

# Appalachian State Innovation District

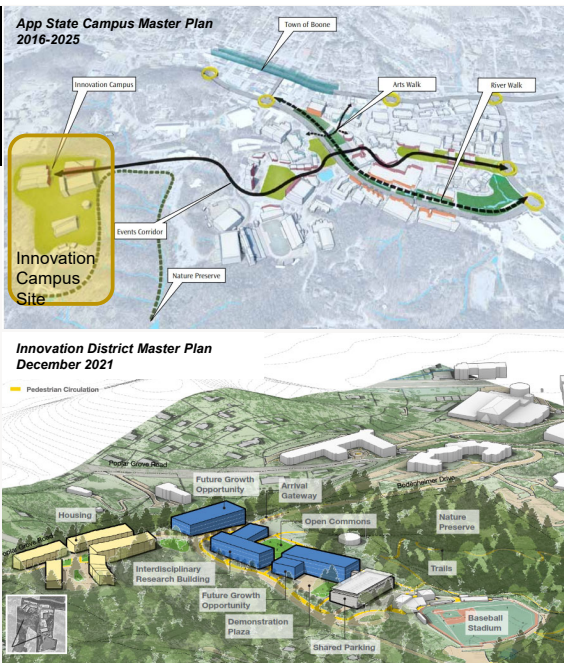
Board of Governors Meeting  
July 2022



## Project Summary

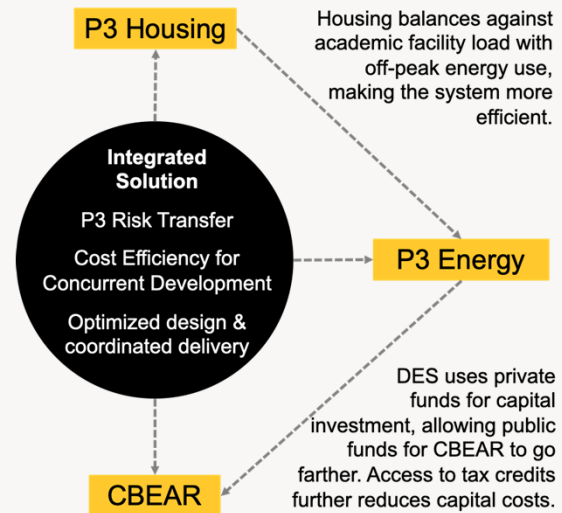
### INNOVATION DISTRICT

- The Innovation District is located on the site of the former Broyhill Conference Center, within the University's Millennial Campus boundary.
- Development of the Innovation District was contemplated in App State's 2025 Campus Master Plan, and the University completed an Innovation District Master Plan in December 2021.
- The Innovation District will bring together multiple disciplines and research centers – connected to sustainable infrastructure systems – to support regional economic development, enhance teaching and research, and establish App State as a national leader in sustainability and resilience strategies.
- App State selected development partners Radnor Property Group and Harrison Street through a competitive solicitation process to deliver an integrated Phase 1 concept for the District.



## Innovation District Phase 1 Concept

- **Academic Facility (\$54M by State Appropriation)**
  - Academic building will be called Conservatory for Biodiversity Education and Research (CBEaR).
  - Will also include cross-disciplinary collaboration space and encourage K-12 partnership.
  - Utilizes state funding and SCO standards.
- **Faculty and Staff Housing (~\$29M P3 funding)**
  - ±150 units of faculty and staff housing.
  - Helps University compete for faculty and staff amid housing scarcity and cost inflation in Boone.
  - University contributes no capital.
- **District Energy System (~\$17M P3 funding)**
  - Zero-carbon energy system that begins campus transition away from steam.
  - Establishes national example for sustainable solutions, enables ambitious future certification.
  - University contributes no capital.



3

## Process & Partner Selection

### INNOVATION DISTRICT

- **Competitive procurement process:**
  - Request for Qualifications: (October-November 2021)
  - Request for Proposals (December 2021-March 2022)
- **Selection of integrated team led by Radnor Property Group and Harrison Street:**
  - Radnor & Harrison Street will design, build, finance, operate, and maintain the housing and energy assets.
  - Radnor will collaborate to manage the design and construction of the Academic Facility (CBEaR).



- **Founded in 1999** / 35+ years experience
- **\$3B** projects completed / **\$1B** in P3 space
- Partnerships with **25 Higher-Ed Institutions** in Last 10 Years



- **45+ Years** investing in clean energy infrastructure
- **50 clean energy assets** since 2018
- Leadership Team with **\$15 billion** in transactions for over **40GW** of power assets

Innovation District will be **6<sup>th</sup> Joint Venture** between Radnor & Harrison Street

## Conservatory for Biodiversity Education and Research

### INNOVATION DISTRICT

- Phase 1 academic building (state funded)
- Department of Biology teaching and research facility
- 50,000 SF facility including botanical conservatory, research labs, auditorium, classrooms and support spaces
- Link between campus and regional community through education, research and outreach
- Targeted opening in Fall 2025
- Architect has been selected



## Faculty & Staff Housing

### INNOVATION DISTRICT

- Demand for 300+ housing units identified in the University's housing survey. University losing talent from lack of attainable housing options.
- Transfers risk while addressing a critical need for App State, outside core mission of teaching and research.
- High-quality, financially accessible housing is not available for professionals moving to Boone. Rental market is focused almost exclusively on student housing.
- P3 will provide housing on-campus with below-market rents for faculty and staff.



## District Energy System

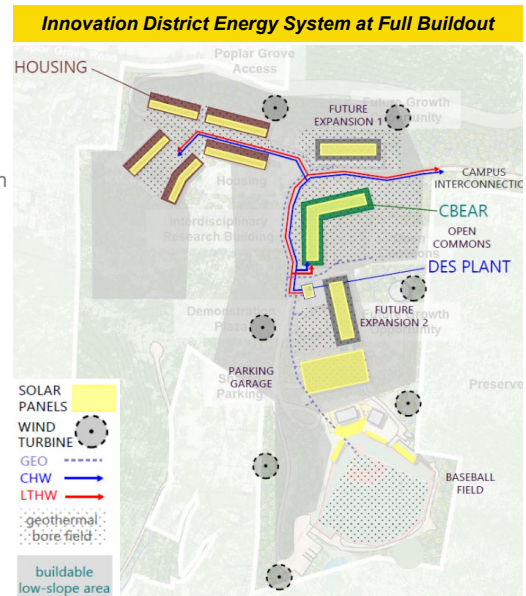
### INNOVATION DISTRICT

#### Background

- Innovation District lacks energy generation and sufficient distribution to meet the needs of planned buildings.
- Carbon zero, renewable, and resilient district system, utilizing proven technologies in innovative configuration.
- 10+ Public University P3s

#### System Overview

- On-site renewable energy generation from state-of-the-art technologies being considered, including wind, rooftop solar, anaerobic digester.
- Flexible, modular system that can accommodate new technologies as district grows.
- Operational and financing risk transfer for the maintenance, continued investment and operations of the district energy system.



## District Energy System

### INNOVATION DISTRICT

#### Integrated Delivery

- Designing and delivering all projects concurrently reduces capital expense for each (only "moving earth" once).
- Designing Housing and Conservatory to harmonize utility utilization.

#### Commercially Viable Outcome

- Zero Carbon System
- Innovative Solutions & Sustainability Leadership
- Cost comparable to traditional approach

#### Value Proposition

- Predictable payments
- Avoided capital investment
- Access to tax credits & incentives
- Avoided lifecycle capital reinvestment

	P3 District Energy	App State Traditional	
Efficient Capital (capital, tax credits)	▲ HIGH	▼ LOW	Project economics to be finalized in negotiations after executed LOI
Operational Resilience	▲ HIGH	▼ LOW	
Utility Commodity Risk	▼ LOW	▲ HIGH	
Innovation	▲ HIGH	▼ LOW	
Sustainability Leadership	▲ HIGH	▼ LOW	

## Pre-Development Letter of Intent

### INNOVATION DISTRICT

- App State desires to execute a Letter of Intent (LOI) with Radnor & Harrison Street, which will allow the parties to continue to **refine the projects' design and negotiate material deal terms** prior to financial close.
  - This will avoid delays and allow App State to deliver Phase 1 of the Innovation District as quickly and efficiently as possible
  - BOG will separately approve the Definitive Agreements following negotiations.
- In a typical P3 transaction, the University and the Developer enter into a pre-development agreement early in the negotiation process to establish basic parameters of the relationship between the parties and their respective obligations.
- Under the terms of the LOI, Radnor and Harrison Street will front all pre-development costs for Housing and Energy through BOG approval, up to \$1.15M.
- University would be responsible for predevelopment costs expended in case of Termination for Convenience until BOG approval.

**Additional Information**



## System and Campus Strategic Priorities

### INNOVATION DISTRICT

		Conservatory	P3 Energy	P3 Housing
UNC System Strategic Plan: Higher Expectations	Affordability & Efficiency	Cost efficiency through concurrent development with P3 projects.	Address enterprise risk related to rising energy costs. Transfer capital and operating risk to third-party.	Address critical University need while preserving capital and debt capacity for mission-central assets.
	Student Success			Help recruit top faculty and staff to support students and ensure App State degrees are valuable in the market.
	Economic Impact & Community Engagement	Serve as a resource for rural community & K-12 outreach.	Create a vehicle for sustainable technology renewable energy research, with potential for DOE grants.	Help recruit top faculty to increase research productivity.
	Excellent & Diverse Institutions	Elevate App State's bioscience and sustainable technology programs. Build cutting edge teaching and research facility in rural NC. Create "living lab" for students and faculty.	Solidify App State's position as a leader in sustainable technologies.	Help recruit and retain at talented workforce in a challenging housing market.
App State Bridge Strategic Plan 2021-2022	Academic Excellence	Enhance STEM assets preparing students for in-demand jobs. Create venue for cross-disciplinary education.	Create a "living laboratory" asset with opportunities for research and student internships.	Help recruit top faculty and staff to support students and ensure App State degrees are valuable in the market.
	Financial Resources	Displace some utility and building systems expense to P3 Energy System, stretching state funds.	Address enterprise risks related to rising energy costs. Utilize private funds and transfer operating risk to third-party. Absorb some costs from Conservatory, stretching state funds.	Address critical University need while preserving capital and debt capacity for mission-central assets.
	Sustainability & Resiliency	Connect to a zero-carbon energy system and design to ambitious sustainability standards.	Zero-carbon system that can serve as a national example for sustainable solutions.	Housing provided at below-market rates connected to a zero-carbon energy system.

## Transaction Structure – P3 Housing

### INNOVATION DISTRICT

#### Risks Transferred:

- Design
- Construction
- Financing
- Operations
- Maintenance

**Appalachian State**

*Ground Lease*

**Housing Owner  
501(c)3 entity**

*Development Agreement*

**Developer  
Radnor Property Group**

**Architect  
Nelson**

**Construction Manager  
Buildtech**

**Civil Engineer  
Bohler**

*501(c)3 issues taxable bonds to fund project  
Radnor-HS JV purchases bonds*

**Equity Investor  
Radnor-Harrison Street  
Joint Venture**

*Management Agreement*

**Property Manager  
Greystar**

A non-profit owns and operates faculty and staff housing for the benefit of the University.

Radnor and Harrison Street are repaid through bond payments & excess cash flow.

University receives a portion of excess cash flow.

## Transaction Structure – P3 District Energy System

### INNOVATION DISTRICT

#### Risks Transferred:

- Design
- Construction
- Financing
- Operations
- Maintenance

**Appalachian  
State**

*Energy  
Services  
Agreement*

Radnor & Harrison Street own and operate the energy infrastructure for the benefit of the University.

App State repays investment through payments for energy usage over time.

**District Energy System Owner  
Radnor-Harrison Street JV**

*Development  
Agreement*

*Management  
Agreement*

**Developer  
Radnor Property Group**

**Operations & Maintenance Manager  
TBD**

**Design & Construction  
TBD**

*Radnor & Harrison Street will procure optimal design, construction, and operations partners once the DES concept has been further defined.*

# Appalachian State Innovation District

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**Appalachian**  
STATE UNIVERSITY