



# Alaska Department of Transportation & Public Facilities

## Division of Facilities Services **Energy Efficiency Program**

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February 2019

Our mission is to ***Keep Alaska Moving*** through service and infrastructure.



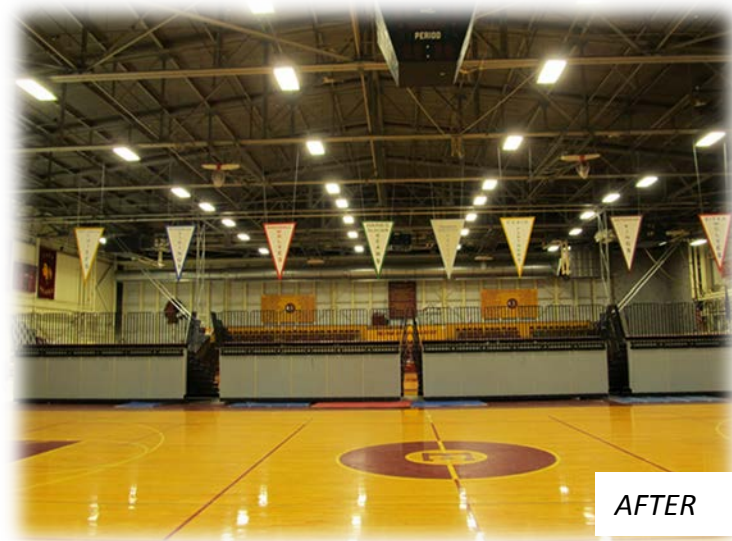
# ENERGY PROGRAM

- AS 44.42.067 -Alaska Sustainable Energy Act
- Requirement to perform energy efficiency improvements in at least 25% of State public buildings 10,000 square feet or larger, excluding Legislative and Court Buildings by January 1, 2020
- This was achieved in 2014 and DOT&PF is continuing to execute and develop further projects
- Energy Program is within the Division of Facilities Services of the Department



BEFORE

*Mt. Edgecumbe High School*



AFTER





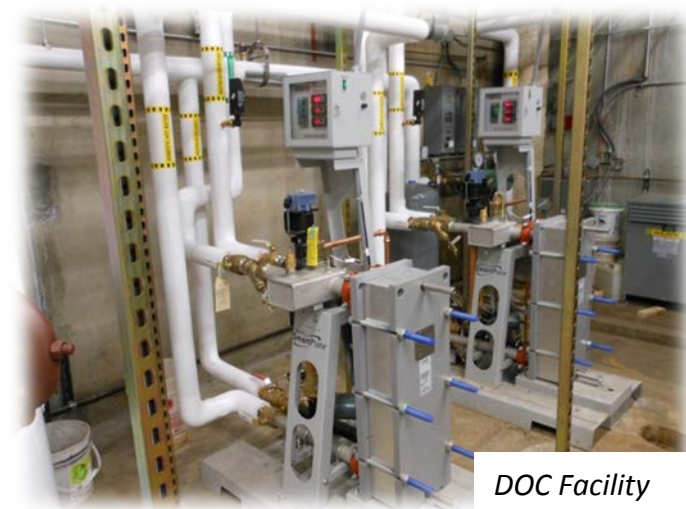


# ENERGY PROGRAM

- Provide comprehensive energy efficiency project development, management, implementation and advisement to State and public agencies
- Manage and execute *Energy Savings Performance Projects* to serve our State Agencies
- Collaborate with Alaska Housing Finance Corporation, Alaska Energy Authority and other state energy partners to improve statewide energy efficiency



DPS Hanger



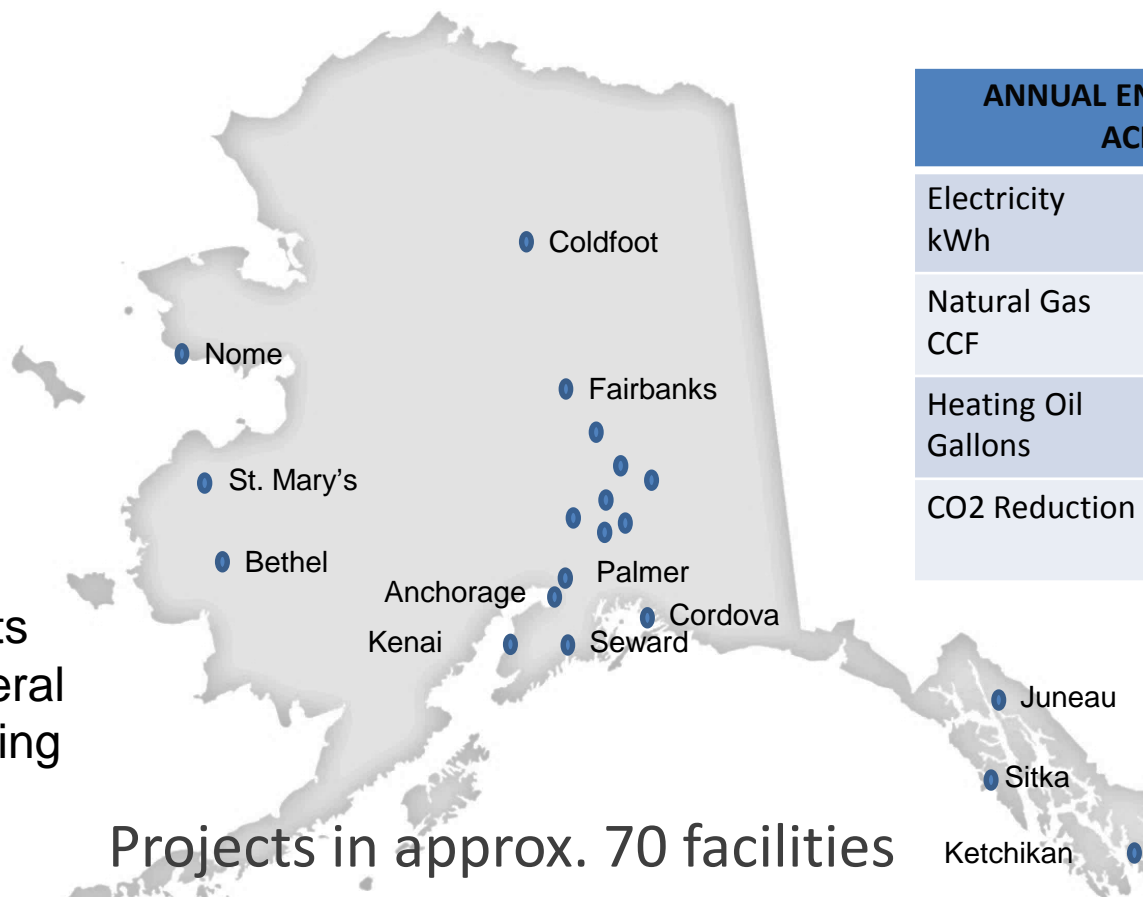
DOC Facility



# ENERGY PROGRAM

Annual savings  
greater than  
\$3.4M

>\$35M in projects  
through state, federal  
and financed funding



Projects in approx. 70 facilities

ANNUAL ENERGY SAVINGS ACHIEVED	
Electricity kWh	> 8,115,000
Natural Gas CCF	> 162,000
Heating Oil Gallons	> 261,000
CO2 Reduction	>10,000 Tons



# ENERGY PROGRAM

## Energy Savings Performance Contracting

- Energy Audits to identify opportunities
- Improvements are funded through available funds, or financed funds
- Financing is repaid from the energy savings of the project
- Energy savings is guaranteed



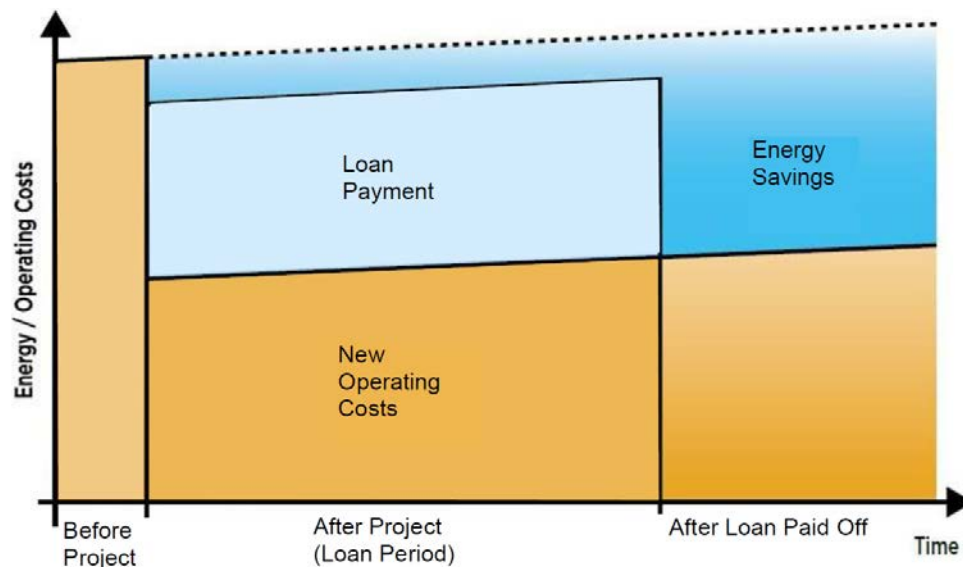
Before Project



After Project

## Ancillary Benefits

- Capital avoidance
- Maintaining/Increasing asset value
- Enhanced capability
- Economic development
- Healthy workplace environment and employee morale







# ENERGY PROGRAM

## 2019 Highlights:

- Anton Anderson Memorial Tunnel – Implementation in progress
- DEC Environmental Health Lab – Energy Audit in progress
- DOT&PF South Coast Facilities – RFP in progress
- DOT&PF Street Lighting – Initial scoping in progress



## Example Technologies & Opportunities:

- New lighting systems and controls
- High efficiency heating, cogeneration and HVAC systems
- Building envelope upgrades –windows, insulation, etc.
- Renewables – solar, wind, biomass



*The Whittier Tunnel Energy Project, scheduled to begin construction in Spring 2019, will reduce tunnel operating costs by \$200K annually, or 60%.*



# ENERGY PROGRAM

## An Effective Program

- Continues to be an existing and effective tool for improving our infrastructure portfolio by:
- Seeking and executing **measurable** efficiency opportunities, and
- Making our infrastructure more **efficient, functional, and sustainable** to serve our communities

## Potential:

- Vast continued potential for state public buildings Government facilities beyond our state facilities



BEFORE

St Mary's Maintenance Shop



AFTER





# REFLECTION

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***Thank you  
for your  
attention and  
this  
opportunity.***