

## DATA CENTERS

# Asking the Right Questions

The issue is not simply whether data centers should be built, but whether each project leaves the community better off.

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# Digital demand has become physical infrastructure

Cloud services and artificial intelligence exist in facilities built for reliability and scale.



## Data centers support:

- Health records and emergency services
- Financial systems and logistics networks
- Manufacturing and industrial automation
- Education and government platforms
- Cloud computing and artificial intelligence

**Infrastructure as essential as power, water, roadways and sewers**

**Data Centers support far more than AI**

# AI – Expectations and Concerns

A rapidly evolving public conversation.

## Expectations:

- Higher productivity
- Faster innovation
- Better decisions
- Medical and scientific breakthroughs
- Greater access to expertise
- Improved accessibility
- Economic growth

## Concerns:

- Incorrect or fabricated outputs
- Job displacement
- Bias and unfair outcomes
- Privacy concerns
- Misinformation and deepfakes
- Out of control technology
- Concentration of power

**Fear of dramatic technological change vs fear of falling behind**

# High value, low daily burden

Long term economic contributions

## CONSTRUCTION

- Large campus development – construction extends over ten years
- Employment for 2,000 to 3,000 workers
- Support for training programs in the trades
- Construction cost can exceed \$10,000,000,000 (\$10B)

## OPERATIONS

- 200 – 400 full-time technical positions
- Salaries typically 50% higher than regional wages
- Spin-off support for local businesses – cleaning, security, maintenance
- Regional identity as a tech hub

## PUBLIC VALUE

- Economic diversification
- High-quality jobs and construction employment
- Community grant funding
- School support and workforce development
- Water and utility infrastructure improvements
- Enhanced tax revenue

**Consider the whole package: tax revenue, infrastructure, local hiring, training and community benefits.**

# Case Study – Prineville, OR 2010 to 2025

Facebook and Apple developed 13 data center buildings over 15 years, investing billions of dollars



## Employment and Wages

County GDP: \$600M to \$2.0B

Unemployment: 15% to 4%

Wages: \$30K-\$35K to \$55K-\$65K

## Taxes and Finance

County Budget: \$30M to \$100M

Property Taxes: \$12.5M to \$40M

## Schools

District Budget: \$20M to \$100M

Graduation Rate 70-75% to 85-90%

## Population

From 21,000 to 28,000 (~30%)

## Workforce Development

Career Technical Education Grants and Community Action Grants at Central Oregon Community College, Oregon State University, local high schools and union training programs – across all trades

## Water Positive Commitment

Aquifer Storage and Recovery System – seasonal storage of 800 million gallons

Improvements to water treatment facilities and pumping infrastructure

Regional watershed improvements

# Power demand - Understand the narrative

Delivering power is a process extending for years. Grid impacts are manageable with defined responsibilities for costs.



## Clear Answers:

- How much power will be needed at full build-out?
- Where will the power come from?
- Who funds substations. Transmission and interconnection?
- How are residential and small business customers protected?
- What commitments are written, reported and enforced?
- Will power be generated on-site? How? Utility interconnections?

# Water use depends on cooling system design

Water use is a trade-off with electrical power

## Clear Answers:

- Evaporative systems save energy but consume water.
- Understand water use context
- Understand source of water
- Consider watershed restoration
- What commitments are written, reported and enforced?
- Remember – despite these considerations the cooling system can be designed to use no water.



**Put the cooling method, projected annual use, water source, caps and use level triggers into the approval.**

# Community character expressed through high-quality design

Expectations defined through the approval process with community engagement



|                      |                                                         |
|----------------------|---------------------------------------------------------|
| SITING               | Compatibility with surrounding uses                     |
| SETBACKS + SCREENING | Distance, landscape buffers and service-yard treatment  |
| NOISE                | Background noise, property-line limits – high standards |
| LIGHTING             | Shielding and measurable spill limits                   |
| CONSTRUCTION         | Haul routes, work hours and road maintenance            |

Once construction ends, daily traffic and deliveries are typically limited. Construction impacts still require a plan.

# Case Study – Springdale Brownfield Redevelopment

Coal fired powerplant site developed for 350mw data center use



# Case Study – Springdale Brownfield Redevelopment

Developer committed to enhancing the environment around the site



Redeveloped site



Former powerplant view

# Case Study – Springdale Brownfield Redevelopment

Materials related to surrounding industrial history, modern technology



Building entry view

MISSISSIPPI DATA CENTER INFORMATION CONVENING



View from the street

Neil Sheehan | Woolpert

# Case Study – Springdale Brownfield Redevelopment

Community outreach is essential – regular public presentations as planning progresses



# Approval should convert promises into enforceable terms

Clear standards protect the community while giving experienced developers greater certainty.



## COMMUNITY BENEFITS

Define public priorities and infrastructure commitments

## RESOURCE PROTECTION

Set power, water, noise and emissions requirements

## WORKFORCE

Establish local hiring, training and education partnerships

## ACCOUNTABILITY

Require reporting, benchmarks, remedies and clawbacks

**The question is not whether data centers will be built.**

**The question is whether communities will shape that growth on their own terms.**