

SEPT. 28-OCT. 2, 2019

Using Creative Funding Approaches for Facility  
Renewal: Campus Success Stories

CAPPA

2019 Conference



2019 CAPPA ANNUAL CONFERENCE

*Centered on Progress for Facilities Management*

Winnipeg, Manitoba, Canada

## Slide 1

---

**EW4** feel free to swap photos with something from your VM  
Erica Weber, 1/25/2018

# Welcome to the intersection of dreamers and doers...

Where we create the answers and the infrastructure to transform the communities we live in and serve.

**We are the Johnson Controls  
Performance Infrastructure™ team.**

We're the fearless innovators, the team players and the trusted partners who work tirelessly – relentlessly – to eliminate all barriers to build the best possible environments and empower the people within.

From one light, to one room, to one building, to one city, to one world: we make it possible and we make it work today.



Proprietary & Confidential





# Who We Are

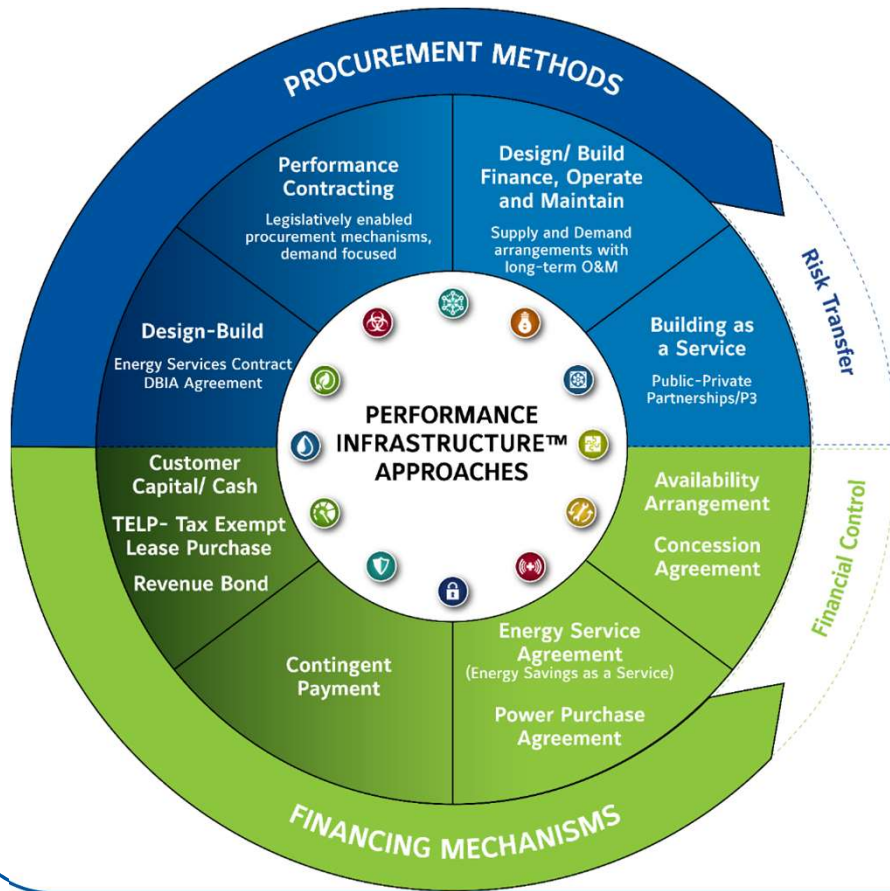


# Partners with Proven Success

1,887 Higher education institutions partner with Johnson Controls to create sustainable campus infrastructure



# Innovative Finance and Procurement



## Problems

- Maintenance costs in the public sector are normally the target of budget cuts.
- Repair costs get overlooked when compared to core public service spending needs.
- These conditions add to Deferred Maintenance and add to risk of failure and student enrollment decline.

## The procurement methods will address

- Infrastructure modernization debt
- Deferred maintenance cap ex allocation
- Repair and replacement
- Energy
- Operations & Maintenance

# Benefits for Owner

## Lower, Fixed Total Cost of Occupancy

Predictable – provides annual budget certainty



## Risk Transfer

Single point of accountability. Owner can focus on their mission.



## Increased Residual Value of Building

Defined handback provision - guaranteed



## Improved Availability

Service Quality standards enforced by contract, or payments are reduced



## Innovative Projects Delivered Faster

Speed to market accelerates revenue. Private sector expertise & innovation.



## Economic Development

Creates opportunities and job growth



## Capital Infusion

Monetize the operational efficiencies to eliminate deferred maintenance up front



# University of North Dakota





## University of North Dakota

### The Challenge

- Century-old coal plant at the center of campus needing immediate replacement

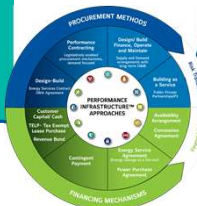
### The Innovative Solution **Public-Private Partnership**

*Design, Build, Finance, Operate, Maintain*

- Natural gas-fired steam plant, moved to edge of campus
- Central quad developed
- Intelligent lighting infrastructure
- Building controls upgrades
- HVAC & mechanical equipment



- 200 building campus, 6.5M sq. ft.
- 40-year public-private partnership
- Consortium members include:
  - Affiliated Engineers
  - AE2S
  - JLG Architects
  - Odney Public Affairs
  - Obermiller Nelson Engineering (ONE)
  - PCL Construction

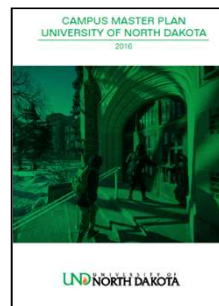


# The Perfect Storm

2015 – The University of North Dakota (UND) recognizes the need to began add capital expenditure dollars (for plant replacement) into their operations budget – increasing their operations budget by ~\$2.5 million/year



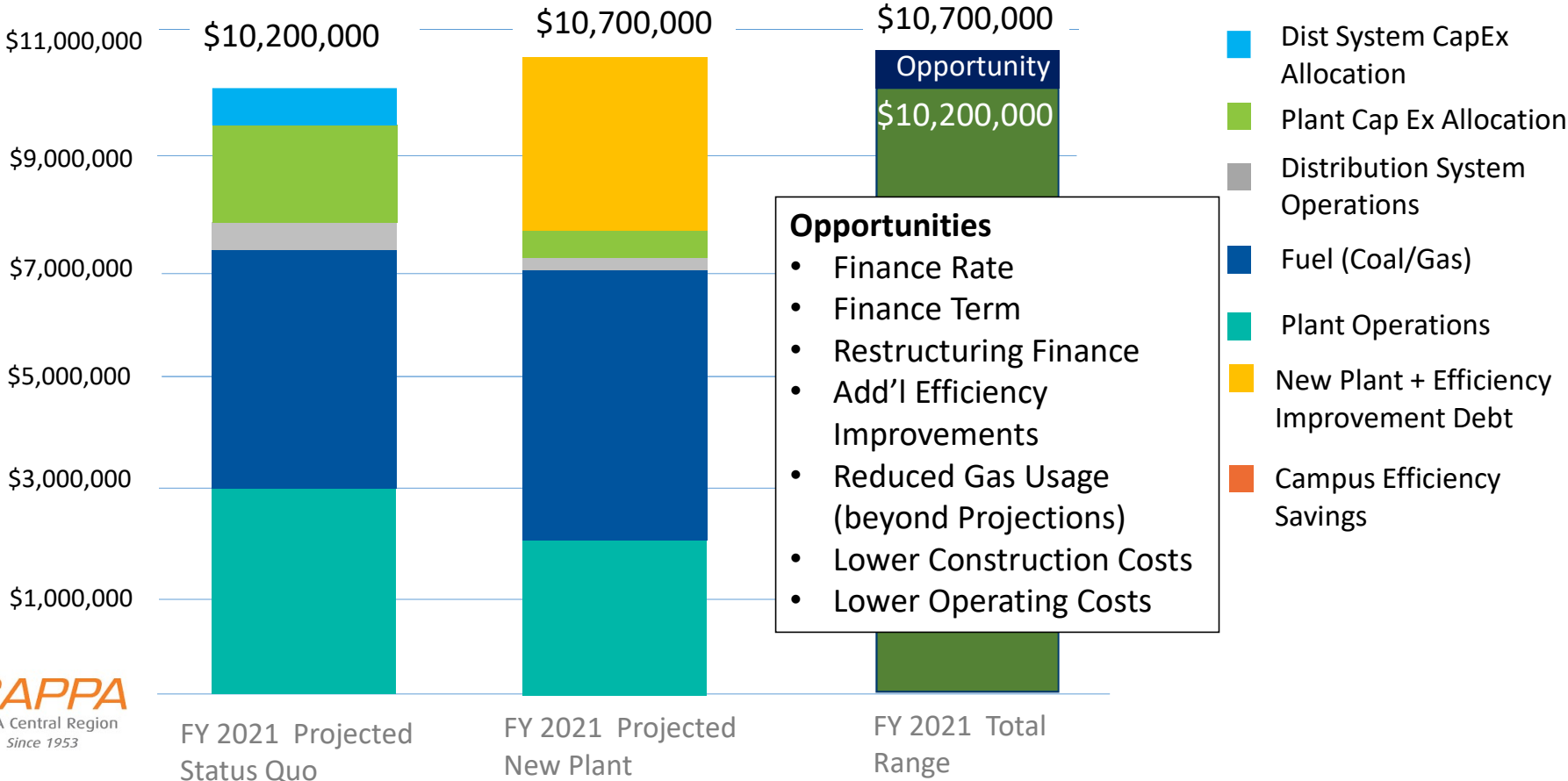
2016 - The University of North Dakota began serious review of replacing campus coal-fired steam plant. The plan was identified in the Campus Master Plan as having an FCI of .55



2016 – New UND President Mark Kennedy and new Vice President of Facilities Mike Pieper plan strategies to address the campus deferred capital issue. State legislation allows for a private entity to develop, build and operate assets for up to 50 years.



# Anticipated New Costs for Steam







## Benefits to UND

- Retained Asset Value AND Maintained New Plant
- \$88 million in addressing deferred maintenance on campus
- UND Paid Penalties for Non- Performance
- Relationship with Off-Takers
- Capital Expenditures covered for the Term including Agreed Upon Handback Condition
- N+1 Redundancy On Campus

# Result

- **\$90 million First Build**
  - \$3 million Initial Study
  - \$3 million Transition
  - \$53 million Plant Build
  - \$31 million Campus Improvements
- **\$106 million O&M / Lifecycle**
  - 38 year term
  - Plant Ops and Lifecycle
  - Created a plan for UND Plant CapEx



© 2018 JLG ARCHITECTS