LARIMER COUNTY | ENGINEERING DEPARTMENT

P.O. Box 1190, Fort Collins, Colorado 80522-1190, 970.498.5700, Larimer.gov

The role of the Advisory Board is to advise the Board of County Commissioners and appropriate departments on environmental and science-related issues that affect Larimer County.

Environmental and Science Advisory Board

MINUTES

Date: September 10th, 2024

Time: 6:00 – 9:00 p.m.

Location: Rm 150 Carter Lake, 200 West Oak St., Fort Collins, Colorado and Virtual by Zoom

Contact: Shelley Bayard de Volo, sbayard@larimer.org or 970.498.5738

MEMBERS		STAFF		GUESTS
Rodger Ames – Chair	X	John Kefalas *	X	**Front Range Sustainability Group**
Tasha Carr		Shelley Bayard de Volo ¥	X	Hernán Villanueva
Anna Cloud	X	Heidi Pruess §	X	
Jim Gerek	X	Caryn Nezat‡	X	
Leo Grassens	X			**Former ESAB Member**
Matthew Haag	X			Michael Jones
Zachary Maffeo				
Lark Murphy	X			
Andrew Newman	X			
Barry Noon	X			
Nicole Poncelet-Johnson	X			
Natalie Walsh	X			
Chris Wood	X			

X = present; * = Commissioner Liaison; ‡ = Engineering; ¥ = ESAB Liaison; § = Climate and Sustainability Program; α = Community Development Department; £ = Community Infrastructure, Planning and Resources.

Call to Order: 6:00 p.m.

1. **Amendments or additions to the agenda** – adding a roundtable items discussion for vice chair and the Rawhide Power Plant tour

2. **Introduction of members, staff and guests** –Heidi introduced herself, as did Michael Jones, a former ESAB member who is interested in re-joining the Board. Caryn Nezat was also sitting in, and Hernan, City of Boulder's Environmental Advisory Board, introduced himself.
3. **Public Comment** – None
4. **Commissioner's Update** – The BOCC approved a transportation funding ballot measure for this Fall's ballot. It will fund needed transportation projects including multi-model transportation infrastructure. All three Commissioner's attended, in Estes Park, a session as part of a 3-day water planning summit hosted by the Sonoran Institute and the Babbitt Center for Land and Water Policy. The goal of the Summitt is to discuss tools to better integrate water and land-use planning. Planning staffattended all 3 days. The Commissioner will provide the guidebook "Growing Water Smart" to Shelley to distribute to members. The Public Health Department distributed an informational video on our region's air quality and the factors that contribute to ground level ozone. The CDOT completed a HWY 287 safety report that among other things identified an area for a wildlife crossing. The Commissioner will provide the report to Shelley to distribute to members. The County received silver status with Sol Smart, who recognizes solar friendly communities. Last week, the BOCC approved a 1.4 MW solar array near Wellington. The Commissioner reviewed the report that Barry wrote on the history of 1041 regulations in Colorado and found it to be a very good report. The State of Colorado has a funding program to help local governments adopt streamlined permitting for residential solar. The BOCC adopted the formal name of the new county open space previously known as the Blue Mountain property – now named Canyon's Edge Open Space.

   Discussion Items

   - Introduction to the Front Range Sustainability Group – Hernán Villanueva discussed how the Front Range Sustainability Group started, some of its goals and discussed some of the challenges. The primary goal is to bring together the region's environmental and sustainability advisory board members for networking opportunities. The group did a survey over the summer to identify which issues might be most important, and water planning was a top issue. Some challenges of the group include how to navigate sunshine laws, get approval for participation from the advisory board's elected officials, and decide what the mission and goals of the group should be. Hernan invited members to attend the next meeting. Commissioner Kefalas noted that he would like to run this by the other Commissioners before any decisions are made regarding ESAB member participation.
   - Climate Smart Future Ready Update – Heidi updated the members on the Climate Smart, Future Ready program. Her presentation focused on the quarterly report recently presented to the BOCC in worksession. The presentation covered the Built Environment and the Mobility focus areas, with greenhouse gas emissions reduction goals within each focus area discussed. Equity, Diversity and Inclusion (EDI) is a central principle for both focus areas. The Climate and Sustainability program has contracted CSU professor Dr. David Rojas to help with the use of the EnviroScreen tool. The presentation slides are attached with these minutes.
   - EnviroScreen and the Environmental Justice Project – Heidi noted that the presentation slides for this part of her update will be provided to Shelley to distribute to members. They are also included with these minutes. The EnviroScreen Tool was developed by CDPHE to help link health impacts with equity concerns across the State.

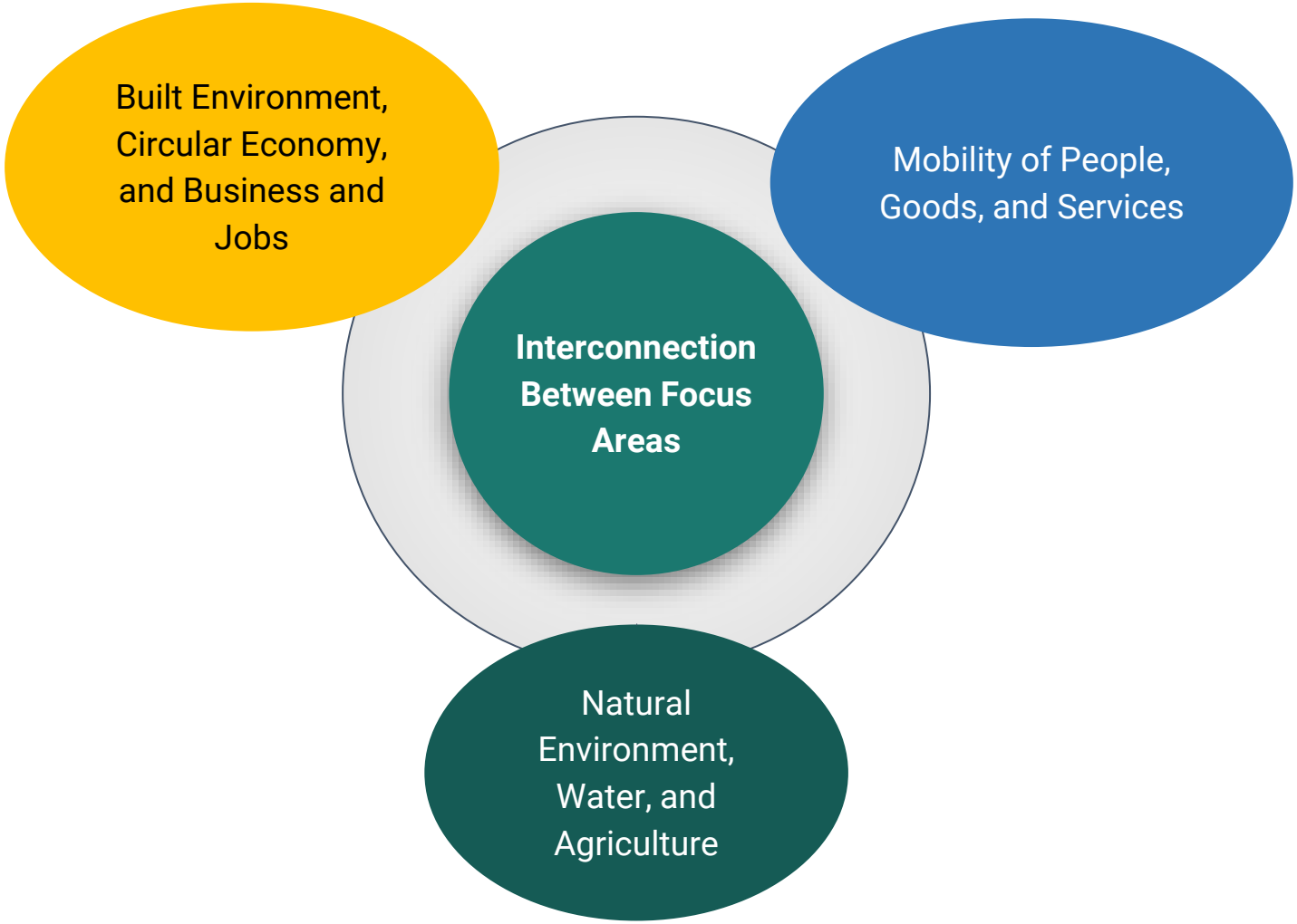
- Tri-State's Responsible Energy Plan – Matthew presented on Tri-State's Electric Resource Plan (ERP) and their Responsible Energy Plan (REP). Tri-State is a non-for-profit coop that provides electricity to 40 members across Wyoming, Nebraska Colorado and New Mexico. In Larimer County, Tri-State supplies electricity to Poudre Valley Rural Electric Association (PVREA). Matthew went through how Tri-State models various scenarios and plans future electricity generation and supply. His slides are attached with these minutes.

5. **Approval of Minutes** – Chris motioned to approve the July minutes, and Barry seconded. The July minutes were approved by acclamation.
6. **Updates and Round Table**
    - Tour of Rawhide Power Station – Chris noted he will send an email with instructions for the tour. The tour is to take place September 17th.
    - Vice-chair position – Rodger asked members to consider filling the vice-chair position for the remainder of this year's term. Barry said that he would serve. Motion to nominate Barry as vice chair. Jim motioned, and Rodger seconded. All were in favor of Barry serving as vice-chair for the next 3 months.
    - Issue Index – Leo noted that he would like to be an issue coordinator for the CSLC.
7. **Issue Index** – will be updated.
8. **Agenda Topics for Future Meetings** – TBD.
9. **Adjourn** – The meeting adjourned at 9:00 PM.

CLIMATE SMART FUTURE READY UPDATE

September ESAB 2024

FOCUS AREAS


Built Environment, Circular Economy, and Business and Jobs
Mobility of People, Goods, and Services
Interconnection Between Focus Areas
Natural Environment, Water, and Agriculture

Reminders

- Finalized plan in March 2024

- 17 Strategies
  21 Champions for 24 Actions
  19 Action Teams

Year one tactics have been identified by Action Teams:

- 28 tactics across 19 action teams

2024 Q3 Focus : Greenhouse Gas Emissions

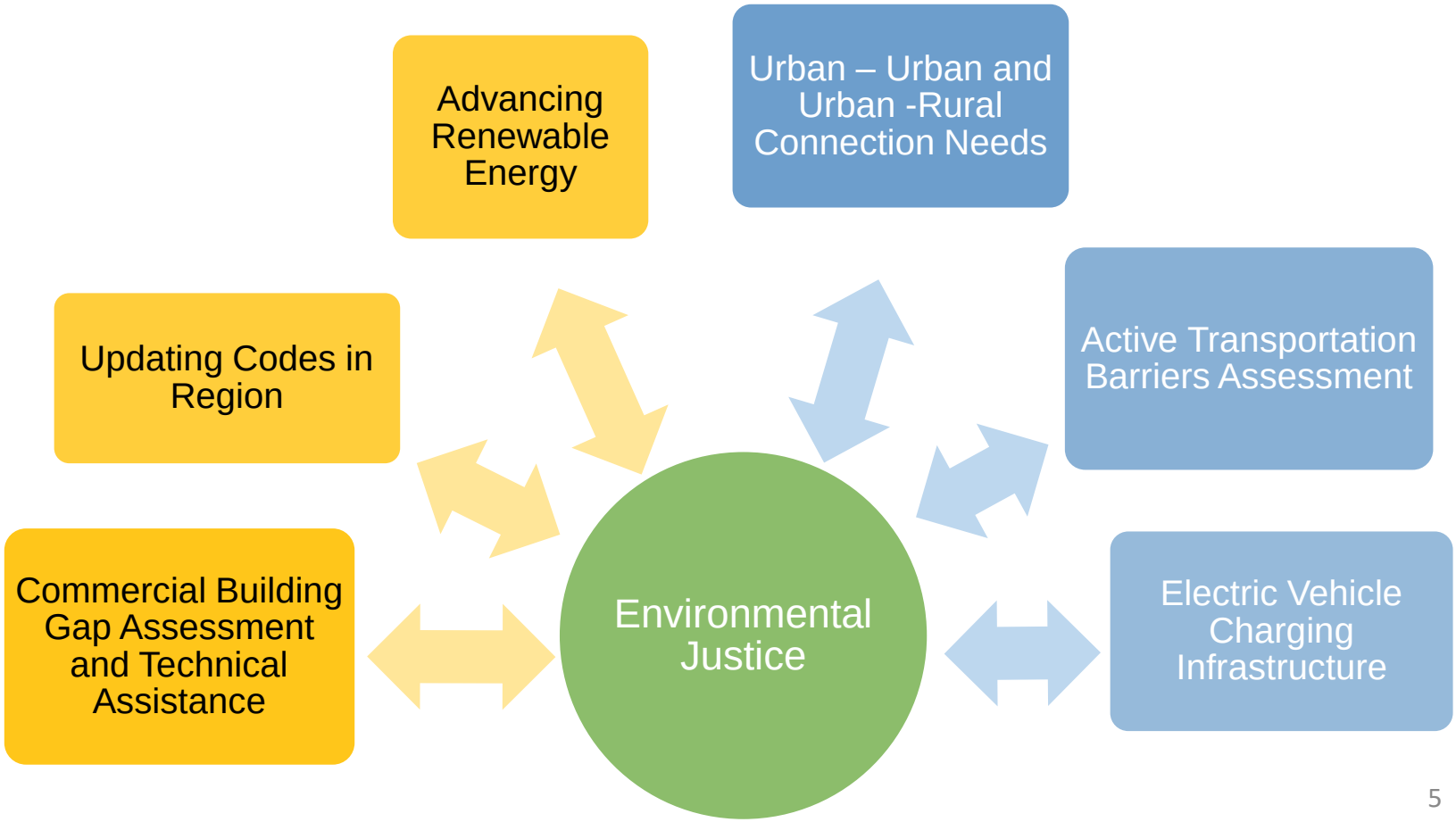
Goal : exceed 45% GHG emission reduction, aiming for 60% GHG reduction by 2030

Action emission reduction modeled for 2030:

- Energy potential = 3.2%
- Transportation potential = 3.2%
- Utility potential = 35%

Year One Activities

Greenhouse Gas Emission Reduction Focus Update



Greenhouse Gas Emissions

Energy Actions

Action Team	Actions Identified	Organizations Participating with Larimer County
Energy Efficiency and Electrification Team	Provide education, training, and incentives that reduce the upfront cost for property owners who weatherize and electrify their businesses and homes. • Technical Assistance program for commercial property owners • Gap assessment of programs for commercial property owners	Colorado State University Carbon Neutral Group Poudre Valley REA Platte River Power Authority Xcel Energy City of Fort Collins City of Loveland Sandbox Solar Regional Air Quality Council

Strategic Plan Alignment : Advancing electrification of buildings and transportation

Greenhouse Gas Emissions

Energy Actions

Action Team	Actions Identified	Organizations Participating with Larimer County
Energy Code Team	Convene a regional group, including all municipalities, to update building codes that encourage energy efficiency, indoor air quality and healthy home standards. • Gain consensus around goals and approaches to code language and incentives	City of Loveland City of Fort Collins Safebuilt ProCode Inc Town of Wellington Town of Louisville Town of Greeley Boulder County Weld County

Strategic Plan Alignment : Advancing electrification of buildings and transportation

Greenhouse Gas Emissions

Energy Actions

Action Team	Actions Identified	Organizations Participating with Larimer County
Grid Resilience and Renewables Team	Support renewable energy installations and electric grid expansion to accommodate building and transportation electrification in an equitable manner.	City of Fort Collins City of Loveland Poudre Valley REA Platte River Power Authority Xcel Energy

Strategic Plan Alignment : Advancing electrification of buildings and transportation

Greenhouse Gas Emissions

Energy Action progress being made:

- Targeting the 600+ large commercial buildings as working toward development of a technical assistance program
- Code officials from region (including Weld and Boulder counties) working through potential code alignment with next updates
- Surveying utilities and municipalities to discover gaps in existing renewable energy and grid resilience programs

Greenhouse Gas Emissions

Transportation Actions

Action Team	Actions Identified	Organizations Participating with Larimer County
Mobility Team	Enhance and expand regional transportation • Engage urban-urban and urban-rural communities to improve cross-boundary transportation solutions • Investigate gaps in rural transportation needs	North Front Range MPO SAINT COLT zTrip RAFT Transfort Town of Estes Park City of Fort Collins Arc of Larimer County Via Mobility Services Division of Vocational Rehabilitation Office on Aging Foothills Gateway

Strategic Plan Alignment : Work with partners to enhance regional transportation

Greenhouse Gas Emissions

Transportation Actions

Action Team	Actions Identified	Organizations Participating with Larimer County
Bike, Pedestrian, and Non-Motorized Transportation Team	Improve maintenance, connectivity, safety, and accessibility of existing and new biking and walking infrastructure • Develop metrics to track performance of existing regional trail system success	North Front Range MPO City of Fort Collins City of Loveland CDPHE Town of Windsor Town of Greeley Town of Timnath Colorado State University League Cycling Instructors

Strategic Plan Alignment : Work with partners to enhance regional transportation

Greenhouse Gas Emissions

Transportation Actions

Action Team	Actions Identified	Organizations Participating with Larimer County
Electric Vehicle and Electric Transportation Team	Improve infrastructure and provide education and incentives for electric transportation. • Support implementation of EV Charging Station Plan • Develop community outreach plan for businesses to implement charging station projects	Drive Clean Colorado Xcel Partners in Energy Poudre Valley REA YMCA of the Rockies Town of Estes Park City of Loveland City of Fort Collins Regional Air Quality Council Colorado State University Big Thompson School District Poudre School District Monarca Group North Front Range MPO

Strategic Plan Alignment : Advancing electrification of buildings and transportation

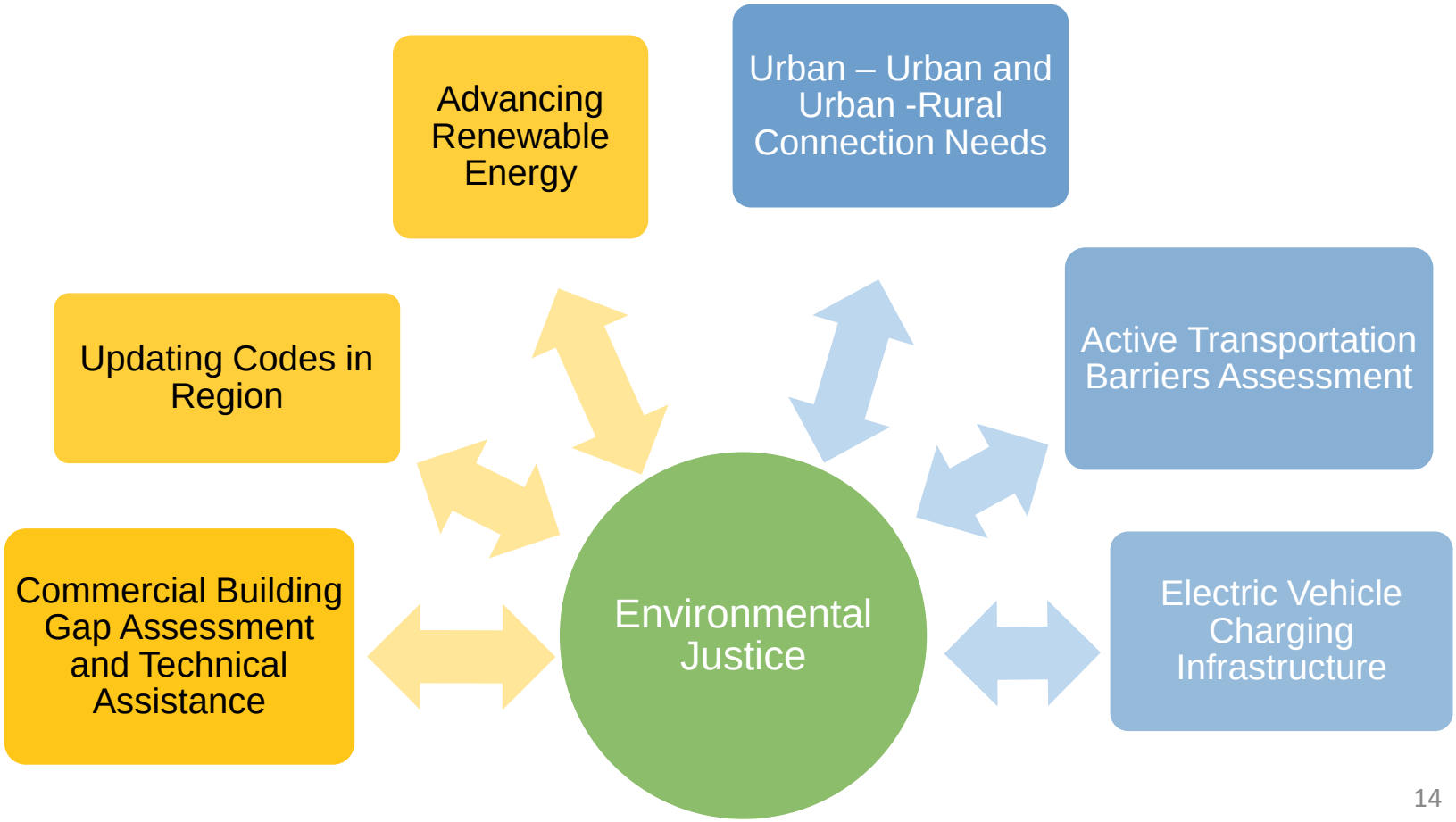
Greenhouse Gas Emissions

Transportation Action progress being made:

- Aligning the County Transportation Master Plan and the NFRMPO Coordinated Public Transit/Human Service Transportation Plan as possible
- Creating metrics and map regarding active transportation miles
- Implementing Electric Vehicle Charging Station Plan through distribution of Business Implementation guide, Municipal Charging Station Plan guide, and construction of charging stations

Year One Activities

Greenhouse Gas Emission Reduction Focus Update



Environmental Justice Project

Understanding Environmental Justice through analysis of greenhouse gas emission reduction actions from a community and Colorado EnviroScreen perspective.

Environmental justice means that everyone has the right to a clean and healthy environment, no matter their race, nationality, income, or where they live.

Implementing an Environmental Justice Impact Assessment (EJIA) with Dr. David Rojas-Rueda, Assistant Professor of Epidemiology at Colorado State University.

Environmental Justice Project

EJIA Framework

EDI AB Feedback

June

November

Scoping	• What, when, where, and who
Data Collection and Analysis	• Identify, collect, and analyze data
Community Engagement	• Understand community concerns and priorities
Impact Assessment	• Identify potential risks and benefits
Recommendations	• Develop strategies: mitigate risks and enhance benefits
Reporting and Communication	• Disseminate information
Monitoring and Evaluation	• Develop indicators: recommendations and implementation

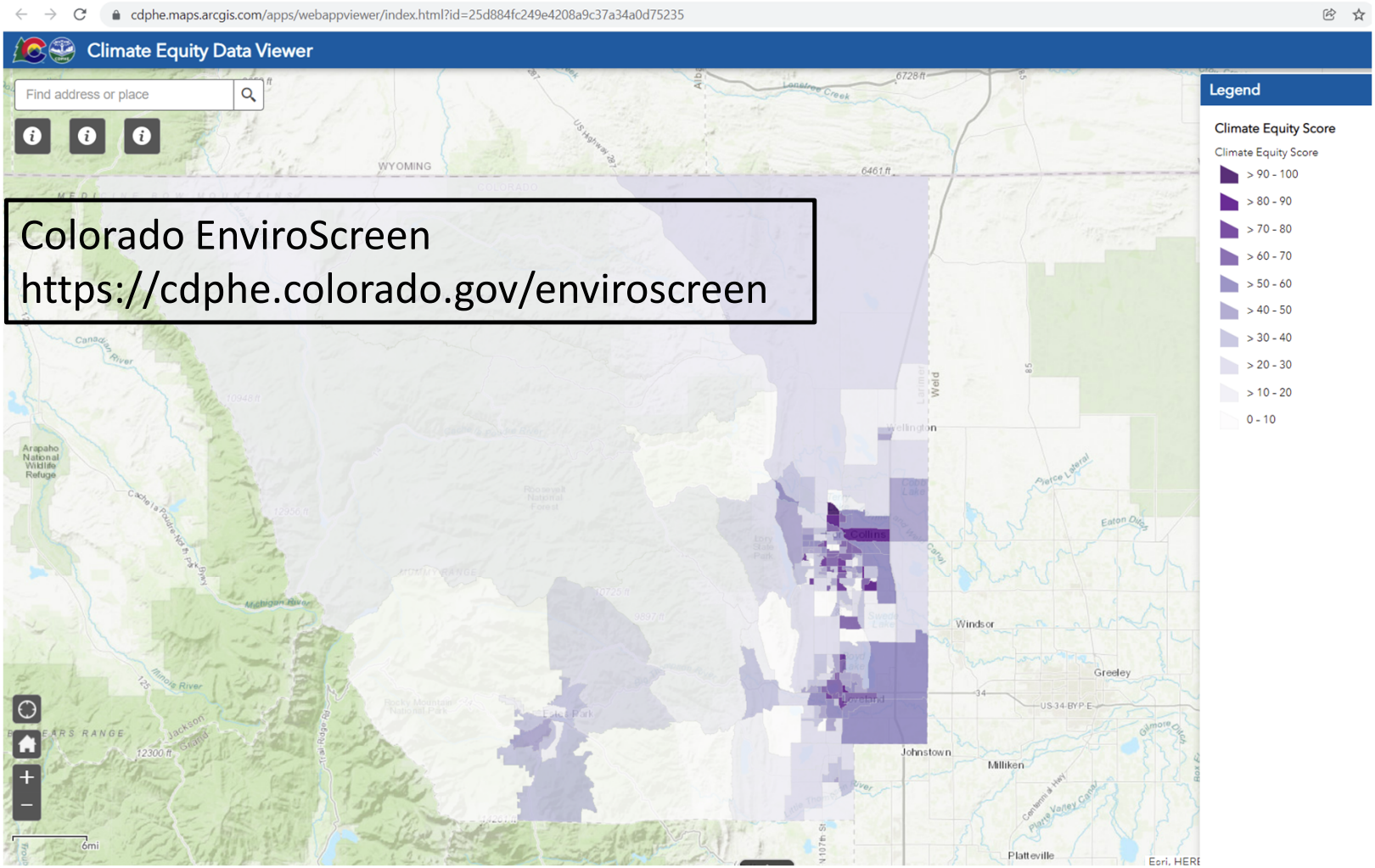
Quarterly Report – Q3 2024

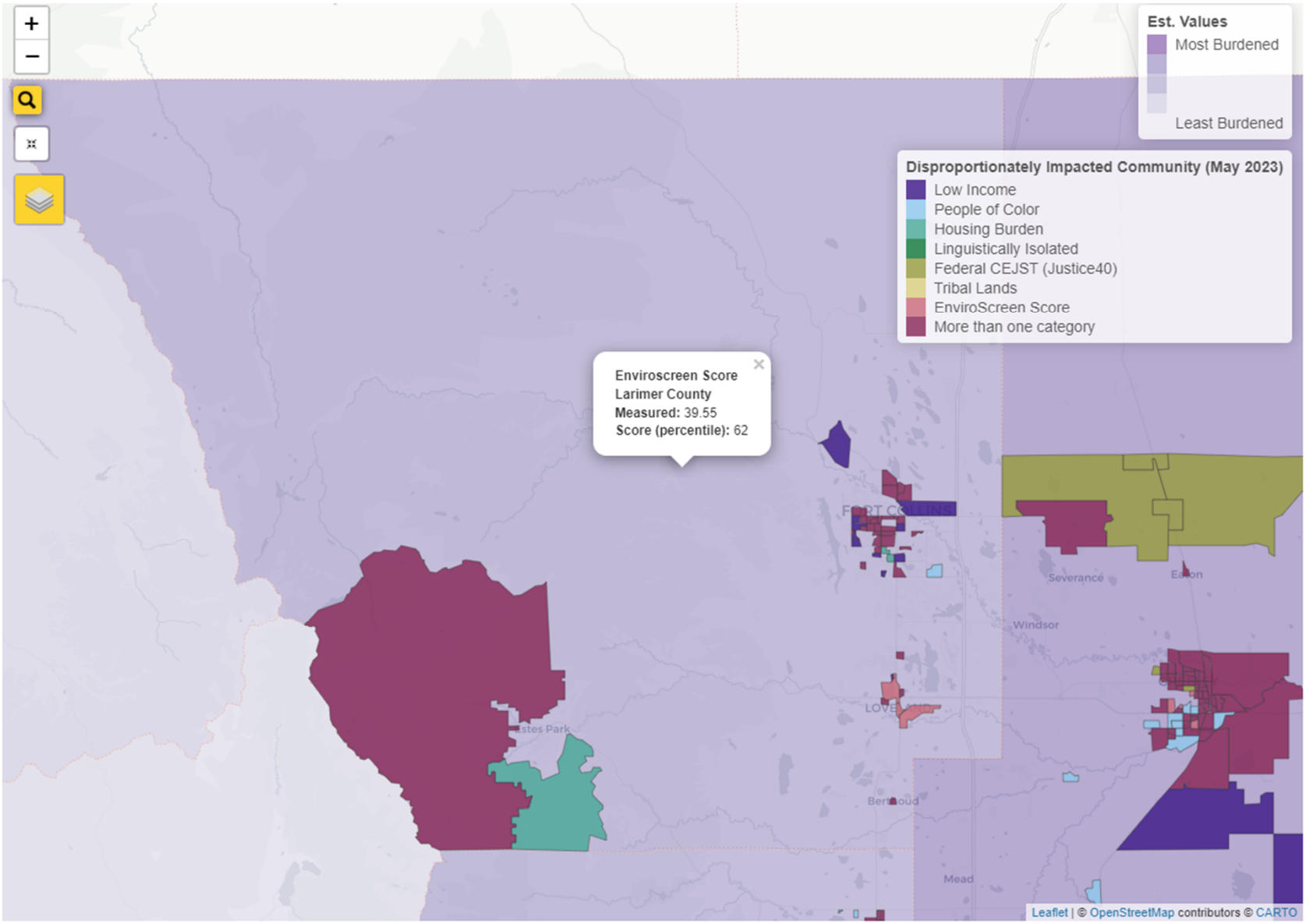
Grants	Quarterly Update
Applied	Energy Efficiency Conservation Block Grant - $524,388 Charging and Fueling Infrastructure - $3,331,841
Secured	Water Master Plan - $117,000 Woody Biomass Study - $150,000 Air Curtain Burner Training - $18,000 Chainsaw Training – $73,535 Fuels Mitigation Crystal Lakes - $1,032,989 Conservation Service Corps Grant 2024 - $111,000 CO Strategic Wildfire Action Programs - $2,100,000 Strong Communities Land Planning - $225,000 Building Sustainable Food Systems - $323,388 Regional Food System Infrastructure - $625,000
Completed	Climate Smart Planning - $360,000

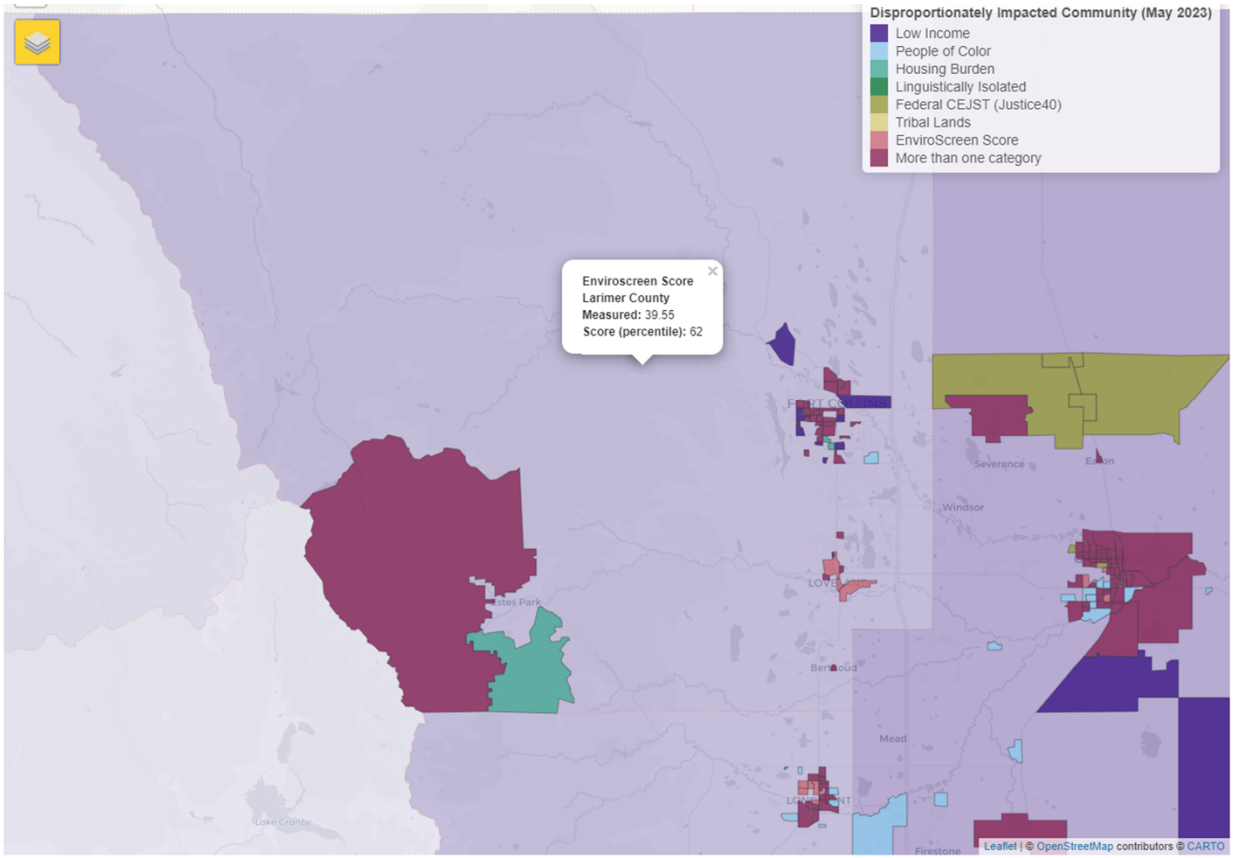
Equity Tools

Intersections with Climate and Sustainability

What do we know about Larimer County?




Est. Values
Most Burdened
Least Burdened
Disproportionately Impacted Community (May 2023)
Low Income
People of Color
Housing Burden
Linguistically Isolated
Federal CEJST (Justice40)
Tribal Lands
EnviroScreen Score
More than one category
Enviroscreen Score
Larimer County
Measured: 39.55
Score (percentile): 62
Severance
Windsor
Estes Park
Mead
Leaflet | © OpenStreetMap contributors © CARTO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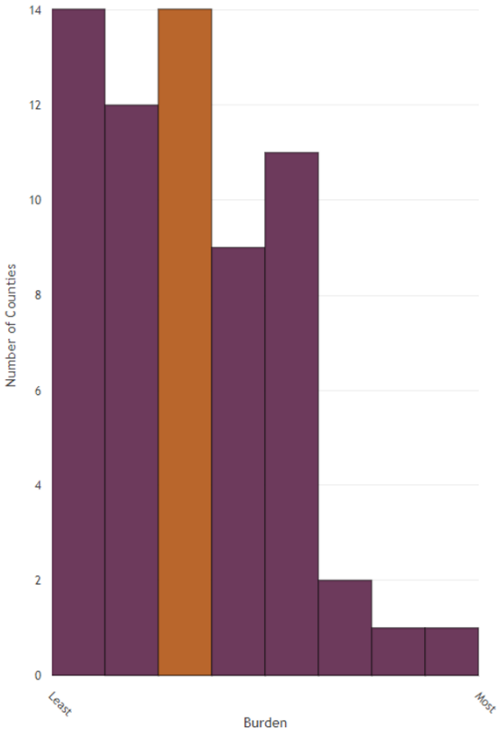
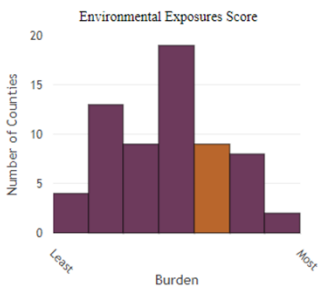
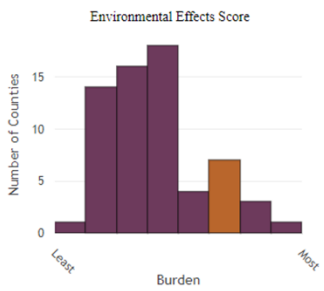
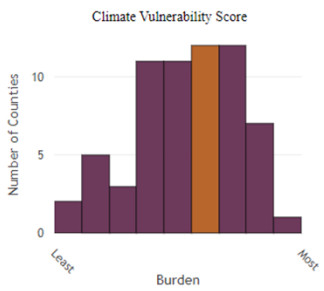
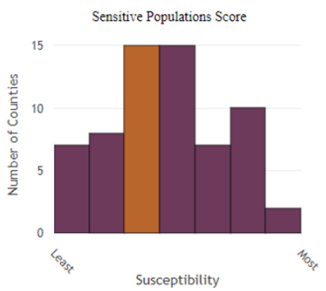
Leaflet | © OpenStreetMap contributors © CARTO


Number of Counties
Least
Most
Burden


Environmental Exposures Score
Number of Counties
Least
Most
Burden


Environmental Effects Score
Number of Counties
Least
Most
Burden

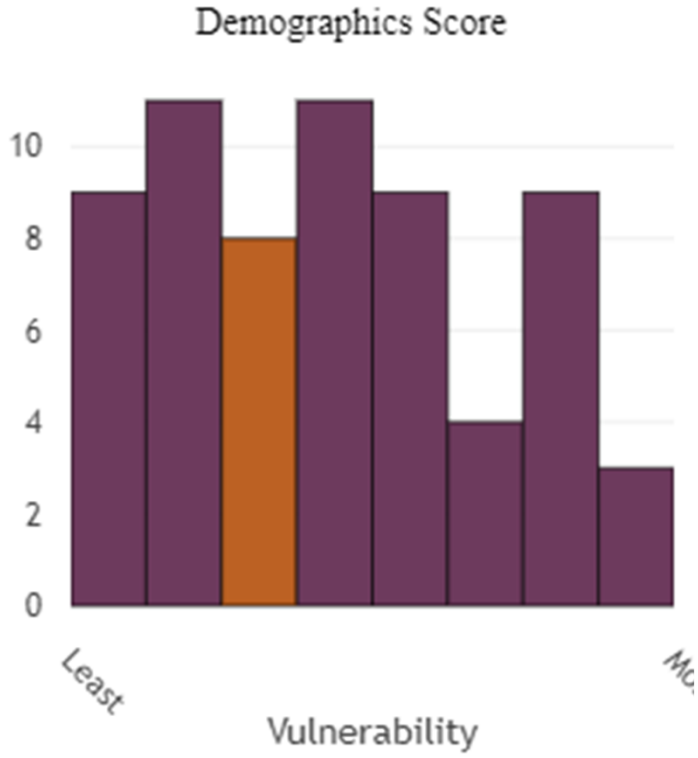

Climate Vulnerability Score
Number of Counties
Least
Most
Burden


Sensitive Populations Score
Number of Counties
Least
Most
Susceptibility

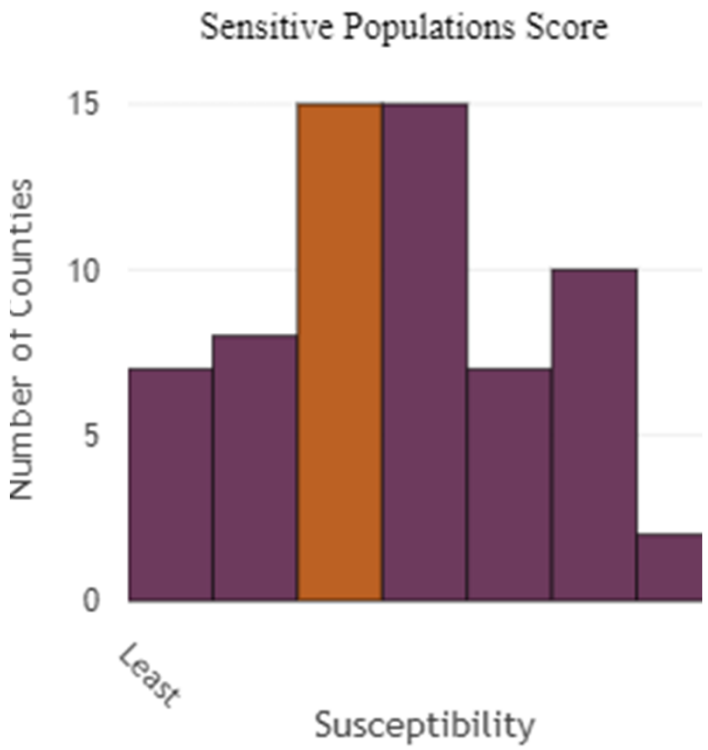

Demographics Score
Number of Counties
Least
Most
Vulnerability

The demographics score represents a community's social and economic vulnerabilities. The score ranges from 0 to 100, with a higher number representing a higher vulnerability. It is calculated using data on people living with disabilities, housing cost burden, educational attainment, limited English proficiency, income, and race and ethnicity

Element	Percentile among CO Counties
Housing Cost Burdened	79.69
Percent Disability	28.12
Percent Less than HS Education	21.88
Percent Linguistic Isolation	48.44
Percent Low Income	29.69
Percent People of Color	39.06
Overall	43.75



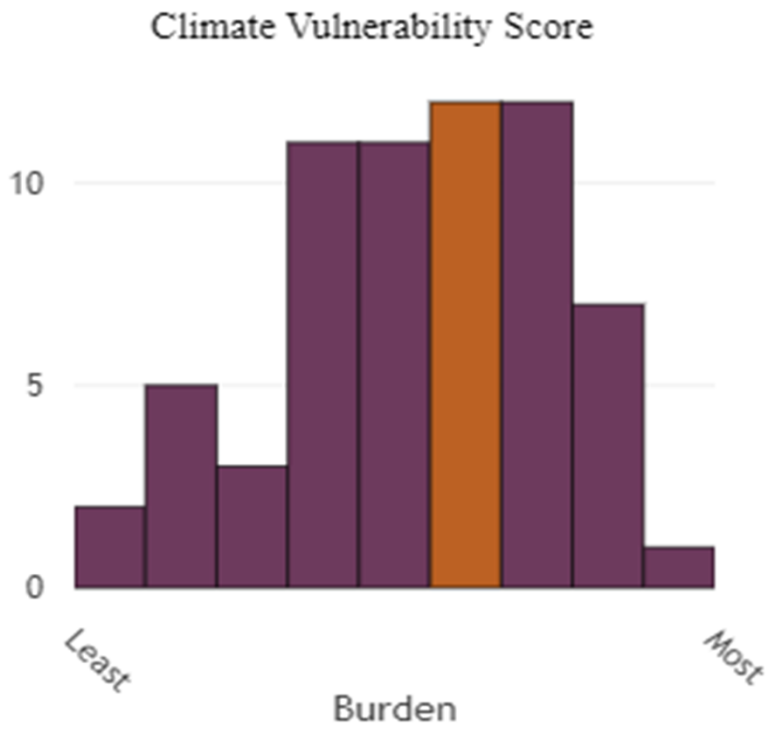
The sensitive populations score captures how at risk a community is to environmental exposures and climate impacts as it relates to health. For example, air pollution has stronger impacts on older and younger people, and people with chronic conditions such as asthma. The score ranges from 0 to 100, with a higher score being worse. The score is calculated using data on asthma hospitalization rate, cancer prevalence, diabetes prevalence, heart disease prevalence, life expectancy, low birth weight rate, mental health, population over 65, and population under 5.



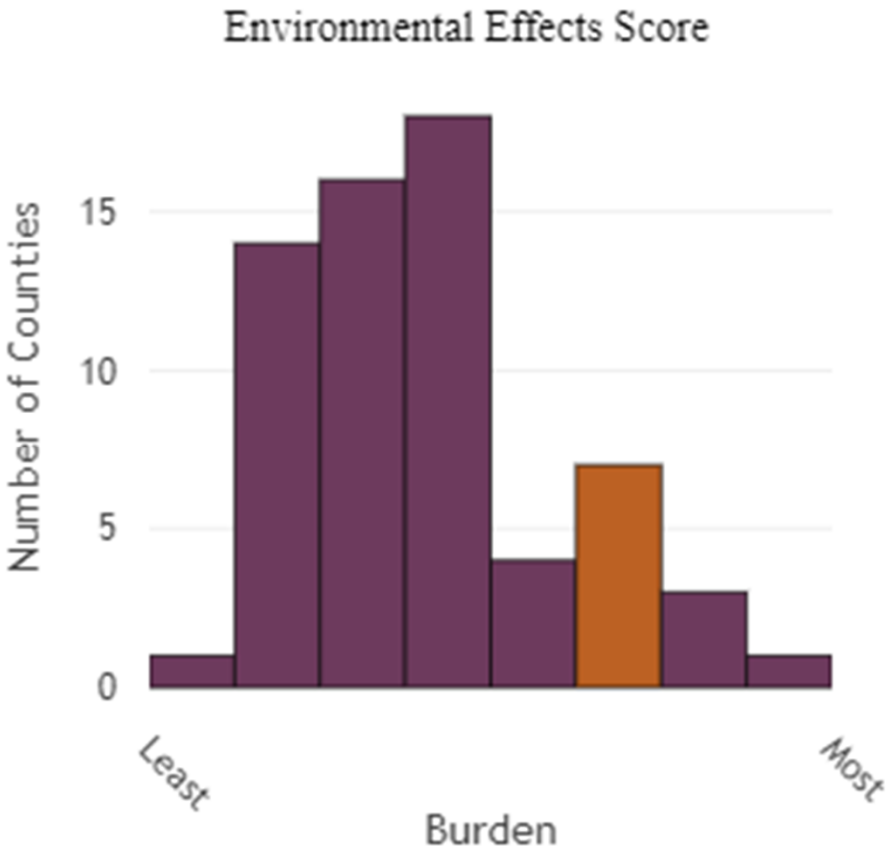
Element	Percentile among CO counties
Asthma hospitalization rate	89.06
Cancer prevalence	31.25
Diabetes prevalence	46.88
Heart disease in adults	32.81
Life expectancy	37.1
Low birth weight	22.95
Mental health indicator	10.94
Population over 64	34.38
Population under 5	43.75
Overall	**37.5**

This Climate Vulnerability score represents a community's risk of drought, flood, extreme heat, and wildfire compared to the rest of the state. The higher the score, the higher the burden.

Element	Percentile among CO counties
Drought	29.69
Extreme heat days	43.75
Floodplain	84.38
Wildfire	68.75
Overall	**52.39**



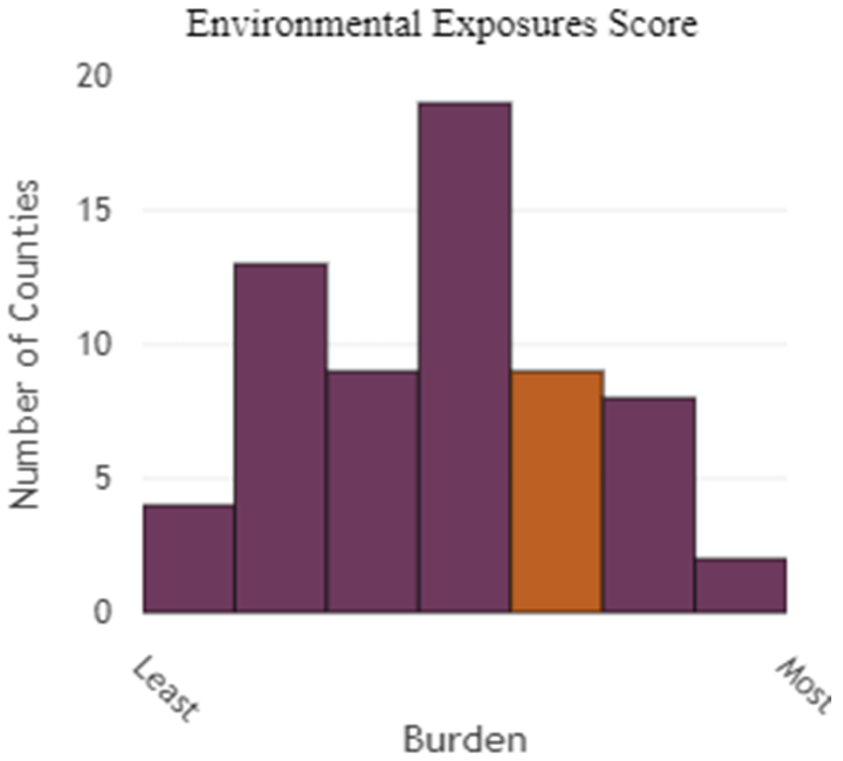
The environmental effects score represents how many hazardous or toxic sites are in a community relative to the rest of the state. The score ranges from 0 to 100, with a higher score being worse. The score is the average of data on proximity to mining, oil and gas operations, impaired surface waters, wastewater discharge facilities, Superfund sites, facilities that use hazardous chemicals, and facilities that generate, treat, store, or dispose of hazardous wastes. As most people are not directly exposed to these sites, this score is weighted half as much as environmental exposures in the overall Pollution and Climate Burden score.



Element	Percentile among CO Counties
Impaired streams and rivers	106.35
Proximity to hazardous waste facilities	95.31
Proximity to mining locations	54.8
Proximity to NPLs	48.44
Proximity to oil and gas	79.69
Proximity to risk management sites	53.12
Wastewater discharge indicator	44.26
Overall	**81.25**

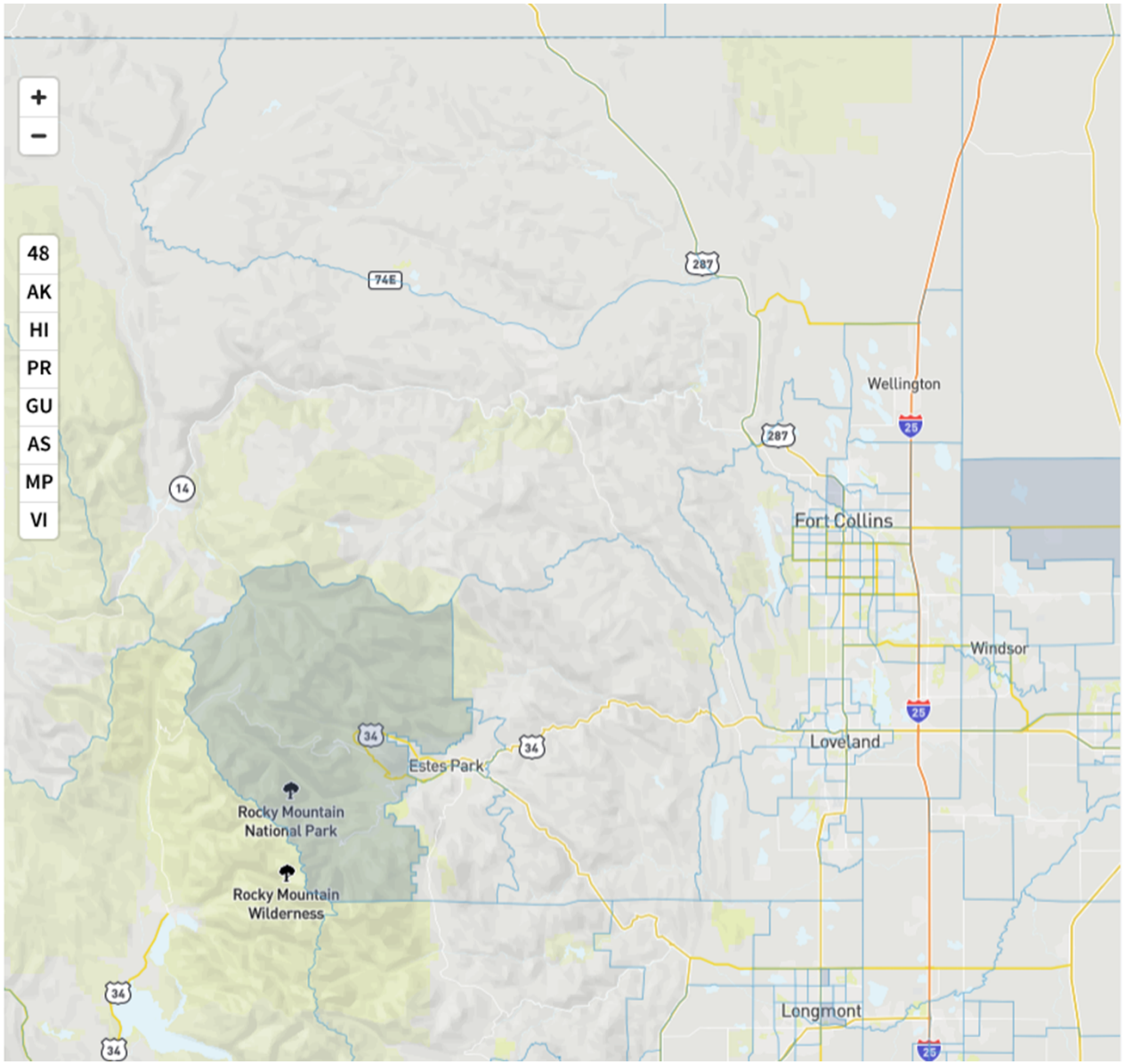
The environmental exposures score represents a community's exposure to certain environmental risks relative to the rest of the state. The score ranges from 0 to 100, with higher scores being worse. The environmental exposures score does not cover all pollutants; it is the average of data on diesel particulate matter, traffic proximity, ozone, PM 2.5, air toxics, other air pollutants, lead exposure risk, drinking water violations, and noise.

Element	Percentile among CO Counties
Air toxics emissions	75
Diesel PM	87.5
Drinking water regulations	48.44
Lead exposure risk	18.75
Noise	54.69
Ozone	31.25
Fine particle pollution	89.06
Traffic proximity & volume	83.61
Overall	**93.75**



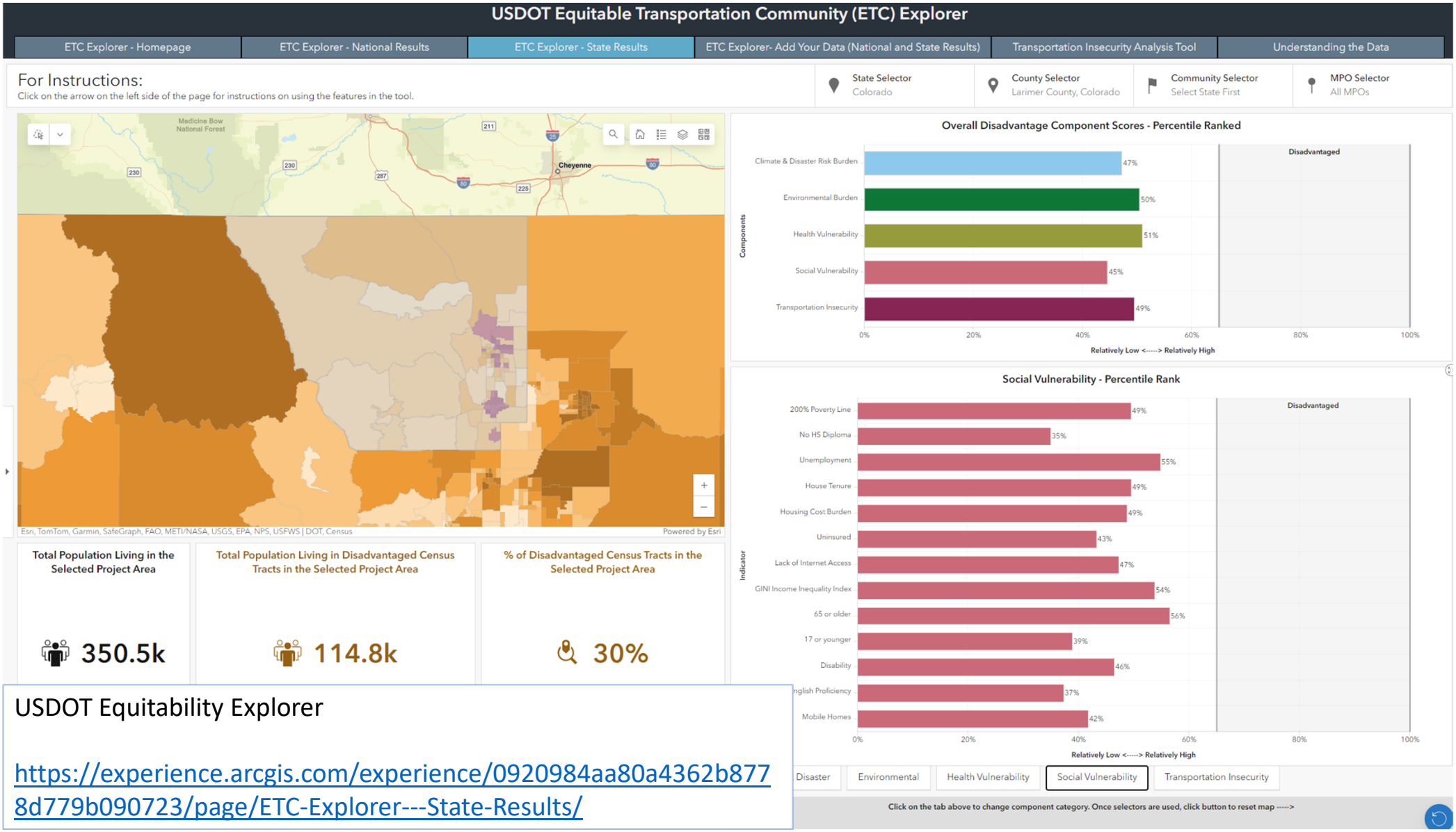
Proposed action for ES 2.0	Review team's recommendations for 2.0
Recommended change	Update all data sets to the most current version available in 2024.
	Update to 2020 Census Geographies.
	Update the distance weighted methodology for the Proximity to Oil and Gas, Proximity to Mining, Air Toxics Emissions, and Other Air Pollutants indicators to the Environmental Protection Agency Environmental Justice (EJ) Screen proximity methods, where census population estimates are used to calculate a distance-weighted count of facilities within a geographic unit.
	Expand health data to include multifactorial indicators that combine prevalence, incidence, mortality, and hospitalization data, and include directly measured measures of health.
	Restrict ozone data to "summer ozone season" (May 1st through September 30th).
	Remove areas with zero human population from the final EnviroScreen calculations.
	Adjust all percentile levels at the indicator level to range between 0-100.
	Include measures of error in data downloads for U.S. Census Bureau-sourced data.
	Expand pop-up window displays to include race/ethnicity and language information at the U.S. Census block group level. This data will be pulled from the U.S. Census American Community Survey 5 year estimates.
	U.S. Census American Community Survey data will be pulled directly from the source, instead of through Environmental Protection Agency EJScreen.
	For the census tract and county EnviroScreen values, county level or census tract estimates should be pulled in whenever possible, instead of averaging up from a smaller geography.

Proposed Action for ES 2.0	Review team's recommendations for 2.0
Recommended future change for version 3.0 or beyond	Explore adjusting the weighting of indicators for the final Colorado EnviroScreen Score equitable contribution of indicators.
	Change ozone indicator data source to a blended model that equally weights the results of the Environmental Protection Agency Downscaler model and the Colorado State Implementation Plan Comprehensive Air Quality Model with extensions (CAMX) model.
	Pursue reliability flags and/or imputation of values.
	Replace extreme heat days with alternate heat exposure indicator.
	Add a Proximity to Uranium Mill Tailings indicator.
	Add a Green Space indicator likely drawn from the National Land Cover Database (Urban Imperviousness).
Recommended no change	Maintain current data source of life expectancy data in ES2.0. Update life expectancy data when available for future versions.
	Continue using US weekly drought monitor data with a four year data time span.



Climate and Economic Justice Screening Tool (Justice40) used by US Government

https://screeningtool.geoplatform.gov/en/#8.9/40.4642/-105.393



USDOT Equitability Explorer

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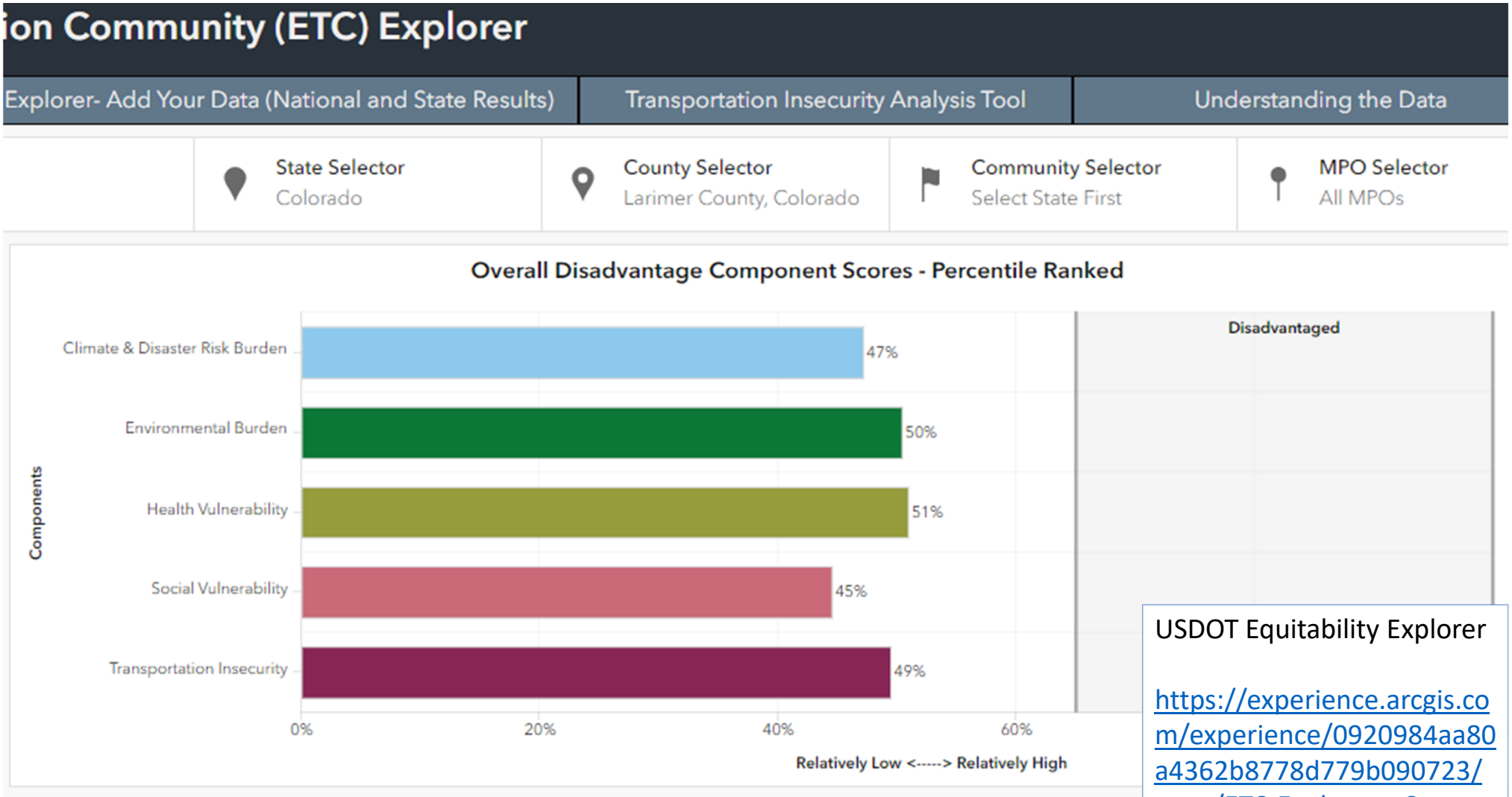

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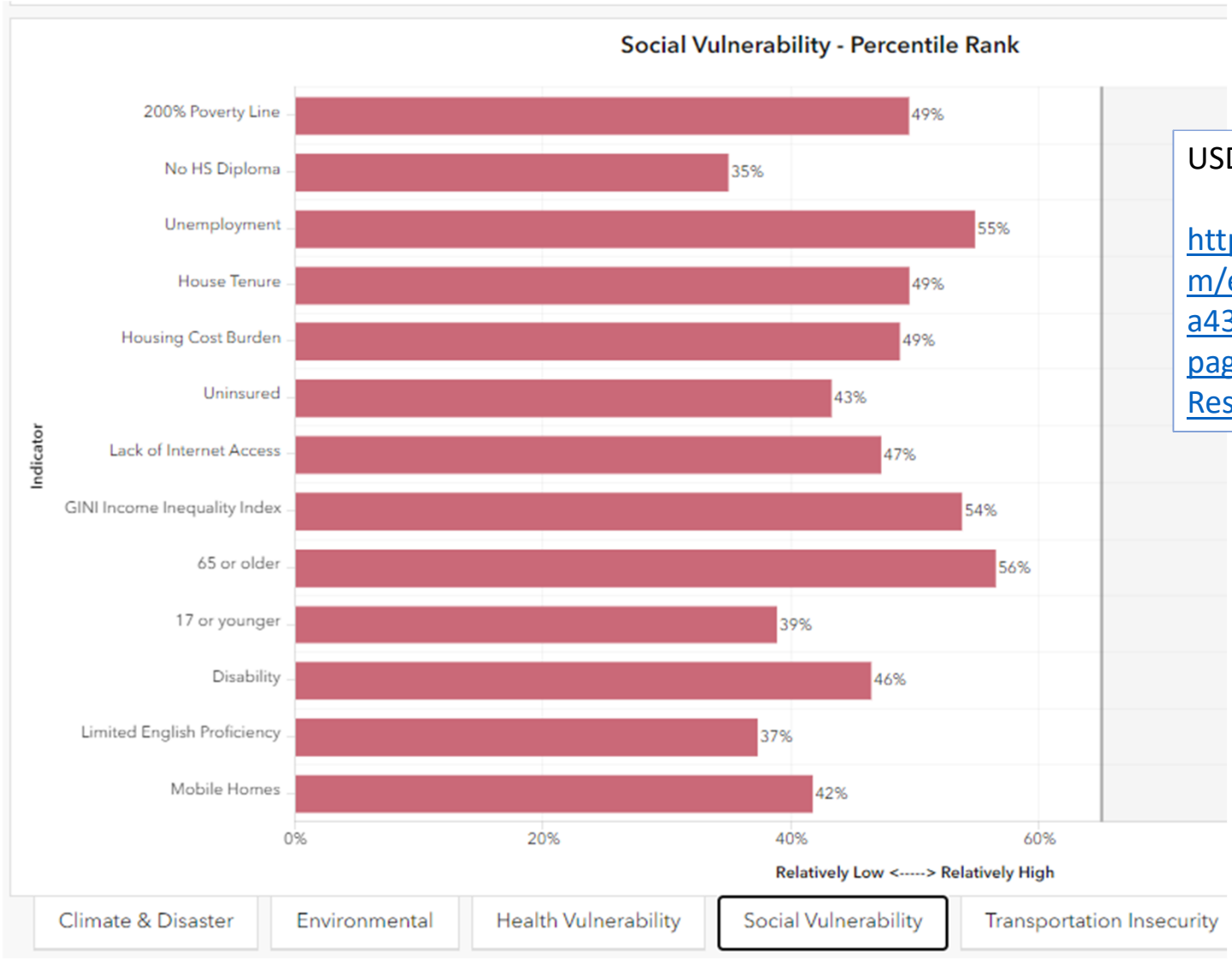

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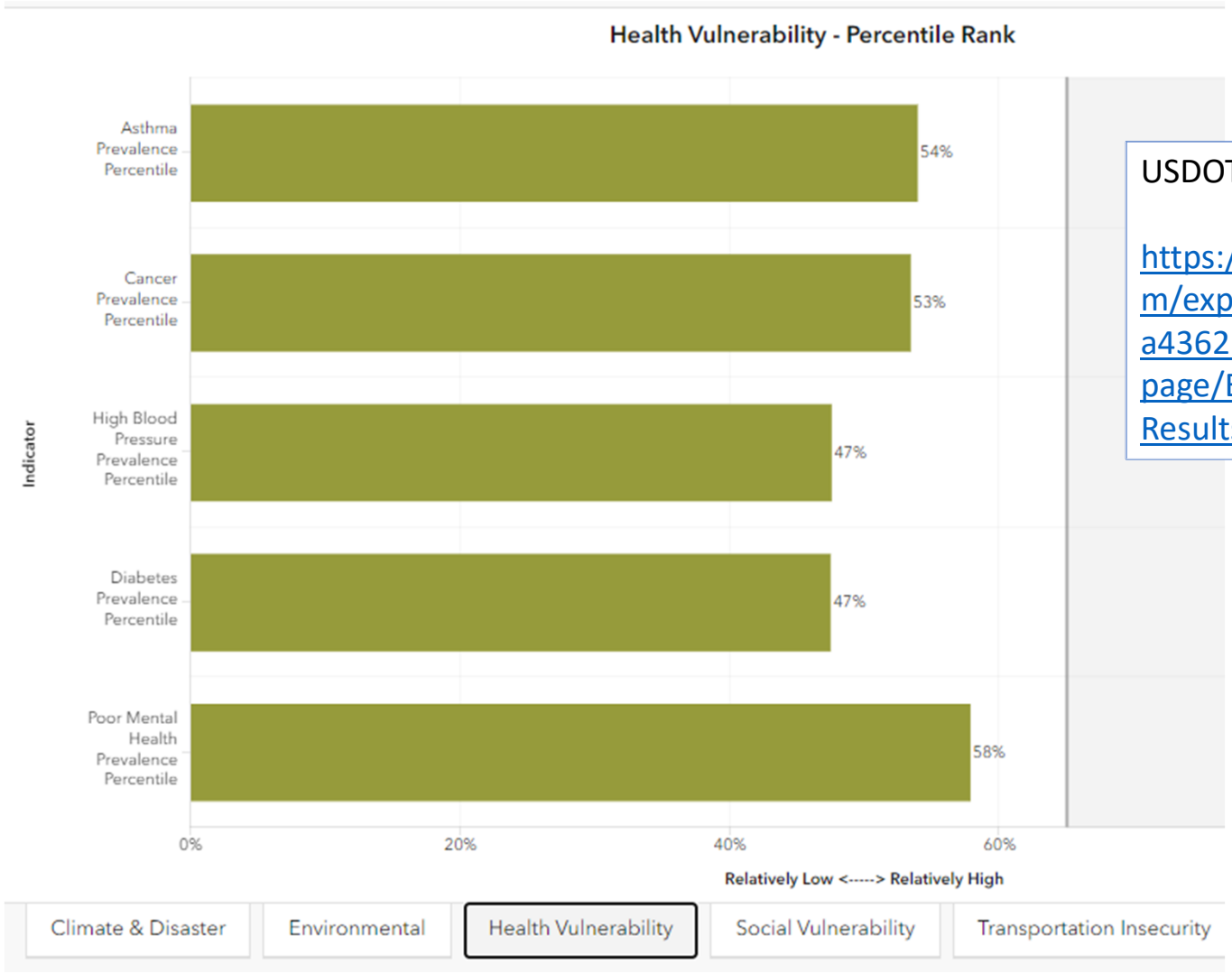

USDOT Equitability Explorer

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TRI-STATE

2023 Electric Resource Plan (ERP) Status Update

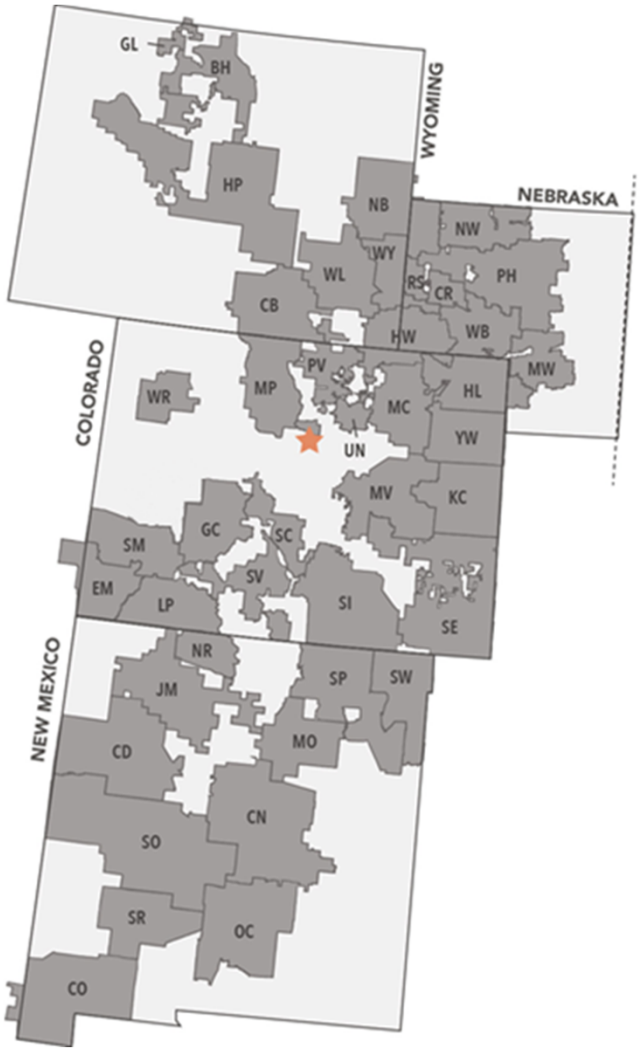
September 10, 2024

WHATEVER THE FUTURE HOLDS,
WE'LL POWER IT.

Who is Tri-State

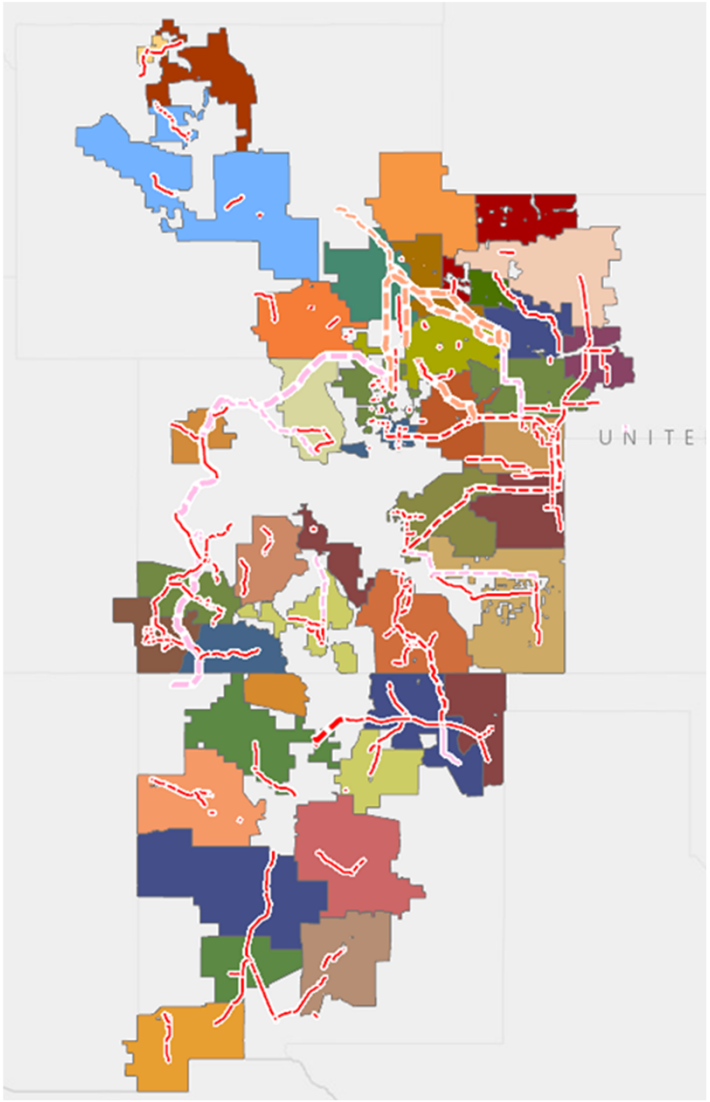
Incorporated in 1952, Tri-State is a generation and transmission cooperative ("G&T") operating on a not-for-profit basis.

Tri-State was formed by its Member Systems for the purpose of providing wholesale power and energy to its Members for resale to their retail consumers. Tri-State is controlled by a 40+ seat Board of Directors, with each of Tri-State's Members occupying one seat on the Board.



Our mission is to provide our members a reliable, affordable and responsible supply of electricity in accordance with cooperative principles.

Tri-State Transmission System

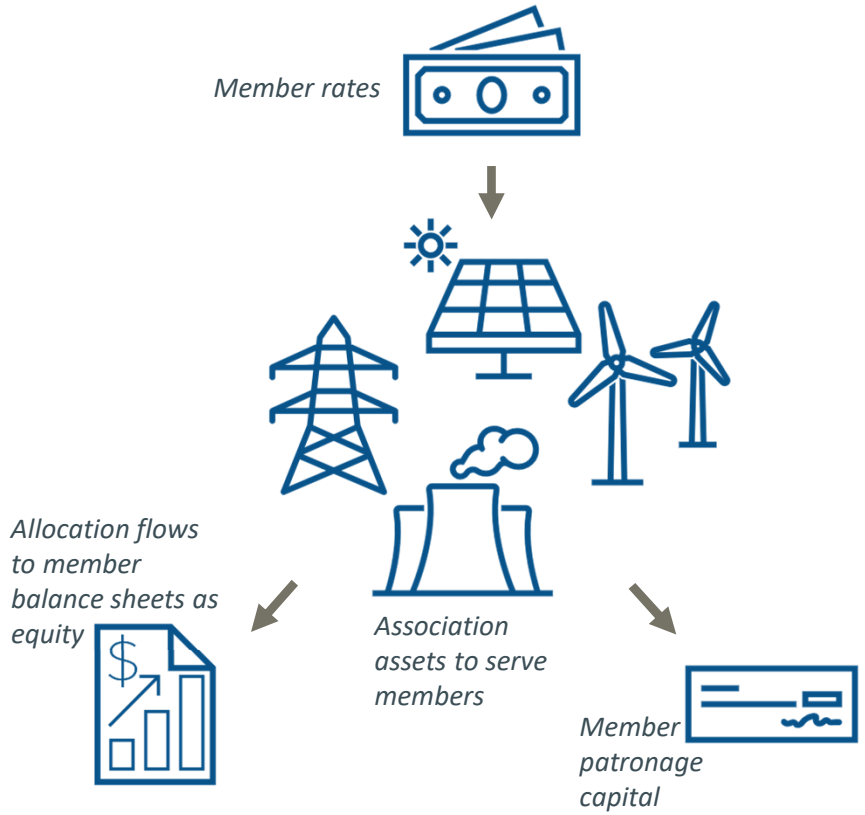


Tri-State delivers reliable power to communities across nearly 200,000 square miles of the west, from the eastern plains through the Rocky Mountains and down to the southern deserts. We own or operate more than 5,665 miles of high-voltage lines, supported by our system of 220 substations and telecommunications sites.

Climate & Economic Justice Screening Tool (geoplatform.gov)

Member Owned - Cooperative Benefits

- Not for profit – members' rates fund Tri-State's investment in assets to serve the members and Net Margins are allocated and returned to members over time
  - Members benefit from Tri-State's growth:
    - Rates support development of association assets to serve members
    - Asset investments drive growth in equity on members' balance sheets
    - Tri-State Net Margin allocation is revenue for members
    - Tri-State makes cash returns of patronage capital equity to the members over time



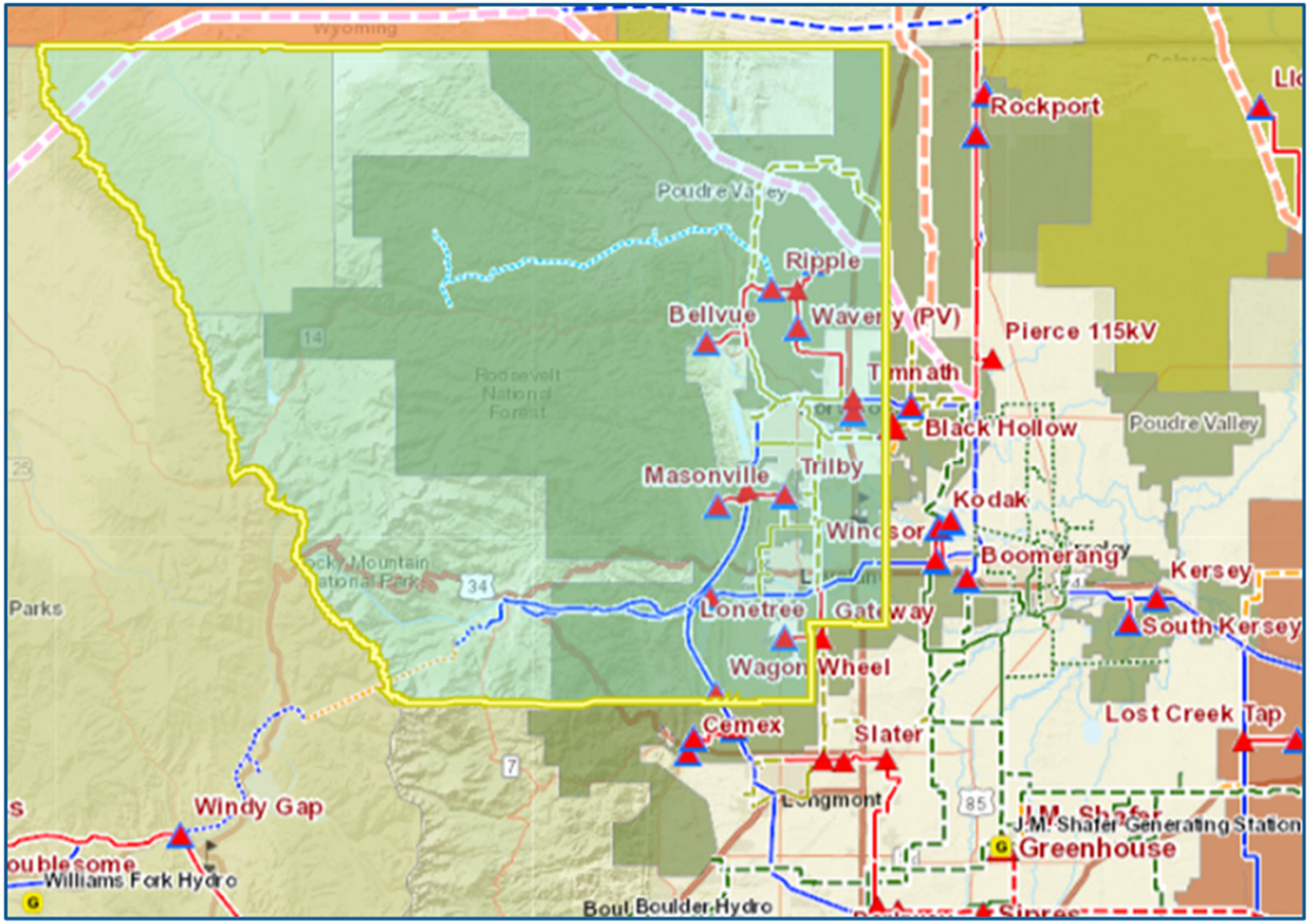
Regulatory Governance

- Tri-State is governed by the following entitles:
- Tri-State Board of Directors

- Federal Energy Regulatory Commission (FERC)

- Colorado Public Utility Commission
  - Colorado Bill SB19-236
  - § 40-2-134, C.R.S. requires Commission to set rules for wholesale electric cooperatives to submit ERP applications for Commission approval
  - Commission Rule 3605: Requires ERP filing in 2020, 2023 and every four years after

Larimer County: Poudre Valley Rural Electric Association



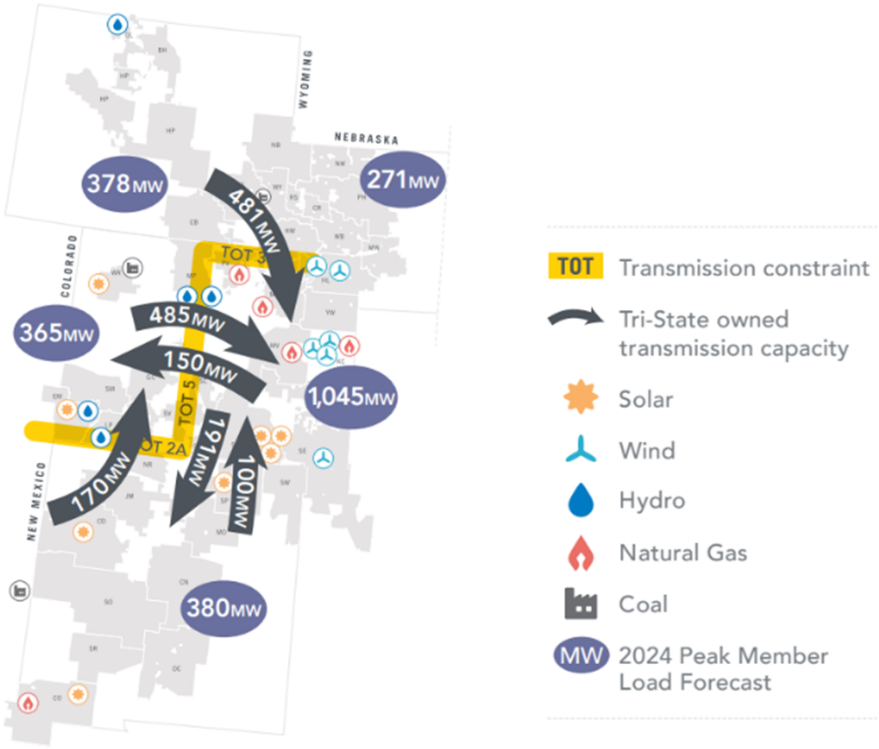
- Tri-States largest Member System
- Diverse customer load type; residential, commercial, industrial, agricultural
- Multiple DER projects including Hydro and micro-grid

http://www.pvrea.coop/

Background & Timeline

Resource Planning: Objectives

- Planning the Tri-State system in the most **reliable, affordable, responsible** manner within environmental and transmission constraints.
- Meeting contractual and regulatory obligations
  - Western Area Power Administration – Federal Hydro Power
  - Colorado Regulated Electric Resource Planning (ERP)



Two-Phase Regulated ERP Process

Phase I (long-term generation scenario modeling, analysis and planning):

- Modeling using generic generation resource assumptions
- 20-year planning period (2024-2043 for 2023 ERP Phase I)
- Begins with filing of ERP Report and Direct Testimony

Phase II (near-term portfolio modeling, analysis, and resource acquisition):

- Begins with Tri-State issuance of RFP(s)
- Modeling using vendor/developer bids for specific generation resources
- 6-10 year resource acquisition period (2026-2031 for 2023 ERP Phase I)

- Phase I and Phase II have separate regulatory requirements, both are subject to Colorado PUC approval

2023 ERP Schedule

Key Procedural Activities	Date
Phase I – Tri-State Initial ERP Filing	Dec. 1, 2023 ✓
Phase I – Settlement Agreement Filing	June 27, 2024 ✓
Phase I – PUC Recommended Decision	Aug. 22, 2024 ✓
Phase II – Tri-State Release of Requests for Proposals (RFPs)	Sept. 13, 2024
Phase II – Bids Due	Oct. 28, 2024
Phase II – Tri-State Implementation Report (bid selection) Filing	Apr. 11, 2025

2023 ERP Preferred Plan

2023 ERP Phase I Scenarios Modeled

Scenario	Assumptions
Scenario 1: Business As Usual (BAU)	• Base case • Craig 3 retirement window of 1/1/2028 to 12/31/2029 • Springerville 3 retirement allowed starting 1/1/2037
Scenario 2: Inflation Reduction Act (IRA)	• System-wide GHG reduction limits • Craig 3 retirement 1/1/2028 • Springerville 3 retirement 9/15/2031
Scenario 3: Early Springerville 3 Retirement (ESPV3)*	• Constrained to select retirement for Springerville 3 between 2026 and 2031 • Fixed retirement date for Craig 3 based on BAU-selected date
Scenario 4: System-Wide Emissions Reductions (SWER)*	• System-wide GHG reduction limits, leading to 70% by 2031 • Allowed for higher levels of DR in Wyoming / West Nebraska and New Mexico • Craig 3 retirement window of 1/1/2028 to 12/31/2029
Scenario 5: Aggressive Colorado Emissions Reductions (ACER)*	• Accelerated constraint on GHG emissions reductions for Colorado to result in a 90% reductions by 2031 • Craig 3 retirement window of 1/1/2028 to 12/31/2029

*Stakeholder-requested scenarios

Resource Plan - Scenario Analyses

- Each ERP Scenario modeled is evaluated across a set of reliability, affordability, and responsibility criterion
- Reliability Metrics:
  - "Level I" industry-standard system planning metrics: Planning Reserve Margin (PRM), Expected Unserved Energy (EUE), and Loss of Load Hours (LOLH)
  - "Level II" Tri-State's heighted reliability standards for system performance in simulated extreme weather events ("EWEs"): evaluates EUE, LOLH, and market lean for capacity during EWEs
- Affordability Metrics:
  - Annual Revenue Requirement
  - Present Value Revenue Requirement for 20-year resource planning period

  (Note: The ERP does not include rate regulation or cost allocation, as Tri-State is rate-regulated by FERC)
- Responsibility Metrics:
  - ERP Scenarios must meet Colorado greenhouse gas (GHG) reduction targets:
    - 26% reduction by 2025
    - 36% reduction by 2026
    - 46% reduction by 2027
    - 80% reduction by 2030

2023 ERP Phase I Preferred Plan: "IRA Scenario"

- 1,540 MW of new generation resources planned from 2026 to 2031*
  - 940 MW of renewables
  - 310 MW of storage
  - 290 MW Combined Cycle Gas resource with transition for Carbon Capture
- Retiring Craig Unit 3 on Jan. 1, 2028
  - Craig Station Units 1 and 2 are jointly owned by Xcel Energy, Platte River Power Authority, Salt River Project, PacifiCorp and Tri-State.
  - Tri-State owns Unit 3.
- Retiring Springerville Unit 3 on Sept. 15, 2031, subject to New ERA funding and successful negotiation of exit from applicable contracts

*Under the 2023 ERP Settlement Agreement the technology types, sizes, and locations selected in Phase II may vary from Phase I, but must achieve the same emissions reductions

USDA New ERA to Support 2023 ERP Implementation

- USDA Empowering Rural America (New ERA) program:
  - $9.7 billion under the Inflation Reduction Act (IRA)
  - designed to help rural cooperatives implement reliable, affordable clean energy transitions
- Tri-State submitted New ERA funding Letter of Interest (LOI) in Sept 2023
- Tri-State was invited by USDA to submit a full Application for New ERA funding, in June 2024
  - $679M Budget Authority – grants, 0% loans, 2% loans
- Sept. 5, 2024, USDA Announced Tri-State selected as a New ERA finalist
- Tri-State's Application includes funding for coal retirements and renewable/storage projects aligned with the 2023 ERP

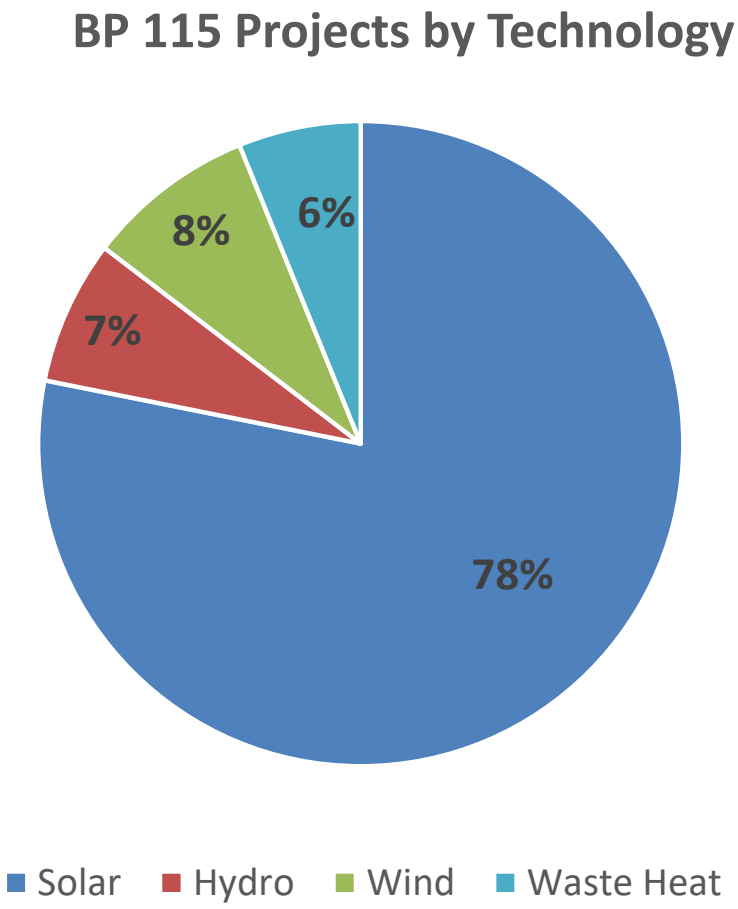
Member Resources & Distributed Generation

Distributed Generation (BP-115)

- Currently 5%
- Valuation methodology(ies)
- Addition of new technologies – e.g., hybrid renewable + battery
- Evaluate relative to state net metering policies and treatment of excess behind-the-meter generation
- Member Systems have 94.4 MW of interconnected DER

Bring Your Own Resource (BYOR)

- Members may individually or together bring a supply resource to Tri-State
- BYOR program cycle acquisition limit of 40% TPP/MCP
- Tri-State contracts with Member for resource
- Resource is owned by member and deemed to serve their load
- Incorporated into Tri-State system
- Cost-neutral to membership
- Approved by FERC



Summary

- To be responsive to the New ERA Program's criteria prioritizing GHG reductions through 2031, Tri-State's preferred plan reliably and ambitiously reduces emissions across its system, including reducing emissions associated with Colorado wholesale electricity sales by 89% by 2030, relative to a 2005 baseline, exceeding the state's emissions reduction requirements.

- Tri-State continues to support energy efficiency and demand management with its members. All of the ERP scenarios include applicable Colorado energy efficiency targets and a Colorado demand response target of 4% beginning in 2025. Tri-State also identifies energy efficiency and demand response in New Mexico and Wyoming

System Metrics and Milestones (as of 8/25/2024)

Renewable Penetration Record:	**88.1%**	**05/24/2024 8:00AM**
Wind Penetration Record:	**47.5%**	**05/23/2024 2:27AM**
Solar Penetration Record:	**20.9%**	**05/01/2024 12:20PM**
Renewable Peak:	**1,416 MW**	**07/13/2023 3:00PM**
Wind Peak:	**659 MW**	**02/13/2023 8:05PM**
Solar Peak:	**267 MW**	**05/06/2024 12:40PM**

Tri-State Solar Facility Additions for 2024 & 2025

TRI-STATE

WWW.TRISTATE.COOP