



VISION 2020

long-range plan



**LONG-RANGE PLANNING COMMITTEE
CYPRESS-FAIRBANKS ISD**



CYPRESS  **FAIRBANKS**
INDEPENDENT SCHOOL DISTRICT
LEARN • EMPOWER • ACHIEVE • DREAM

LONG-RANGE PLANNING COMMITTEE



AGENDA:

- Overview of 2004 & 2007 Bonds
 - Project Update
- Factors Affecting Construction Costs
 - District's Techniques for Reducing Costs
 - Impact to Cypress-Fairbanks ISD
- Questions?

2004 Bond Referendum



Proposition 1



New schools, sites and buses for increased enrollment

\$337,900,000

- 11 new schools: 7 elementary schools, 2 middle schools and 2 high schools
- 18 school sites: 13 elementary schools, 2 middle schools and 3 high schools
- 194 buses: 153 71-passenger buses, 41 special education buses



Instructional/support facilities renovations

\$264,000,000

- improvements at 30 elementary schools, including major instructional renovations for Lamkin, Post and Holbrook
- improvements at 10 middle schools, including major instructional renovations to Bleyl and Campbell
- improvements at 7 high schools, including major instructional renovations at Cypress Creek and Jersey Village
- miscellaneous improvements at all support facilities
- ADA/asbestos abatement/emergency allowance



Instructional technology needs

\$57,200,000

- new technology to accommodate increased student enrollment
- replace aging technology
- increase student access to technology

Total.....\$659,100,000

Proposition 2



Curricular/program enhancements

\$54,100,000

- addition of multipurpose facilities at all current and future high schools
- expansion of existing music facilities at all current and future high schools
- air conditioning for elementary school network data equipment rooms

Total.....\$713,200,000

2007 Bond Referendum



New schools, sites and buses for increased enrollment . . . \$500.5 million

- 13 new schools: 8 elementary schools, 3 middle schools and 2 high schools
- 2nd Alternative Learning Center
- 10 school sites: 8 elementary schools and 2 middle schools
- 275 school buses



Instructional/support facilities renovations . . . \$238.5 million

Examples:

- academic additions: science, music and vocational classrooms
- repairs, upgrades and replacements: fire alarm systems; heating, ventilating and air conditioning; plumbing; roofing; security; electrical systems; emergency, ADA and asbestos abatement allowance



Technology . . . \$68 million

- technology to accommodate increased enrollment
- replacement of aging technology
- increased student access to technology

Total . . . \$807 million

PROJECT UPDATE



2009 RENOVATIONS

Completed



- Pkg. A Cy-Ridge Renovations w/MPR
- Pkg. B Cy-Fair H.S./Arnold/Lamkin and ISC Additions and Renovations
- Pkg. C Holbrook ES Additions and Renovations
- Pkg. D Millsap/Yeager Renovations
- Pkg. E Owen/Wilson Renovations
- Pkg. F Bang/Hamilton Renovations
- Pkg. G Ault/Lowery/Willbern Renovations
- Pkg. H Windfern Annex/Falcon Trans./Food Production Center
- Pkg. I Truitt/Watkins Renovations
- Pkg. J Jowell Chiller Replacement
- Pkg. K Maintenance & Operations/Pridgeon Stadium Renovations
- Pkg. L Matzke & Windfern HS Renovations
- Pkg. M Cy-Springs High School Additions & Renovations
- Pkg. N Cy-Woods High School Science Addition
- Pkg. O Secondary School Technology
- Pkg. P Telge Ag Barn, SRC, Exhibit Center, Telge Transportation
- Pkg. Q Frazier ES, Lieder ES, Walker ES Renovations
- Pkg. R Goodson MS, Farney ES, Aragon MS Renovations
- Pkg. S Hopper MS, Kahla MS Renovations
- Pkg. U Watkins MS Gym Floor

Total 2001 bond:

\$1,253,113

Total 2004 bond:

\$49,577,841

Total 2007 bond:

\$69,642,644

TOTAL 2009:

\$120,725,398

2010 RENOVATIONS

Completed



- Pkg. A Cook Middle School and ELC #2 Renovations
- Pkg. B Labay Middle School Renovations
- Pkg. C Holmsley Renovations
- Pkg. D Barker Cypress Transportation Renovations
- Pkg. E Falcon Annex/ELC No. 1/ALC&ABC Renovations
- Pkg. F Hairgrove/Gleason/Kirk Renovations
- Pkg. H 11 Elementary schools, Carlton Center, Ben Bradley
Security Upgrades

Total 2004 bond:

\$541,907

Total 2007 bond:

\$19,859,444

TOTAL 2010:

\$20,401,351

2011 RENOVATIONS

Completed



- Pkg. A Fiest Renovations
- Pkg. B Dean Middle School Renovations (August 2012)
- Pkg. C Hamilton Middle School Renovations (August 2012)
- Pkg. F Moore Elementary & ROPES Renovations
- Pkg. G Adam/Emmott/Francone Renovations (August 2012)
- Pkg. H Bane/Reed Renovations (August 2012)
- Pkg. I Copeland/Jowell/Metcalf/Sheridan Renovations (August 2012)
- Pkg. J Hancock and Horne Renovations (August 2012)

Total 2007 bond:

\$26,438,390

TOTAL 2011:

\$26,438,390

2012 RENOVATIONS

Completed



- Pkg. A Wilson Renovations
- Pkg. B Truitt Renovations
- Pkg. C Watkins and Thornton Renovations
- Pkg. D Ault, Hamilton ES, and Spillane Renovations
- Pkg. E Millsap and Yeager Renovations
- Pkg. F Willbern and Bang Renovations
- Pkg. G Cy-Falls, Lowery , and Owens Renovations
- Pkg. I Windfern High School Renovations
- Pkg. J Pridgeon Stadium Renovations

Total 2007 bond:

\$34,034,465

TOTAL 2012:

\$34,034,465

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2007 BOND NEW FACILITIES

2007 Bond New Facilities

BUILT

- *Emery Elementary No. 51*
- *Rennell Elementary No. 52*
- *Pope Elementary No. 53*
- *Salyards Middle School No. 17*

UNDER CONSTRUCTION

- *Anthony Middle School No. 18 under construction for August opening.*

ON THE BOARDS

- *Woodard Elementary School No. 54 - August 2015 opening*
- *HS No. 11 - August 2016 opening*

Emery Elementary School (#51)



Rennell Elementary School (#52)



Rennell Elementary School (#52)



Pope Elementary School (#53)



Pope Elementary School (#53)



Salyards Middle School (#17) – Fairfield



Salyards Middle School (#17) – Fairfield Area



Anthony Middle School (#18)



Anthony Middle School (#18)



Anthony Middle School (#18)



High School (#11)



High School (#11)



High School (#11)



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2001/2004/2007 BOND MAJOR RENOVATION PROJECTS

Jersey Village HS Additions and Renovations



Jersey Village HS Additions and Renovations



Bleyl MS Additions and Renovations



Bleyl MS Additions and Renovations



Campbell MS Additions and Renovations



Campbell MS Additions and Renovations



Campbell MS Additions and Renovations



Holbrook ES Additions and Renovations



Holbrook ES Additions and Renovations



Lamkin ES Additions and Renovations



Lamkin ES Additions and Renovations



Lamkin ES Additions and Renovations



Post ES Additions and Renovations



Post ES Additions and Renovations



LONG-RANGE PLANNING COMMITTEE



Factors Affecting Construction Costs

SCHOOL CONSTRUCTION COSTS



The 2011 School Construction Report School Planning & Management Magazine

- *Presents a profile for new school construction within states in the same geographic region as Texas.*
- *School systems in these states spend less than the national median in terms of cost per square foot.*
- *According to School Planning and Management, “construction costs in Region 9 are below the national median. Schools in the region tend to be quite large.”*
- *Profile of New Schools Regionally vs. CFISD*

SCHOOL CONSTRUCTION COSTS



•School Type	•Cost per Square Foot	•Square Feet per Student	•Number of Students	•Total Building Cost
Region 9 – AR. LA, OK, TX (*)				
Elementary	\$168.92	112.5	740	\$13.5 million
Middle	\$210.71	154.2	1000	30.0 million
High	\$186.67	159.1	1600	37.0 million
CFISD (**)				
Elementary	\$120.65	110.2	1,040	13.8 million
Middle	\$125.52	166.3	1,450	29.0 million
High	\$130.09	172.3	2,950	66.1 million

•Source: School Planning and Management, 2009 Annual School Construction Report, and CFISD Assistant Superintendent for Facilities and Construction.
 •(*) Median.
 •(**) Actual.

SCHOOL CONSTRUCTION COSTS



School Construction Costs for CFISD vs. Comparison Districts, US Median, and Regional Median

WCL Enterprises Performance Review, 2010

- Presents information on the construction cost of most-recently-completed schools in each of the comparative school systems. Unless otherwise noted, all schools were completed in 2009.*
- At all three grade levels, CFISD construction cost per square foot was less than the regional and national medians, with one exception (middle school construction cost in Ft Bend).*
- CFISD construction cost per square foot was less at all three grade levels than that in any of the comparison districts.*

SCHOOL CONSTRUCTION COSTS



School Construction Costs for CFISD vs. Comparison Districts, US Median, and Regional Median

WCL Enterprises Performance Review, 2010

School System	Per Square Foot Construction Cost		
	Elementary	Middle	High
•CFISD	\$120.65	\$125.52	\$130.09
•Austin ISD	\$158.72	\$181.22	N/A
•Ft Bend ISD	\$146.15	\$112.29	\$193.05
•Ft Worth ISD	\$153.00	\$137.50	N/A
•Katy ISD	\$123.33	\$129.29	N/A
•North East ISD	\$168.23	N/A	N/A
•Northside ISD	\$184.00	\$216.00	\$224.38
•Houston MSA	\$128-142	\$118-130	\$153-169
•Regional Median	\$168.92	\$210.71	\$186.67
•US Median	\$190.48	\$215.14	\$188.68

SCHOOL CONSTRUCTION COSTS



- *Published October 2012*
- *Survey of State school districts*
- *Identifies costs for construction & operations*

SCHOOL CONSTRUCTION COSTS



SAVINGS SNAPSHOT: KAHLA MIDDLE SCHOOL

Cypress-Fairbanks Independent School District serves more than 105,000 students in a fast-growing suburban area west of Houston. In the last decade, the district has built 33 new campuses, including **Kahla Middle School**, which opened its doors in 2005 with room for 1,539 students in grades 6 through 8.

Based on data supplied by the school district, construction costs for the facility were just **\$85** per square foot, well below the average of **\$147** found in a Comptroller survey of public schools built in Texas between 2005 and 2012. The construction cost per student (at capacity) was **\$12,273**, just under 57 percent of the average of **\$20,683**.



To make the most efficient use of its resources and employ optimal instructional designs, Cypress-Fairbanks ISD uses **architectural prototypes**, with several designs suited for elementary and middle schools and one developed for high schools. According to district officials, prototype designs **save money, permit faster construction** and allow the district to test materials and improve its work processes with each successive use.

By using an existing architectural prototype suited to the grades served and the building site, the district saved more than **\$470,000** in design fees alone on the Kahla project.



KAHLA MIDDLE SCHOOL AT A GLANCE (OPENED 2005)

TOTAL CONSTRUCTION COST	\$18,888,1
TOTAL SQUARE FEET	222,0
CAPACITY (STUDENTS)	1,5
COST PER SQUARE FOOT AT CAPACITY	\$
COST PER STUDENT AT CAPACITY	\$12,2
SQUARE FEET PER STUDENT AT CAPACITY	144



COST PER SQUARE FOOT AT CAPACITY
\$85



COST PER STUDENT AT CAPACITY
\$12,273

MIDDLE AND JUNIOR HIGH SCHOOLS AT A GLANCE

(CONSTRUCTED 2005-12)

AVERAGE COST PER SQUARE FOOT AT CAPACITY	\$147
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“...construction costs for the facility were just **\$85** per square foot, well below the average of **\$147** found in a comptroller survey of public schools....”

SCHOOL CONSTRUCTION COSTS



Your Money and Education Debt

SNAPSHOT: CYPRESS WOODS HIGH SCHOOL AND JUAREZ-LINCOLN HIGH SCHOOL

Susan Combs
Texas Comptroller
of Public Accounts



Cypress-Fairbanks Independent School District serves more than **105,000** students in a rapidly growing suburban area west of Houston. Cypress Woods High School, completed in 2006 with a capacity of **3,219** students, is one of **33** new school campuses built in the district in the last decade.

Cypress-Fairbanks ISD contains cost by using adaptable architectural prototype designs. Based on data supplied by the school district, construction costs for **Cypress Woods High School**, at **\$107** per square foot, were just **60 percent** of the **\$181** average for public high schools constructed in

Texas between 2005 and 2012, as determined by a Comptroller survey. Its construction cost per student (at capacity) of **\$16,607** is just **55 percent** of the average of **\$30,049**.



CYPRESS WOODS HS

TOTAL CONSTRUCTION COST	\$53,457,693
TOTAL SQUARE FEET	499,765
CAPACITY (STUDENTS)	3,219
COST PER STUDENT AT CAPACITY	\$16,607
COST PER SQUARE FOOT AT CAPACITY	\$107
SQUARE FEET PER STUDENT AT CAPACITY	155



COST PER SQUARE FOOT AT CAPACITY
\$107



COST PER STUDENT AT CAPACITY
\$16,607

JUAREZ-LINCOLN HS

TOTAL CONSTRUCTION COST	\$63,050,847
TOTAL SQUARE FEET	225,000
CAPACITY (STUDENTS)	1,860
COST PER STUDENT AT CAPACITY	\$33,898
COST PER SQUARE FOOT AT CAPACITY	\$280
SQUARE FEET PER STUDENT AT CAPACITY	121

“...construction costs for **Cypress Woods High School**, at **\$107** per square foot, were just **60 percent** of the **\$181** average for public high schools”

TRADITIONAL HIGH SCHOOLS BUILT FROM 2005 THROUGH 2012

AVERAGE COST PER SQUARE FOOT AT CAPACITY	\$181
AVERAGE COST PER STUDENT AT CAPACITY	\$30,049
AVERAGE SQUARE FEET PER STUDENT AT CAPACITY	166

Sources: Comptroller survey, EAST data and district/school websites

SCHOOL CONSTRUCTION COSTS



Your Money and Education Debt

SNAPSHOT: LEE ELEMENTARY SCHOOL AND CIBOLO GREEN ELEMENTARY

Susan Combs
Texas Comptroller
of Public Accounts



Cypress-Fairbanks Independent School District serves more than **105,000** students in a rapidly growing major suburban area west of Houston. **Lee Elementary School**, with a capacity for **1,092** kindergarten through fifth-grade students, was completed in 2005, providing enrollment relief for nearby schools.

Based on data supplied by the school district, construction costs for the facility, built using one of the district's cost- and time-efficient architectural prototype designs, were



\$88 per square foot, or **56 percent** of the **\$157** average for public elementary schools built in Texas between 2005 and 2012, according to a Comptroller survey. Its construction cost per student (at capacity) of **\$7,880** was less than half of the **\$18,315** average.

LEE ELEMENTARY SCHOOL

TOTAL CONSTRUCTION COST	\$26,005,173
TOTAL SQUARE FEET	97,636
CAPACITY (STUDENTS)	1,092
COST PER STUDENT AT CAPACITY	\$7,880
COST PER SQUARE FOOT AT CAPACITY	\$88
SQUARE FEET PER STUDENT AT CAPACITY	89



COST PER SQUARE
FOOT AT CAPACITY
\$88



COST PER STUDENT
AT CAPACITY
\$7,880

CIBOLO GREEN ELEMENTARY SCHOOL

TOTAL CONSTRUCTION COST	\$30,600,149
TOTAL SQUARE FEET	122,756
CAPACITY (STUDENTS)	1,200
COST PER STUDENT AT CAPACITY	\$25,500
COST PER SQUARE FOOT AT CAPACITY	\$249
SQUARE FEET PER STUDENT AT CAPACITY	102

“...were \$88 per square foot, or just 56 percent of the \$157 average for public elementary schools”

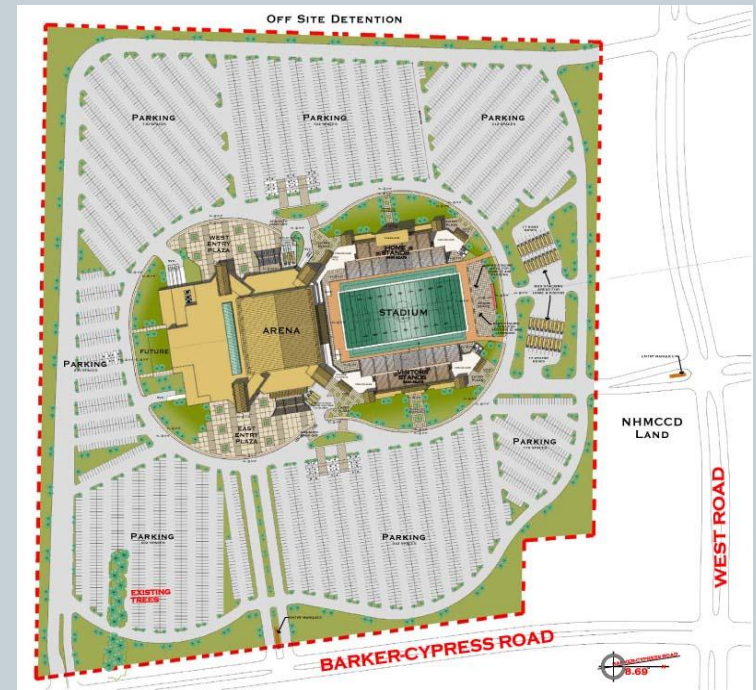
ELEMENTARY SCHOOLS BUILT FROM 2005 THROUGH 2012

AVERAGE COST PER SQUARE FOOT AT CAPACITY	\$157
AVERAGE COST PER STUDENT AT CAPACITY	\$18,315
AVERAGE SQUARE FEET PER STUDENT AT CAPACITY	116

Sources: Comptroller survey,
FAST data and district/school websites

CFISD Cost Saving Strategies

- **Multi-Campus sites with shared infrastructure**
 - ✦ *Central Plants*
 - ✦ *Roadways*
 - ✦ *Utilities*
- **Combined Facilities**
 - ✦ *Arena– Stadium – Food Distribution*
- **Materials and Methods**
 - ✦ *Repetitive structure and standard materials*
 - ✦ *Multi-Story Facilities*
 - ✦ *Collaborative for High Performance Schools*



CFISD Cost Saving Strategies



- ***Extra Work Completed (samples, not complete list)***
 - ✦ ***Security Entry Vestibules at Multiple Campuses***
 - ✦ ***Security Access Controls at Multiple Campuses***
 - ✦ ***Lighting retrofits***
 - ✦ ***New partitions at various Elementary Schools***
 - ✦ ***Parking Lot Replacement at ISC***
 - ✦ ***New Turf at Pridgeon Stadium***
 - ✦ ***Energy Management System Upgrades***
 - ✦ ***Multiple Chalkboard to Markerboard replacements***
 - ✦ ***Added Canopies to Multiple Campuses***
 - ✦ ***Construction of New Portable Buildings in the City of Houston***

Current Construction Market



“A Boom in Houston Is Led by the Energy Industry”

The New York Times

"Construction supervisors are in high demand, and there is a shortage. Yet, there is a shortage in all skilled trades”

Houston Chronicle

“Energy industry drains Houston’s construction talent; impacts project costs, timelines”

Houston Business Journal

Current Construction Market

Houston Business Journal
August 23-29, 2013

“In addition, the shortage of skilled workers because of new large scale projects in the energy sector has caused wages to creep up.”

Construction industry faces price hike in

BY CHRIS SHELTON
HOUSTON BUSINESS JOURNAL

Though the price of construction materials is on the rise, for Houston-based WHR Architects Inc. — where fees are based on a percentage of construction costs — it hasn't become a bigger factor in decision making.

Materials as a whole are up 2.1 percent from last year, while lumber and cement have risen 4.7 and 3.1 percent, respectively, based on the previous year, according to Engineering News Record. Material prices would need to increase by about 7 percent before projects may be halted, said WHR CFO Gailand Smith.

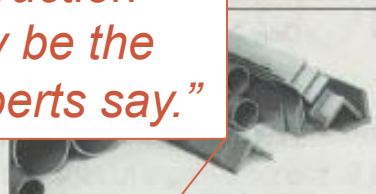
Though many variables affect material prices, a natural disaster could be the most likely reason



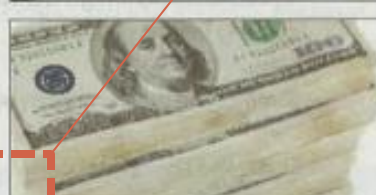
4.7%
Year-over-year price increase in lumber



3.1%
Year-over-year price increase in cement



1.1%
Year-over-year price increase in steel



7%
How much material costs would need to increase for projects to be halted

as construction contracts. In July, residential and commercial construction contracts in the 10-county Houston area for the year totaled \$953 million, which is a 14 percent increase from the \$838 million recorded in July 2012, McGraw Hill Construction reports.

In addition, the shortage of skilled workers because of new large-scale projects in the energy sector has caused wages to creep up. It could also stretch the subcontracting industry, Jerry Nevlud, president of the Associated General Contractors Houston chapter, told the Houston Business Journal in May.

“Many subcontractors are going to have a hard time manning up the numbers to accommodate the volume of work projected,” Nevlud said.

The pay difference for construction jobs in the energy industry makes it harder for other sectors to compete.

In May 2011, a construction worker in the Houston area made \$16.53 an hour on average or \$34,380 a year, while a person with transferable skills could make \$20.48 per hour on average, or \$42,610 a year, as an extraction worker for the energy sector in Houston, according to the Bureau of Labor Statistics.

“As we move forward it's going to be a larger issue to find competent skilled laborers. It would be good to look at training programs starting in high school. It's not a field that kids generally grow up wanting to get into,” Skanska's Howe said.

“There's a lot of nonskilled labor out there, but the skilled labor is becoming scarce,” he said. ■

CHRIS SHELTON is editorial intern for Houston Business Journal. To contact the editor of this article, email Emily Wilkinson at ewilkinson@bizjournals.com.

“A shortage in the construction industry's labor pool may be the most pressing issue, experts say.”

LABOR SHORTAGE

A shortage in the construction industry's labor pool may be the most pressing issue, experts say.

Current Construction Market

- *Construction spending is at it's highest level since March 2009*
- *Houston construction hiring up 8%*
- *After the recession, the number of contracting firms is down*
- *Multi-residential, light industrial, retail and commercial markets are ON FIRE*
- *Project starts are up across the state due to delayed projects*



Current Construction Market



School Construction
A LOCAL SNAPSHOT
 GREATER HOUSTON BULLETIN • JULY 2013

UPSWING OF ECONOMIC GROWTH

The question of whether the Houston metropolitan area is in an upswing of economic growth is not up for debate. As we see our tower cranes grow throughout the city, the traffic increase and the housing market surge, it is inevitable that school districts will have to address their growing facility needs if they have not already. The discussion will now circle around:

- 1. What kind of growth can we expect and for how long?**
 You can expect a five to ten-year run depending on the source. This growth is mostly driven by the energy sector.
- 2. How do we address the safety of our schools as we move forward with new bond programs?**
 CEFPI has developed a best practices guide for safe schools. See Safe Schools - Best Practices section.
- 3. What is the impact on our building programs from the increased construction demand?**
 There will be more demand than what the construction workforce can supply which will drive costs up.
- 4. How have the recent legislative changes affected our schools?**
 As the battles for state funding for our schools' maintenance and operations budgets continue and the state revenues increase, we will see a shift of monetary concerns towards focusing on controlling the construction costs of our schools.

Unemployment Rate

Region	Unemployment Rate
Houston	6.4%
Texas	6.5%
National	7.3%

Source: Texas Workforce Commission, May 2013

Job growth, sales tax collections and building permits all signal that the Texas economy continues to outpace the national economy.

Texas total nonfarm employment increased by 19,500 jobs during May 2013. Between May 2012 and May 2013, Texas total nonfarm employment increased by 3.0 percent.

Over the past year, Texas added jobs in all of the 11 major industries, including professional and business services, trade, transportation and utilities, leisure and recreation, education and health services, logging, financial activities, other information, and construction.

Texas employment fell by more than 100,000 jobs during the recession, reaching its low point in November 2010. Texas employment to its pre-recession peak in November 2010, the state had added an additional 67 percent of net new jobs by March 2013.

Texas and the nation returned to their pre-recession employment levels in November 2011, respectively. In calendar year 2012, Texas added 19,500 jobs.

Specialty contractors are projecting increases across the board for 2014.

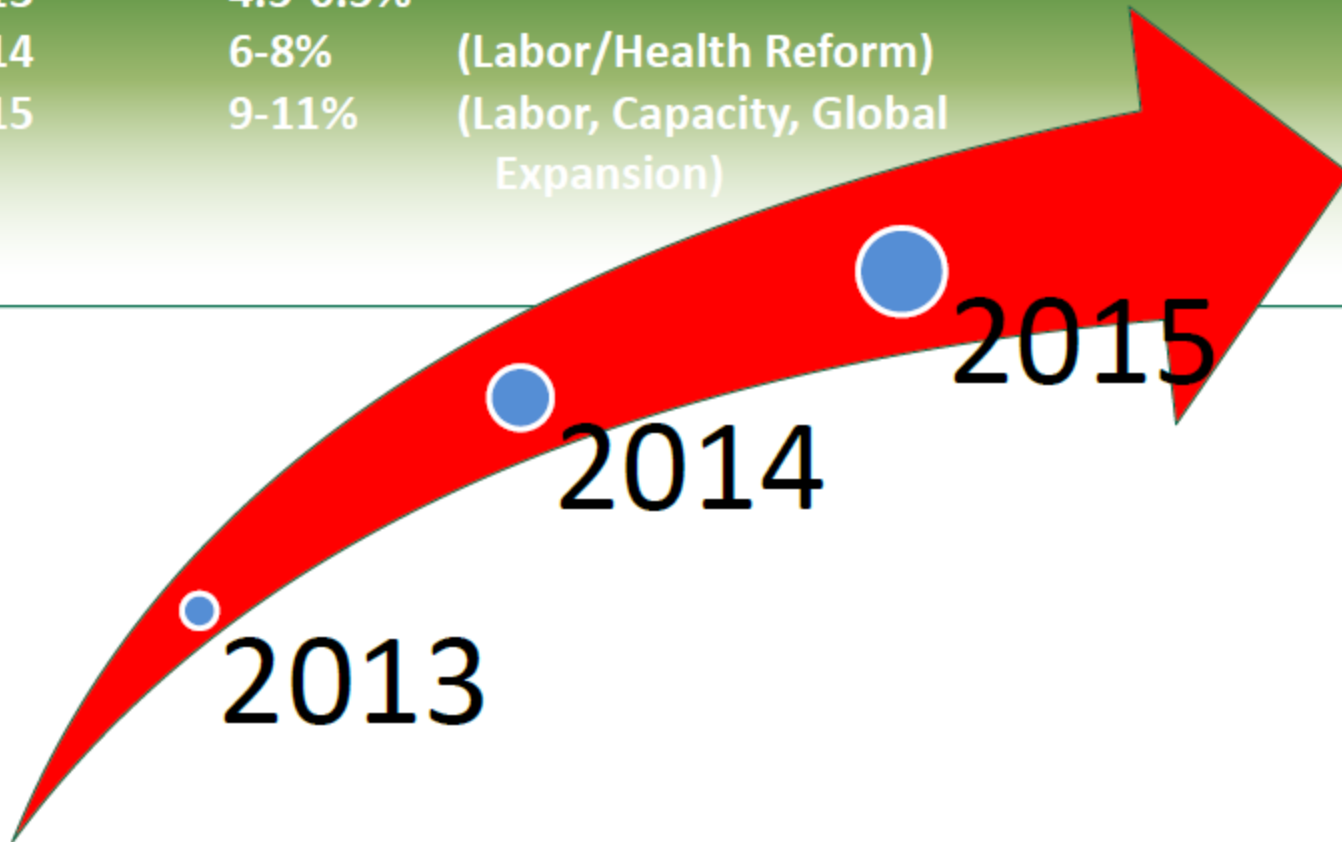
Labor ↑, Materials ↑, Margins ↑

Number one concern from survey:
 Adequate workforce as demand increases

Current Construction Market

Projected Escalation for K-12 School Market

- | | | |
|---------|----------|-------------------------------------|
| a. 2013 | 4.5-6.5% | |
| b. 2014 | 6-8% | (Labor/Health Reform) |
| c. 2015 | 9-11% | (Labor, Capacity, Global Expansion) |



Impact to CFISD



- *CFISD had experienced approximately 10% increase in projected costs for new schools*
- *Still maintaining good contractor/subcontractor participation on new and renovation projects*
- *Potential inflation will impact ability to complete new schools included in 2007 bond program due to delayed new school openings within approved allocated funds*
- *Unfunded Mandates by County, City, State have impacted construction costs*
 - ✦ *Traffic Signals*
 - ✦ *Driveways and drop off lanes*
 - ✦ *Fire Lanes*
 - ✦ *New City of Houston Building and Energy Codes*



CYPRESS  **FAIRBANKS**
INDEPENDENT SCHOOL DISTRICT

The logo features a central graphic of three overlapping triangles: a blue triangle at the top, an orange triangle at the bottom left, and a purple triangle at the bottom right. These triangles meet at a central white circular cutout.

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