

Capital Improvement Roadmap- Modernize Your Facilities & Add Resilient Energy

Spring Conference – April 2022



ameresco.com

Four blue pencils are arranged diagonally on a light green background. The pencils are sharpened and have a blue paint coating. The top pencil is the most prominent, followed by three others below it, all pointing towards the top left.

Agenda

- Introductions
- Who is Ameresco?
- What do we do for Oregon Cities?
- Unfunded Liability in Capital Planning (Demo)
- Realistic & Dependable Funding Options
- Community Renewable Energy Program Grant
- Questions and Discussion



Who is
Ameresco?

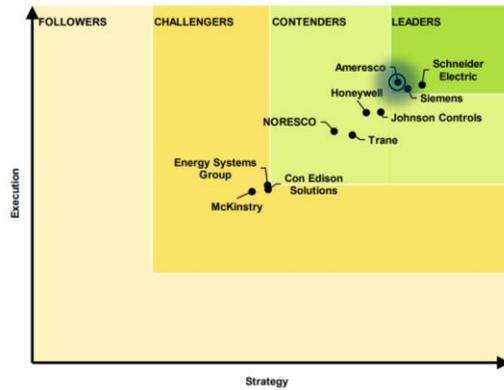
Ameresco's Advanced Technology Portfolio



Industry Awards & Analyst Recognition

Acclaimed a Leader in *Guidehouse Insights' 2020 Leaderboard Report*

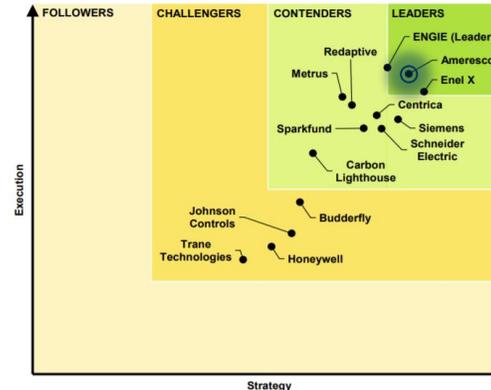
Energy Service (ESCO) Companies



(Source: Guidehouse Insights)

Acclaimed #1 Leader in *Guidehouse Insights' 2021 Leaderboard Report*

Energy-as-a-Service Companies

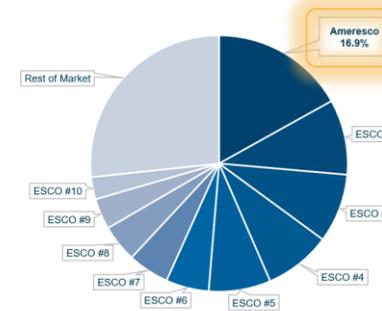


(Source: Guidehouse Insights)

Ranked #1 in Revenue Market Share in *Atlas Energy Intelligence's 2021 Report*

#1 U.S. ESCO Market Leader

Estimated ESCO Market Share by Revenue, U.S., 2020-2022



Source: Atlas Energy Intelligence Report: "The North American Energy Service Company (ESCO) Market"



Implementing the Work – A Turnkey Provider

YOUR CITY

AMERESCO
Green • Clean • Sustainable



Design & Permitting



Funding



Construction & Implementation



Commissioning Services



Subcontractors & Subconsultants



Communication & Public Outreach



What we do for Oregon Cities

Northwest Experience

Local Government Customers: 40+

Total implemented: 65 project phases

Example Projects:

City of Bend – \$3.7 M (HVAC, Streetlights, Solar PV) **saving \$205,000/year**

City of Troutdale – \$2.1 M (WWTP, PWD HVAC, Lighting) **saving \$90,000/year**

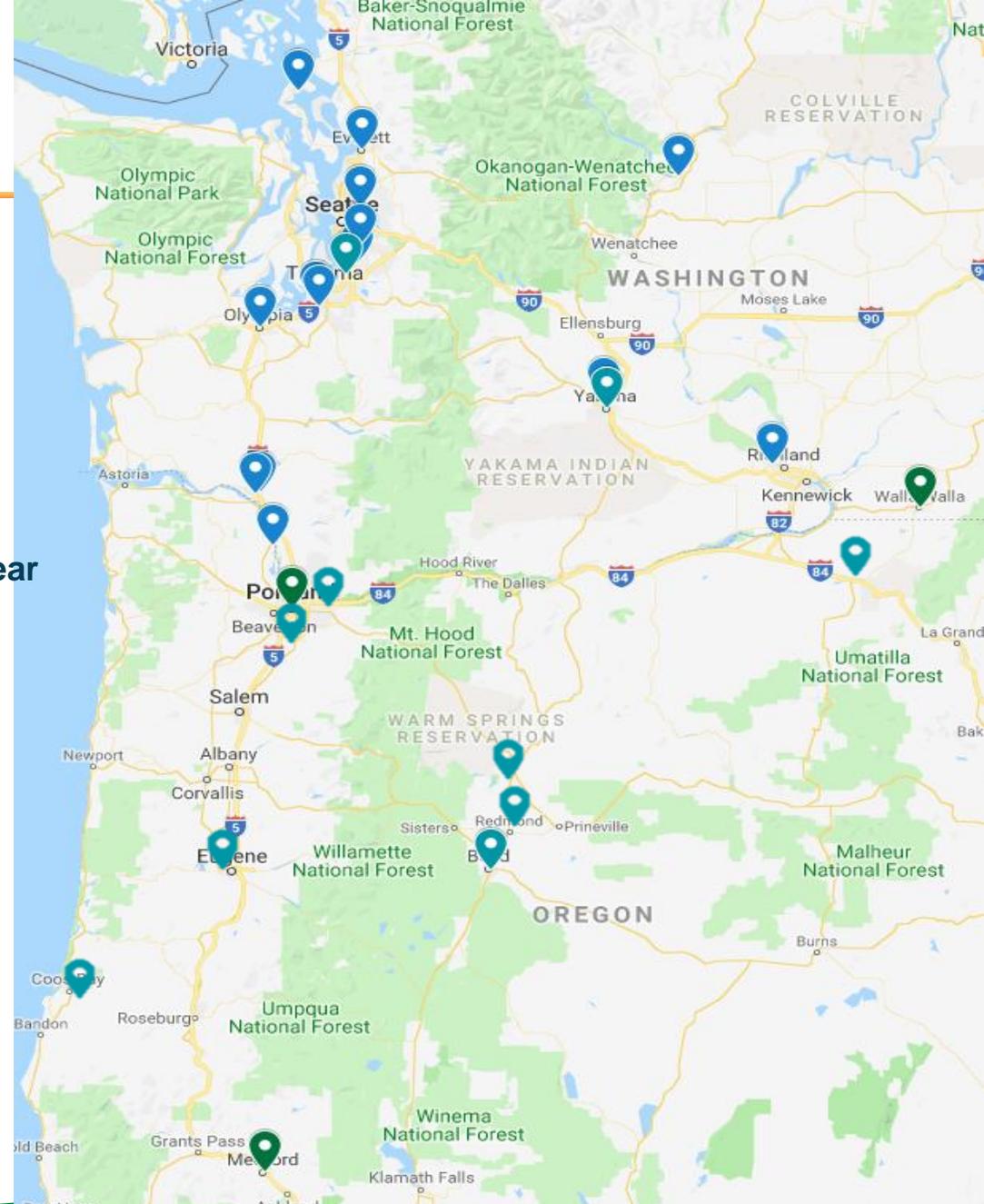
City of Redmond – \$2.3 M (Parks&Rec, Solar PV, Airport HVAC) **saving \$114,000/year**

Oregon DOT – \$23 M (8,800+ lights, largest on West Coast) **saving \$700,000+/year**

Note: While most projects are set up to be cashflow positive from day 1, savings are fully realized after the initial finance period ends.

Other PNW State and Municipal Clients:

- Grays Harbor County
- Island County, WA
- Kittitas County, WA
- Lane County, OR
- Multnomah County, OR
- Okanagon County, WA
- Spokane County, WA
- City of Bend
- City of Coos Bay
- City of Everett
- City of Edmonds
- City of Federal Way
- City of Kelso
- City of Kent
- City of Kirkland
- City of Lakewood
- City of Longview
- City of Madras
- City of Medford
- City of Oak Harbor
- City of Olympia
- City of Pendleton
- City of Renton
- City of Selah
- City of St. Helens
- City of Troutdale
- City of West Richland
- City of Yakima
- Oregon Dept. of Transportation
- Washington State Dept. of Transportation (WSDOT)



Unique Ability to Finance Any Opportunity

- \$10+ Billion in energy solutions across financing models, markets & technologies
- Budget-neutral infrastructure upgrades use energy savings to pay for projects over time
- Options for customers to implement infrastructure upgrades on- or off-balance sheet
- Innovative funding with renewable energy certificates, grants, utility rebates & tax credits

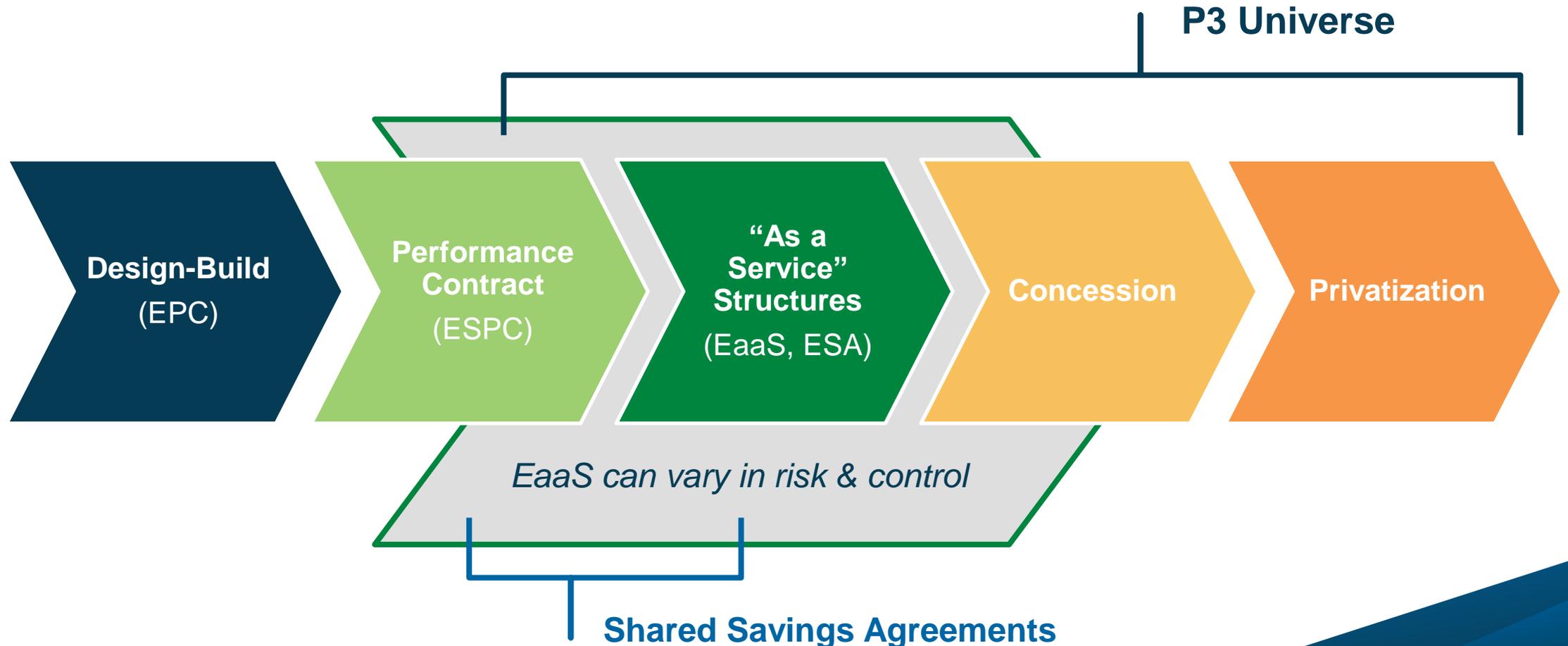
Performance Contracting (ESPC, UESC) | Design, Build, Own, Operate, Maintain (DBOOM)

Power Purchase Agreements (PPA) | Design-Build | Engineer-Procure-Construct (EPC)

Energy Service Agreements (ESA) | Public-Private Partnership (P3) | Energy-as-a-Service (EaaS)

Level of Risk Transfer and Control

Under the EaaS umbrella, different projects can be implemented under different structures:



The Dilemma – We All Know It



Common Challenges: Asset Management

Aging infrastructure

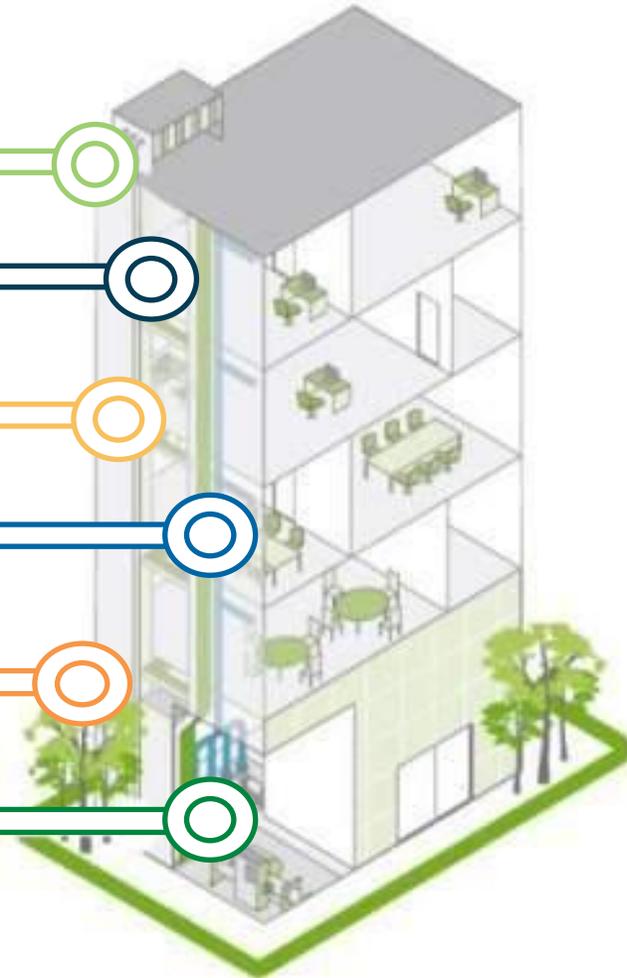
Cap X/Op X constraints

Growing deferred maintenance

Institutional knowledge transfer and staff retirements

Energy Goals

Translating facilities language to financial language



Data Drives Decision Making

“High percentages of senior leaders indicate that they do not have the data they need to inform their decision making. The move to a data-informed culture will be essential if higher education is going to achieve a sustainable future.”

- ***Inside Higher Ed’s annual survey of Chief Business Officers***
(July 2020)



Deferred Maintenance / Unfunded Liability

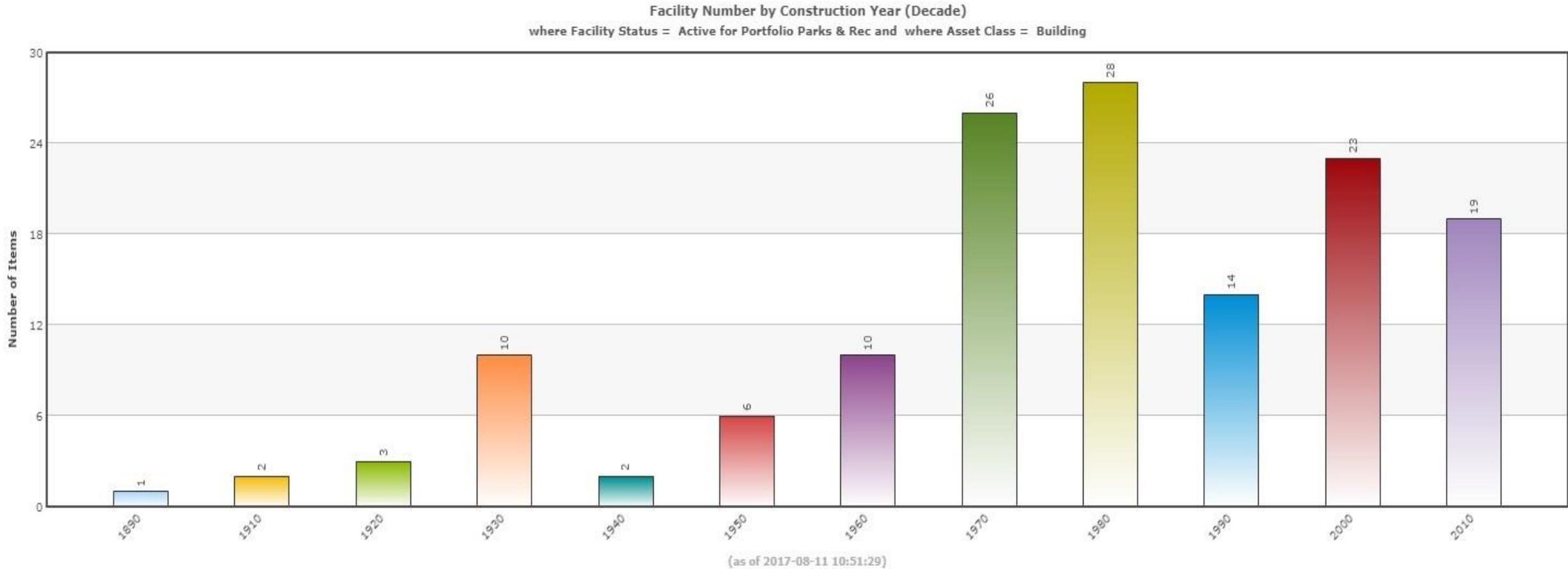
Examples:

- Public University System in California, 2021: Estimated Renewal backlog of \$4.01 Billion over 23 campuses
- Two Public University Systems in Washington, 2020: \$2.4 Billion combined backlog
- Public University System in Alaska, 2019: over \$1 Billion in backlog
- Major university in Pacific NW, per a 2017 report: it will cost \$650M to replace all deferred maintenance backlog at campus

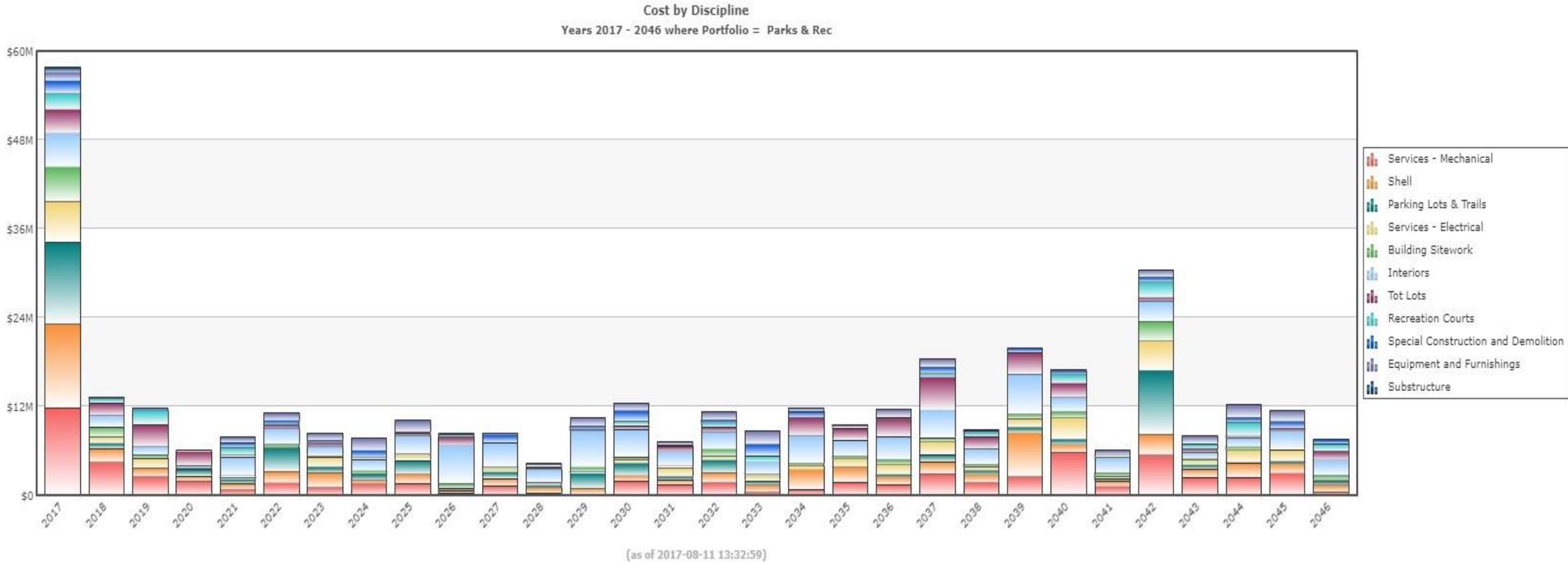
75% of campus facilities are between 30-40 years old

Plus, projected 10-year average annual need of \$308M for end-of-life systems

Portfolio View – Buildings by Age



Deferred Maintenance – Cost by Discipline



Asset Prioritization

Weighted score for each Building System

- Is System **LIFE SAFTEY/CODE RELATED**? Yes/No
- Does System have an **ADVERSE EFFECT ON SECURITY**? Yes/No
- If System fails, will it **SHUT BUILDING DOWN**? Yes/No
- If System is replaced, is there an **ENERGY SAVINGS OPPORTUNITY**? Yes/No

Capital Needs by Discipline

Total Deferred Backlog of \$12.4M includes over \$9.1M deemed Urgent and High Priority.



Sample of **Urgent** Items:

- Fire Alarm System
- Sanitary Waste Drainage Piping
- Boilers Cabinet Unit Heaters
- Fume Hood
- Roof Drainage

Sample of **High** Items:

- Air Handling Units
- Drop Down Ceiling
- Exhaust Fans
- Overhead Garage Doors
- Steam and Hot Water Radiators
- Stand Alone Thermostats

Facility Condition Index

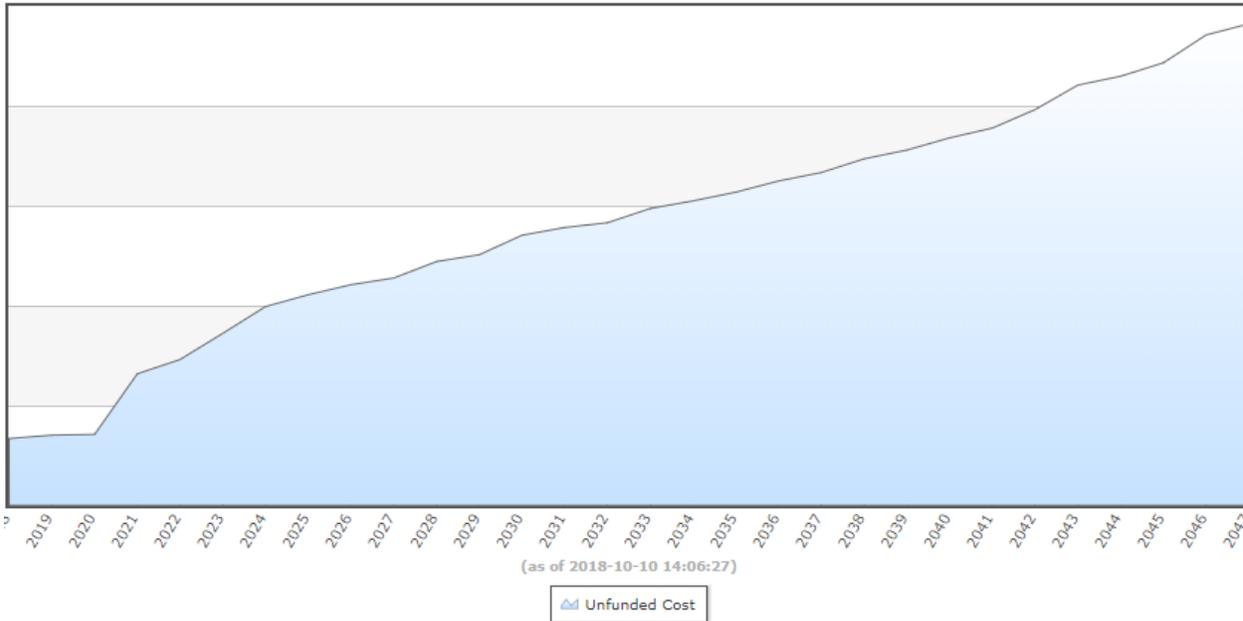
Industry-standard index used to track condition performance of facilities and portfolios

$$\text{FCI} = \frac{\text{Renewal and Repair Costs}}{\text{Replacement Cost}}$$

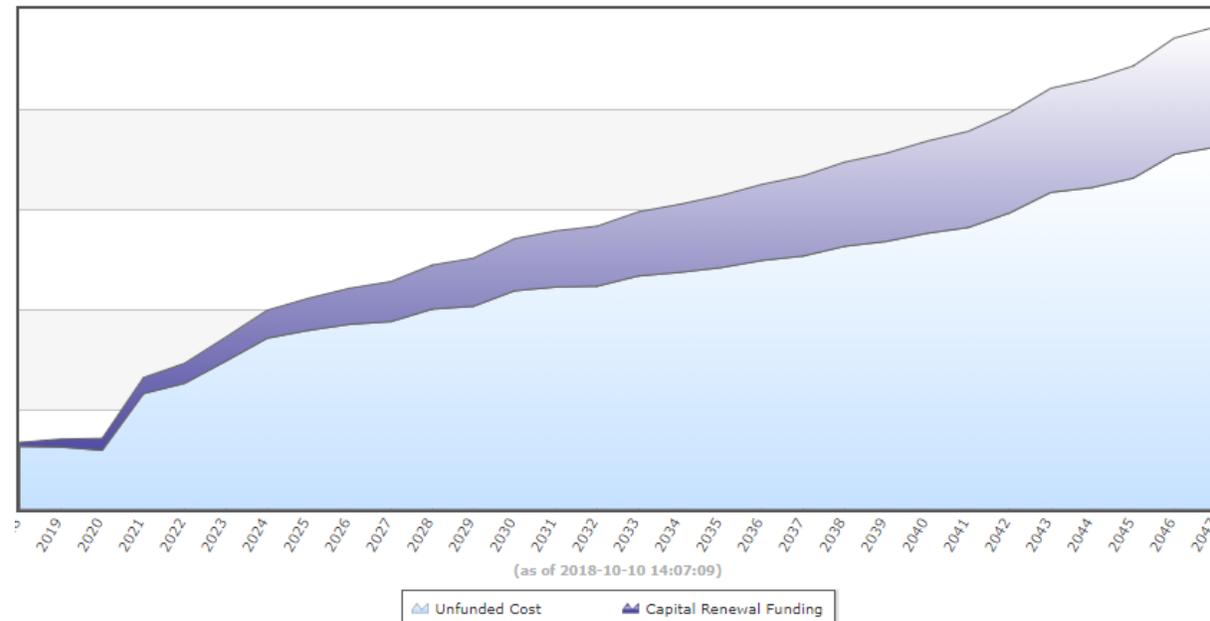


Projected Total Liability vs. Unfunded Liability

Unfunded Liability Impacts
Years 2018 - 2047



Unfunded Liability Impacts
Years 2018 - 2047 and where Asset Status = Active



Realistic & Dependable Financial Solutions

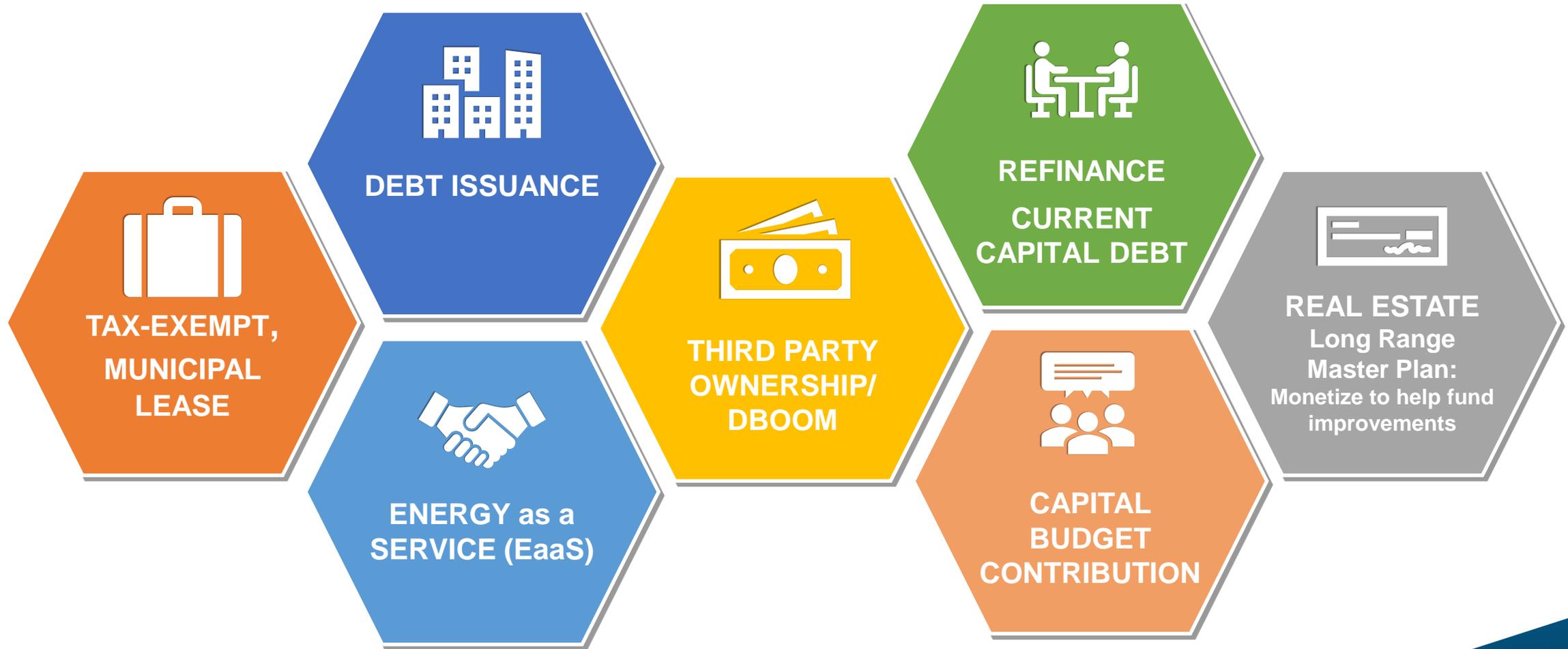


Time to find Alternative Funding Solutions!

- Cities have limited resources & limited budgets
- There is no silver bullet. It's okay to have deferred maintenance, and unfunded liability, but need to have a plan.
- Embrace collaboration with private sector partners

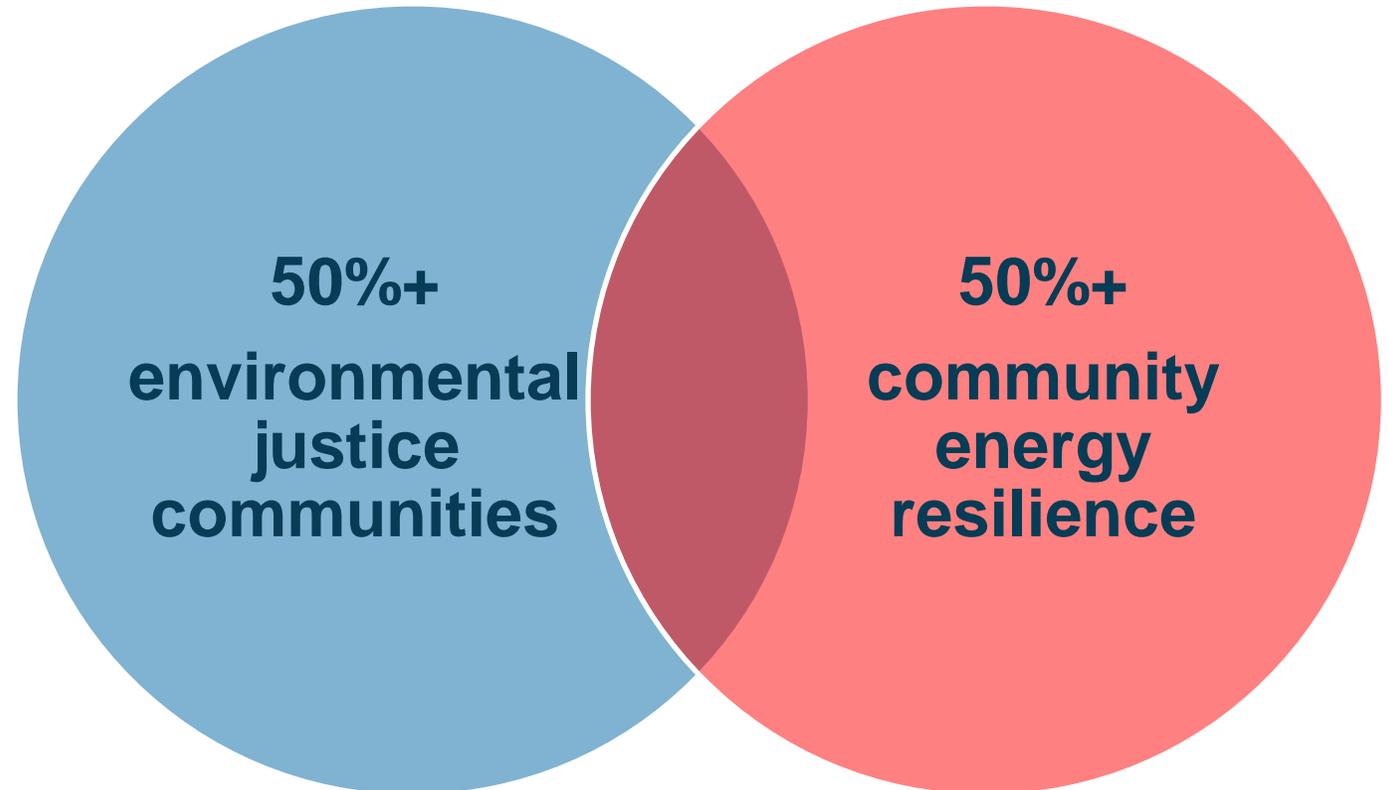


Funding & Financing Options: What is on the table?



ODOE Community Renewable Energy Program

- **Who:** Oregon Tribes, Public Bodies, and Consumer-owned Utilities
- **What: \$12 Million** in grants for projects that support program equity goals, demonstrate community energy resilience, and include energy efficiency and demand response
- **When:** June 10th, 2022!



ODOE: CREP – Eligible Projects

- **Eligible projects** include **renewable energy generation systems** like **solar** or **wind**, and **energy storage systems, electric vehicle charging stations, or microgrid** technologies paired with new or existing renewable energy systems
- Eligible applicants are encouraged to partner with community groups, non-profits, private businesses, and others on potential projects

Grant Amounts

Project	Maximum Award	Maximum Percent of Eligible Project Costs
Planning a community renewable energy project	\$100,000	100%
Planning a community energy resilience project	\$100,000	100%
Constructing a community renewable energy project	\$1,000,000	50%
Constructing a community energy resilience project	\$1,000,000	100%

Due Date: June 10th 2022!

ODOE: CREP – Next Steps

What is possible?

1. Put real opportunities on the table.
2. Start answering some fundamental questions.

Where is your City most vulnerable to sustained loss of power?

What is the potential for renewable/resilient energy systems at these locations?

What energy/sustainability goals can you also achieve with this focus?

How do you get there by June 10th?

Feasibility of Options? Call Ameresco

Program Questions? Email Christy Splitt at christy.splitt@energy.oregon.gov

Why it matters?
Telling the Story



Why it Matters – Creating the Narrative

Externally

- Declining municipal facilities & critical infrastructure are damaging to both public attraction and staff retention.
- Attractive, healthy, safe, and comfortable municipal buildings are a necessity.

Internally

- What if “Frank” on the maintenance team doesn’t have to maintain 25-30 old piece of equipment?
- Economies of scale – what efficiencies can be realized and monetized by doing a larger project?

Planning and Prioritizing

- How does funding identified in previous step prevent assets from migrating to Poor or Critical FCI rating?
- What improvement identified would produce energy or operating savings?
- What facilities are mission critical?
- Incorporate Resiliency, Renewables, Battery Storage



Environmental Value

- What are the goals or outcomes most important to the community & staff?
- Is this an opportunity to redefine or enhance the City's climate commitment?
- Reduce the Green House Emissions (GHG) for facilities by "X"
- City will be carbon neutral by a certain date
- Fleet electrification and EV charging systems



Operations & Maintenance



Leveraging your Asset Management Program

Preventative Maintenance Module

1. Organize and schedule preventative maintenance tasks

Service Request Module

1. Connect with seamlessly with your end users
2. Mobile tools allow data to be managed on the go in real time.

Project Planning Module

1. Create and manage projects, build estimates and accrue actual costs

Energy and Sustainability Module

1. Track the energy performance in real time
2. Identify savings opportunities in real time – energy analytics

Shared Maintenance Responsibilities

- What are the skill sets or scope gap needed for doing the work you need to do?
- When equipment is owned or DBOOM by the investor there can be a shared responsibility of maintenance:
 1. Quarterly inspections done by staff and Annuals done by others/ partners
 2. Utilize maintenance module to document and extend useful life



Leveraging Service Providers

- When looking at boiler, chiller and air handling equipment installation – Ameresco will ask (on behalf of our clients) for annual service contract estimate for five years – don't have to use their services but...
- Get service providers to create training for your maintenance team to enhance their skill sets to better maintain equipment.



Final Thoughts

- If COVID has taught us anything – Challenging times call for us to “Pivot”
- Skilled workforce is becoming a scarce resource
- There is no silver bullet
- Data is key to Planning!
- Planning is key to Funding!
- Collaboration is the key to Success!



Thank You!



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