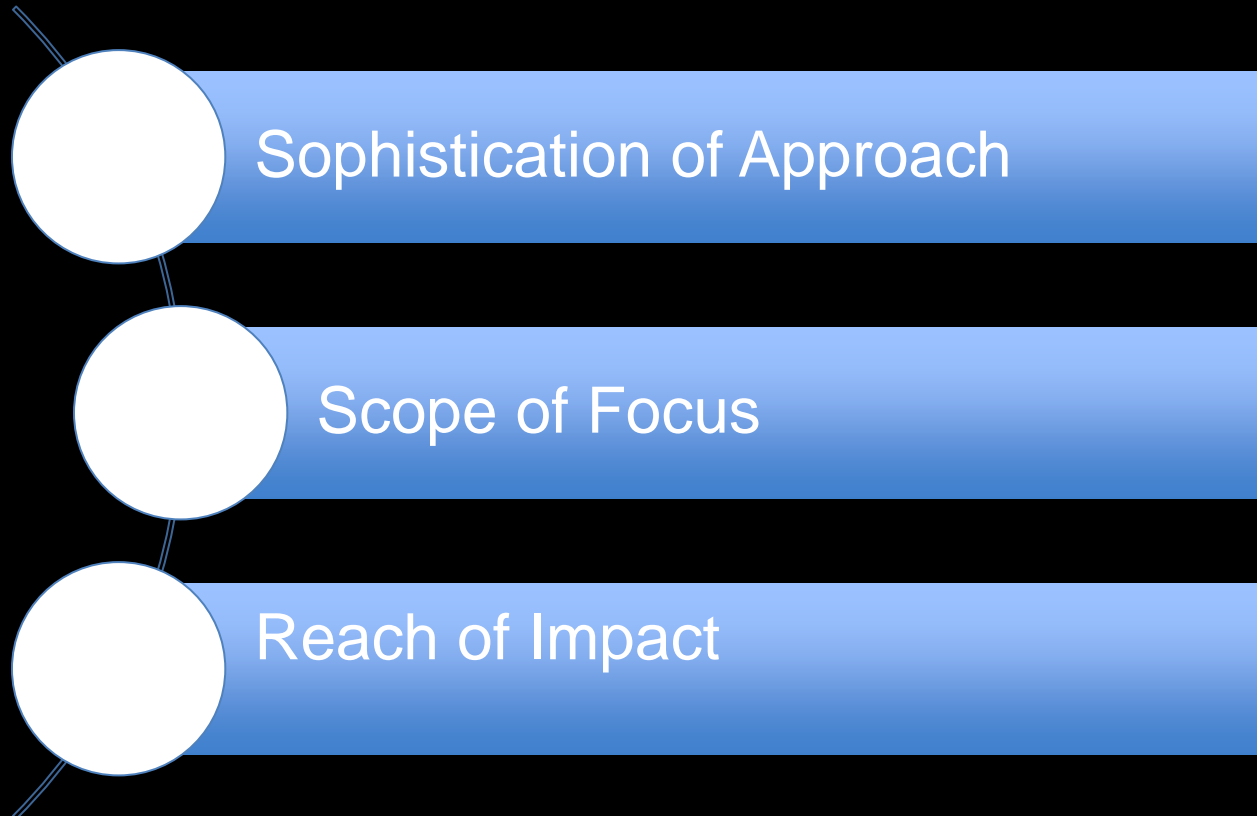
Vulnerability Assessment, Goals, Actions, Metrics

## **Resource Management**

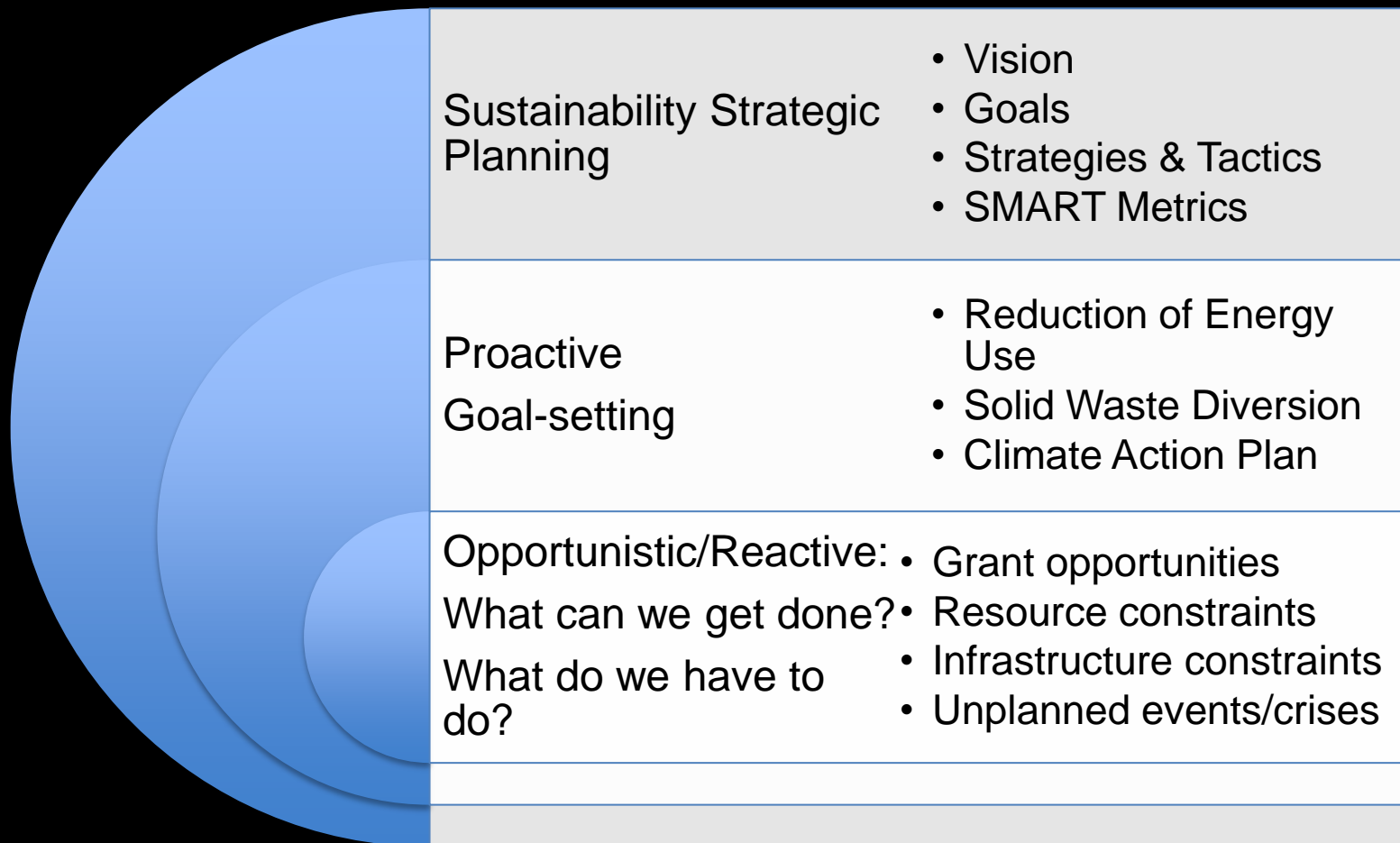
- Energy Efficiency
- Water Management
- Waste and Waste Diversion
- Air Quality and Pollution



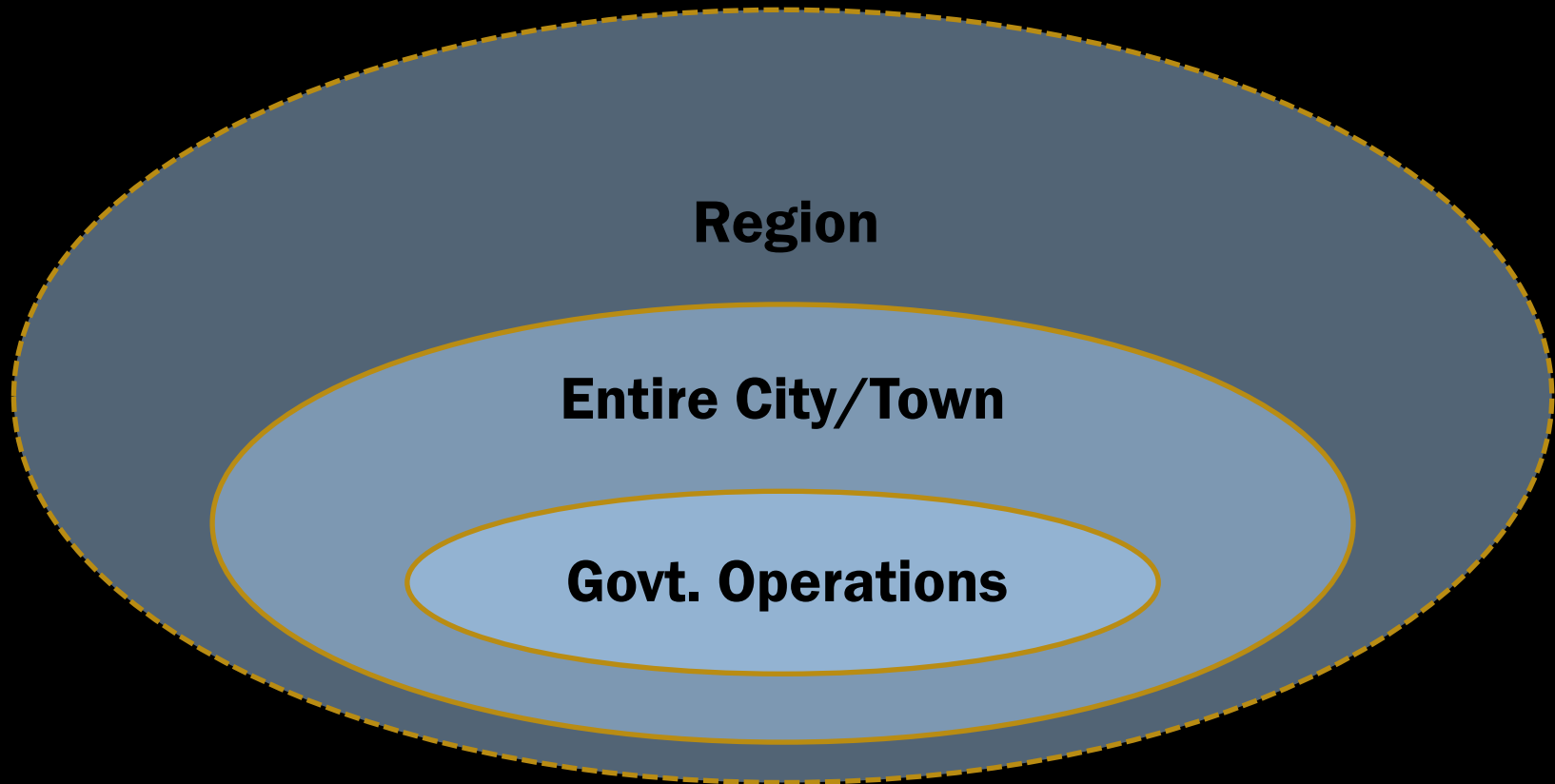
# Strategic Considerations



# Sophistication of Approach

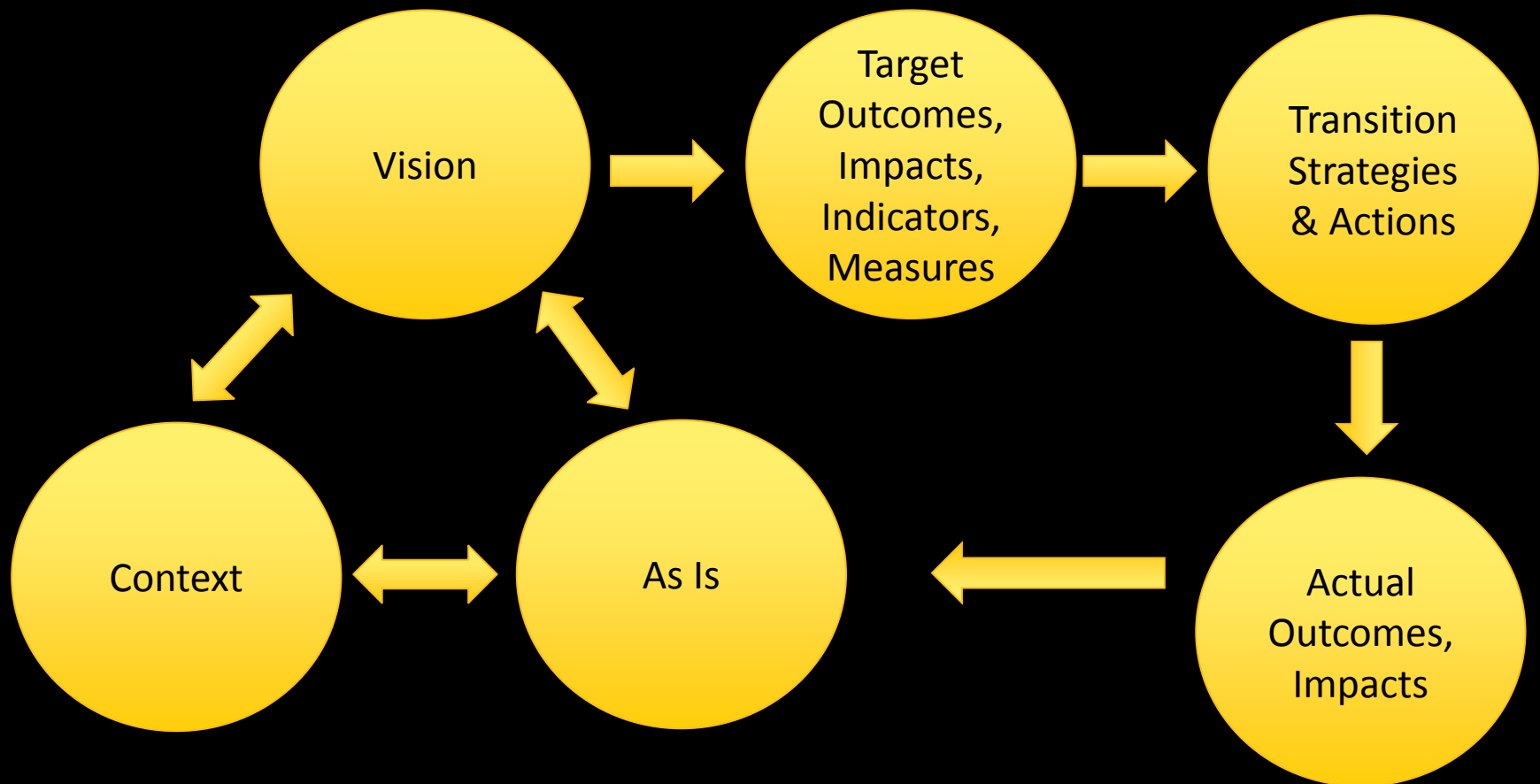


# Scope of Impact





# General Methodology



# An Example Impact Framework

Table of STAR Goals and Objectives						
Built Environment	Climate & Energy	Economy & Jobs	Education, Arts & Community	Equity & Empowerment	Health & Safety	Natural Systems
Ambient Noise & Light	Climate Adaptation	Business Retention & Development	Arts & Culture	Civic Engagement	Active Living	Green Infrastructure
Community Water Systems	Greenhouse Gas Mitigation	Green Market Development	Community Cohesion	Civil & Human Rights	Community Health & Health System	Invasive Species
Compact & Complete Communities	Greening the Energy Supply	Local Economy	Educational Opportunity & Attainment	Environmental Justice	Emergency Prevention & Response	Natural Resource Protection
Housing Affordability	Industrial Sector Resource Efficiency	Quality Jobs & Living Wages	Historic Preservation	Equitable Services & Access	Food Access & Nutrition	Outdoor Air Quality
Infill & Redevelopment	Resource Efficient Buildings	Targeted Industry Development	Social & Cultural Diversity	Human Services	Indoor Air Quality	Water in the Environment
Public Spaces	Resource Efficient Public Infrastructure	Workforce Readiness		Poverty Prevention & Alleviation	Natural & Human Hazards	Working Lands
Transportation Choices	Waste Minimization				Safe Communities	

# STAR Communities

## UNDER 100,000

- Albany, NY
- Blacksburg, VA
- Davenport, IA
- El Cerrito, CA
- Evanston, IL
- Fayetteville, AR
- Madison County, NY
- Northampton, MA
- Rockingham County, NC
- Rosemount, MN
- Santa Fe, NM
- Santa Monica, CA
- Victoria, BC
- Woodbridge, NJ

## 100,001-499,999

- Atlanta, GA
- Chandler, AZ
- Chattanooga, TN
- Cleveland, OH
- Dayton, OH
- Des Moines, IA
- Fort Collins, CO
- Lee County, FL
- Omaha, NE
- Riverside, CA
- Salt Lake City, UT
- Sarasota County, FL
- St. Louis, MO
- Tacoma, WA

## 500,000-999,999

- Austin, TX
- DeKalb County, GA
- Indianapolis, IN
- Portland, OR
- Seattle, WA
- Vancouver, BC
- Washington, DC

## 1,000,000+

- Broward County, FL
- Calgary, AB
- King County, WA
- Montreal, QC
- Orange County, FL
- Philadelphia, PA
- Phoenix, AZ
- Toronto, ON

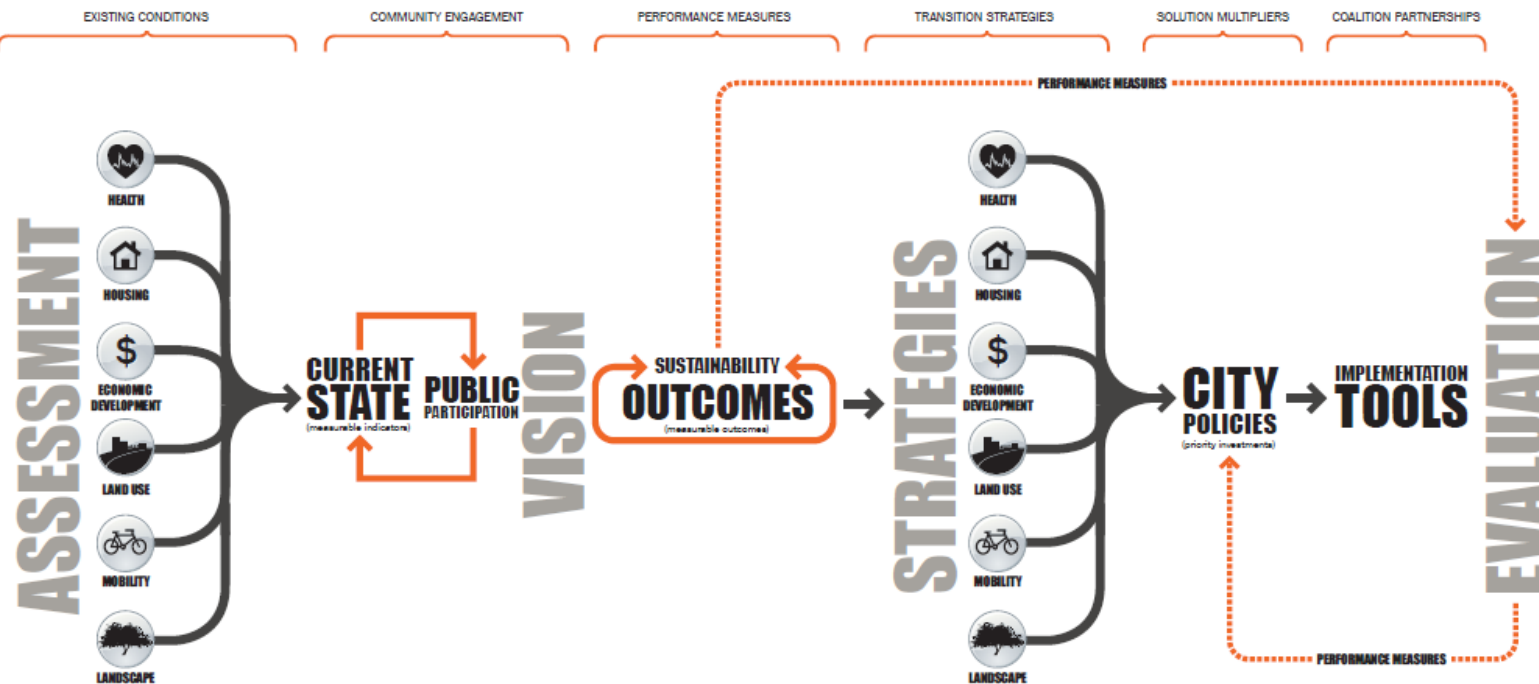


# Sustainability **Plan**

- Envision a sustainable community that assures **stable economic growth** founded on **social balance and environmental protection**
- Develop community **goals** and performance **measures**
- Create a **framework** that ties together a community's goals, strategies, implementation plans, and metrics for improving sustainability

# Example: Reinvent Phoenix

## Planning Process

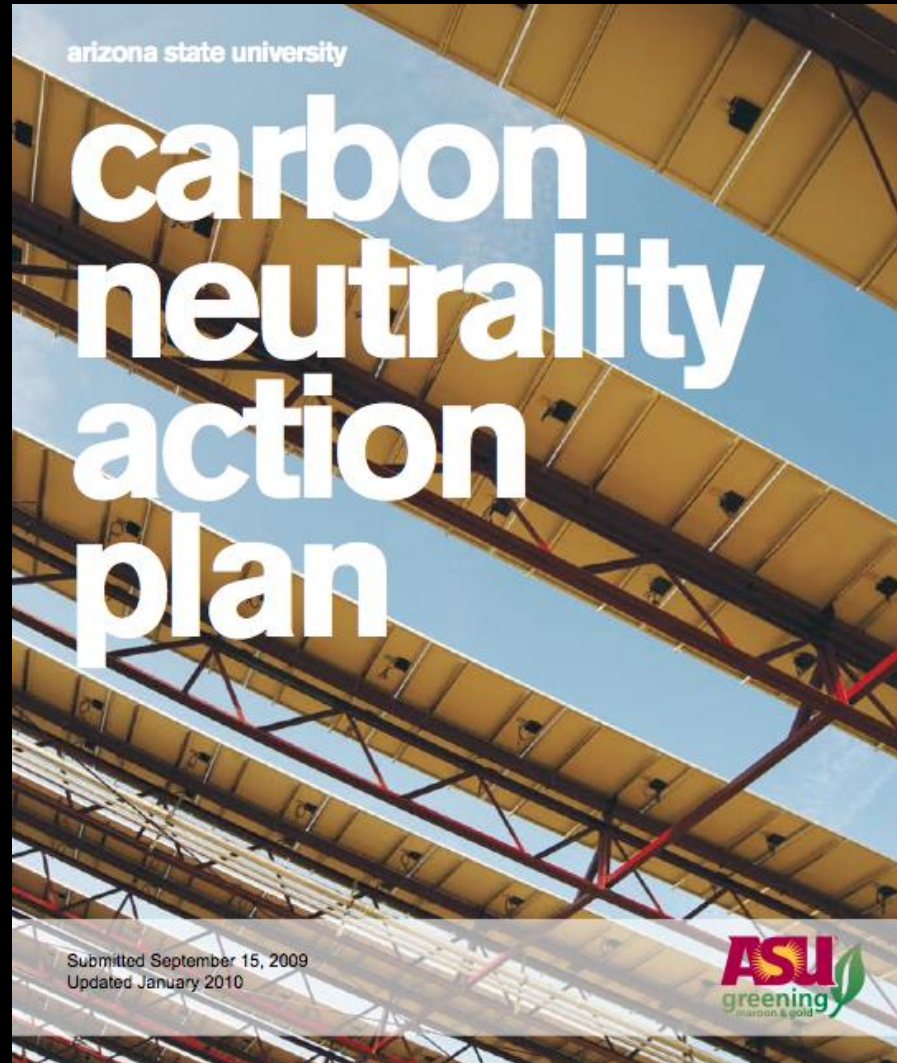


# Climate Action Plan

- GHG emissions inventory
- Reduction strategies and actions
- Best practices
  - U.S. Conference of Mayors
  - ICLEI



# Example: ASU



# Resiliency Plan

- **Overlap** with Sustainability Plan
- Community **Vulnerability** and **Risk**
- Plan to **mitigate/adapt** to vulnerabilities
- **Transition** strategies/actions **overlap** with sustainability plan

# **Example: Flagstaff**



**City of Flagstaff**

**Resiliency and Preparedness Study**





# Resource Management

- **Energy Efficiency**
- **Water Management**
- **Waste and Waste Diversion**
- **Facilities**
- **Streets**
- **Fleet**
- **Air Quality and Pollution**
- **Other Environmental Programs**

# Proactive Example: CfRI



# Resource Intelligence in the Greater Phx Region

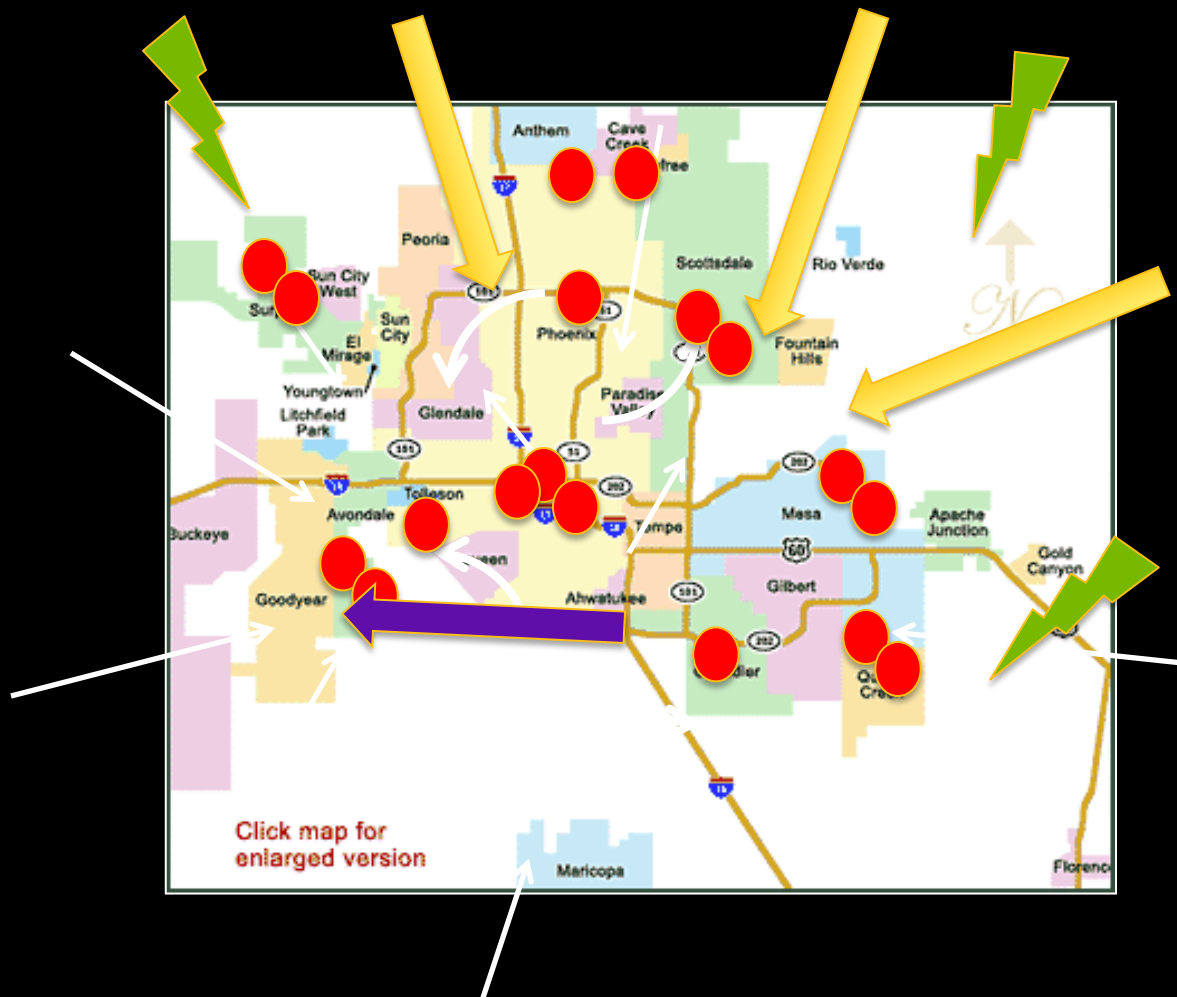


Reimagine Phoenix  
Transforming Trash Into Resources

**Plans and progress toward a  
Center for Resource Intelligence  
and a  
Sustainable Urban Metabolism**

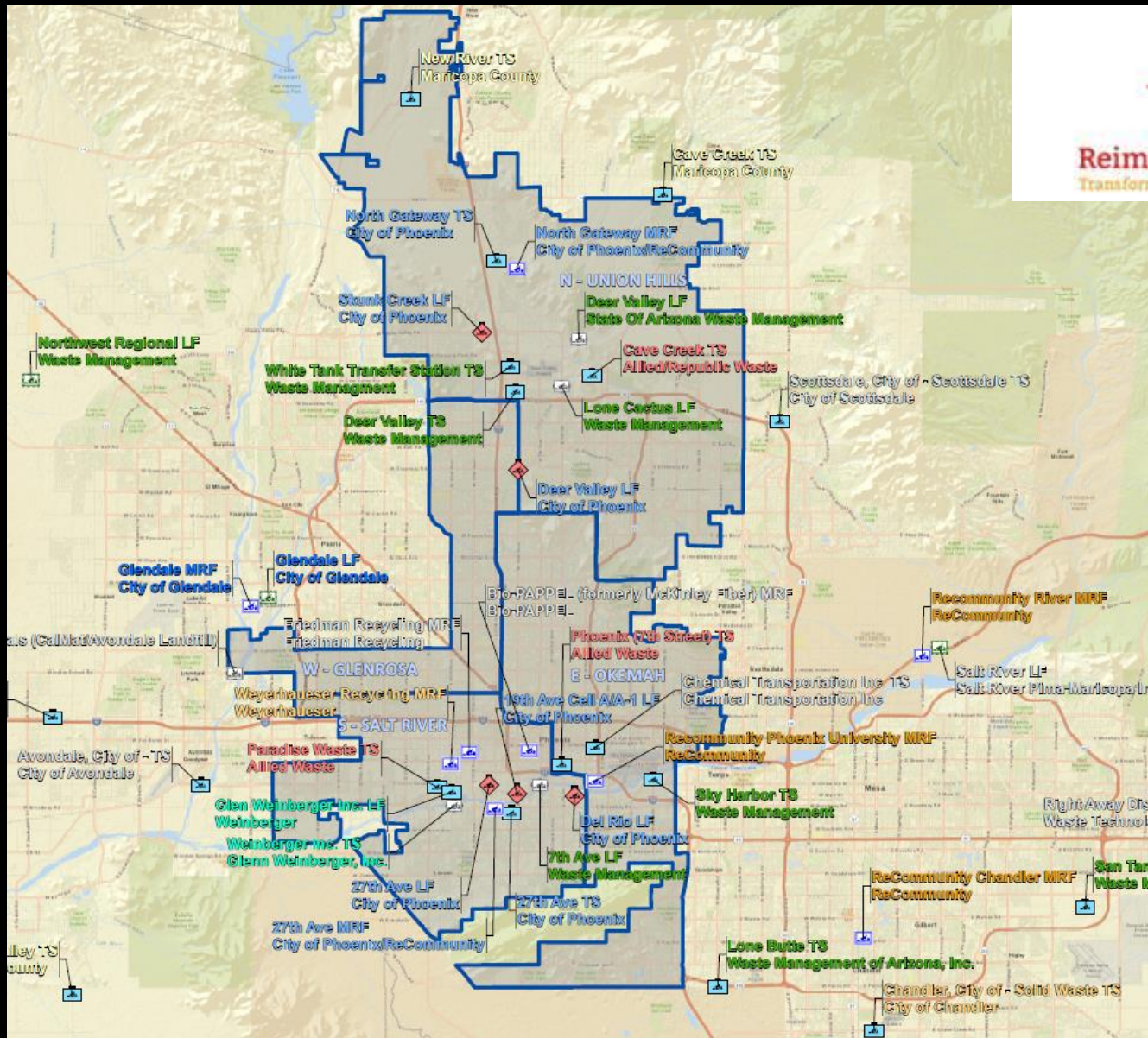


# Sustainable Urban Metabolism



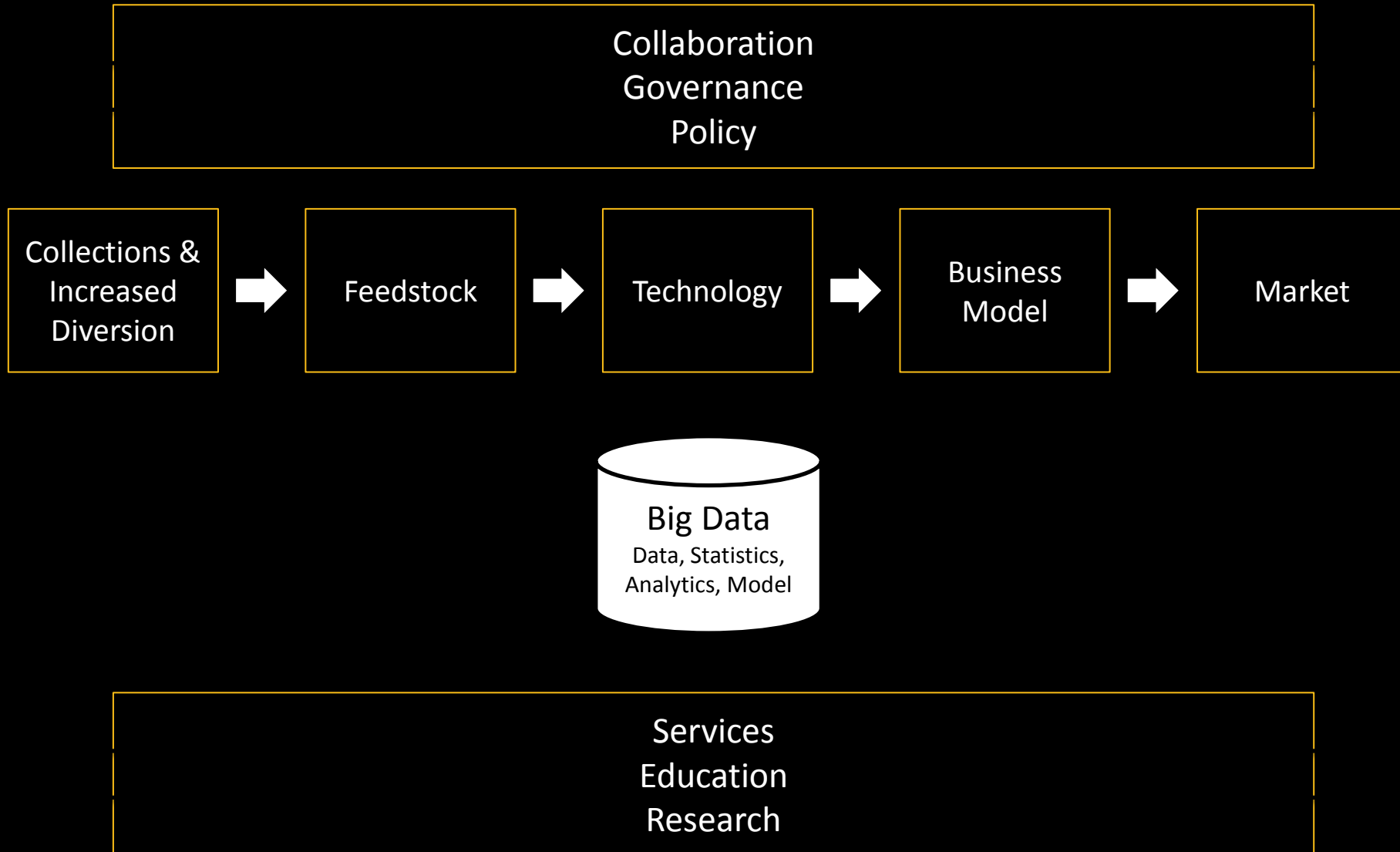


# Sustainable Urban Metabolism



**Reimagine Phoenix**  
Transforming Trash Into Resources

# CfRI solutions

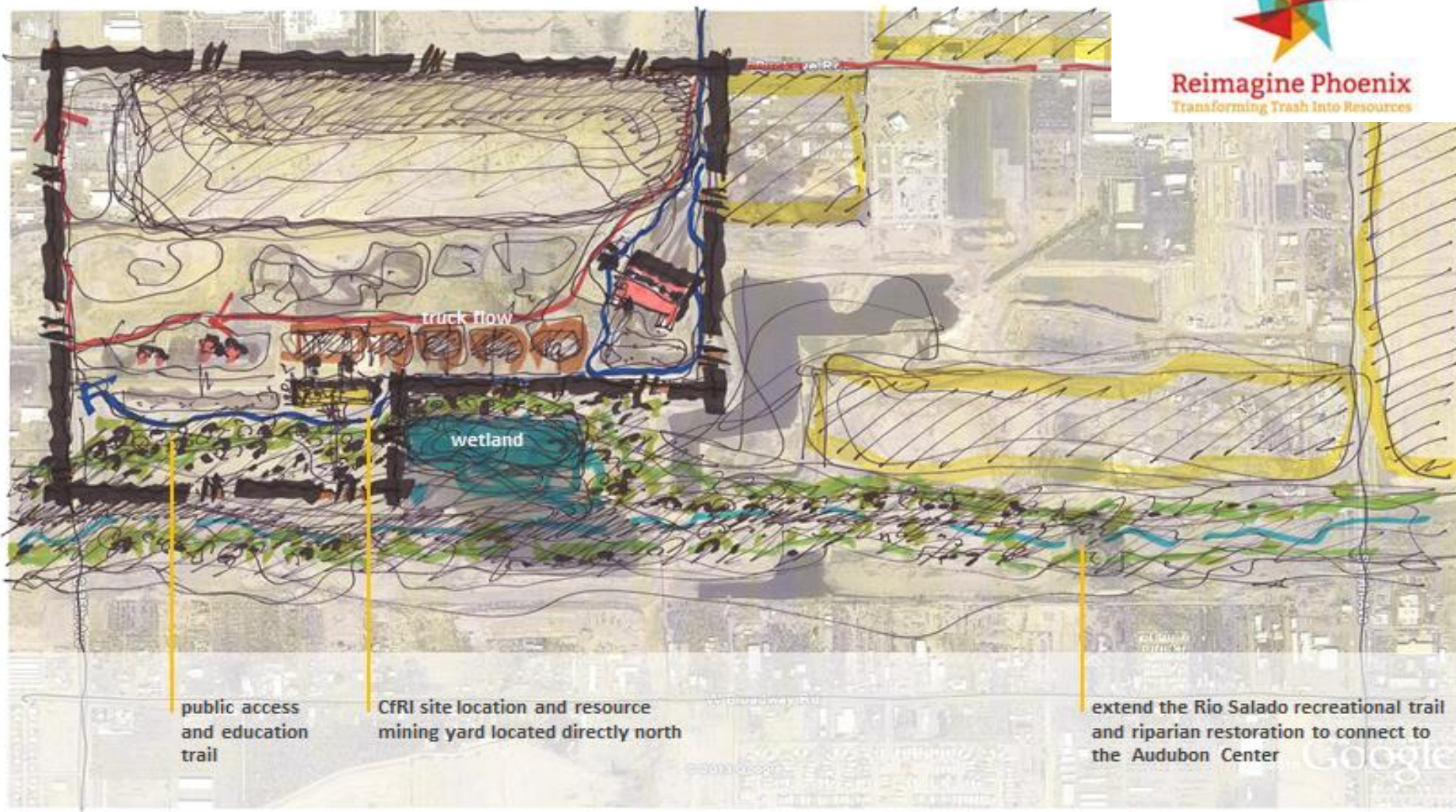




# CfRI Campus



**Reimagine Phoenix**  
Transforming Trash Into Resources



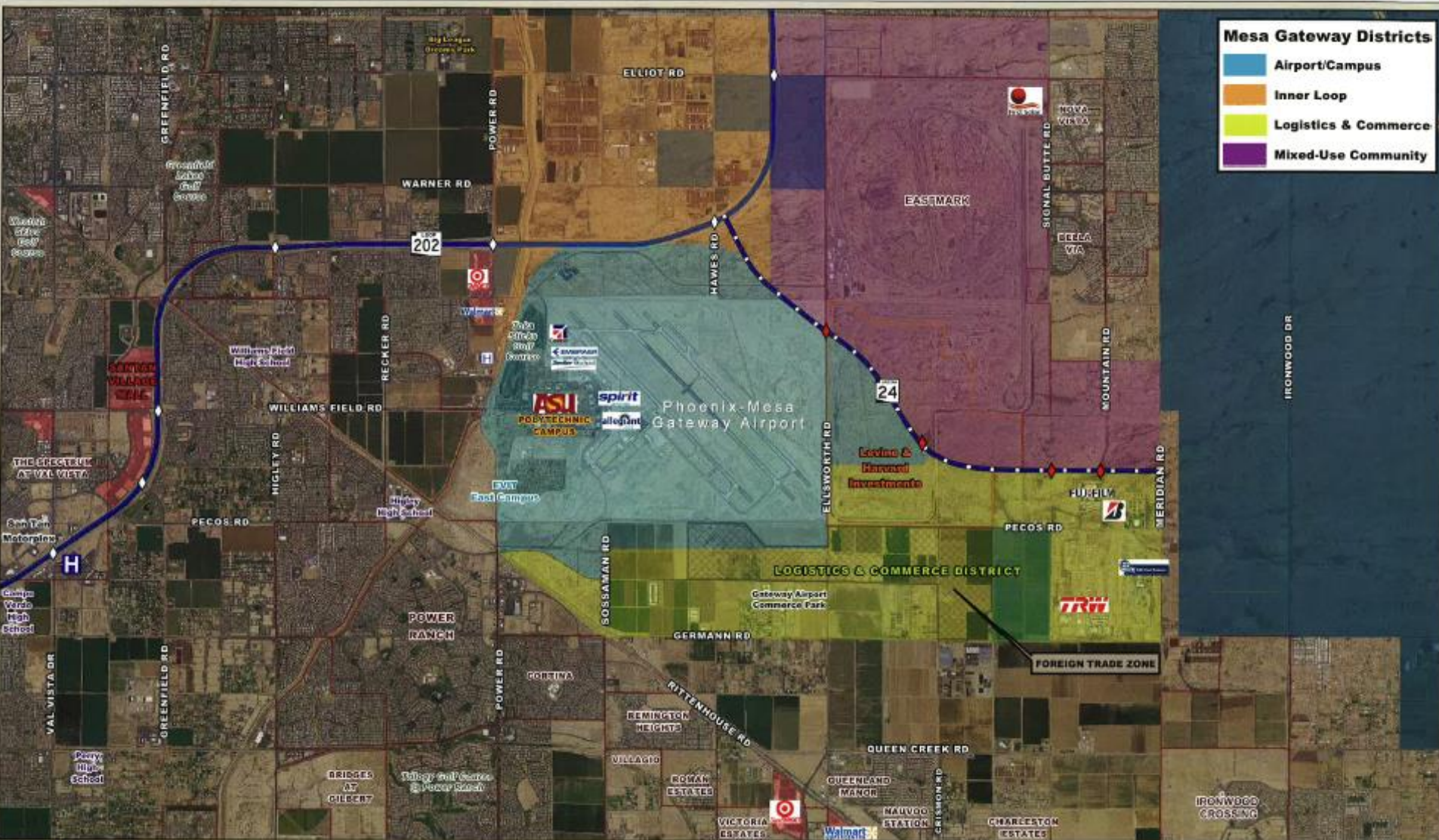
public access  
and education  
trail

CfRI site location and resource  
mining yard located directly north

extend the Rio Salado recreational trail  
and riparian restoration to connect to  
the Audubon Center



# Other Clusters





# Opportunistic Examples

- Grant opportunities
- GHG Inventory
- Building energy audit (Energy Star)
  - Energy efficiency and conservation
  - Energy supply options - Solar
- Performance benchmarking
- Waste characterization to increase diversion

# Example: Gilbert the Good Bad & Ugly

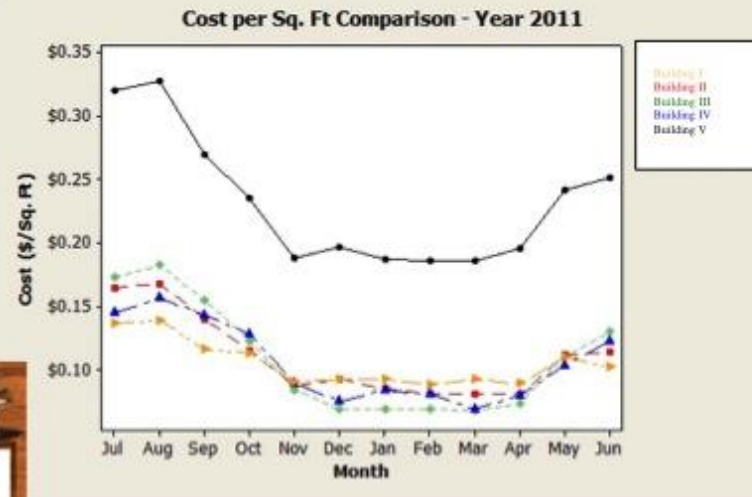
## ARIZONA STATE UNIVERSITY



*Building I  
Building II*

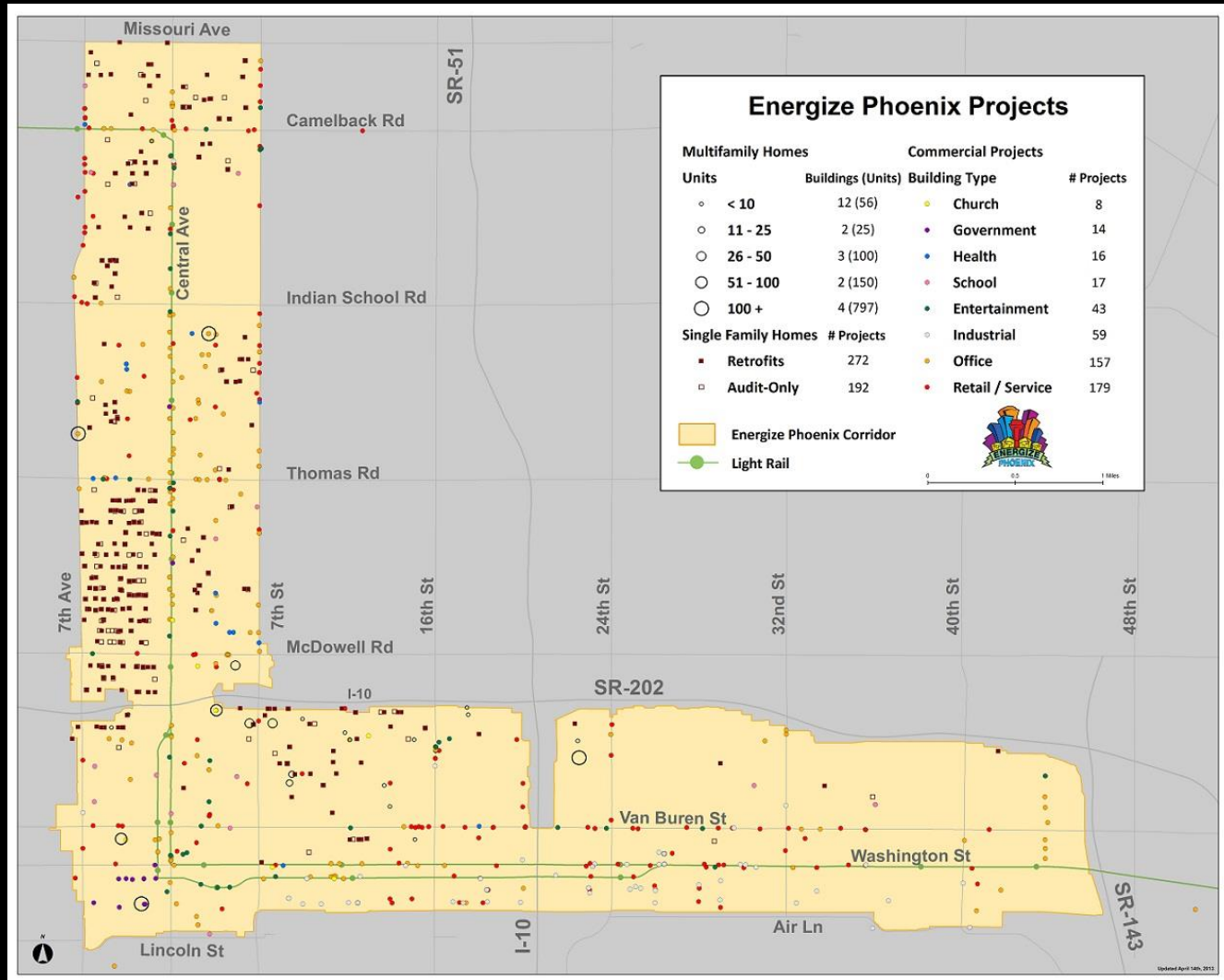


*Building III  
Building IV*



*Building V*

# Example: Energize Phoenix



# Next Steps

Up to 4 Hours of **complimentary facilitated workshop** offered by ASU's SSS to identify strategic:

- **Approach**
- **Audience**
- **Domain**
- **Challenges**
- **Opportunities**
- **Recommendations**



# Next Steps

Includes:

- Pre-meeting
- Questionnaire
- Up to 4 hours complimentary facilitation
- Post-meeting Report & Recommendations

**Thank you!**

**Questions?**