
KIDS' SAFE & HEALTHFUL FOODS PROJECT

The Right Tools for the Job: School Foodservice Equipment and Infrastructure Needs

Jessica Donze Black RD, MPH



Kids Safe and Healthful Foods Project



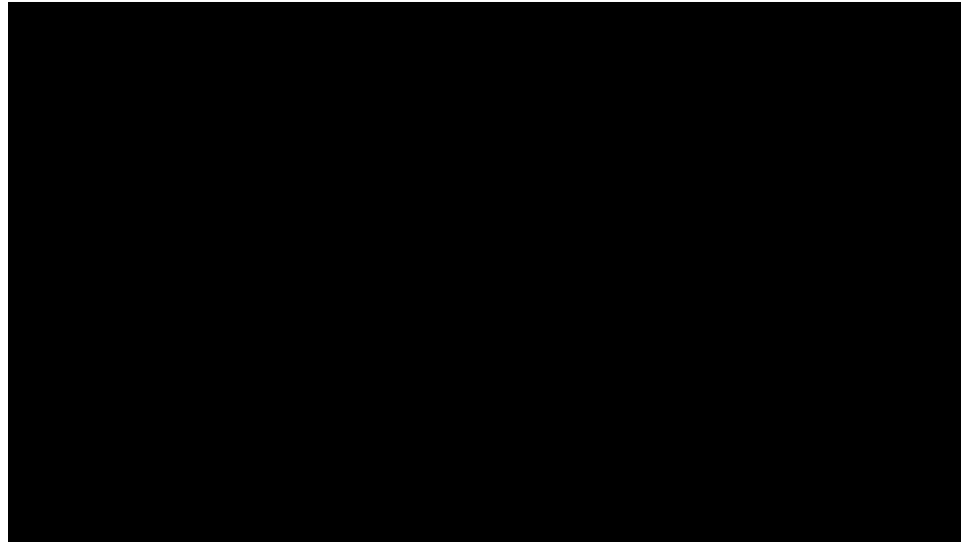
OUR MISSION

- Progress toward meeting updated nutrition standards and challenges encountered.
- Equipment and infrastructure needs and implications.
- innovative strategies for addressing schools' needs.
- Recommendations and next steps



A Recipe for a Challenge

- Until early 1980's Federal government regularly appropriated funds for school kitchen equipment, but then nearly 30 years without support.
- 2009 \$100M from American Recovery and Reinvestment Act (ARRA) resulted in over \$630M requests
- Several years with no appropriations but much discussion and many questions.
- 2012 Updated meal standards going into effect going to put a strain on an already compromised system.



Kitchen Infrastructure and Training for Schools (KITS) Study

- First-ever nationally representative, quantitative study assessing school's readiness for implementing updated meal standards, barriers and specific kitchen equipment, infrastructure and training needs.
- Data is representative at both the national and state level for all 50 states and District of Columbia

Sample & questionnaire design

- Web-based survey to SFAs, self-administered
- Collaborative effort with expert panel of child nutrition and food service experts
- Survey focused on the SFAs' perceived needs in relation to meeting the new *lunch* requirements
- Questionnaire underwent two rounds of pretesting with SFA directors before it was finalized
- Data were collected August through December 2012

Data analysis

- 3,372 SFAs completed the survey
- Key findings were examined for statistically significant differences among subgroups of SFAs
 - Size (5 categories)
 - Community type (urban, suburban, rural)
 - FNS region (7 regions)
 - Poverty level (3 levels)

Background characteristics of public SFAs

- Most SFAs are small
 - Half of all SFAs have fewer than 1,000 enrolled students
 - More than half (55 percent) have 1 to 3 schools
 - Only about one in ten SFAs have 12 or more schools (11 percent)
 - Districts with >10,000 students make up just 7 percent of SFAs, they serve 55 percent of all public school students.
- About six in ten SFAs (62 percent) characterize their location as rural
- SFAs are fairly evenly distributed by poverty category*
 - Low (<40 percent F/R)
 - Intermediate (40 to 60 percent F/R)
 - High (>60 percent F/R)

* Based on percentage of students approved for free/reduced-price meals

Various types of kitchens used across districts Nationally

- Full-service kitchens (88 percent)
 - Prepare and serve meals at the schools in which they are located
- Production kitchens (23 percent)
 - Prepare and serve meals at the schools where they are located and send food/meals to other schools in SFA
- Central kitchens or commissaries (9 percent)
 - Prepare food off-site and ship to multiple schools, either in bulk or as pre-portioned meals
- Finishing or satellite kitchens (31 percent)
 - Receive food or meals from central production facilities, production kitchens, or commercial vendors

California

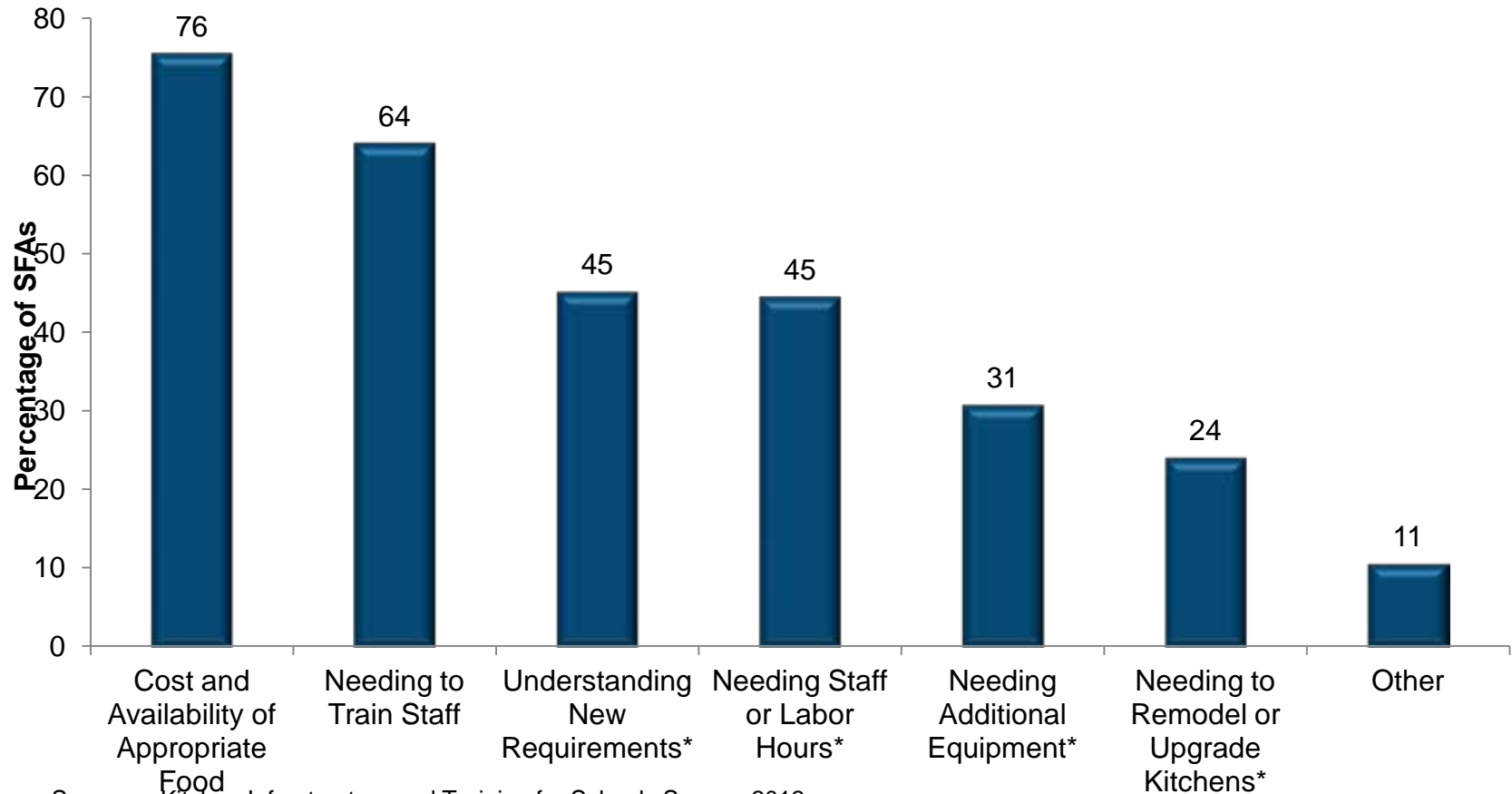
| School district characteristics | California | United States |
|--|------------|---------------|
| Student enrollment* (median per SFA) | 1,875 | 1,017 |
| Number of public schools* (median per SFA) | 5 | 3 |
| Location of most schools | | |
| Urban/suburban | 51% | 38% |
| Rural | 48% | 62% |
| Students approved for free/reduced-price lunch* (mean per SFA) | 59% | 49% |
| Food service management company used | 16% | 17% |
| Central production facilities | 27% | 9% |

The Good News!

- 96% of districts in CA (94% nationally) indicated they would be able to meet nutrition standards by the end of the 1st school year
- 93% in CA were certified as doing so as of December!)



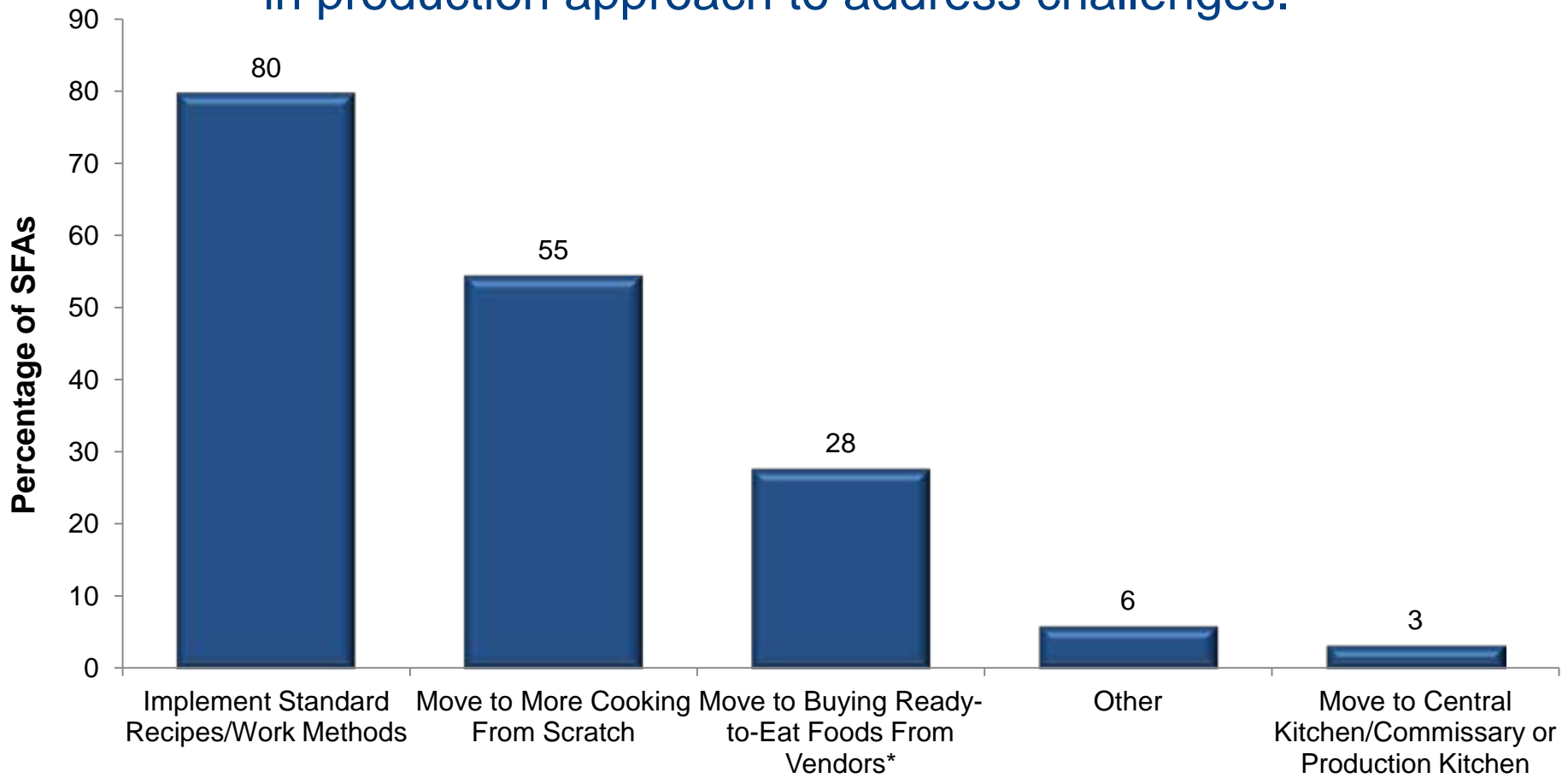
Finding 2: 91 percent nationally faced at least one challenge to implementation by start of SY 2012-13



Source: Kitchen Infrastructure and Training for Schools Survey, 2012.

*Questionnaire items had nonresponse rates between 5 and 9 percent. SY = School year.

90 percent of SFAs had made or planned to make at least one change in production approach to address challenges.



A Deeper Dive into Equipment

- Is existing equipment adequate to meet new requirements?
 - More fruits and vegetables on daily menus
 - Greater variety of fruits and vegetables
 - At least half of grains offered are whole grain-rich
 - Different portion sizes for different grade groups
 - New calorie ranges and saturated fat, *trans* fat, and sodium targets

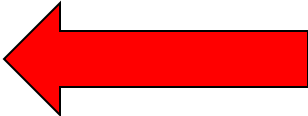
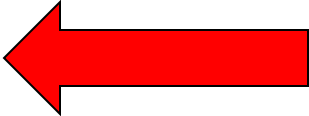
- For each new requirement, is existing equipment adequate to meet *four specific food service functions*?
 - Receiving and storage
 - Food preparation
 - Holding and transportation
 - Meal service

Equipment needs

88% of SFAs nationally and 93% of SFA's in CA reported needing at least 1 piece of equipment

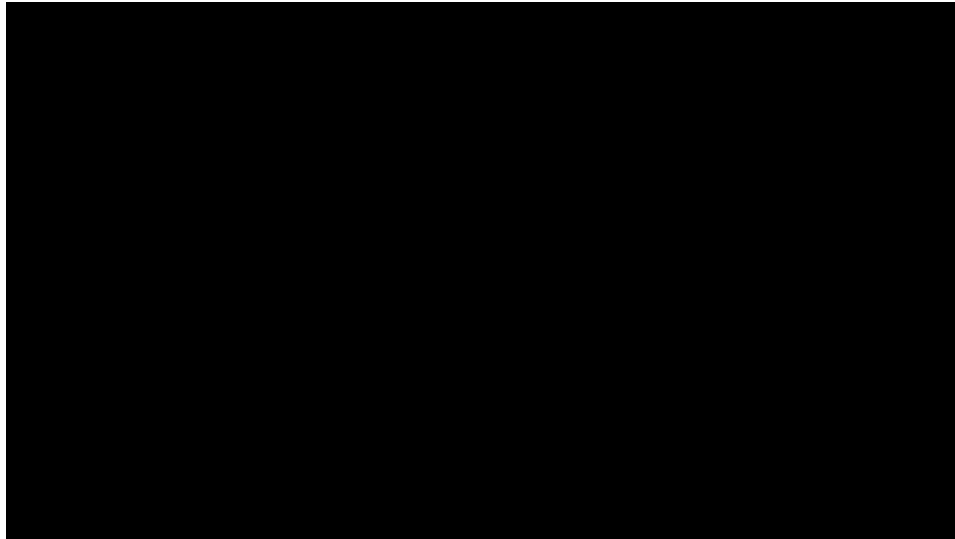


Adequacy of Existing Equipment :

- Is existing equipment adequate to meet new requirements?
 - More fruits and vegetables on daily menus 
 - Greater variety of fruits and vegetables
 - At least half of grains offered are whole grain-rich
 - Different portion sizes for different grade groups
 - New calorie ranges and saturated fat, *trans* fat, and sodium targets
- For each new requirement, is existing equipment adequate to meet *four specific food service functions*?
 - Receiving and storage 
 - Food preparation
 - Holding and transportation
 - Meal service

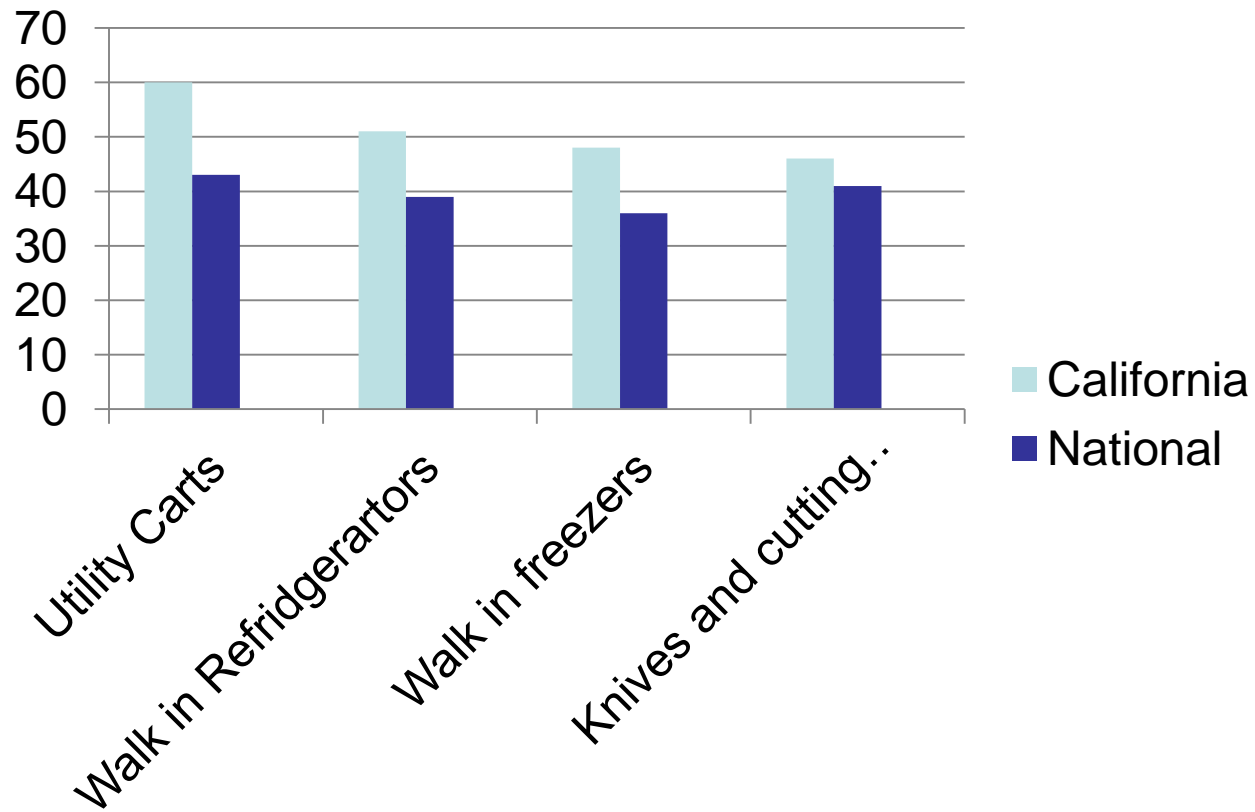
Overcoming challenges through “Work-Arounds”

- Examples included:
 - Manually chopping/slicing fruits and vegetables because slicers and choppers were unavailable
 - Storing fruits and vegetables off-site and transporting them daily
 - Keeping fruits and vegetable in temporary storage containers, such as small coolers or milk crates
- Leading reasons why work-arounds were inadequate:
 - Expensive
 - Inefficient
 - Unsustainable



Types of equipment needed: top 5 among school kitchens In California

(list included 49 items)



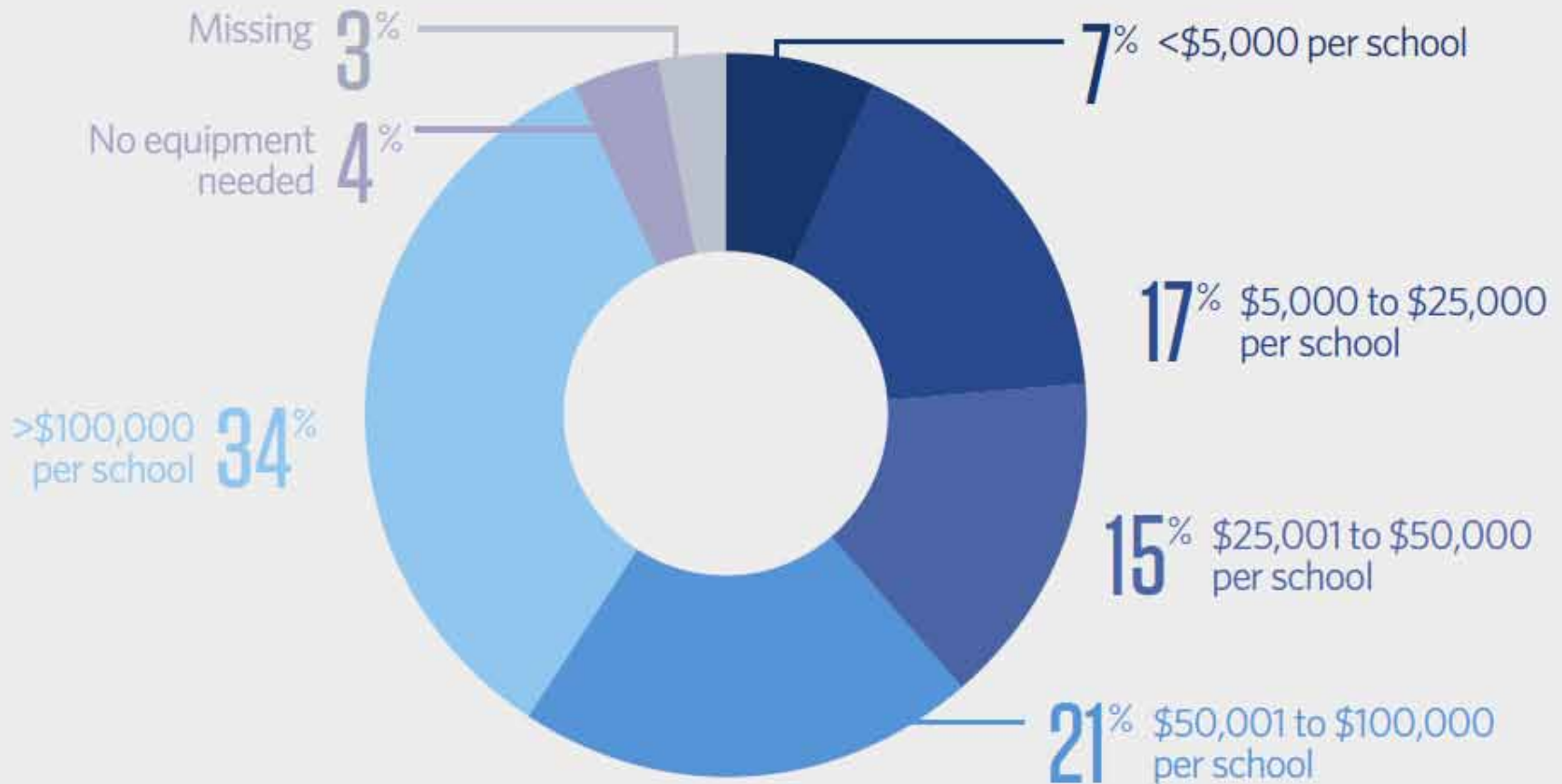
Types of equipment needed: top 5 among central kitchens (list included 27 items)

| Equipment | Percentage of SFAs that need this | Estimated unit cost (dollars) |
|-------------------------------------|-----------------------------------|----------------------------------|
| | piece of equipment | |
| Hot holding mobile carts | 34.1 | 6,079 |
| Sets of knives with cutting boards | 31.9 | 530 |
| Automatic high-capacity can openers | 29.7 | 3,537 |
| Walk-in freezers | 29.7 | 31,500 |
| Walk-in refrigerators | 29.2 | 29,056 |

Equipment needs by size

- Medium, large, and very large districts (> 2,500 students):
Most likely to need large equipment items, such as walk-in refrigerators and freezers and reach-in refrigerators
- Small SFAs (1,000 to 2,499 students):
More likely to need equipment to set up self-serve salad or fruit/vegetable bars
- Very small SFAs (<1,000 students):
Most likely to report needing software programs such as those used for menu planning and nutrient analysis.

The Cost of Food Service Equipment Needed by California Schools



Not Necessarily an Unmet Need

- 53% of school districts in California (42% nationally) reported having budgets for kitchen equipment purchases.
- Of the districts with budgets, 34 % expected the resources to be adequate.
- 25 % of SFAs in California were unsure whether they had a budget to purchase equipment.

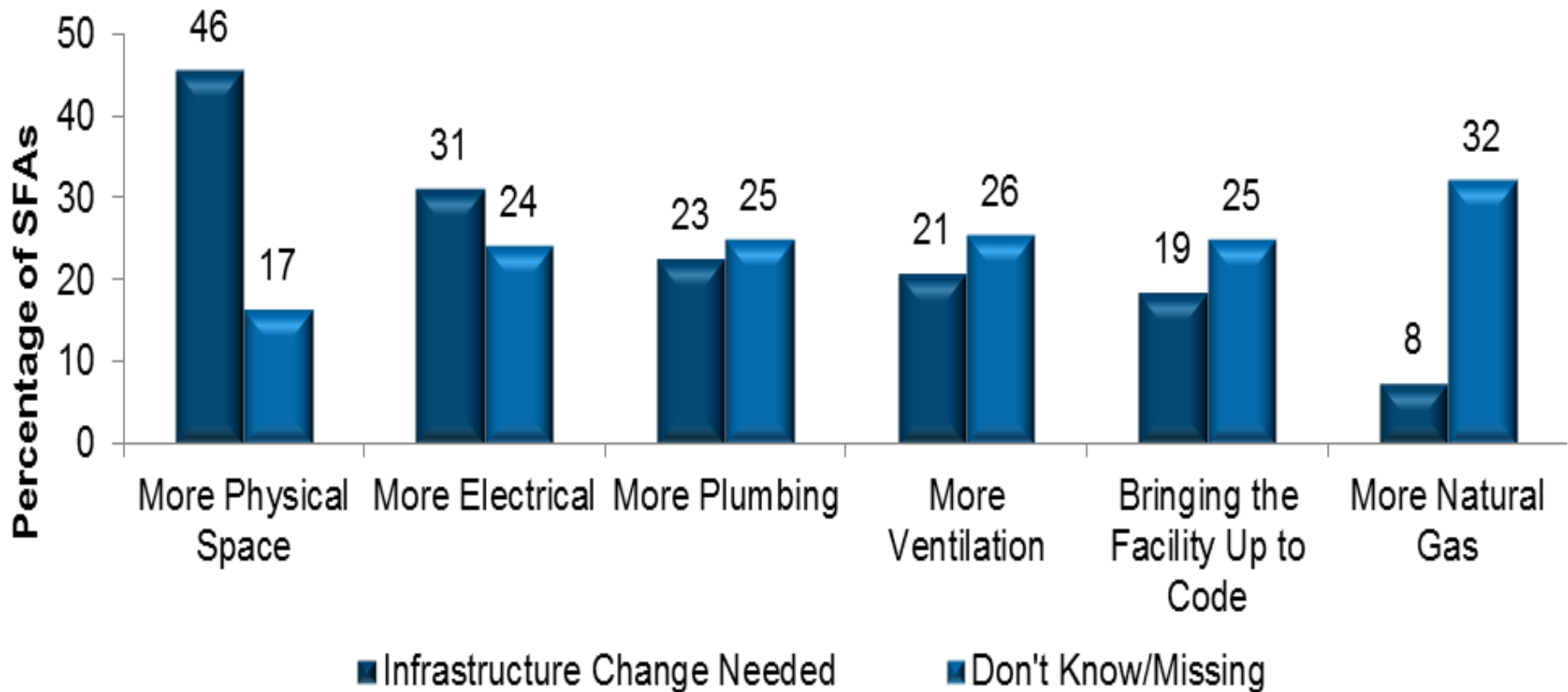
Equipment replacement and upgrade plans

- At least half of SFAs do not have a plan:
 - Only one-quarter of SFAs (26 percent) reported having an equipment replacement or upgrade plan
 - A similar proportion (24 percent) did not know whether their SFA had such a plan
- Very small SFA (less than 1,000 students) and rural SFAs were **least** likely to have plans

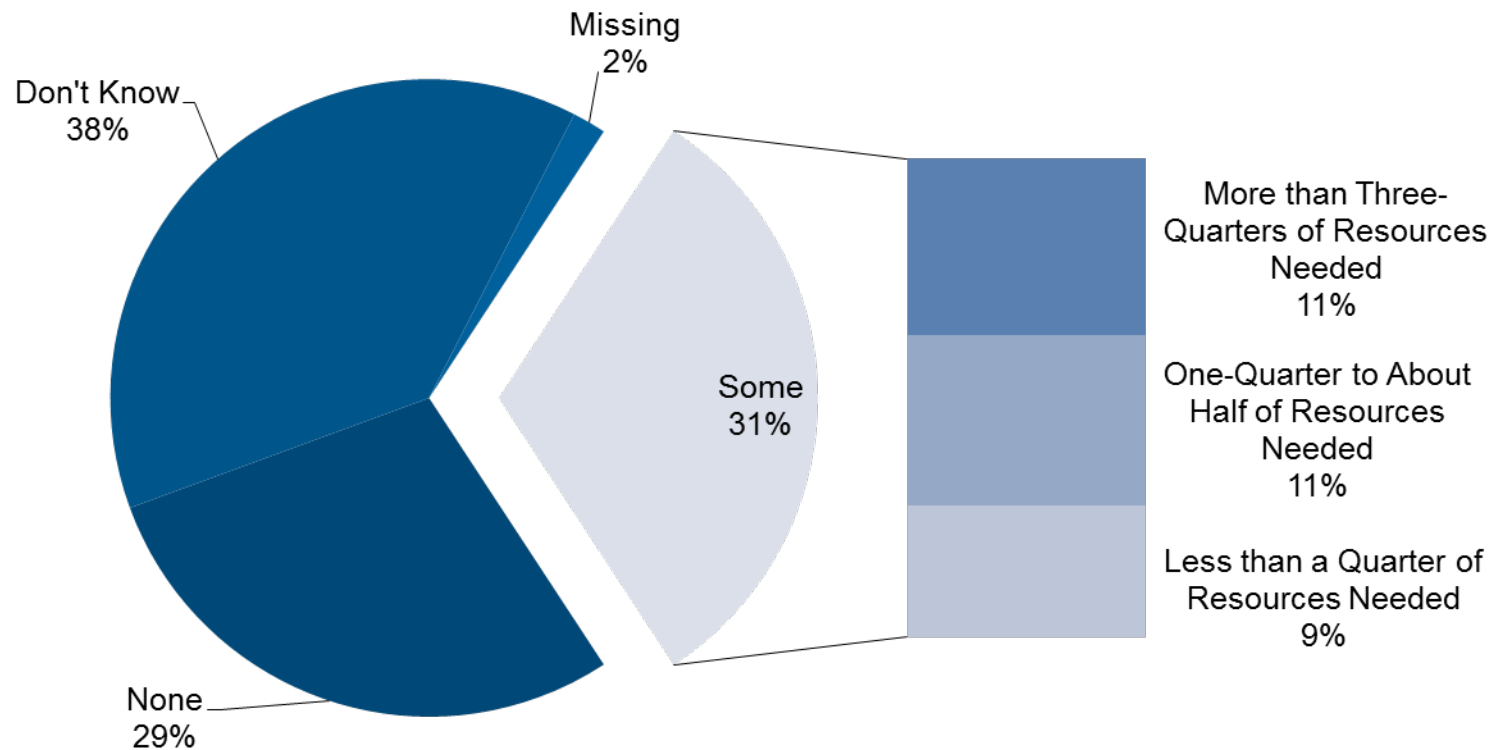
Don't forget about infrastructure...



Infrastructure Changes: 70% of CA SFA's and 55% of SFAs nationally reported needing at least one infrastructure upgrade



Financial Resources Expected from Local Education Agency for Infrastructure Changes



So...what can be done???

Serving Healthy School Meals

Financing strategies for school food service

- Realize savings by developing a detailed procurement strategy for equipment and supplies.
- Streamline operations to reduce costs
- Work with other districts
- Create revenue opportunities.
- Secure public and private funding

Recommendations

- School foodservice providers should consider innovative and collaborative strategies for increasing revenue and meeting needs.
- School districts should be considering their foodservice equipment and infrastructure in broader facility conversations and initiatives.
- Federal, state, and local governments should make funds available to school districts for upgrading their kitchen equipment and infrastructure to ensure that they are able to efficiently and reliably serve healthy and appealing meals.
- Nonprofit and for-profit organizations interested in improving children's health, education,
- school infrastructure, and community wellness should assist schools in acquiring the necessary equipment.



School Food Modernization Act:

- Establish a loan assistance program within USDA to help schools acquire new equipment
- Provide targeted grant assistance, similar to what has been provided in 2009 ARRA, and FY10, FY13 appropriations by Congress
- Strengthen training and provide technical assistance to aid school food service personnel in meeting the updated nutrition guidelines.
- Senate version shows preference for those programs that are working with other community food and food assistance programs.



Appropriations

- FY 2013 \$10M was appropriated for school kitchen equipment grants.
 - \$1,494,322
- FY 2014 \$25 million appropriated
 - \$3,051,012 to California
- FY 2015 request is \$35 million

Summary

- 94% of SFAs expected to meet updated school lunch standards and 93% have done so!!
- But many could be more effective and/or more efficient if they had the right equipment and infrastructure.
- To be continued...Additional CA report and training report still to come!

**KIDS' SAFE &
HEALTHFUL
FOODS PROJECT**

Join us at

www.HealthySchoolFoodsNow.org

[@jdonzeblack_pew](https://twitter.com/jdonzeblack_pew)

jblack@pewtrusts.org