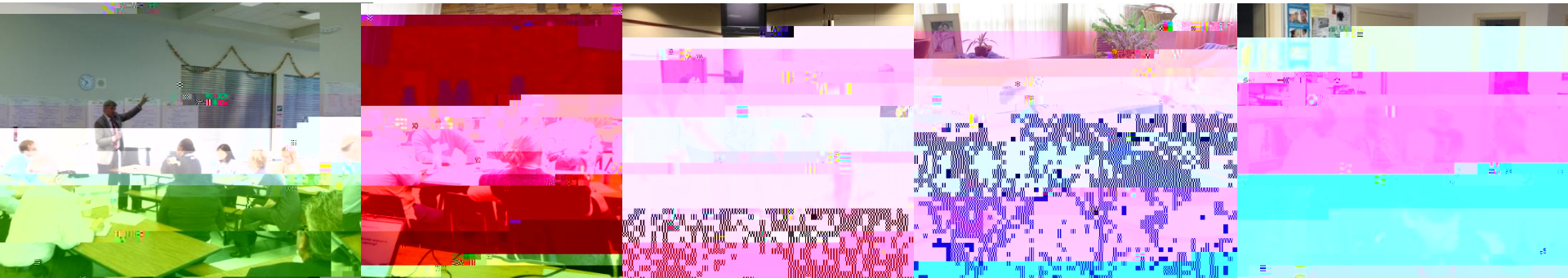
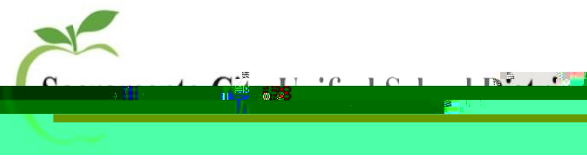


Sustainable Facilities Master Plan EXECUTIVE SUMMARY

June 21, 2012





Formula for Success: *Í Di Hjb['7 \]Xf Yb': JfghÎ*

High Performing Education

+

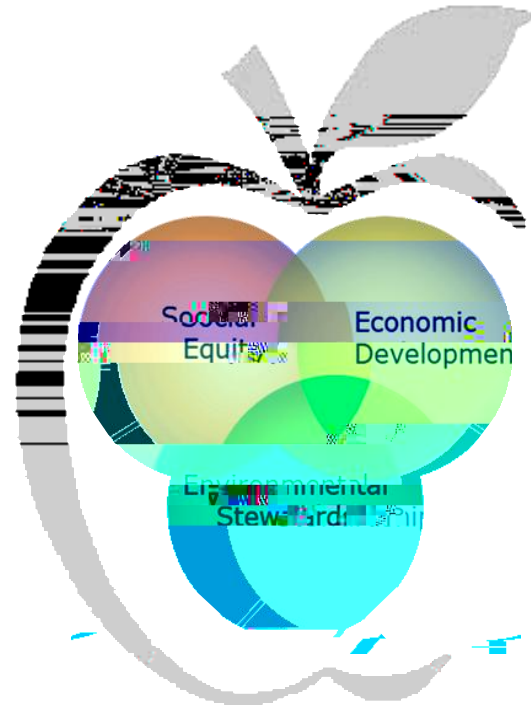
High Performing Facilities

+

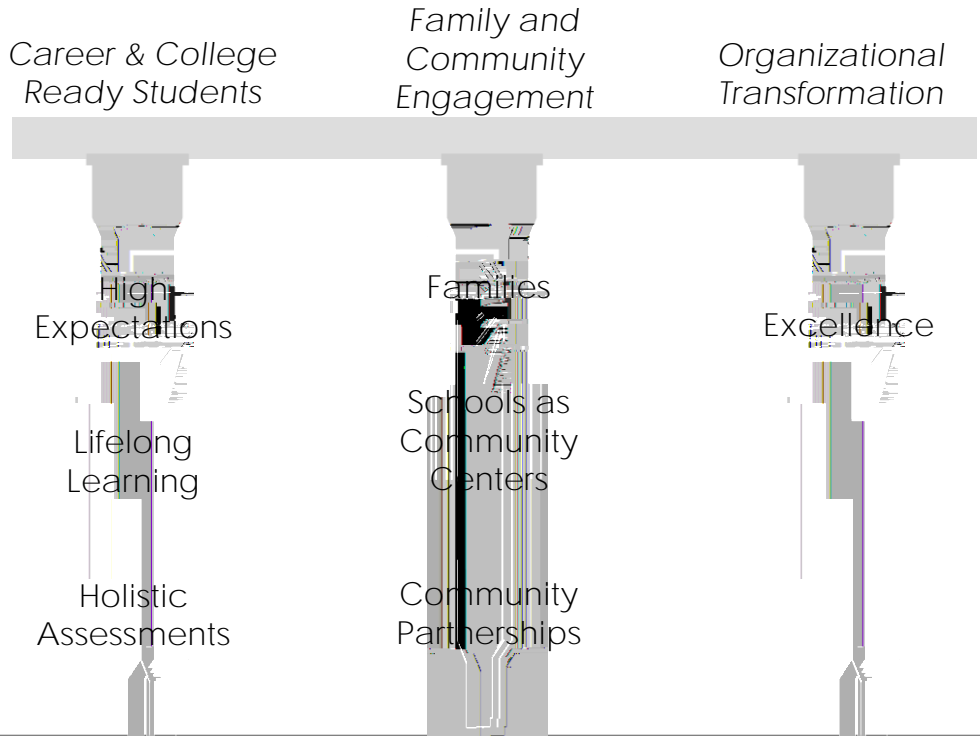
Community Partnerships

=

***HIGH PERFORMING
STUDENTS***

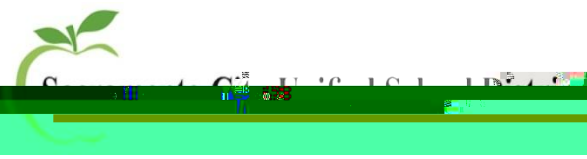


Í Hf]d`Y'6 chca '@bYÎ



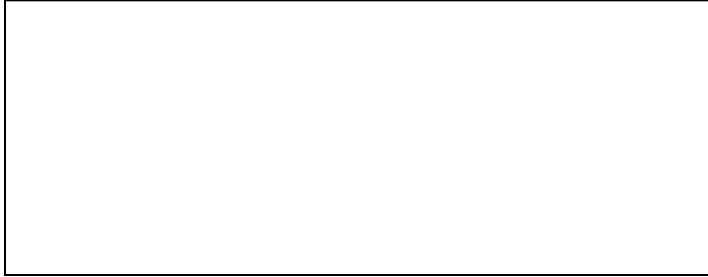
SCUSD Strategic Plan 2010 - 2014



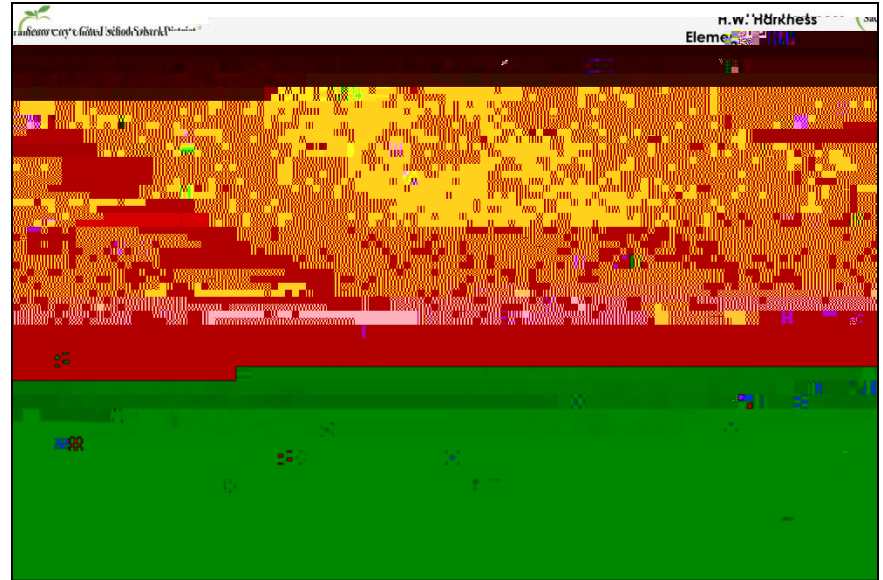


Sustainable Facilities Master Plan

Career & College Ready



Social Equity- Approach

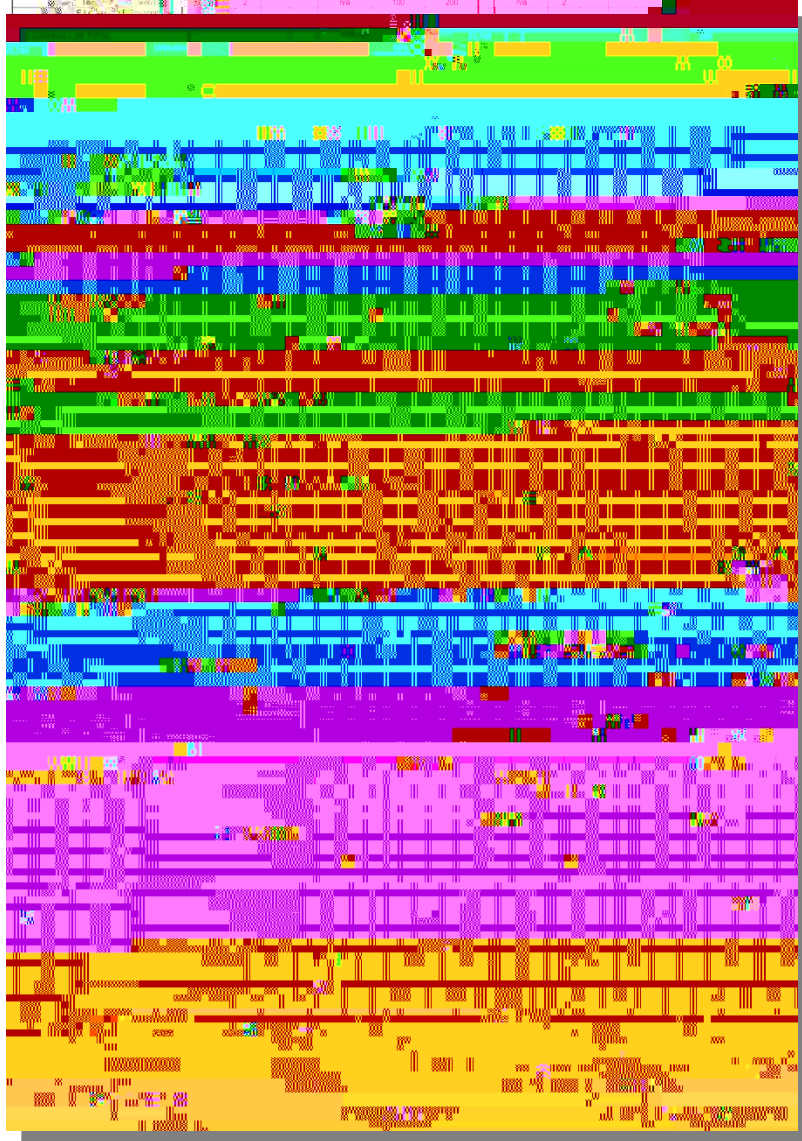




Guiding Principles / Patterns

Goals / Expectations:

To establish the Guiding Principles / Patterns that will align the Strategic Plan and the Educational Vision with Facility Requirements for each of the grade configurations.



PROTO-TYPE PROGRAM SUMMARY

SCHOOL SIZE OPTIMIZATION

- Grade Group Configuration
- Academic Pathway Alignment
- Desired / Contract Max Classroom Loading Options

CAREER & COLLEGE READY

- Core Academic Classrooms
- Learning Labs
 - Science, Technology,*
 - Fine & Performing Arts,*
 - Career Tech*

FAMILY & COMMUNITY ENGAGEMENT

- Multipurpose Center



Sustainable Facilities Master Plan

Environmental Stewardship- Approach



- Create safe and welcoming schools
- Manage stormwater/erosion control
- Improve outdoor surfaces & spaces



- Extend life-cycle of existing building materials
- Promote use of sustainable materials
- Reduce wasteful environmental impacts



- Maximize efficient irrigation systems
- Promote reduction of potable water usage.



- Optimize lighting efficiency and functionality
- Improve day-lighting
- Address sound acoustics to improve learning



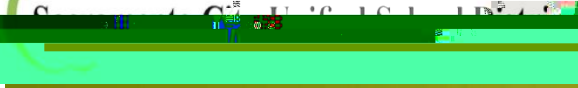
- Optimize energy efficiency/performance
- Improve comfort of interior spaces
- Reduce environmental impact
- Reduce operating costs



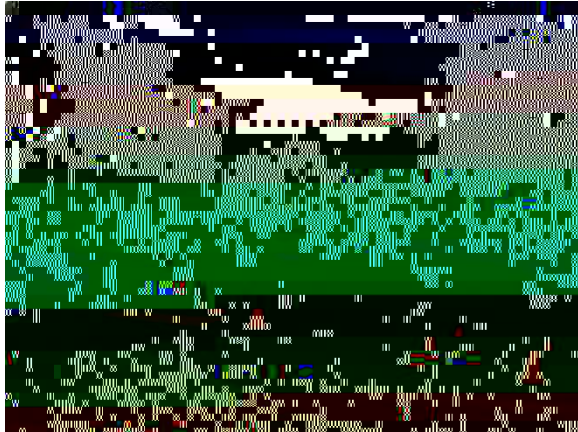
- To optimize facilities to align with Strategic Plan
- To address Common Core Standards impacts



Examples



- School Entry & Drop-off
- Service Access
- Campus Core
- Parking & Drives
- Outdoor Activity
- Utilities & Infrastructure



John Cabrillo Elementary School

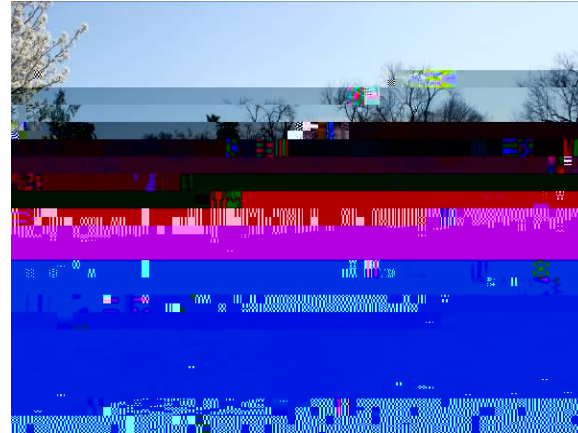


Sam Brannan Middle School

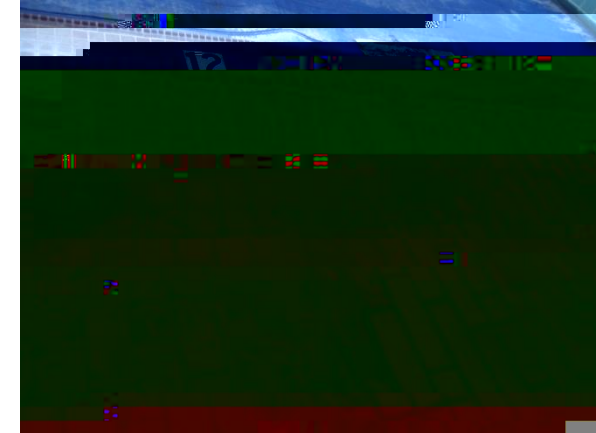


C. K. McClatchy High School

The Met Sacramento



William Land Elementary School

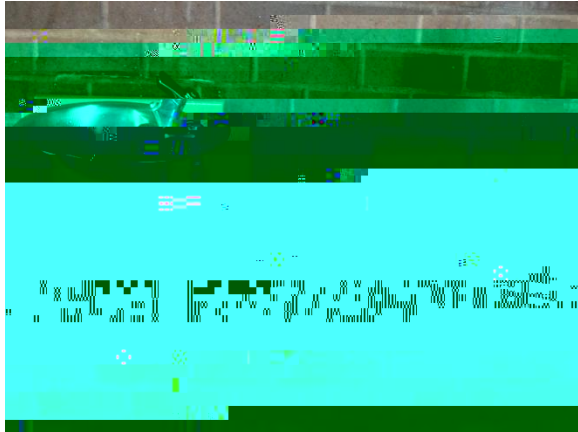


Luther Burbank High



- Site Utilities & Infrastructure
- Specialty Systems

- Plumbing Systems
- Fire Protection Systems



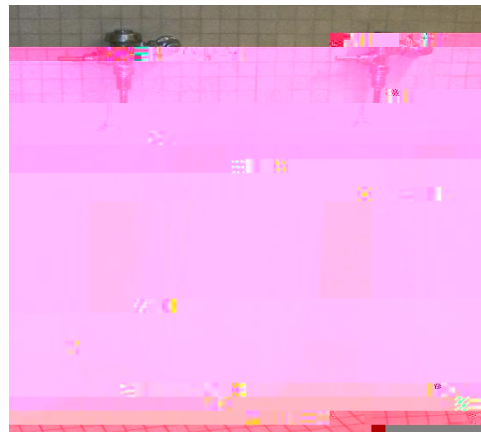
Kit Carson Middle School



Earl Warren Elementary

John F Kennedy High School

Thomas Jefferson Elementary



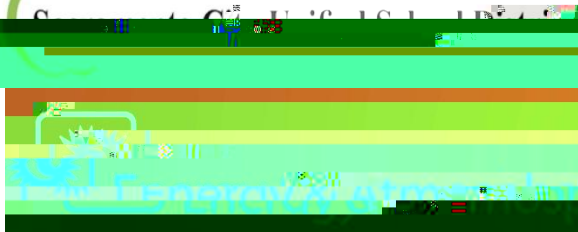
Marian Anderson Elementary



Albert Einstein Middle



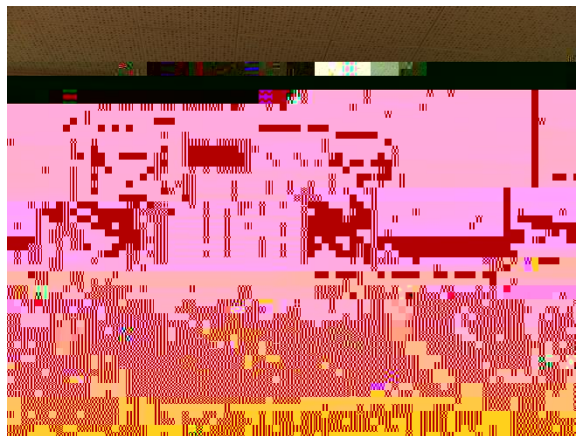
Examples



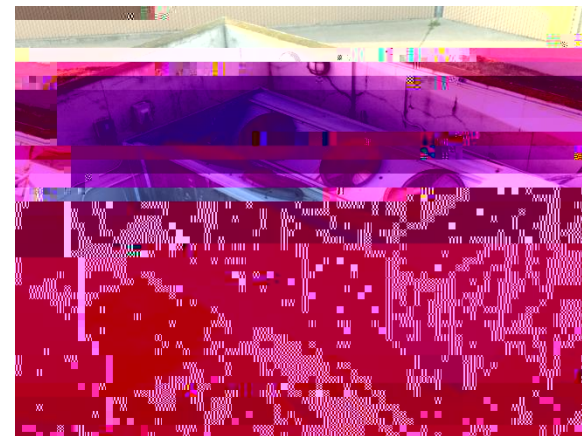
- Central Plant -



Rosemont High School



Sequoia Elementary School



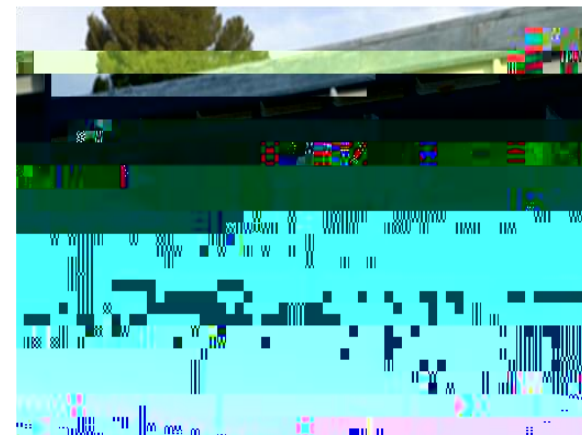
Marian Anderson Elementary



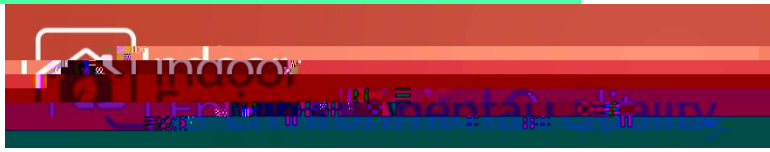
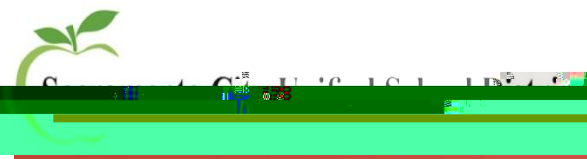
California Middle School



O. W. Erlewine Elementary School



Sutterville Elementary



- Electrical Systems
- Technology Systems
- Lighting Systems
- Low Voltage Systems

Sutter Middle School

Rosa Parks Middle School

Joseph Bonnheim Elementary

Abraham Lincoln Elementary

James W. Marshall Elementary

Golden Empire ES

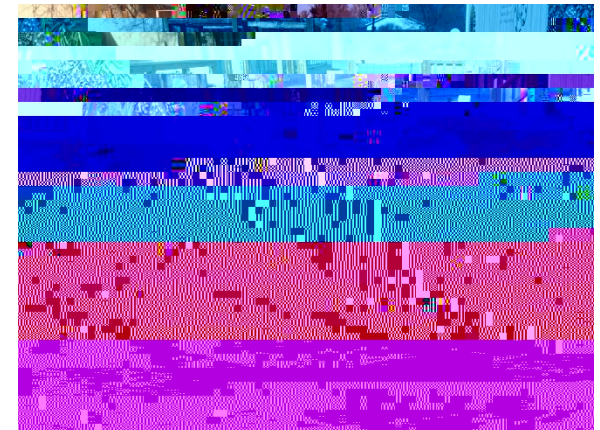
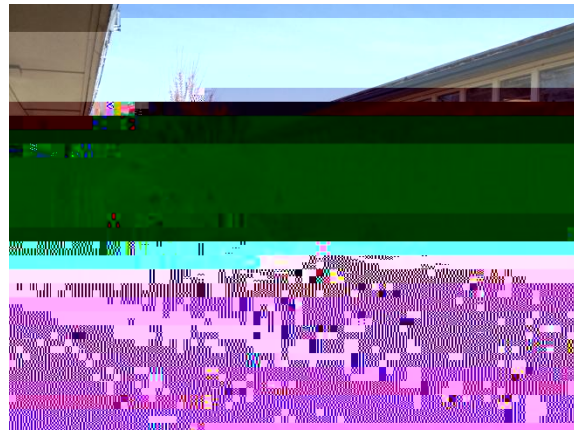


- Career & College Ready
- Family & Community Engagement
- Organizational Transformation

Alice Birney K-8

The MET

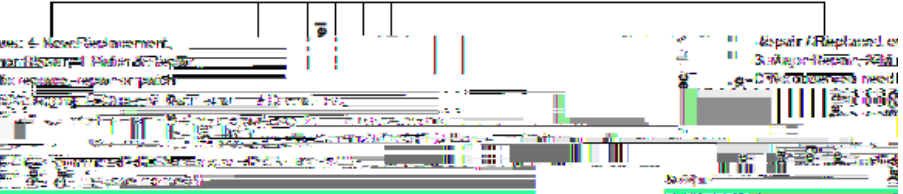
Oak Ridge ES

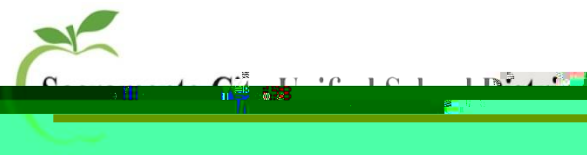


George Washington Carver HS

Sutterville ES

Theodore Judah ES





The Total Project Costs for the categories are as follows:

Code & Life Safety = labeled \$ Value

Maintenance & Operations Costs = labeled \$ Value

High Performance Transformation = labeled \$ Value
Scope required to achieve Modernization / Transformation scope.

Total Code & Life Safety / Maintenance & Operations /
High Performance / Modernization / Transformation
The combination of all categories to achieve the optimized Scope.

The High Performance Transformation costs
The Innovation & Education Section identifies the additional costs above the assessment items carried above to transform the



Sustainable Facilities Master Plan

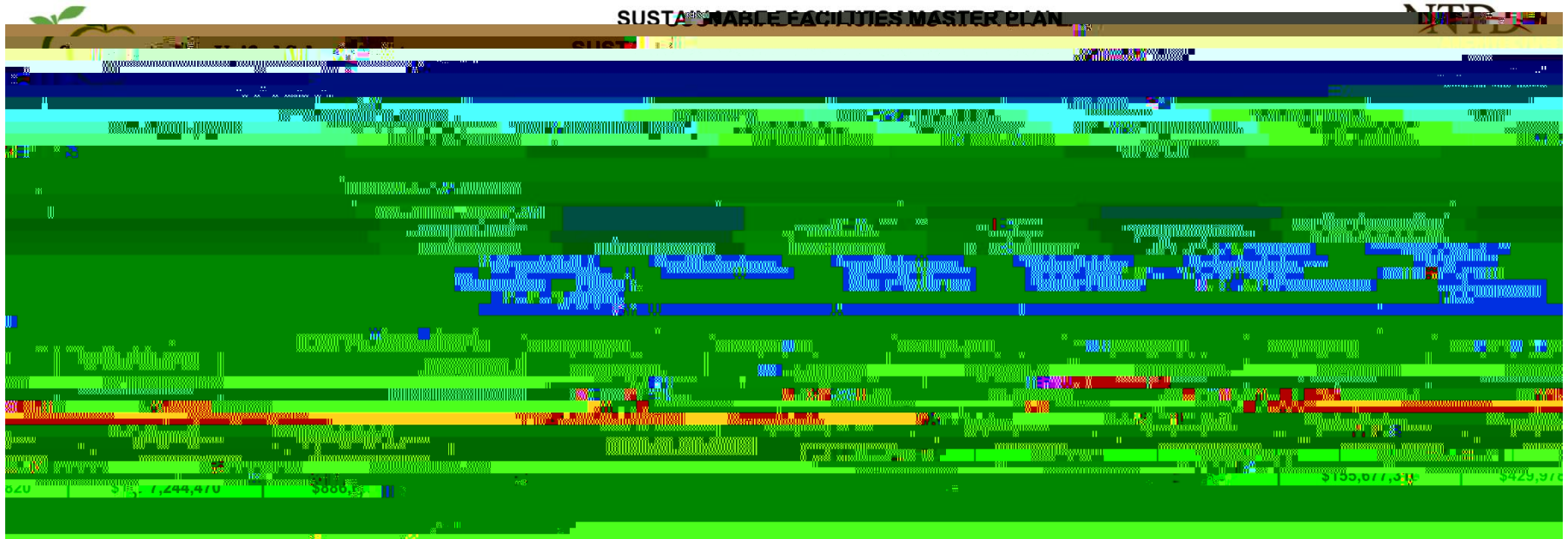
Economic Development- *District / Grade Configuration Example*





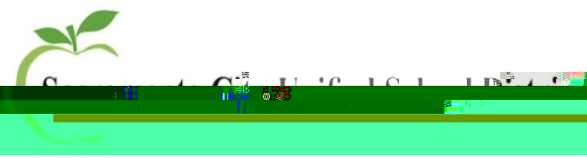
Sustainable Facilities Master Plan

Social Equity - Environmental Stewardship - Economic Development Program Summary

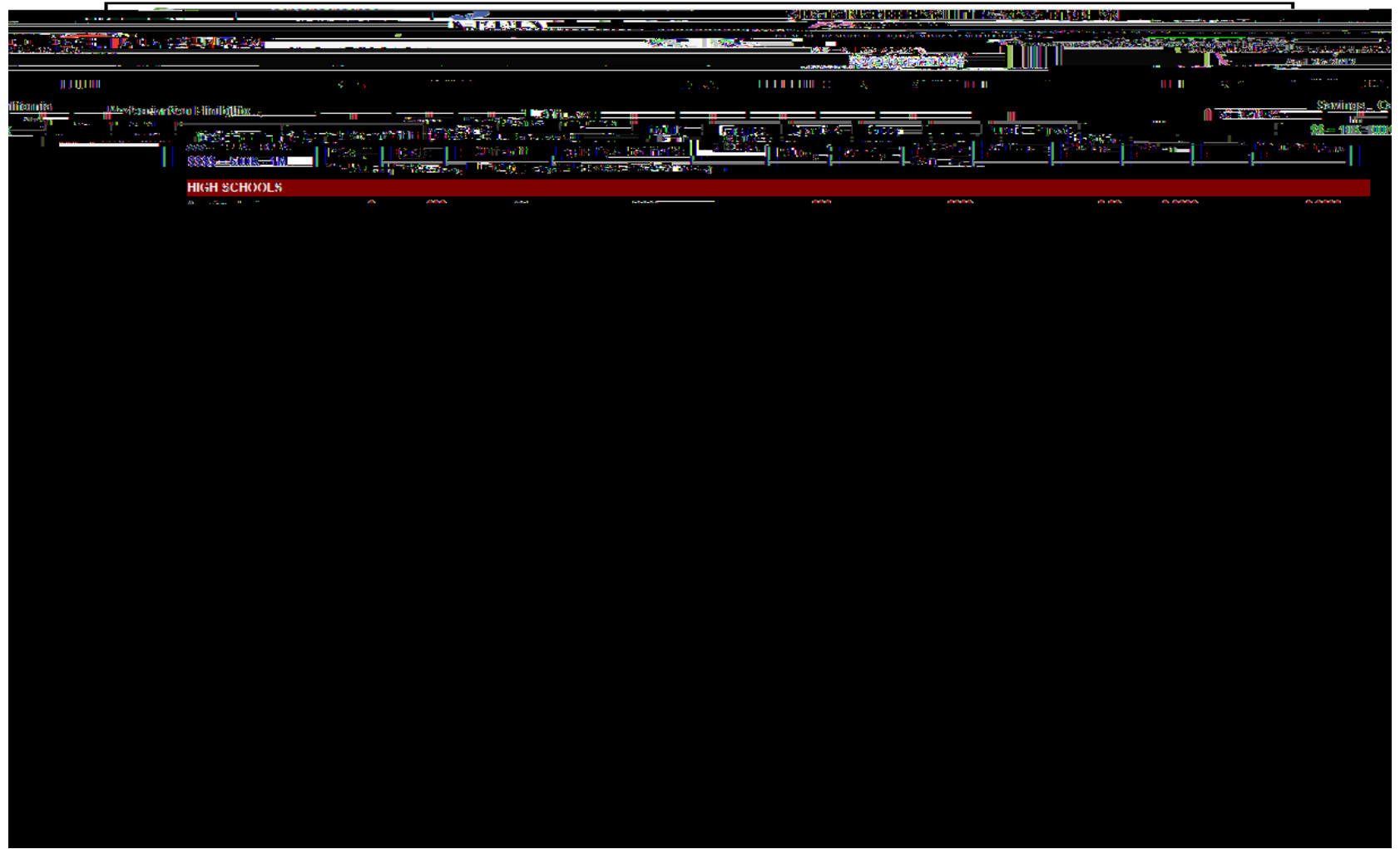


Sustainable Sites through Indoor Environmental Quality = \$1,176,366,610
The cost to convert our schools to make them newer 45 year old schools.

Innovation & Education = \$886,691,290
The additional cost to take our new 45 year old facilities and optimize them as 21st Century Schools for teaching and learning.



Sustainable Facilities Master Plan





Sustainable Facilities Master Plan

Economic Development- *General Fund Impact Case Study Examples*



The location of active turf areas support physical and mental health of students and community members. However, the largest water usage occurs in open passive spaces.

- Active recreational fields need to remain as turf.
- Alternative synthetic fields are available if programmatically feasible;





Sustainable Facilities Master Plan

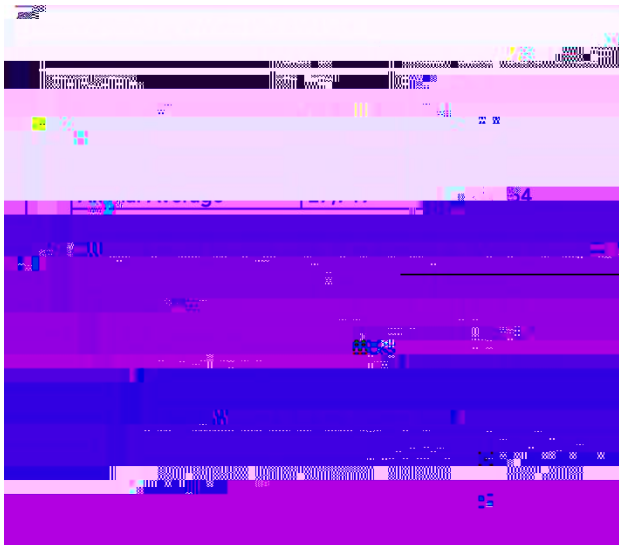
Economic Development- *General Fund Impact Case Study Examples*



The installation of high performance irrigation heads and the use of "Smart Controllers" can save the user an estimated 40% on their water bill.

- Inefficient heads and improper spacing waste water through over-spray or lack of coverage.
- Smart controllers adjust the system needs based on daily climatic changes.
- Most schools do not even contain controllers resulting in the need for maintenance staff to turn on / off individual stations.
- Manual irrigation, systems are inadvertently left on wasting tremendous amounts of water.
- Reference: Assembly Bill AB 1881 and Sacramento City Model Water Efficient Landscape Ordinance section 15.92.210

Case Study Example: James Woody Community Center



Irrigation Controllers
 Programmable to Smart Controller
 \$1,699 annual savings

Water Use Reduction
 Climate Sensitive Plants & Irrigation
 20% Reduction: \$3,396 annual savings
 50% Reduction: \$8,491 annual savings

Return On Investment (ROI) Analysis	
ET Based Controllers	\$8,366
Flow Monitoring	\$945
Shipping/Taxes	\$1,862
Installation Cost	\$3,724
Total One Time Investment	\$14,897



Sustainable Facilities Master Plan

Economic Development- *General Fund Impact Case Study Examples*



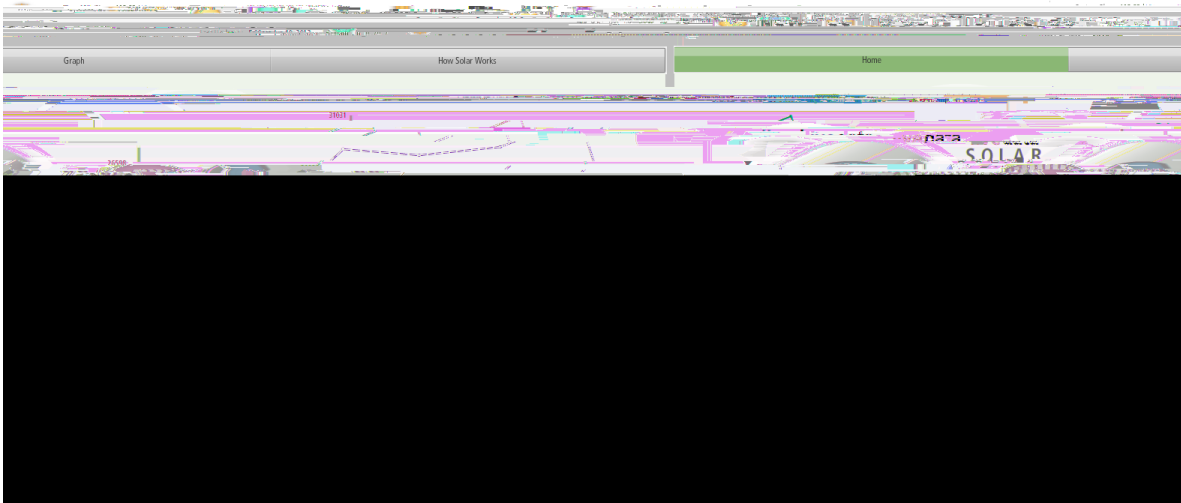
On-site renewable energy systems reduce environmental and economic impacts associated with fossil fuel energy use.

Reference: *Grid Neutral Schools Program*

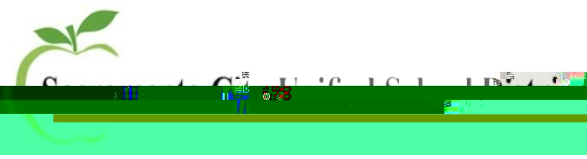
Case Study Example: Napa New Technology High School

Project Parameters:

- 400 Student High School
- PV System Size: 108.92 DC kW
- Annual Percent Usage Offset 33.3%
- Projected: **\$23,653 annual savings**
- Building; 40,000sf
- Annual Estimated Production 139,770 kWh
- \$655,210 (Includes cost of PV & Carport Structures)



For live tracking see: http://live.deckmonitoring.com/?id=new_technology_high_school



Sustainable Facility Design



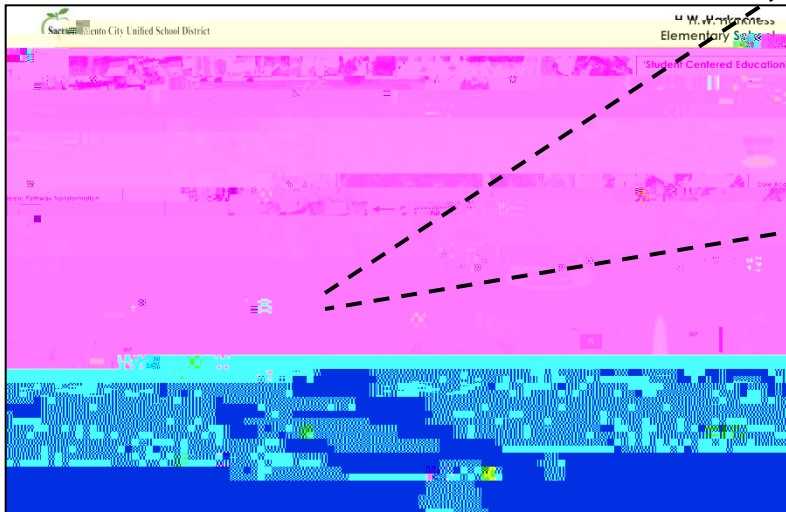


Sustainable Facilities Master Plan

Pillar I: Career & College Ready



- Hands-On Learning Laboratories
- Relevant & Rigorous
- Flexible & Adaptable Spaces



*Project Lab (Art & Science)
Transformation Concept*

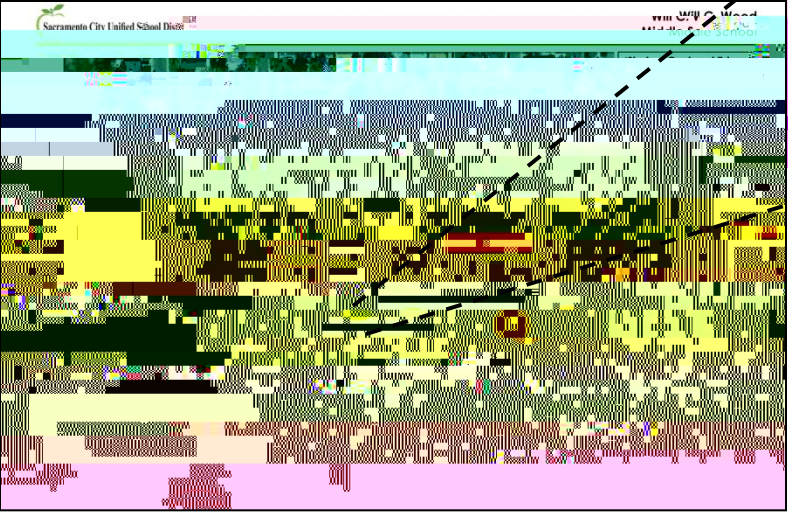


Sustainable Facilities Master Plan

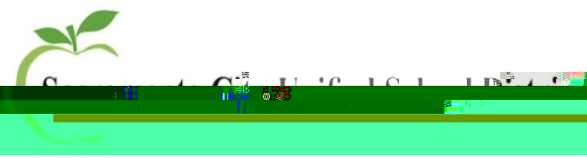
Pillar II: Family & Community Engagement



- Technology Center
- Educational & Social Experiences
- Community Resource

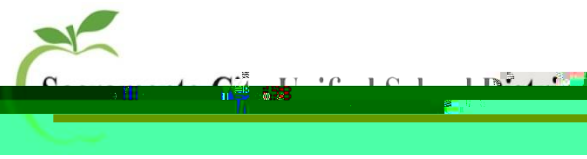


Technology Center Transformation Concept



Sustainable Facilities Master Plan





Sustainable Facilities Master Plan

Next Steps

Our time is now to:

View facilities as a capital asset

- Economic Resource Management
- Operational Efficiencies
- Reduce General Fund Expenditures

View facilities as a strategic tool

- Align with District's Educational Vision
- Support & Enhance Student Achievement
- Sustainable Initiatives
- Promote Community Collaboration

Seek all available Funding Strategies

- Federal
- State
- Local

Our time is now to look holistically at the District and seek an implementation strategy that creates Community Centered 21st Century Educational Facilities for our students, staff, parents and community members in the Sacramento City Unified School District.