

California Hospital Construction
Cost & Market Trends 2004-2005
July 26, 2005



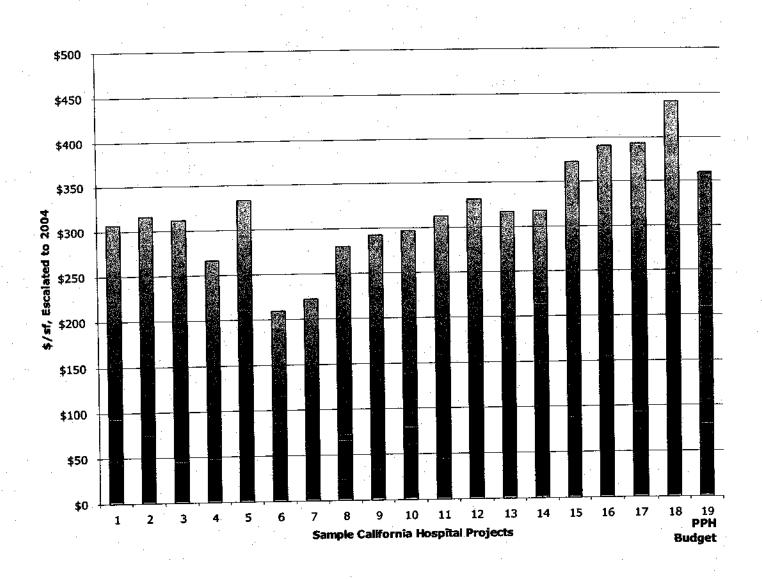


#### **Cost & Market Trends**

- Inflation vs. market conditions
- Causes of recent cost increases
- Strategies
- Affect on the Facilities Master Plan budget



#### New Hospital Construction Cost/sf, 2004



# Inflation Measurement: Cost Indices

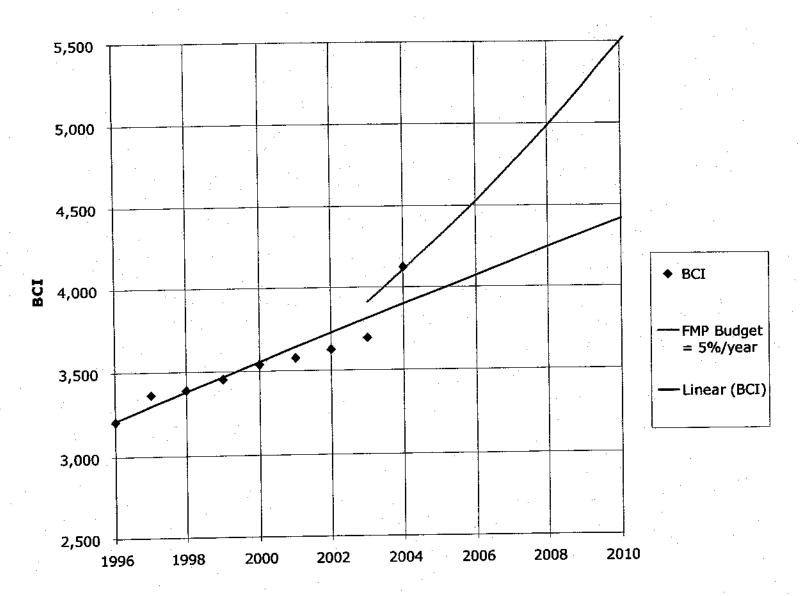
- Composites of current wage rates and materials unit costs, analogous to the CPI
- Example: Engineering New Record Building Cost Index – "BCI" - is a widely used measure of inflation in the construction industry
- The BCI and other indices provide an overview of inflation but typically do not consider:
  - Project type, complexity, difficulty or risk
  - Market conditions, i.e. the trade contractor bidding environment

#### **Market Data**

- Individual data collected from specific projects
  - Actual bid results
  - Market surveys, i.e. budget quotes from trade contractors: "What the people who actually do the work expect to charge"
- Data may be segregated for California hospitals
- Provides a more meaningful measure of cost trends than inflation indices alone

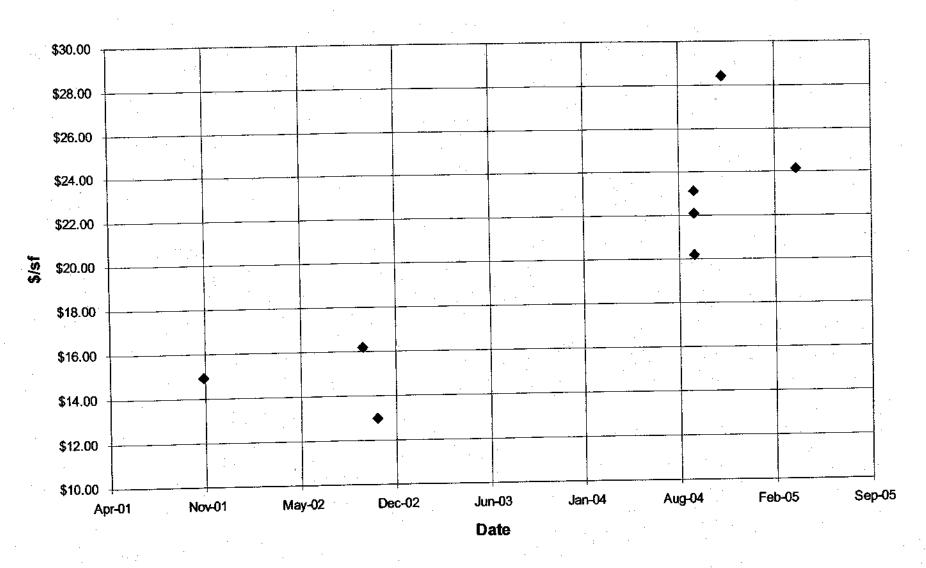


# Inflation vs. FMP Budget

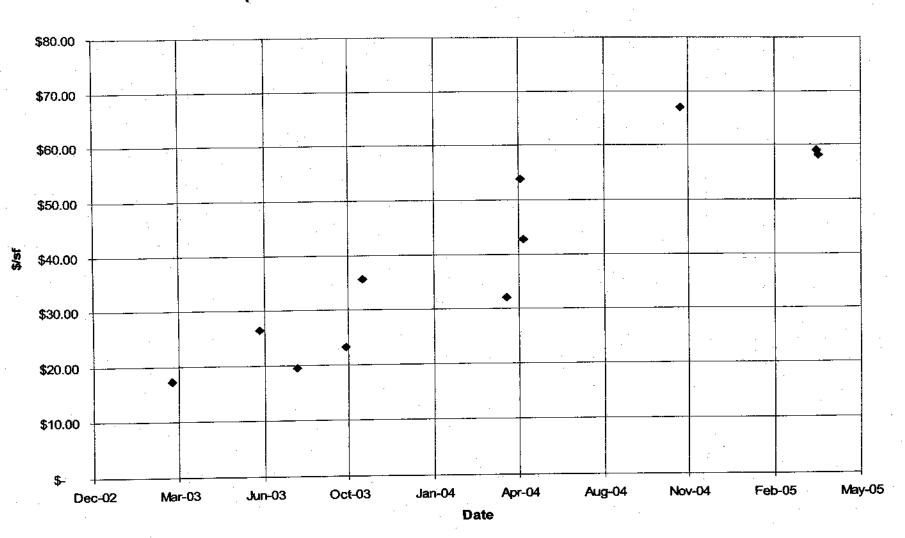




#### STRUCTURAL STEEL BRACED FRAME CA HOSPITAL MARKET DATA



#### INTERIOR METAL STUDS & DRYWALL CA HOSPITAL MARKET DATA (TRADITIONAL HARD BID APPROACH)





# Factors affecting California hospital construction costs:

- Regional construction market
- OSHPD impacts
- Global markets



#### California Market

- High level of demand for construction services
  - Hospital projects driven by SB 1953 and demographics
  - Concurrent growth in other sectors
- Limited supply of qualified labor
- Limited number of trade contractors who are qualified and interested in hospital work
  - Major trade scopes are often in the \$20 \$50 million range
  - Relatively few trade contractors are large corporations; many are sole proprietors or closely held private companies. For many, large hospital projects put a strain on their resources:
    - Financial capacity
    - Management teams
    - Bonding capacity



## California Market - Strategies

- Enable more companies to participate
  - Explore bonding alternatives
    - Owner controlled insurance program (OCIP)
    - "Subguard" purchase risk coverage in bulk
  - Explore dividing the work into smaller bid scopes
    - Design an "unbundled" concept
    - Multiple packages within project components (some offsetting impact to project management and staffing)
    - Phased completion to free up bonding capacity, retention, etc.
  - Explore payment options for subcontractors
- Create collaborative vs. adversarial business environments

#### OSHPD Impacts

- Completeness of documents, re-submittals
- Complexity of California hospital construction
- Duration of projects, carrying costs
- Lengthy change approval process
- Low productivity on past & current projects
- Variation in OSHPD's application of codes
- Strong market for other project types

## OSHPD Impacts - Strategies

- Selection process that addresses teams with OSHPD experience
- Expedite changes and payments
- Standard of care for preparing complete and "buildable" documents
  - Study lessons from other OSHPD projects
  - Include trade contractors in constructability review and document quality control
  - Minimize OSHPD changes
- Explore alternative (and early) procurement methods
  - Negotiated contracts for selected trades
  - Competition based on a pricing structure in lieu of on lump sum
- Demonstrate to the contracting community that we have effective measures in place to manage the risks

#### **Global Markets**

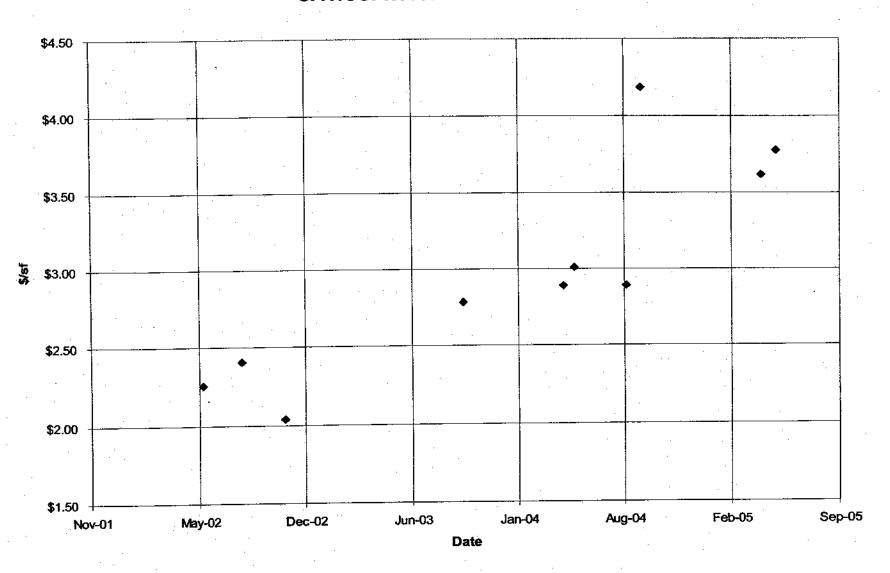
- Materials markets
- Fuel costs
- Currency exchange rates

# Global Markets - Strategies

- Sustainability
  - Select systems that optimize resources
  - Acquire funding for features that reduce life cycle costs
- Explore hedging opportunities
- Explore pre-purchasing and/or early commitment opportunities
- Expedite non-OSHPD program components

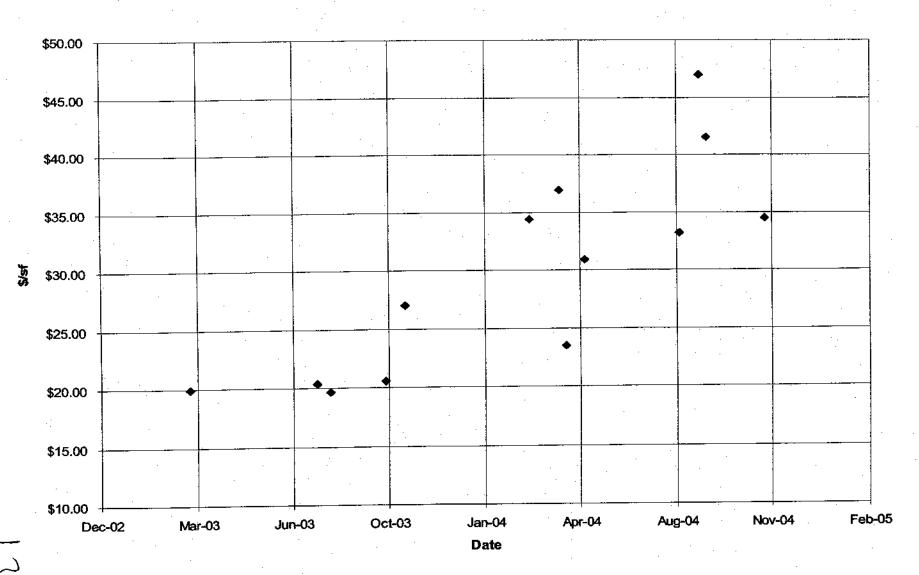


#### METAL DECKING CA HOSPITAL MARKET DATA

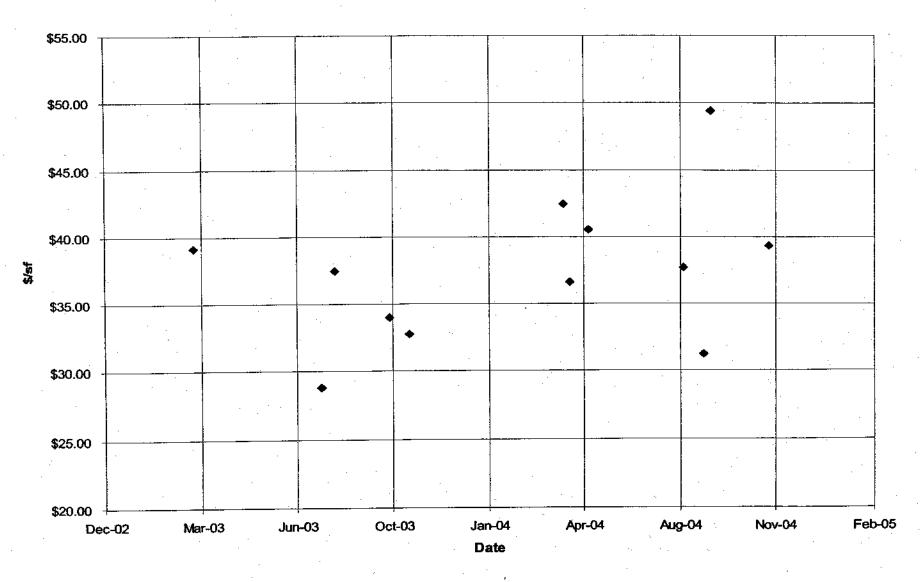




#### PLUMBING & MEDICAL GAS PIPING CA HOSPITAL MARKET DATA

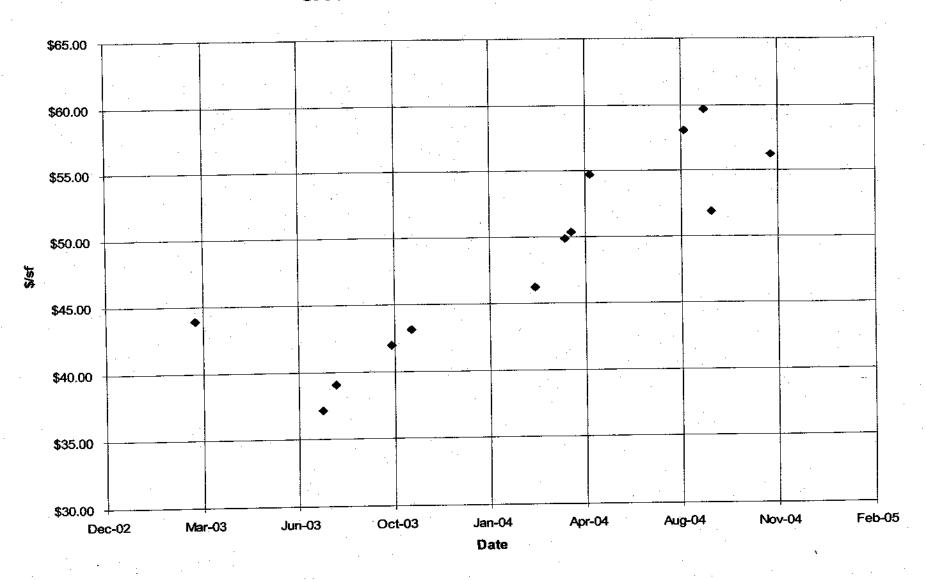


#### ELECTRICAL CA HOSPITAL MARKET DATA

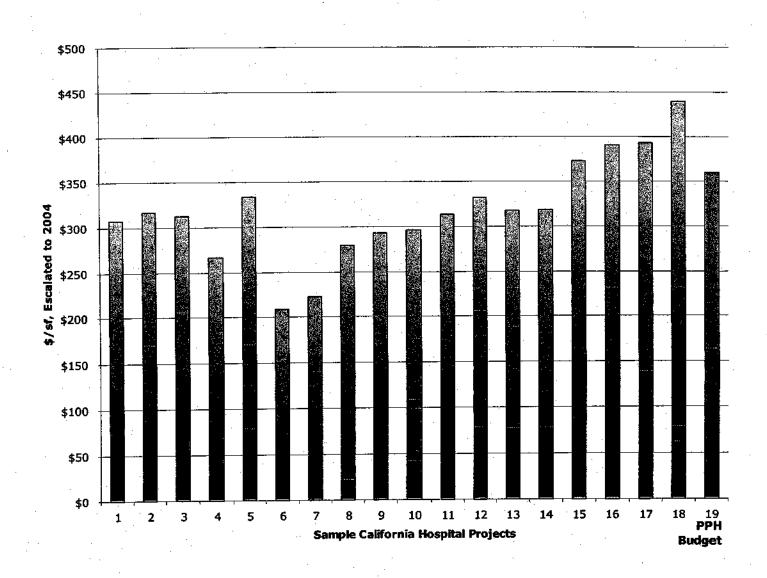




HVAC CA HOSPITAL MARKET DATA

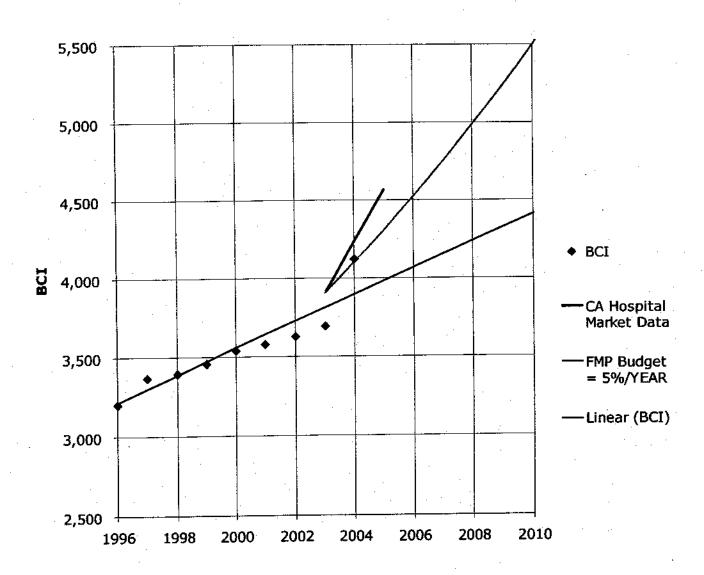


#### New Hospital Construction Cost/sf, 2004





#### Cost & Market Data



# Change, 2004 to 2005

		• • • • • • • • • • • • • • • • • • • •			:
Trade	2004 cost/bgsf	2005 cost/bgsf	% change, 2004 to 2005	% of total construction cost	contribution to
Structural Steel	\$22.00	\$25.00	13.6%	12.4%	1.7%
Reinforcing Steel	\$4.00	\$4.00	0.0%	2.8%	0.0%
Metal Deck	\$2.80	\$3.70	32.1%	0.7%	0.2%
Metal Framing & Gypsum Board	\$38.00	\$60.00	57.9%	8.3%	4.8%
Plumbing & Medical Gas Piping	\$28.00	\$40.00	42.9%	10.3%	4.4%
H.V.A.C.	<b>\$55.00</b>	\$60.00	9.1%	18.6%	1.7%
Electrical	\$38.00	\$41.00	7.9%	13.8%	1.1%
subtotal, market data analyzed			20.8%	66.9%	13.9%
Other trades			20.8%	33.1%	6.9%
Total		· ·	20.8%	100.0%	20.8%
Reference values:	1-00 000 000	د	5.0%	1 	
FMP Budget (construction)	\$530,000,000	. A service of the service of	3.0%	<u> </u>	A
OSHPD Portions only: PMC West	\$311,000,000	i <sub>.</sub>			
Pomerado	\$76,000,000	· · · · · · · · · · · · · · · · · · ·			4
PMC East	\$28,000,000				ili de la compania del compania de la compania de la compania del compania de la compania del la compania del la compania de la compania del la compania del la compania de la compania del la c
Building Cost Index, Los Angeles			5.1%	l. <u>.</u>	

# Uncertainty - Inflation

- Labor
  - History: relatively steady wage increases
  - Availability of skilled labor will be affected by demographics and demand
- Materials
  - Some recent easing in prices
  - Future volatility due to global factors

## **Uncertainty – Market Conditions**

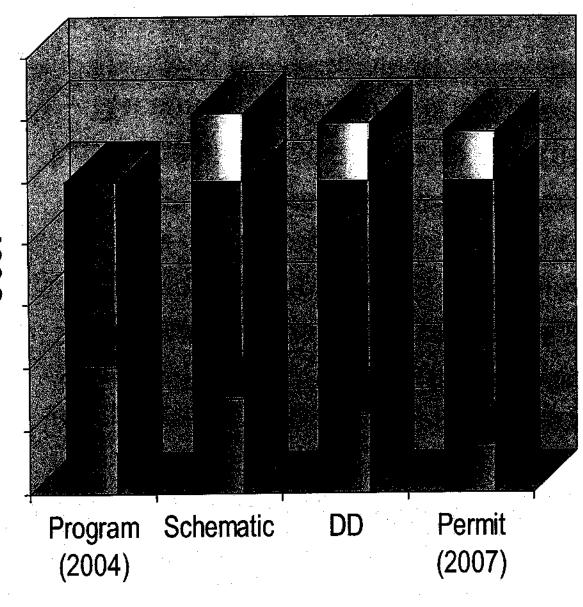
- Well established trend in California health care construction due to SB 1953 and demographics
- Other project types
  - High current activity
  - Future demand is less certain
- Contractor capacity will continue to be the biggest variable
  - Limited resources
  - Relative attractiveness of OSHPD projects

# **Managing Uncertainty**

- We must develop ways to increase the relative desirability of PPH's OSHPD work
  - Alternative procurement methods
  - Optimize work packages size, duration, terms
  - Trade involvement in design & permitting
  - Collaborative vs. adversarial processes
- Implement other mitigation strategies
  - Decant to non-OSHPD and expedite
  - Hedging, bonding, other.....
- Develop a flexible program/scope of work



#### Managing Uncertainty



■ Program/ Scope flex

Base Estimate

ContingencyEscalation

# Update on California Hospital Construction Cost & Market Trends

TO: Board of Directors

FROM: Board Finance Committee

Tuesday, July 26 2005

MEETING DATE: Monday, August 15, 2005

Bob Hemker, CFO

Mike Shanahan, Director Facilities

of costing factors and information was used to predict construction costs at the time of totaling \$753 million. In the development of the costs of the various projects, a multitude management strategies were considered to management cost exposure. which affects the procurement of materials and equipment. actual project work including inflation, market conditions, and the timing of projects, Directors, encompasses various facility development, expansion and renovation projects Background: The Facility Master Plan, as developed and approved by the Board of In addition, various risk

time is one of the most critical components affecting cost and the project budget. forecasted could potentially risk the project budget. In addition to market conditions, control strategies to curb the impact of escalation on the project. Escalation beyond that We continue to monitor current market conditions, inflation and opportunities for cost

part of the ongoing development of the project scope and costs. reviewed and evaluated in the development of the refined project cost budget. presented an overview of current cost and market trends & conditions that are being At the Finance Committee meeting, our costing consultant, Rudolph and Sletten, and approvals. presented for awareness. Adoption of specific strategies will be part of future discussions The information was

Budget Impact: N/A

Staff Recommendation: Information Only

Committee Questions:

COMMITTEE RECOMMENDATION:

Motion:

Individual Action:

Information:

×

Required Time:

Form A - Construction cost and market trends.doc