BENCHMARKING FOR STRATEGIC PLANNING

The CHPS Operations Report Card
Our mission is to make every school an ideal place to learn.
“40% of schools are in bad to poor condition.”

“It will take $271 billion to bring all of those buildings up to a decent standard.”

Schools earn a “D” grade from the American Society of Civil Engineers 2013 Report Card for America’s Infrastructure

STUDY: 30% of CA’s schools are older than 50 years and $117 billion is needed over the next 10 years
7 Essential Metrics for Schools

Create healthy and productive learning environments

- Indoor Air Quality
- Thermal Comfort
- Acoustics
- Visual Quality

Conserve natural resources

- Energy Use
- Water Use
- Waste management
The Operations Report Card

- Web-based software program that helps you benchmark seven school-focused metrics
- Get an easy-to-understand building performance score
- Build systems knowledge
- Get actionable improvement recommendations
- Develop outcome-oriented plans
What Is The ORC?

• Online subscription service

• Guides you through key benchmarking steps
  – Gather school-wide building/systems data
  – Survey faculty and staff
  – Collect classroom measurements
  – Complete ENERGY STAR Portfolio Manager
  – Perform water fixture and waste audits

ORC Dashboard

My Schools

<table>
<thead>
<tr>
<th>School Name</th>
<th>Date Added</th>
<th>Date Completed</th>
<th>District Survey</th>
<th>Collect Data</th>
<th>Portfolio Manager</th>
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<tbody>
<tr>
<td>Academy 2</td>
<td></td>
<td></td>
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<tr>
<td>Energy Star (Los Solares)</td>
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<td>In Progress</td>
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<td>San Jose **</td>
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** Invoiced and payment is pending. You may begin the ORC. Results will not be available until payment is received.

My Program Users

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Email</th>
<th>School</th>
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<td>All</td>
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My Results

<table>
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<tr>
<th>School Name</th>
<th>Energy</th>
<th>Thermal</th>
<th>Assessment</th>
<th>Visual</th>
<th>HG</th>
<th>Meter</th>
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<tr>
<td>San Jose **</td>
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</table>
What You Get With the ORC

- ORC Report Card
- Detailed reports
- Suggested facility improvements
- Recognition

<table>
<thead>
<tr>
<th>Subject</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Energy Efficiency</td>
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<tr>
<td>Thermal Comfort</td>
<td>68</td>
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<tr>
<td>Acoustics</td>
<td>76</td>
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<tr>
<td>Visual Comfort</td>
<td>72</td>
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<tr>
<td>Indoor Air Quality</td>
<td>60</td>
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<tr>
<td>Water Conservation*</td>
<td>55</td>
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<tr>
<td>Waste Management*</td>
<td>61</td>
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*currently being piloted
Why Do the ORC?

- Benchmark and improve the learning environment
- Prioritize precious resources
- Develop need and support for local school bonds
- Measure before and after improvements
- Validate the actual performance of schools
- Complements facility condition assessments
The Operations Report Card Cycle
The ORC Cycle: Engage

Team

~$2500.00

Tools

$1000 - $600/school

Registration

ORC Registration:

$1000 - $600/school

Training

Utility Bills

Buy-In
The ORC Cycle: Benchmark

- Staff Survey
- School Data
- Classroom Measurements
- ENERGY STAR Portfolio Manager
- Waste Audit (optional)
- Water Audit (optional)
The ORC Cycle: Plan

- Develop timeframe
- Prioritized based on:
  - Improvement of the learning environment
  - Occupant survey results
  - Cost of improvements

<table>
<thead>
<tr>
<th>Name</th>
<th>Energy</th>
<th>Thermal</th>
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The ORC Cycle: Improve

• Implement your action plan
• Benchmark the “after” using the Operations Report Card
• Measure improvement against your established baseline
Case Study: San Bernardino City USD

- 70 schools and buildings
- 8th largest district in CA
- Use as a benchmark
- Apply for state bond funds and utility incentives for all projects
- ORCs for 13 schools
- Typical school:
  - Housed in one large building
  - Central mechanical system
  - Limited use of natural light
  - No exterior windows
SBCUSD ORC Report Cards

Del Vallejo Middle School

<table>
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<th>Subject</th>
<th>Grade</th>
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<tr>
<td>Thermal Comfort</td>
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<tr>
<td>Acoustics</td>
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<tr>
<td>Visual Comfort</td>
<td>64</td>
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<tr>
<td>Indoor Air Quality</td>
<td>81</td>
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SMART SCHOOLS SYMPOSIUM 2013
## Pacific High School

<table>
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<th>Subject</th>
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<tbody>
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<tr>
<td>Thermal Comfort</td>
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<tr>
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<tr>
<td>Indoor Air Quality</td>
<td>77</td>
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![Spider chart](chart.png)
LEARN MORE

• Check out the relevant materials for today: www.chps.net/sss2013
• CHPS website: www.chps.net/orc
• Monthly ORC webinar: www.chps.net/education
• Get a demo ORC account: email me!
Thank you!

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