

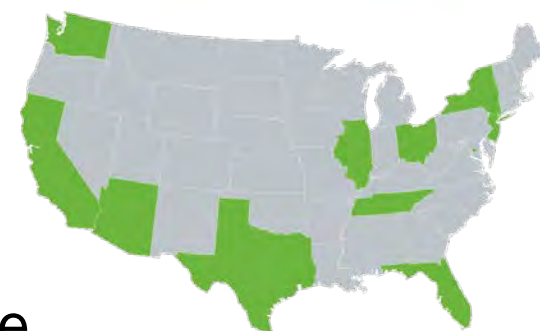


## Energy Efficiency Services

Educational institutions are under increasing pressure to cut costs. Willdan Energy Solutions has extensive experience helping schools, from preschools to universities, develop and implement programs that can provide remarkable savings without affecting staff or services. For larger educational institutions, such as community colleges, it is not uncommon for Willdan to save these organizations hundreds of thousands of dollars per year in operating costs.

# Introduction to Willdan

## Willdan is qualified to talk about implementing Energy Efficiency



- National provider doing work in states like California, New York, Texas, and Tennessee
- *Example:* Willdan served 303 schools in 17 School Districts in an 8-month period delivering 14.3MM kWh's of energy savings
- *Example:* Willdan advises facility owners on which EE measures to implement, and coordinates incentives and rebates to maximize ROI

# Implementing Energy Efficiency in Schools

## Installations without affecting daily operations

- Scheduling around the school day
- Michelle Montoya Laws



# Implementing Energy Efficiency in Schools (continued)

## Communication during implementation

- Facility staff
- Principal, superintendent
- Teachers, faculty
- Students, parents



# Implementing Energy Efficiency in Schools (continued)

## Lighting levels

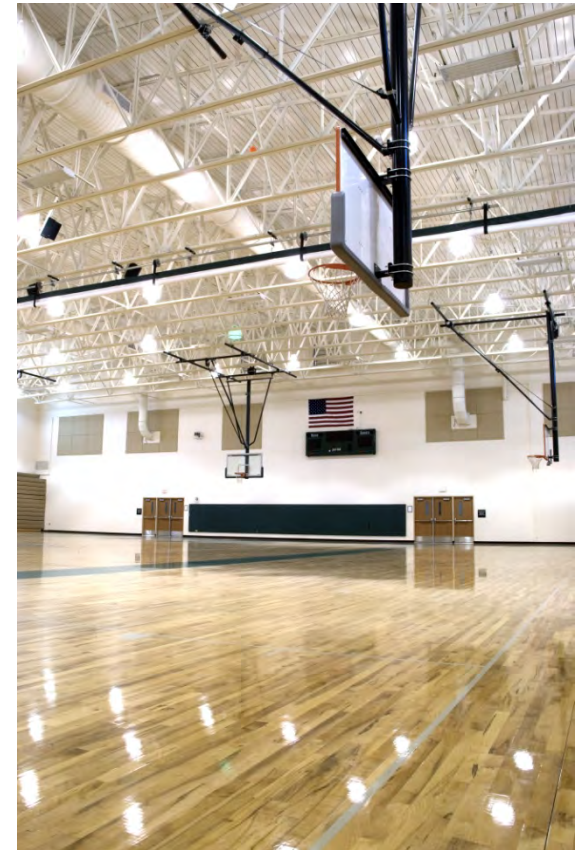
- Pre- and post-installation lighting measurements
- Teacher, student, facilities management and executives



# Implementing Energy Efficiency in Schools (continued)

## Safety

- Quality of installation crew
- Training (helps develop workforce)
- Post-installation clean up



# Implementing Energy Efficiency in Schools (continued)

## Quality of Installation

- Inspection during installation
- Quality of materials
- Post-inspection by both implementer and oversight agency



# Implementing Energy Efficiency in Schools (continued)

## Persistent Energy Savings

- Materials/Equipment
  - Select measures that have sustained savings over time
    - e.g. Lighting, Refrigeration and HVAC Retrofits
    - Controls
  
- Training
  - Facilities Manager
    - Procurement (e.g. provide “Cut Sheets”)
    - Controls operations
  - Energy Manager



# Implementing Energy Efficiency in Schools (*continued*)

## Suggested Audit Practices/Procedures

- Walk-through Survey
  - Record existing equipment (types and quantities)
  - Use electronic recording system
  - Analyze and determine retrofit upgrades
  - Strive for comprehensiveness
  - Use standardized equipment lists/measures (e.g. DEER)
  - Provide minimum equipment standards and warranty requirements

# Conclusion

- Prop 39 is not just about EE for schools
- How to implement without affecting daily operations
- How to ensure stakeholder “buy in”