



# Belle Plain School District

## Solar Opportunity



# Agenda

- ▶ **Who we are**
- ▶ **What we do**
- ▶ **Solar Overview**
- ▶ **Advantages of Solar**
- ▶ **Solar Opportunity**
  - ▶ **Senior High School**
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- ▶ **LED Lighting**
- ▶ **Summary**
- ▶ **Next steps**
- ▶ **Questions**



# Who we are



- Founded in 2012 by industry veterans
- Over 40 years of industry experience
- Have successfully developed and implemented over \$50 Million in *Self Funding* efficiency projects
- Passionate about making a difference
  - Professionally focused on resource conservation
  - Organizationally focused on making a difference both locally and world wide – Apex Foundation



# What we do



- Work with Client to identify ways to save on Energy and O&M Expenses
- Develop Turn-Key project to implement Facility Improvement Measures (FIM's)
- Provide a Self-Funding solution that provides positive cash flow to the client
- Guaranteed total price of project and Guaranteed Performance so there is NO risk to the District.
- Work with the District on Financing
- Single point of contact and responsibilities
- Leverage the State Statutes with Guaranteed Price and Performance to Procure the project through a design-build process





# Solar overview



- ▶ **January of 2015 Xcel Energy released new solar program**
- ▶ **Meter connected – Rooftop or ground mount**
- ▶ **Xcel incentives – Federal Tax Incentives**
- ▶ **Belle Plaine District gets Xcel Incentives**
- ▶ **Federal tax incentives go to the 3<sup>rd</sup> party investor**
  - ▶ **Federal Investment Tax Credit**
  - ▶ **Accelerated depreciation**
- ▶ **GUARANTEED SAVINGS THROUGH APEX**



# Advantages of Solar

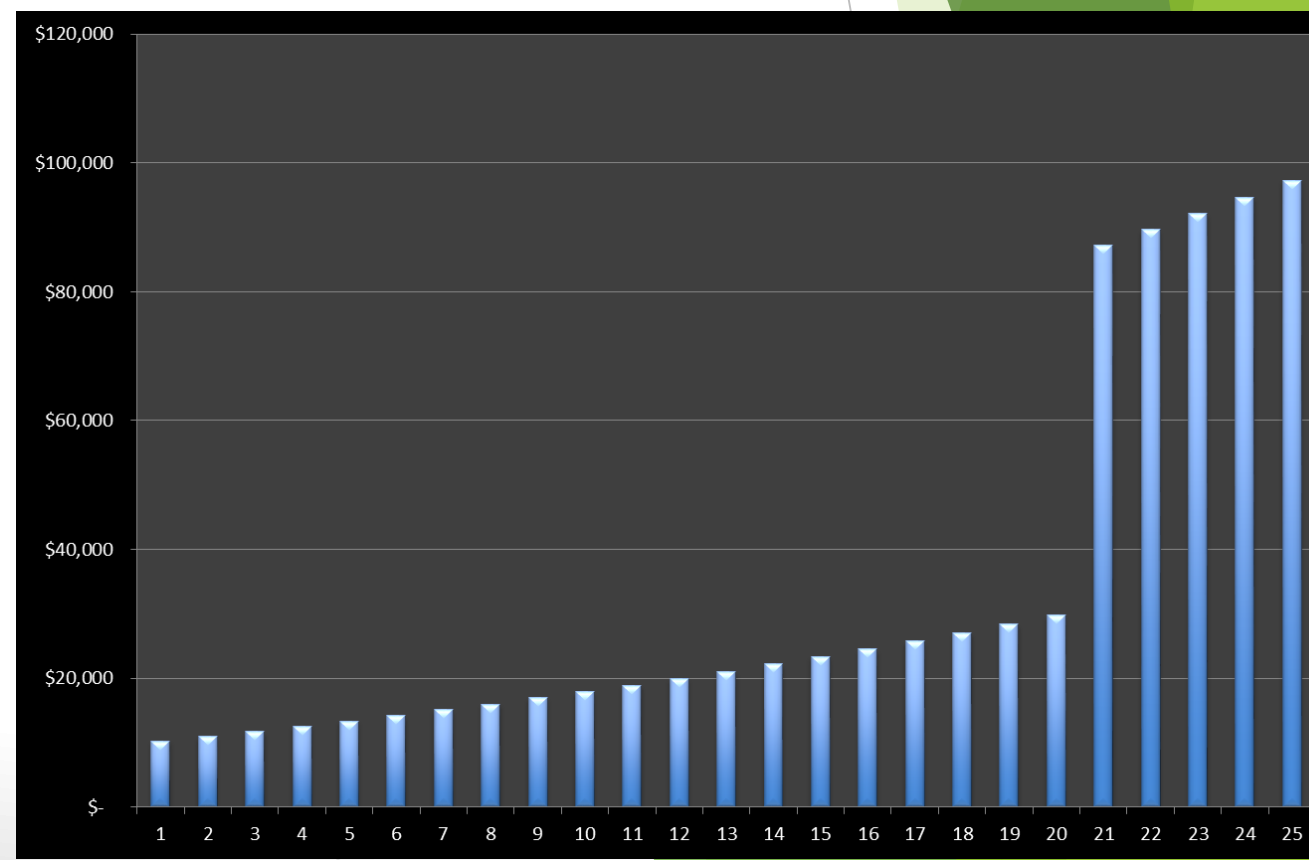
- ▶ Renewable Energy - Savings
- ▶ Ability to add solar curriculum to the district
  - ▶ Small solar “kits” for the classroom
  - ▶ Live real time data from the solar panels
- ▶ Visually displays Fiscal and Environmental Leadership to the community
- ▶ Capacity credits from Xcel Energy
- ▶ Savings can help or fully fund capital needs in District



# Solar opportunities

## ► Belle Plaine High School

- 230KW of potential solar opportunity – demand limited
- Over \$10,000 in positive cash flow first year
- 20 year cumulative cash savings over \$350,000
- 25 year cumulative cash savings over \$800,000



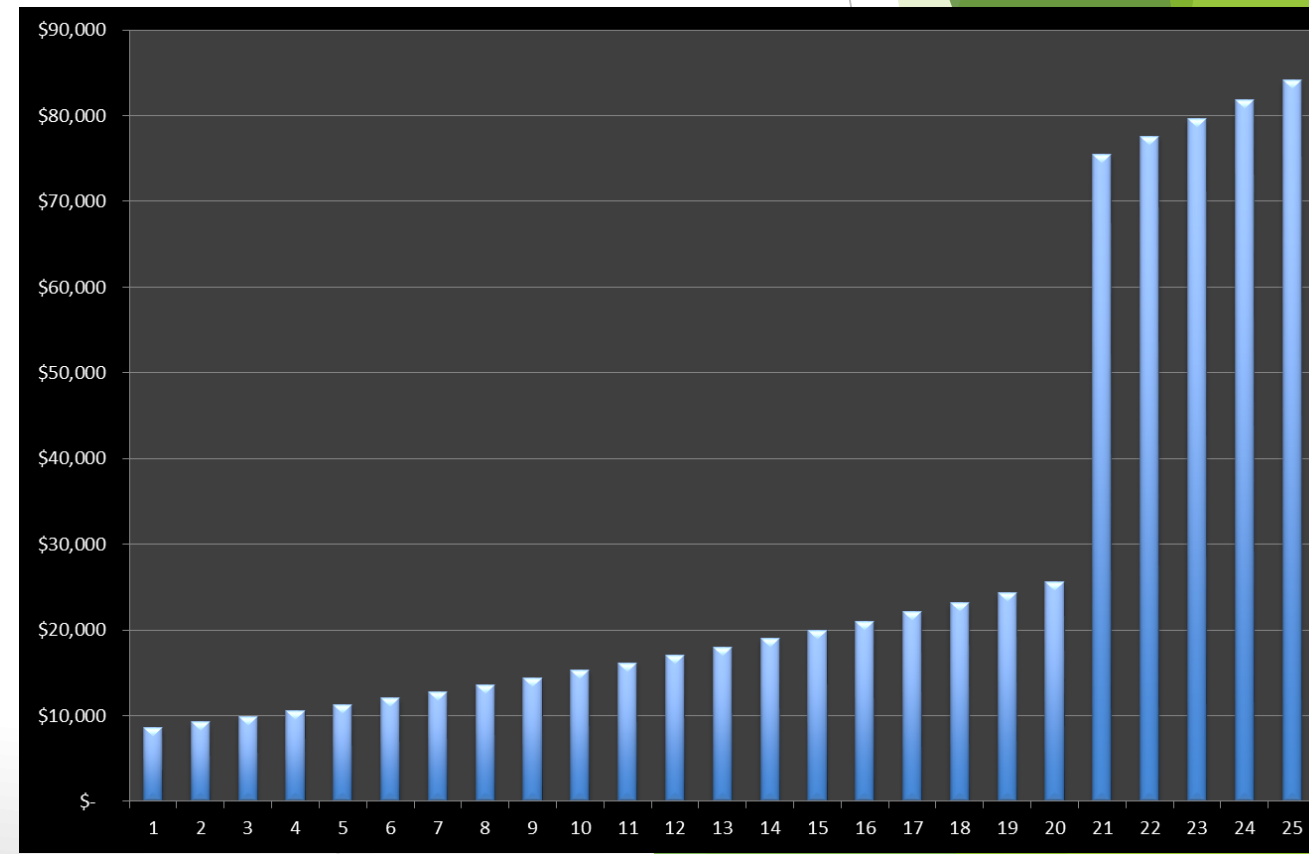


# Solar opportunities



## ► Oak Crest Elementary School

- 200KW of potential solar opportunity – demand limited
- Almost \$10,000 in positive cash flow first year
- 20 year cumulative cash savings over \$300,000
- 25 year cumulative cash savings over \$700,000



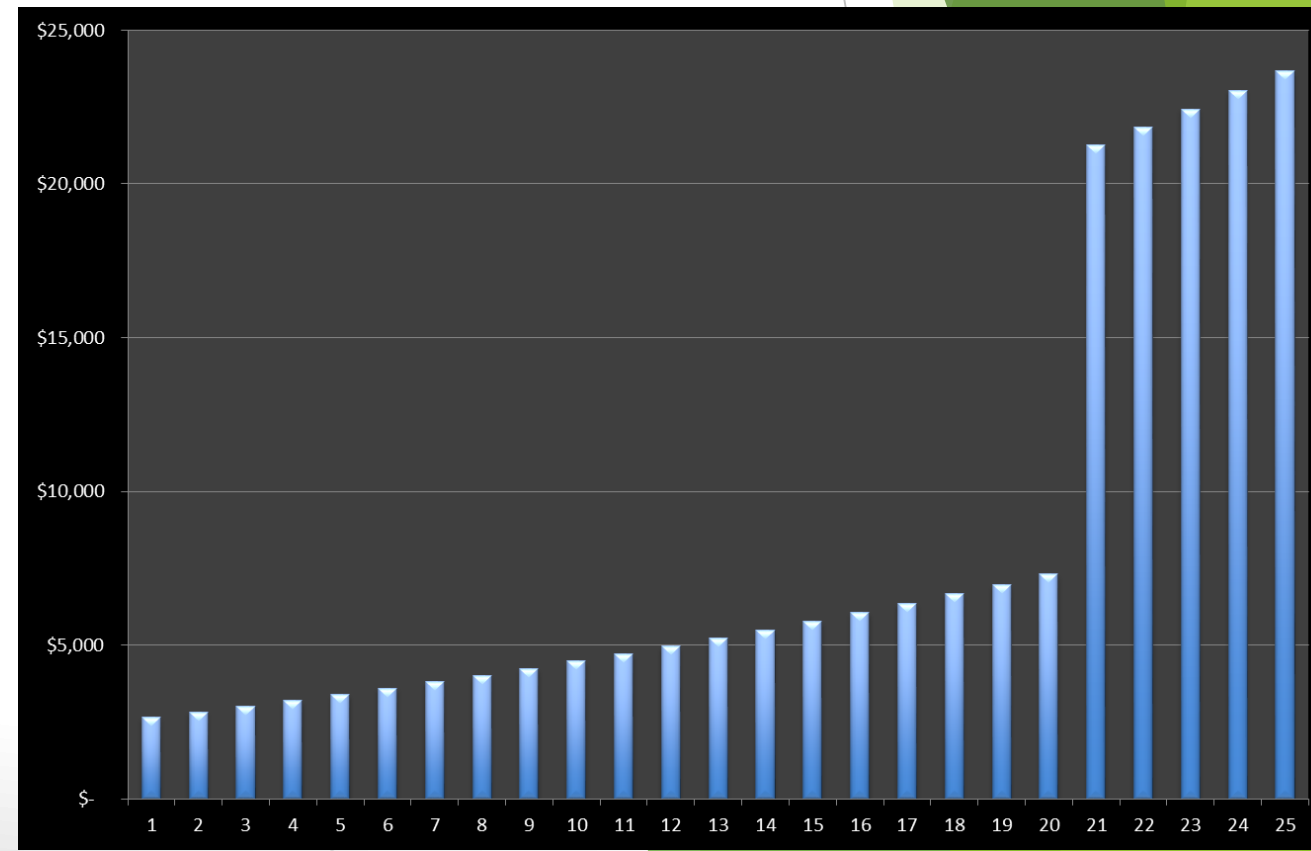
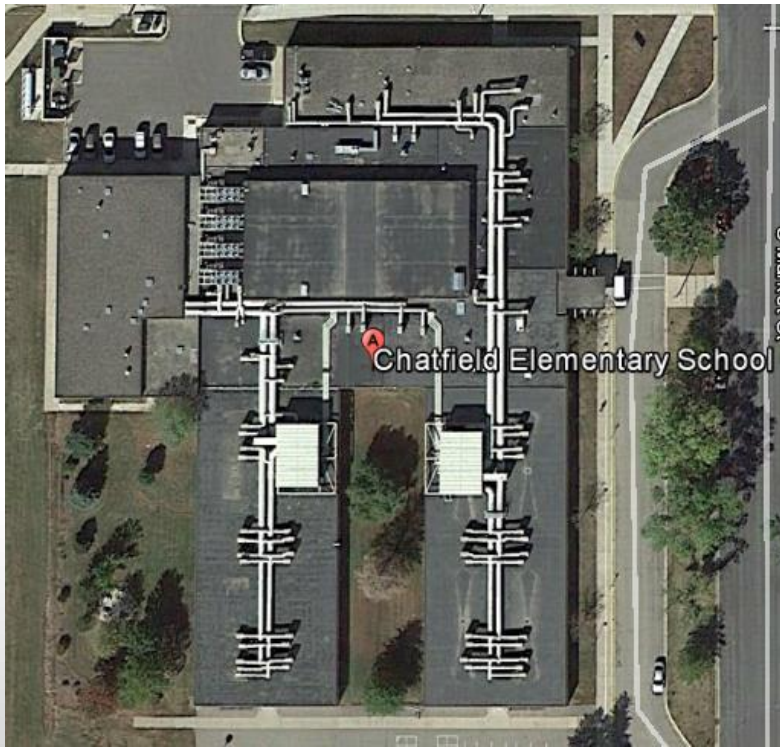


# Solar opportunities



## ► Chatfield Elementary School

- 70KW of potential solar opportunity – Roof limited
- Almost \$3,000 in positive cash flow first year
- 20 year cumulative cash savings over \$60,000
- 25 year cumulative cash savings over \$90,000



# LED Lighting

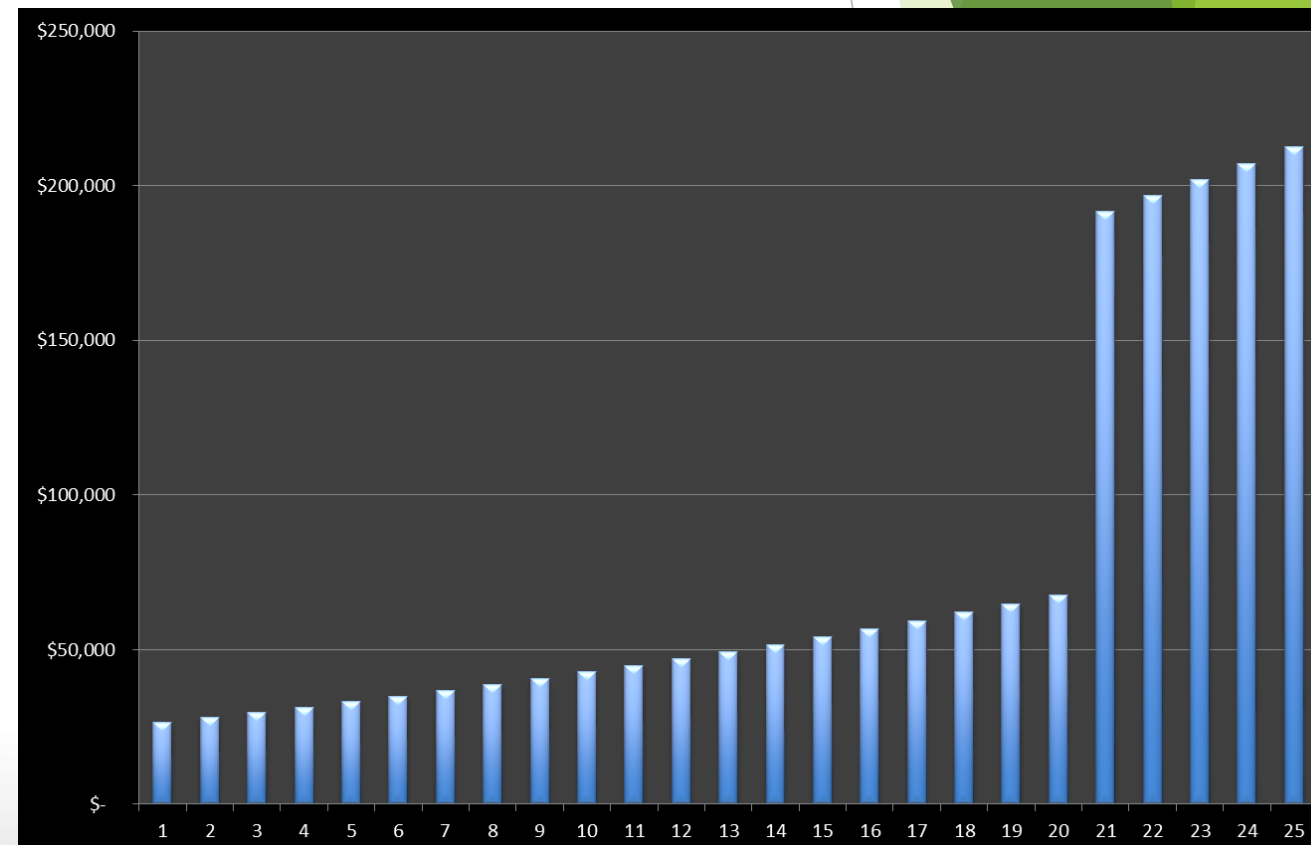
## ► Advantages:

- Up to 60% in Energy and Operational savings
- 20+ year average life
- Better lighting environment
- Utilize EAct (Energy Policy Act) of \$.60 per square foot
  - Share in the savings as an incentive to the district
  - Good through 2016 not sure if it will get extended



# Summary

- ▶ **Total of ALL Schools**
  - ▶ 500 KW of potential solar opportunity throughout the district
  - ▶ About \$30,000 in positive cash flow first year – Std. loan model
  - ▶ 20 year cumulative cash savings of nearly \$1,000,000
  - ▶ 25 year cumulative cash savings of nearly \$2,000,000
- ▶ **Investor Builds, owns and maintains system at their expense**
- ▶ **GUARANTEED SAVINGS THROUGH APEX**
  - ▶ Leverage state statutes to procure project through Design-Build process
  - ▶ Allows District to decide who does the work and what they get
- ▶ **20 Year Agreement**





# Next Steps



## ► **Directed Engineering Study**

- **Finalize solar sizes**
- **Finalize LED Lighting**
- **Finalize solar production**
- **Design electrical tie-ins**
- **Determine interconnect with Xcel Energy**
- **Structural Engineering to verify that the roofs can handle solar panels**
- **Finalize project scope and costs**
- **Finalize 3<sup>rd</sup> party tax ownership/investor details**
- **Develop and finalize other potential Facility Improvement Measures and subcontractor pricing**
- **Finalize guaranteed costs and savings so Belle Plaine School district has no risk**

# Solar - questions

