

# Asset mapping summary

Our research on the existing ecosystem reveals the following key findings

## Key findings

- **Abundant natural resources:** The region offers a foundational advantage in raw inputs (timber, solar, wind, and geologic minerals) alongside extensive, cost-accessible land.
- **Energy infrastructure:** REAL AZ hosts a growing mix of utility-scale solar, wind, and biomass projects, with coal sites transitioning to gas. Grid connectivity is a core asset, and as clean energy expands, planning is needed for long-term integration with developers, manufacturers, data centers etc.
- **Transportation network:** Interstate 40, the BNSF mainline, Apache Railway short line, and regional airports provide multimodal links to regional and cross-border trade hubs. However, last-mile logistics will require continued development to support clustering.
- **Digital infrastructure expansion:** A new 105-mile middle-mile fiber network in Navajo County boosts broadband access for homes, over 1,300 businesses and institutions, enhancing the region's attractiveness.
- **Workforce readiness:** Regionally specialized in building materials, heavy construction, repair services, and wood products. Institutions like NPC and NAVIT offer training aligned with modular housing and energy sector needs, while state-level players like ASU and NAU contribute through clean energy research and regional economic diversification initiatives.
- **Business ecosystem:** Anchor firms and newcomers benefit from a growing ecosystem supported by academic, research, and workforce institutions. Stronger linkages could accelerate commercialization and deepen local supply chains.
- **Incentives and institutional support:** Active local, state, and federal bodies provide targeted tax credits, workforce programs, and permitting support though access outside Arizona's larger communities remains a barrier.

## Key segments identified

### Renewable energy



- 1 **Material suppliers** to utility-scale renewable energy projects
- 2 **Heavy equipment providers,** contractors and operators involved in construction
- 3 **Service and maintenance firms** supporting long-term operations
- 4 **Specialized logistics firms** positioned to support development

### Advanced manufacturing



- 1 **Interior systems and appliance suppliers** for housing
- 2 **Raw material and structural components suppliers** essential to housing fabrication
- 3 **Industrial equipment and automation firms,** including those focused on robotics
- 4 **Industrial building developers,** providing speculative and build-to-suit buildings

# 1 Asset mapping

What regional assets, infrastructure, and actors shape the investment potential of Apache and Navajo Counties, and how do they support the development of segments in renewable energy and advanced manufacturing??

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**1.1 Methodology**

1.2 Investment motives

1.3 Key infrastructure assets

1.4 Workforce & talent pipeline

1.5 Innovation, clusters & business ecosystem

1.6 Policy, promotion & facilitation environment

# Methodology

Identifying assets, opportunities, and enablers across Navajo and Apache counties

## The United States

Real GDP (2024 Q4): US\$23,542.3 billion  
Real GDP YoY growth: 1.99%

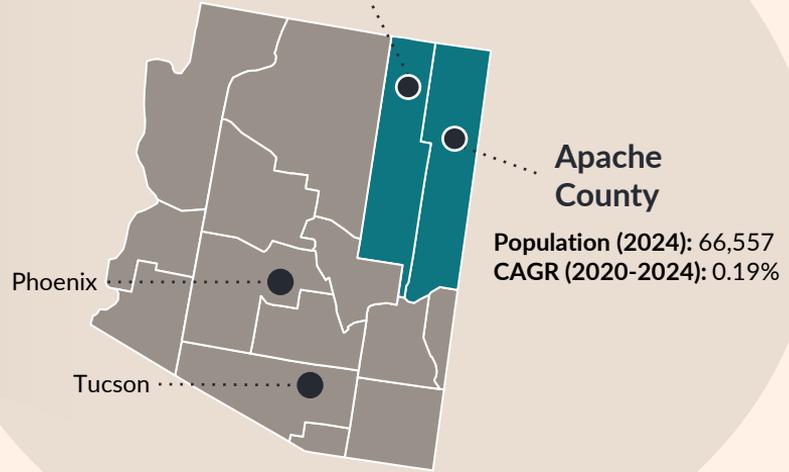


## Arizona

Real GDP (2024 Q4): US\$438,854.8 million  
Real GDP YoY growth: 2.89%  
Market share of national GDP: 1.9%

## Navajo County

Population (2024): 110,846  
CAGR (2020-2024): 0.94%



## Apache County

Population (2024): 66,557  
CAGR (2020-2024): 0.19%

Source  
FT Locations, *fDi Strategies*, based on BEA and Arizona Economy

# Methodology

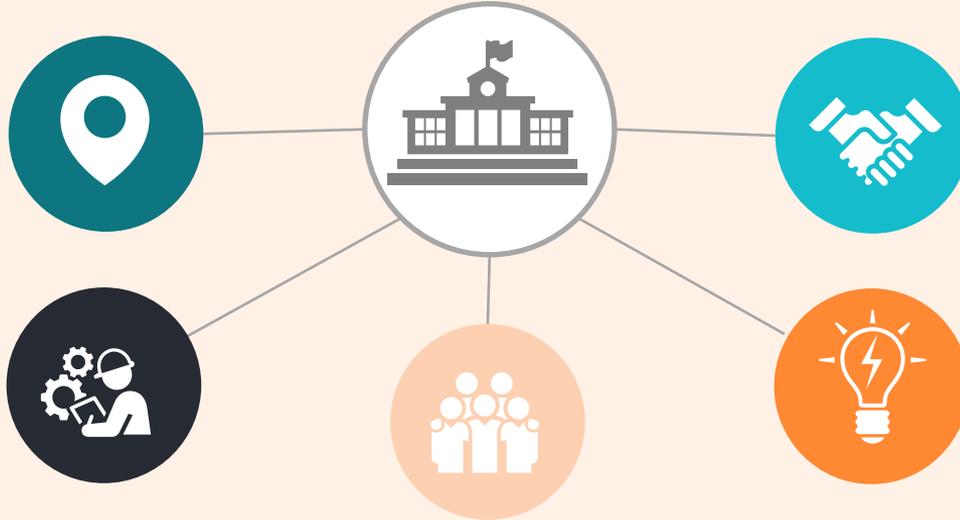
We assessed the Apache and Navajo counties ecosystem across 5 dimensions

## Investment trends & motives

- FDI/Inter-state investment trends
- Sector-specific site selection criteria

## Key infrastructure assets

- Development-ready sites
- Energy infrastructure
- Logistics and transportation
- Broadband, water and utilities



## Policy, promotion & facilitation environment

- Incentives, tax advantages and grants
- Speed and ease of permitting

## Innovation, clusters & business ecosystem

- Presence of anchor firms, supply participants, start-ups and customers
- Academic/R&D institutions
- Business incubators, accelerators and private funding access

## Workforce & talent pipeline

- Availability of skilled labor and transferable talent
- Educational and training institutions
- Workforce development programs and partnerships

### Source

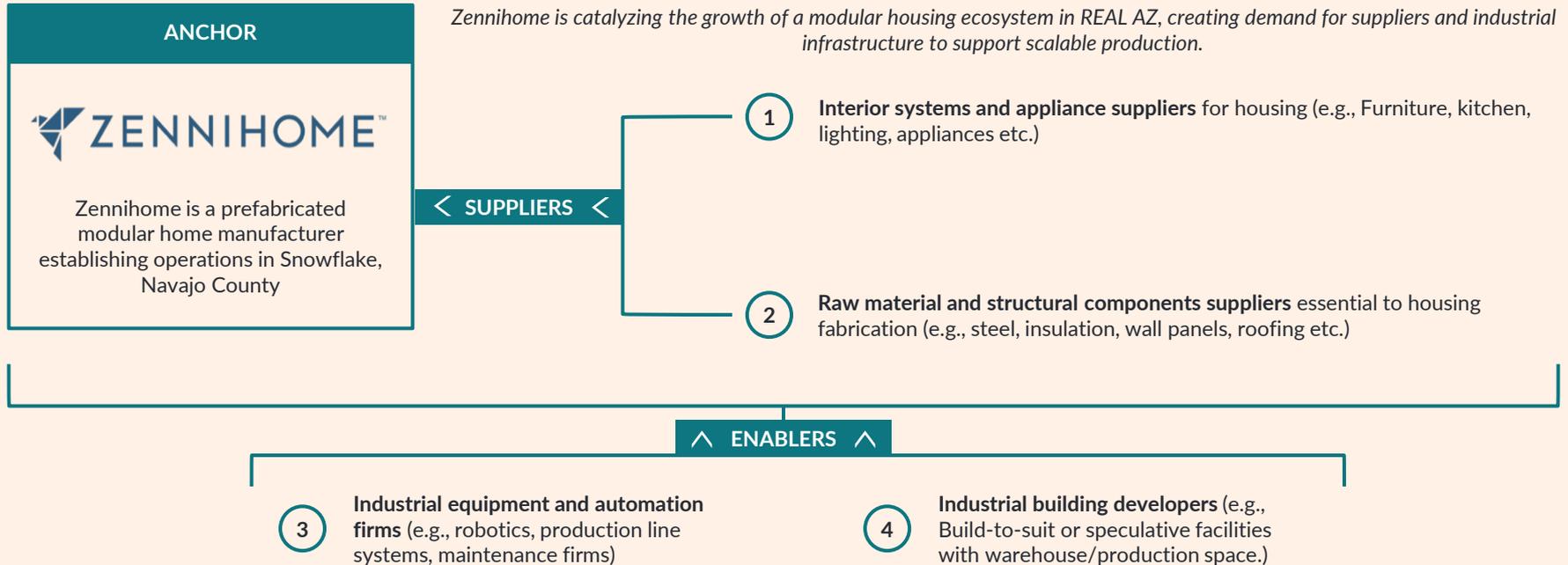
FT Locations, *fDi Strategies*, based on [Deloitte, Accelerating smart manufacturing: The value of an ecosystem approach, 2020](#) and [UN PRI, Impacting Investing Market Map, 2018](#)

### Note

See Appendix A1 and A2 for models; See Appendix A3 for questionnaire

# Segment definition – Advanced Manufacturing

Target segments for advanced manufacturing defined around anchor firm needs and regional supply chain potential

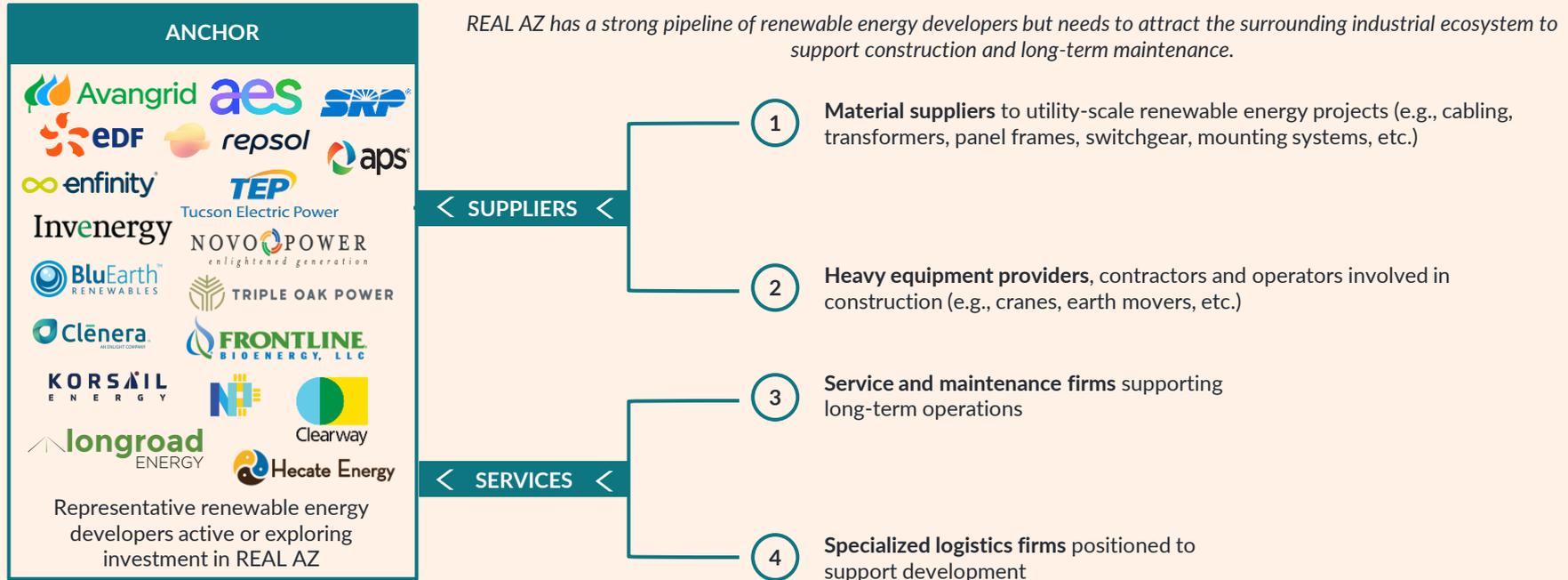


Source  
FT Locations, fDi Strategies, based on consultations with REAL AZ

Note  
See Appendix A4 for definition

# Segment definition – Renewable Energy

Target segments for renewable energy defined around developer activity and supporting supply/service ecosystems



Source  
 FT Locations, fDi Strategies, based on consultations with REAL AZ

Note  
 See Appendix A4 for definition

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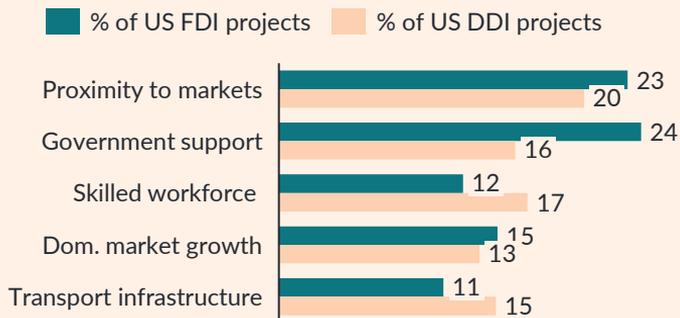
# What drives investment in advanced manufacturing in the US?

Proximity to markets is a top driver, while national FDI trends highlight untapped potential for investor attraction

## Overview of site selection criteria for sector

Companies investing in advanced manufacturing are primarily driven by proximity to markets, government support, and skilled workforce. Foreign investors place greater emphasis on policy and talent, while domestic investors lean slightly more toward domestic market growth and transport infrastructure.

## % of US investments projects by location motive for sector<sup>1</sup>



**Source**

FT Locations, *fDi Markets*. Data includes announced and opened projects and does not capture all FDI/DDI projects. Data excludes retail FDI/DDI.

**Note**

<sup>1</sup> A total of 592 motives have been recorded for 326 projects <sup>2</sup> See Appendix A4 for definition <sup>3</sup> DDI data shown reflects US interstate investment (i.e., projects by US-headquartered companies expanding or relocating across state lines).

## Advanced manufacturing<sup>2</sup> investment trends, 2021-2024

| No. of FDI projects by destination | 2021 | 2022 | 2023 | 2024 | CAGR % (2021-2024) |
|------------------------------------|------|------|------|------|--------------------|
| United States                      | 101  | 101  | 132  | 136  | 10                 |
| Arizona                            | 0    | 0    | 1    | 1    | 0                  |

| No. of DDI <sup>3</sup> projects by destination | 2021 | 2022 | 2023 | 2024 | CAGR % (2021-2024) |
|---|------|------|------|------|--------------------|
| United States                                   | 187  | 112  | 132  | 199  | 2                  |
| Arizona   | 3    | 4    | 9    | 21   | 91                 |

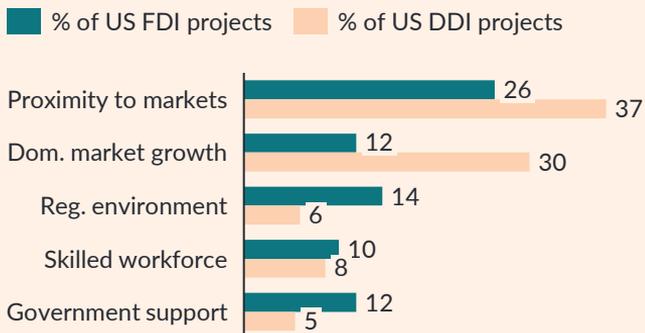
# What drives investment in renewable energy in the US?

Proximity to growing markets is key for renewable energy investors; rising US FDI signals opportunity

## Overview of site selection criteria for sector

In renewable energy, domestic projects are strongly market-led, prioritizing proximity to markets and domestic growth. Foreign investors, by contrast, are more influenced by the regulatory environment, government support, and a skilled workforce.

## % of US investments projects by location motive for sector<sup>1</sup>



**Source**

FT Locations, *fDi Markets*. Data includes announced and opened projects and does not capture all FDI/DDI projects. Data excludes retail FDI/DDI.

**Note**

<sup>1</sup> A total of 302 motives have been recorded for 172 projects <sup>2</sup> See Appendix A4 for definition <sup>3</sup> DDI data shown reflects US interstate investment (i.e., projects by US-headquartered companies expanding or relocating across state lines).

## Renewable energy<sup>2</sup> investment trends, 2021-2024

| No. of FDI projects by destination | 2021 | 2022 | 2023 | 2024 | CAGR % (2021-2024) |
|------------------------------------|------|------|------|------|--------------------|
| United States                      | 22   | 35   | 57   | 66   | 44                 |
| Arizona                            | 1    | 0    | 2    | 0    | -100               |

| No. of DDI <sup>3</sup> projects by destination | 2021 | 2022 | 2023 | 2024 | CAGR % (2021-2024) |
|---|------|------|------|------|--------------------|
| United States                                   | 69   | 134  | 132  | 87   | 8                  |
| Arizona   | 1    | 4    | 8    | 4    | 59                 |

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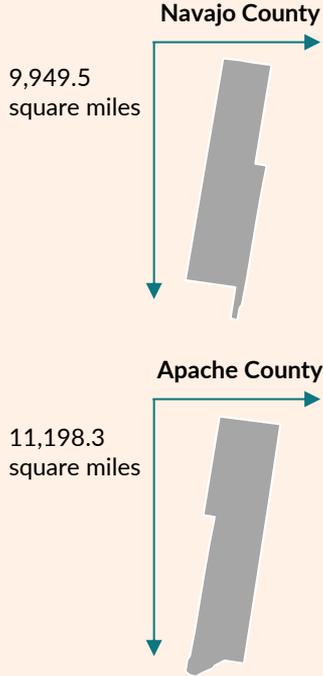
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# Natural resources & land advantage

Abundant raw materials, renewable energy potential, and land access



The **REAL AZ Corridor** is rich in natural resources, including water, forest products and minerals. Open land is abundant, affordable and accessible.

## Mineral and geologic assets

The REAL AZ Corridor has strong coal, oil, gas, uranium, lithium, copper, silver, gold, gypsum and salt resources. It is estimated that there are up to 2.5 billion tons of potash in the Holbrook, AZ basin, which could provide for up to 80 years of production.

## Land availability

Navajo and Apache Counties span over 21,000 square miles, offering expansive land availability for development. Almost 66% of Navajo County's 9,949 square miles is Indian reservation land. Individual and corporate ownership accounts for 18%; the US Forest Service and US Bureau of Land Management together control 9%; and the state of Arizona owns 5.9%. All of Navajo County is an Enterprise Zone.

## Timber/wood supply

Northeastern Arizona hosts the largest contiguous stand of ponderosa pine in the world. Approximately 245,000 bone-dry tons of woody biomass are available annually across Apache, Navajo, and Coconino counties. This resource supports biomass energy and green construction opportunities, including mass timber and modular housing inputs.

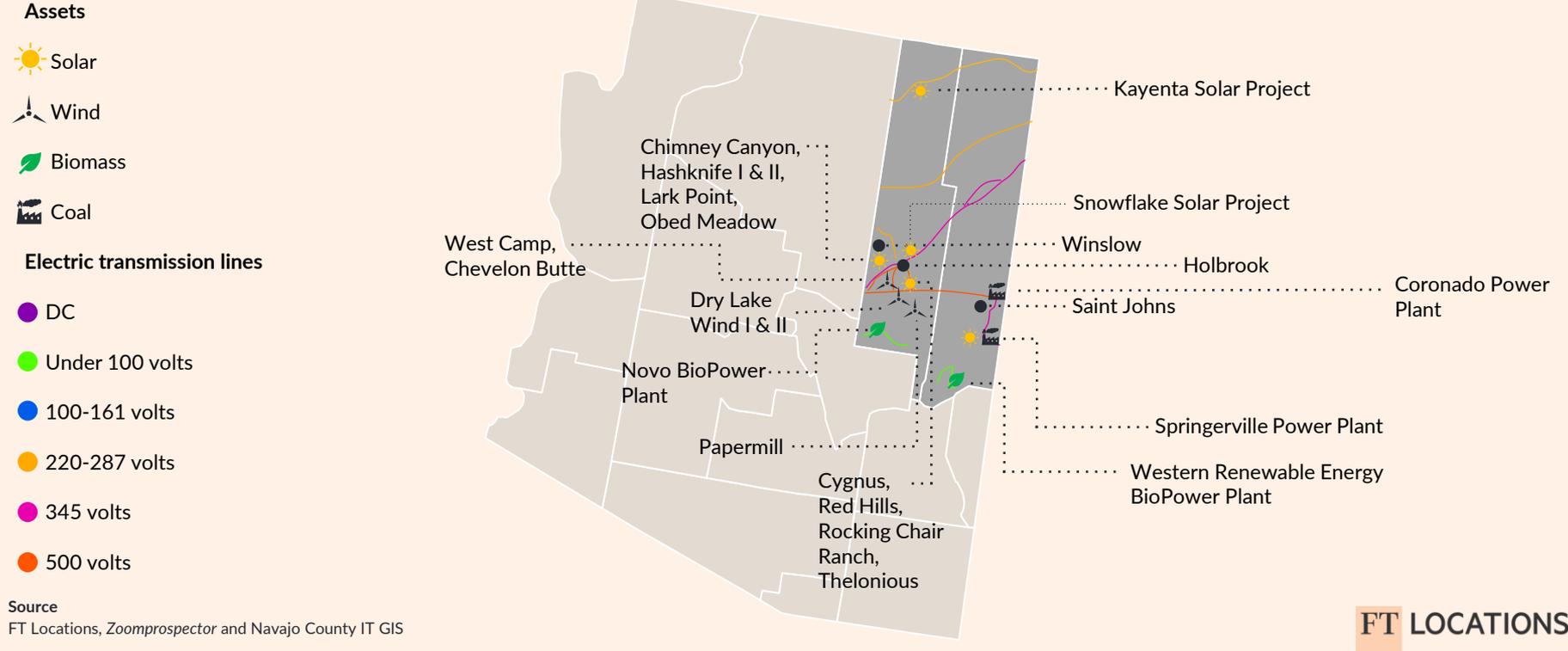
## Renewable energy resources

Apache and Navajo Counties receive 280–290 days of sunshine per year, with average solar insolation of 5–6 kWh/m<sup>2</sup>/day. The White Mountains region offers strong wind potential with speeds between 6–8 meters/second, and elevated ridges in Apache County meet feasibility thresholds for wind turbines. The region also offers geothermal development potential, particularly in Springerville and St. Johns.

Source  
FT Locations, *fDi Strategies*, based on secondary research

# Energy infrastructure

Robust energy assets and grid connectivity position the REAL AZ corridor for future infrastructure growth



# Energy infrastructure

Key energy assets serving the Navajo and Apache county communities



**Springerville Power Plant**  
 Owner: Tucson Electric Power  
 Location: Springerville, Apache County  
 Type: Coal & solar  
 Coal capacity: 1,765.8 MW  
 Solar capacity: 13.4 MW



**Kayenta Solar Project**  
 Owner: NGL-Kayenta Solar  
 Location: Kayenta, Navajo County  
 Type: Solar  
 Capacity: 27.3 MW



**Coronado Power Plant**  
 Owner: Salt River Project  
 Location: St Johns, Apache County  
 Type: Coal (natural gas conversion est. 2029)  
 Capacity: 821.8 MW



**Dry Lake Wind I & II**  
 Owner: Avangrid  
 Location: Herber, Navajo County  
 Type: Wind  
 DLW I capacity: 63 MW  
 DLW II capacity: 65.1 MW

**Source**  
 FT Locations, *fDi Strategies*, based on secondary research

**Note**  
 The Cholla Power Plant, a coal-fired generation plant, is decommissioned as of March 2025. Calls to reopen the plant from state and federal representatives, including the Trump administration, would require US\$1.9 billion in funding to bring the facility up to code and back online.

# Logistics & transportation assets

Strategically located with multimodal access to regional and interstate transport networks

**Time and distance to key trade hubs**  
from Winslow

| Destination     | Road<br>(Time/Distance)  | Rail access                      |
|-----------------|--------------------------|----------------------------------|
| Flagstaff, AZ   | 58 mins/58 miles         | BNSF Line                        |
| Phoenix, AZ     | 3 hrs/ 185 miles         | BNSF Line                        |
| Albuquerque, NM | 3 hrs 53 mins/ 265 miles | BNSF Line                        |
| Los Angeles, CA | 8 hrs/ 523 miles         | BNSF Line                        |
| Nogales, MX     | 5 hrs 30 mins/ 345 miles | BNSF via Phoenix + Union Pacific |
| El Paso, TX     | 6 hrs 28 mins/ 461 miles | BNSF Line                        |

Source  
FT Locations, *fDi Strategies*, based on secondary research



# Logistics & transportation assets

Key logistics & transportation assets serving the Navajo and Apache county communities



## Road network

Navajo and Apache counties have a combined road network spanning 6,400 miles. Apache County maintains around 3,500 miles of roads, while Navajo County accounts for approximately 2,900 miles. This extensive coverage supports local access and regional connectivity.



## Major highways

The region is linked by key east-west corridors, including Interstate 40, which runs through Navajo County, and US Route 60, which crosses Apache County. These routes connect communities and facilitate the movement of goods across Arizona and beyond.



## Burlington Northern Santa Fe (BNSF) Railway

Both counties are served by the BNSF Railway, which operates a mainline through western Navajo County. The line connects to multiple rail yards and intermodal facilities, providing reliable freight access to regional and national markets.



## Airports

The nearest commercial airport is Gallup-McKinley County Airport in New Mexico, around 60 miles from Apache County and 85 miles from Navajo County. The region is also served by regional airports such as Show Low and Springerville, supporting executive and cargo flights.

### Source

FT Locations, *fDi Strategies*, based on primary and secondary research

# Industrial development opportunities

Sites offering multimodal access, utility-ready infrastructure, and scalable space to support advanced manufacturing and renewable energy investment

## Small-to-medium industrial sites with development potential

### Eagar Old Sawmill (Apache County)

Two industrial parcels (84 and 40 acres) owned by Western Renewable Energy, located in Eagar.

### St Johns Airport (Apache County)

A 47-acre site available with runway access at St Johns Airport.

### Show Airport (Navajo County)

A 250 acres, I-1 zoned large industrial site located in the Opportunity Zone adjacent to the Airport Industrial Park and close to Show Low Airport.

### Joseph City Area (Navajo County)

Three land parcels available for development spanning 57, 42 and 27 acres.

### Holbrook Area (Navajo County)

Large land parcel along I-40, in close proximity to Airport, BNSF and Petrified Forest

#### Source

FT Locations, *fDi Strategies*, based on consultations with REAL AZ

## Master-planned and large-scale investment-ready sites

### I-40 Tradeport Winslow (Navajo County)

A large-scale industrial development zone strategically positioned near the City of Winslow and I-40. Key features include designated rail- and non-rail-served zones for industrial use, a dedicated area for data center development, and parcels allocated for solar energy generation. The Tradeport benefits from multimodal connectivity through proximity to the BNSF rail line, Winslow Airport, and the Lindbergh bypass, positioning the industrial park as a strategic location for large-scale investment.

### Aztec Ranch Industrial District (Navajo County)

A master-planned industrial area located adjacent to State Route 277, approximately 13 miles west of Snowflake in Navajo County. The district offers a total of up to 1,570 acres zoned for light and heavy industrial use. These sites benefit from direct access to the Apache Railway, a shortline connection to the BNSF transcontinental rail network at Holbrook. They also offer robust utility infrastructure, with has active queue positions with APS and SRP for delivering between 250 and 800 MW of power. With access to industrial-scale utilities, abundant acreage, and proximity to workforce centers such as Snowflake and Taylor, the district is well-positioned to support major investment in advanced manufacturing and renewable energy.



# Water infrastructure

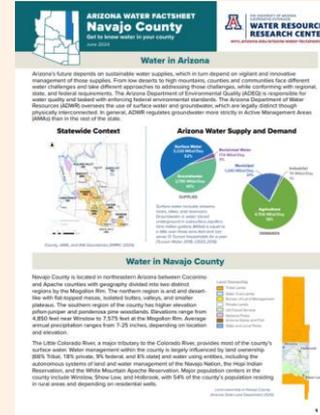
## Sustainable water access supporting growth and resilience

### Key features of the region's water infrastructure and management system:

- Primary supply sources:** Groundwater is the dominant source in both counties, supplying 94% of total water use in Apache and 73% in Navajo. Surface water from the Little Colorado, Black, and White Rivers supplements supply, particularly in Tribal areas.
- Water usage:** In Apache County, 62% of water use supports thermoelectric power generation at the Springerville Power Plant, while 25% is municipal. In Navajo County, municipal, aquaculture, and irrigation account for nearly 90% of use.
- Regulatory environment:** Neither county lies within a designated Active Management Area (AMA), but both are subject to statewide conservation rules including the Adequate Water Supply program.
- Infrastructure investment:** Upgrades such as irrigation system modernization and the White Mountain Apache Rural Water System are improving efficiency, expanding storage, and enhancing delivery capacity.
- Water management:** Water previously used in coal-fired power plants is becoming available for reallocation to future industrial users, supporting new investment. It also creates a strategic opportunity to accelerate the region's transition toward solar and wind energy.

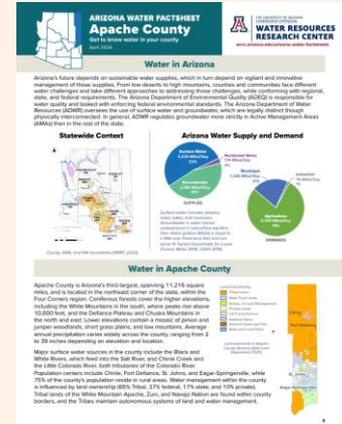
Source

FT Locations, *fDi Strategies*, based on The University of Arizona, Water Resources Research Center, *Arizona Water Factsheets*, 2024



### Navajo County Water Factsheet

### Apache County Water Factsheet



# Broadband Infrastructure

## Expanding digital access to support industry, workforce, and remote operations

### Key features of the region's digital connectivity landscape:

- **Access:** Approximately 53.3% of households in Apache County and 71.3% in Navajo County have a broadband internet subscription. However, many households rely on satellite connections, which are often less reliable and slower than fiber or fixed wireless alternatives.
- **Expanding fiber backbone:** Both counties are included in Arizona's Statewide Middle-Mile Network, with infrastructure running along I-40 and US-60. This network improves regional access to affordable, high-speed internet for industry and households.
- **Local access points:** Towns such as Holbrook, Show Low, and St. Johns have existing broadband service from providers like Sparklight, Frontier, and T-Mobile, supporting commerce, remote work, and virtual learning.
- **Federal and state funding:** Both counties are recipients of broadband expansion funding through the BEAD program, NTIA Tribal Broadband Connectivity Program, and Arizona's Rural Broadband Development Grants.
- **Relevance to investors:** Reliable broadband enables remote monitoring, real-time data exchange, and digital supply chain systems, particularly for advanced manufacturing and energy projects.

#### Source

FT Locations, *fDi Strategies*, based on primary and secondary research



April 2024 - The Navajo County Board of Supervisors and eX<sup>2</sup> Technology, a communications infrastructure group, announcing the start of construction on a new 105-mile open-access, dark fiber middle-mile network in the area of northeastern Arizona.

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# Employment in industries aligned with target sectors

Strong regional concentration indicates readiness, but county-level disparities suggest uneven opportunity

| Industry                              | Apache County |            | Navajo County |            | REAL AZ Corridor |            |      | Arizona   |            |
|---------------------------------------|---------------|------------|---------------|------------|------------------|------------|------|-----------|------------|
|                                       | Jobs          | % of total | Jobs          | % of total | Jobs             | % of total | LQ   | Jobs      | % of total |
| General construction                  | 42            | 1.96       | 1,100         | 5.59       | 1,142            | 5.24       | 0.78 | 159,106   | 6.72       |
| Building materials, hardware & garden | 32            | 1.49       | 791           | 4.02       | 823              | 3.77       | 2.67 | 33,296    | 1.41       |
| Heavy construction                    | 9             | 0.42       | 609           | 3.1        | 618              | 2.83       | 2.13 | 31,420    | 1.33       |
| Repair & maintenance services         | 23            | 1.07       | 393           | 2          | 416              | 1.91       | 1.22 | 37,268    | 1.57       |
| Stone, glass and concrete             | -             | 0          | 99            | 0.5        | 99               | 0.45       | 1.32 | 8,044     | 0.34       |
| Wood products                         | 9             | 0.42       | 87            | 0.44       | 96               | 0.44       | 2.59 | 4,112     | 0.17       |
| Furniture manufacturing               | -             | 0          | 21            | 0.11       | 21               | 0.1        | 0.36 | 6,612     | 0.28       |
| Metals fabrication                    | -             | 0          | 9             | 0.05       | 9                | 0.04       | 0.04 | 24,734    | 1.05       |
| Total (including other industries)    | 2,142         | -          | 19,661        | -          | 21,803           | -          | -    | 2,366,512 | -          |

**Source**  
FT Locations, *fDi Strategies*, based on Applied Geographic Solutions, 2024

**Note**  
Location Quotient (LQ) measures industry concentration in the REAL AZ Corridor relative to the state average. An LQ above 1.0 indicates a higher-than-average regional presence in that industry.

# Assessing workforce readiness in the REAL AZ Corridor

Demographic, labor force, and education insights reveal opportunities to enhance workforce pipeline

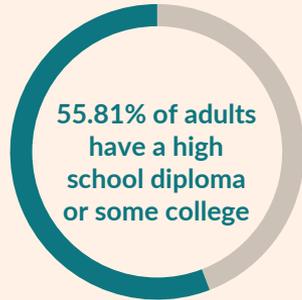
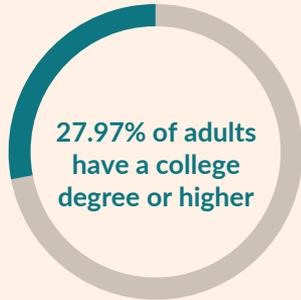


The REAL AZ Corridor has a total population of **175,134**, with approximately **141,504** residents of working age (15–64). Within this, **62,064** participate in the labor force, resulting in a workforce participation rate of 43.9% - notably lower than the Arizona state average of 51.9%



The REAL AZ Corridor has a labor force of 62,064, of which **92.5%** are employed and **7.3%** are unemployed, while 74,644 residents are not participating in the labor force. At a state level, 94.9% of Arizona’s labor force is employed suggesting challenges in connecting REAL AZ residents to job opportunities.

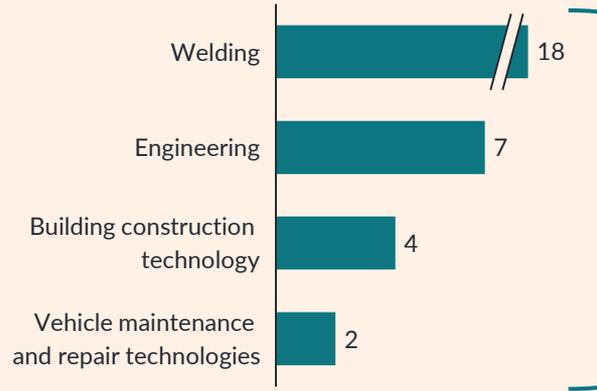
## Education attainment levels in REAL AZ Corridor



Compared to the state level in Arizona, the REAL AZ Corridor has a lower share of college-educated residents and a higher share without a high school diploma.

Source  
FT Locations, *fDi Strategies*, based on Applied Geographic Solutions, 2024

## Number of annual graduates in REAL AZ Corridor within relevant study areas



Some 12% of local graduates align with advanced manufacturing and renewable energy industries

# Academic institutions

## Strengthening the talent pipeline in Navajo and Apache counties



### Northland Pioneer College (NPC)

NPC is a public community college serving the communities of northeastern Arizona. Campuses are located in four of the largest Navajo County communities in Holbrook, Snowflake, Winslow and Show Low, its primary campus.

#### Key features

- Approximately 6,000 students enrolled annually
- NPC offers bachelor's and associate degrees, career and technical education
- Offers seamless pathway (2NAU) to Northern Arizona University (NAU) in Flagstaff

#### Relevant pathways

- Associate of Applied Science (direct to work programs)
- Bachelor of Applied Science
- Bachelor of Applied Management
- Associate degrees in Automotive Technology (composed of automotive service operations and electrical systems & engines), Industrial Technology Trades (Electrical & instrumentation, HVAC, mechanical maintenance, power & alternative energy), and Welding

#### Source

FT Locations, *fDi Strategies*, based on primary and secondary research



### Northern Arizona Vocational Institute of Technology (NAVIT)

NAVIT provides high school students in 11 host school districts across northeastern Arizona with access to career and technical education (CTE).

#### Key features

- Approximately 3,355 students attend programs on college campuses, through partnerships with NPC and Gila Community College (GCC)
- Supported by strong industry partnerships (e.g., APS, Salt River Project, Northern Arizona Training Center)

#### Relevant pathways

- Welding
- Industrial Trade Trades
- Automotive Technology
- Construction
- Cybersecurity

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