



Office of Statewide  
Health Planning and  
Development



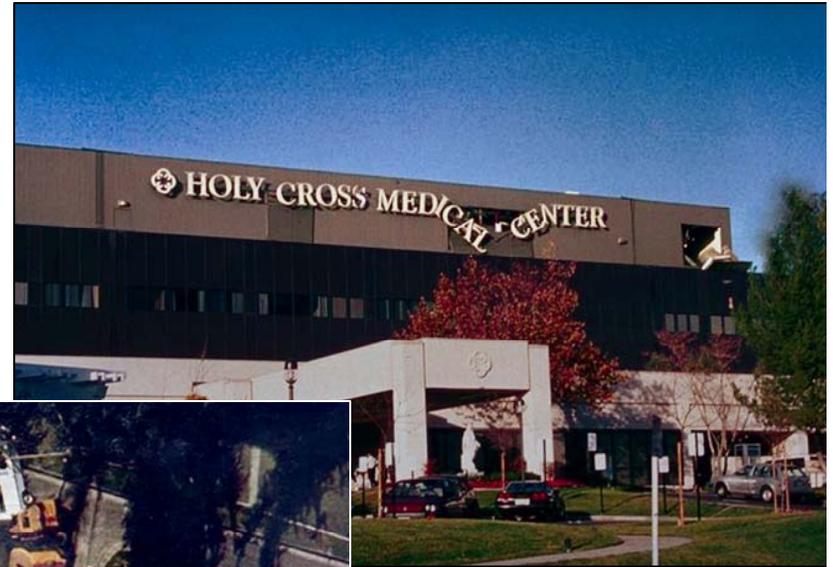
# California Senate Health Committee Hearing on Hospital Seismic Safety February 17, 2010

*Testimony by:  
The Office of Statewide Health  
Planning and Development (OSHPD)*



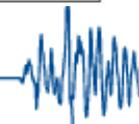
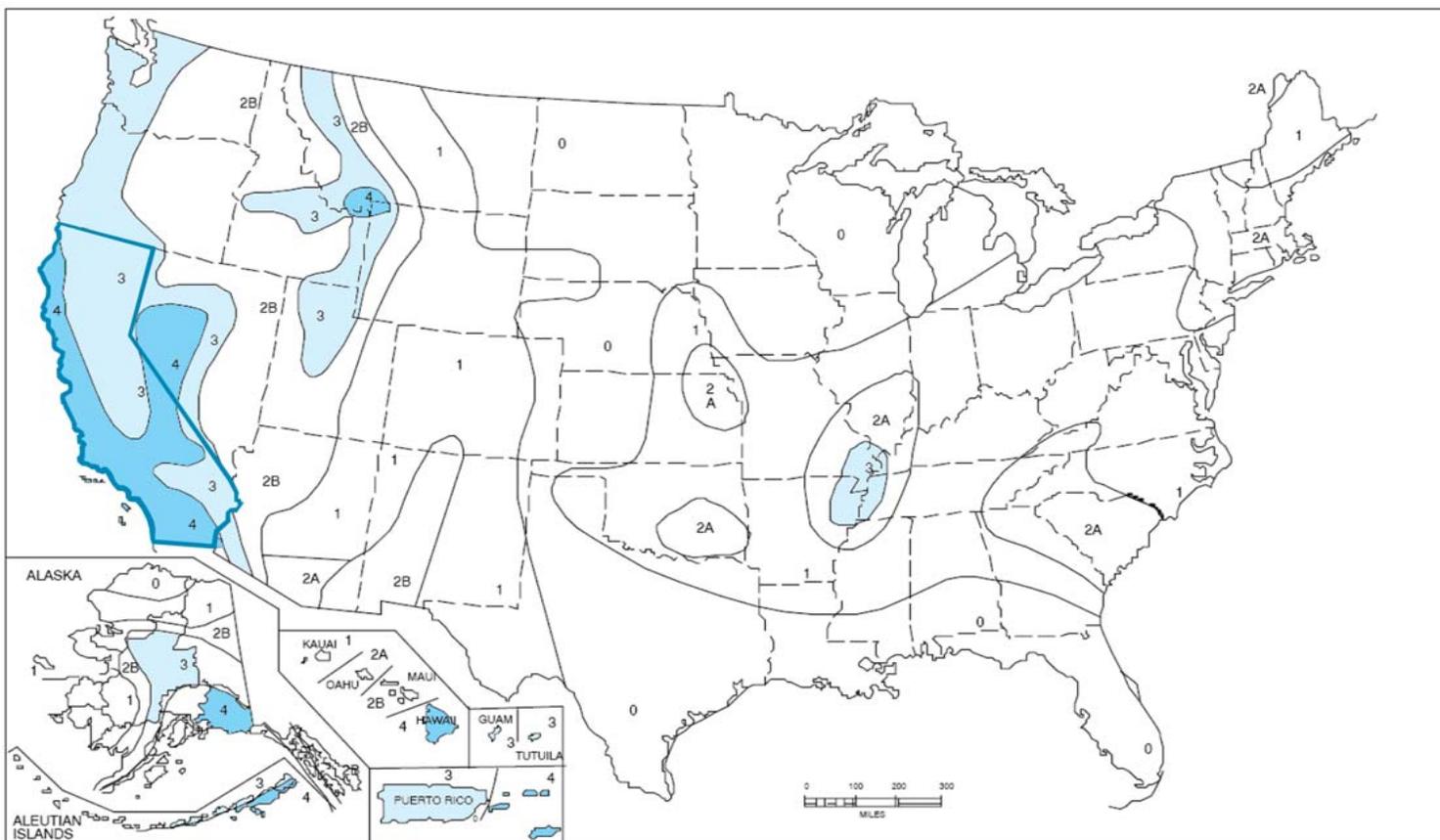
# Module I

## Hospital Seismic Safety Overview

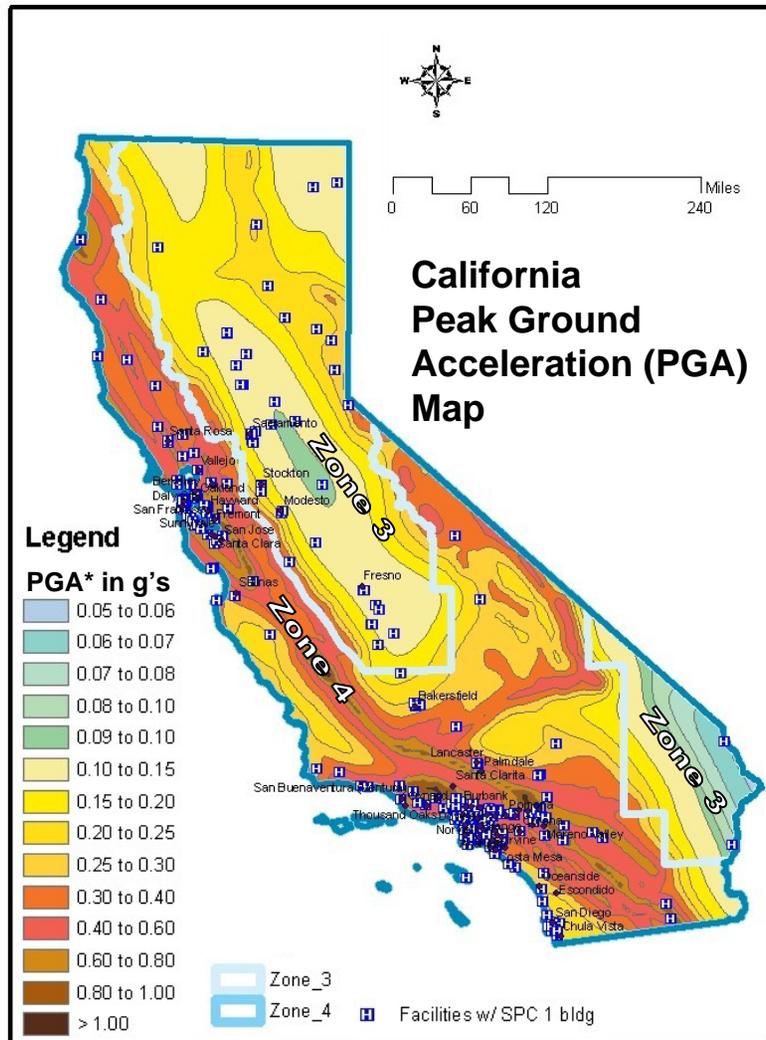


# U.S. Seismic Zone Map

*Large portions of California, containing our State's most populated regions, are in Seismic Zone 4 areas*



# Seismicity and Hospital Density in California

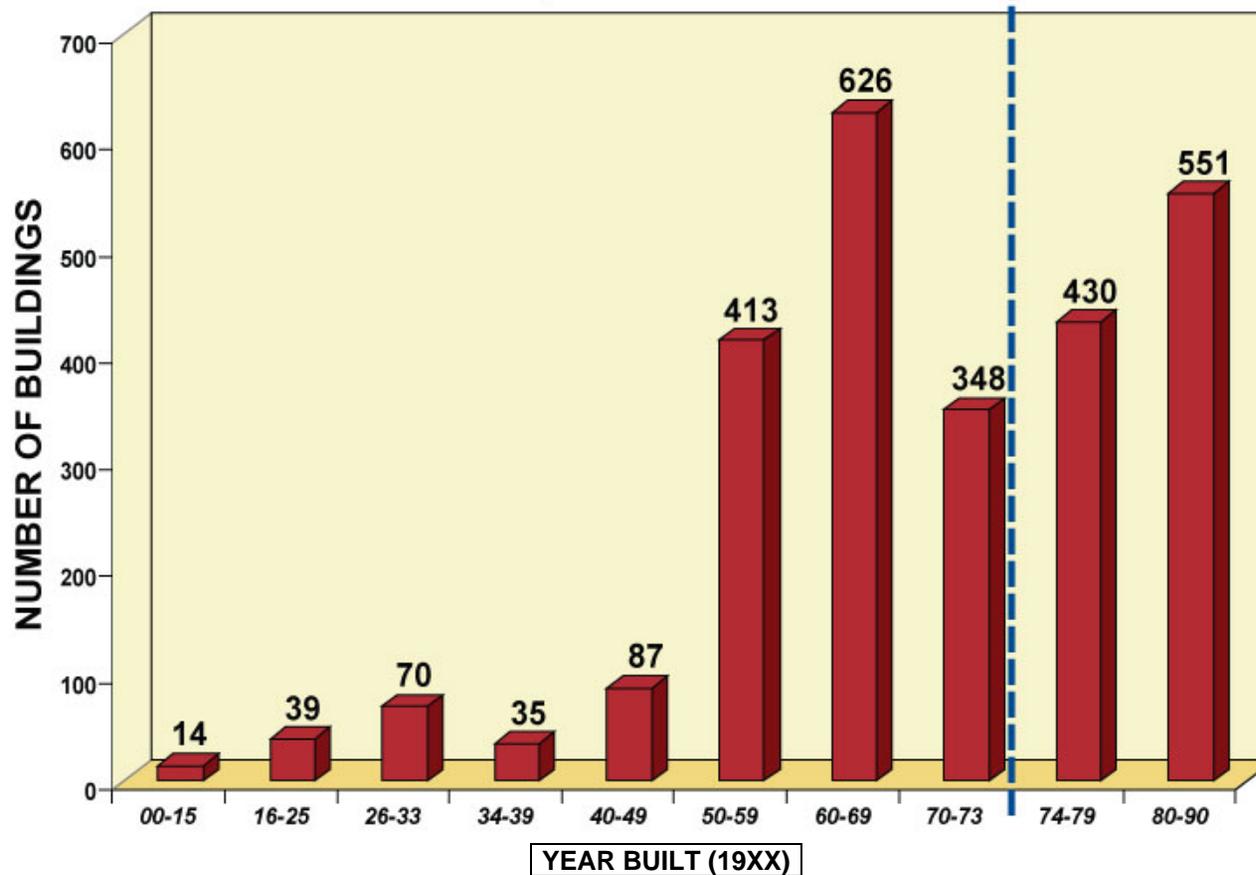


- **California has a 99% chance of experiencing an earthquake of magnitude 6.7 or greater in the next 30 years**
- **Most of California's Hospitals are in Seismic Zone 4 areas - Many of these are among the oldest hospital buildings in California**
- **608 SPC-I buildings are in the top three PGA regions (0 are in the bottom three)**
- **However:**  
***Building Risk = Seismicity + Vulnerability***



# Age of California's Hospital Buildings (Based on 2001 Survey)

Most of California's hospital buildings were constructed prior to the 1973 Hospital Seismic Safety Act (HSSA).



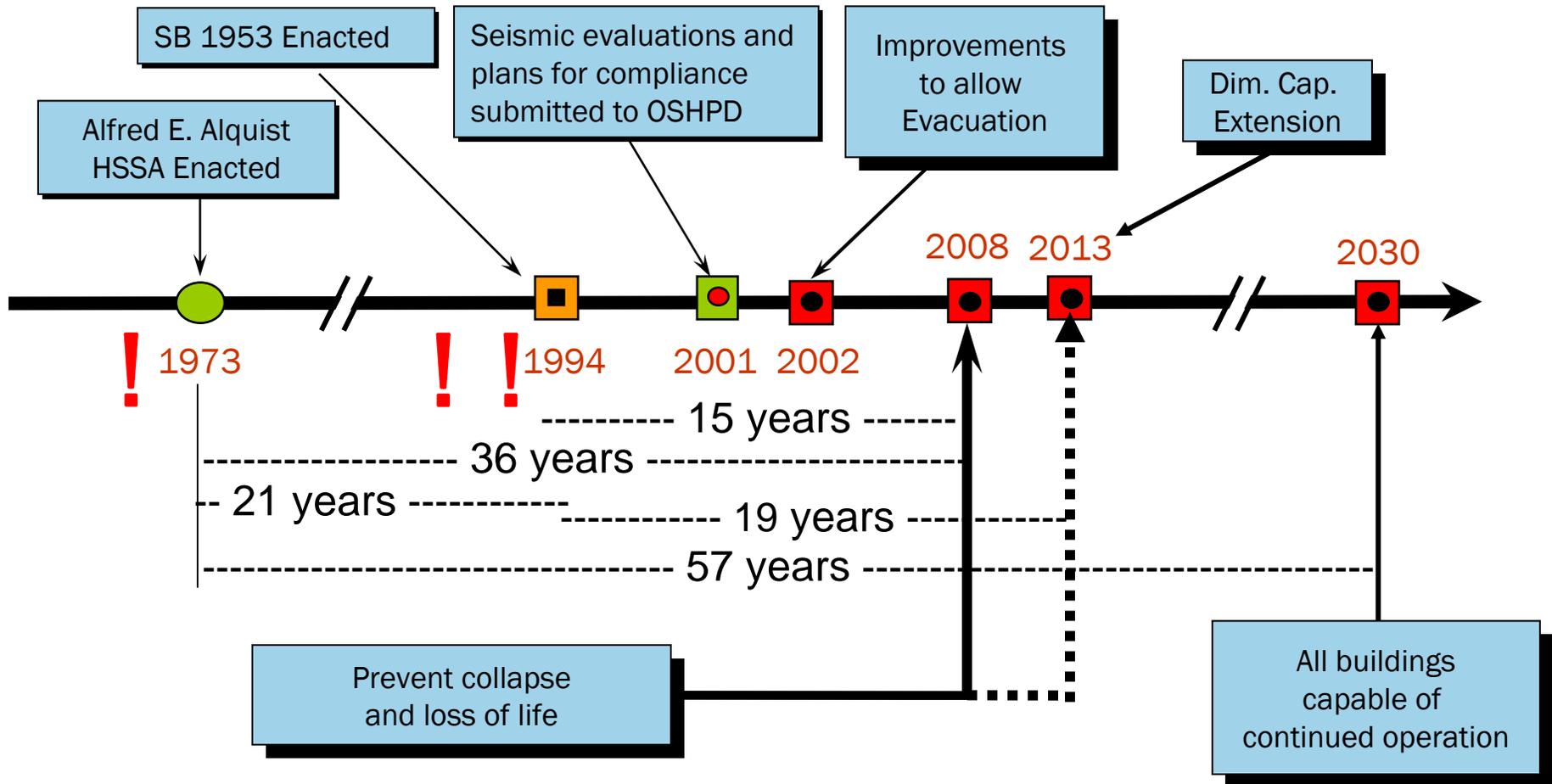
# An Important Lesson from the 1994 Northridge EQ

*Post-HSSA (1973) buildings had significantly better performance*

	Pre-Act (51 Buildings)	Post-Act (31 Buildings)
<b>Structural Damage</b>		
Red tagged (Major Damage)	12 (24%)	0 (0%)
Yellow tagged	17 (33%)	1 (3%)
Green tagged	22 (43%)	30 (97%)
<b>Nonstructural Damage</b>		
Major	31 (61%)	7 (23%)
Minor	20 (39%)	24 (77%)



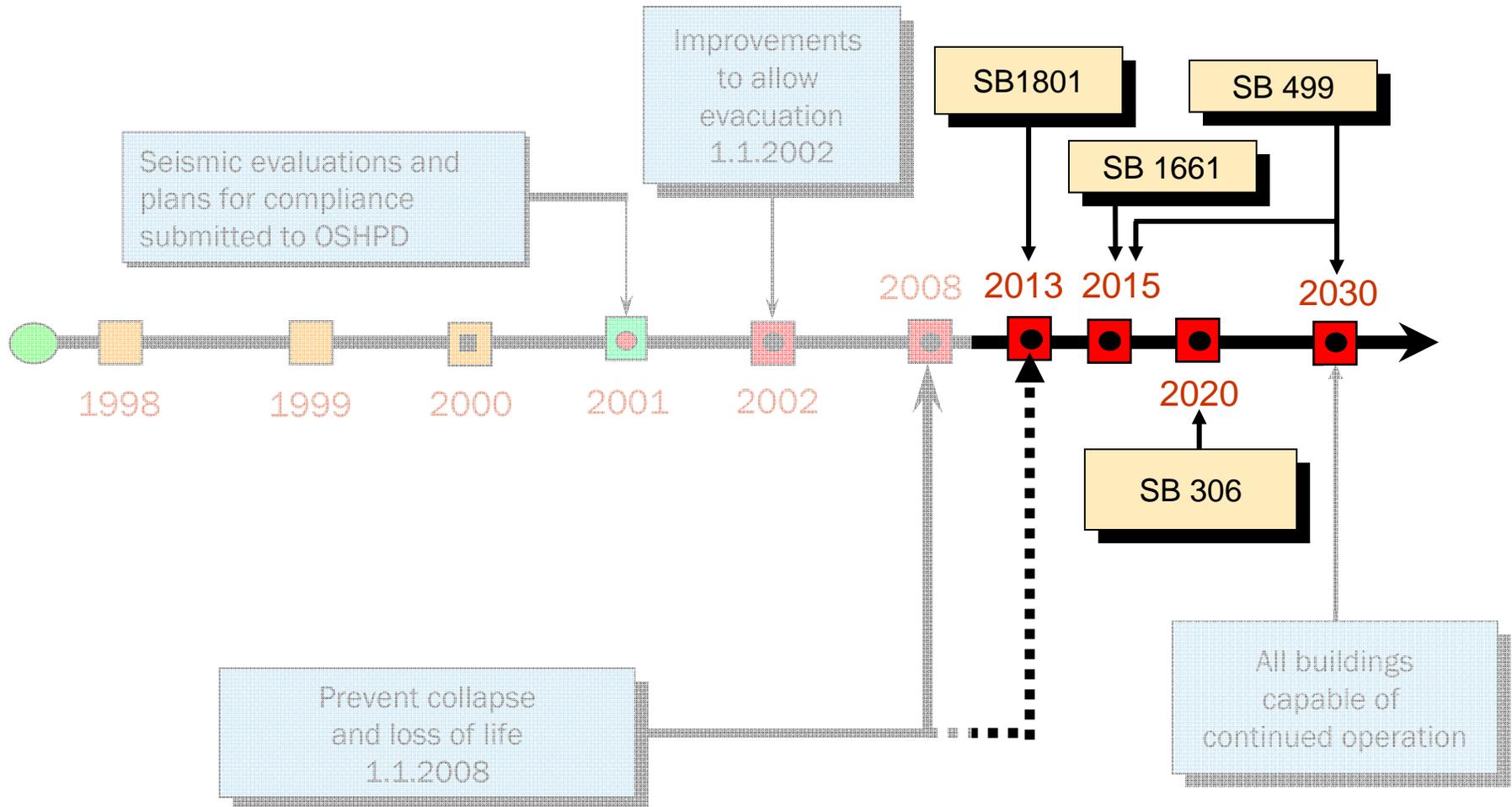
# Initial SB 1953 Major Milestones



! – 1971 Sylmar, 1989 Loma Prieta, and 1994 Northridge EQs



# Extensions to SB 1953 Milestones



# Hospital Seismic Safety Definitions

Significant  
Risk of  
Collapse in  
a Major EQ

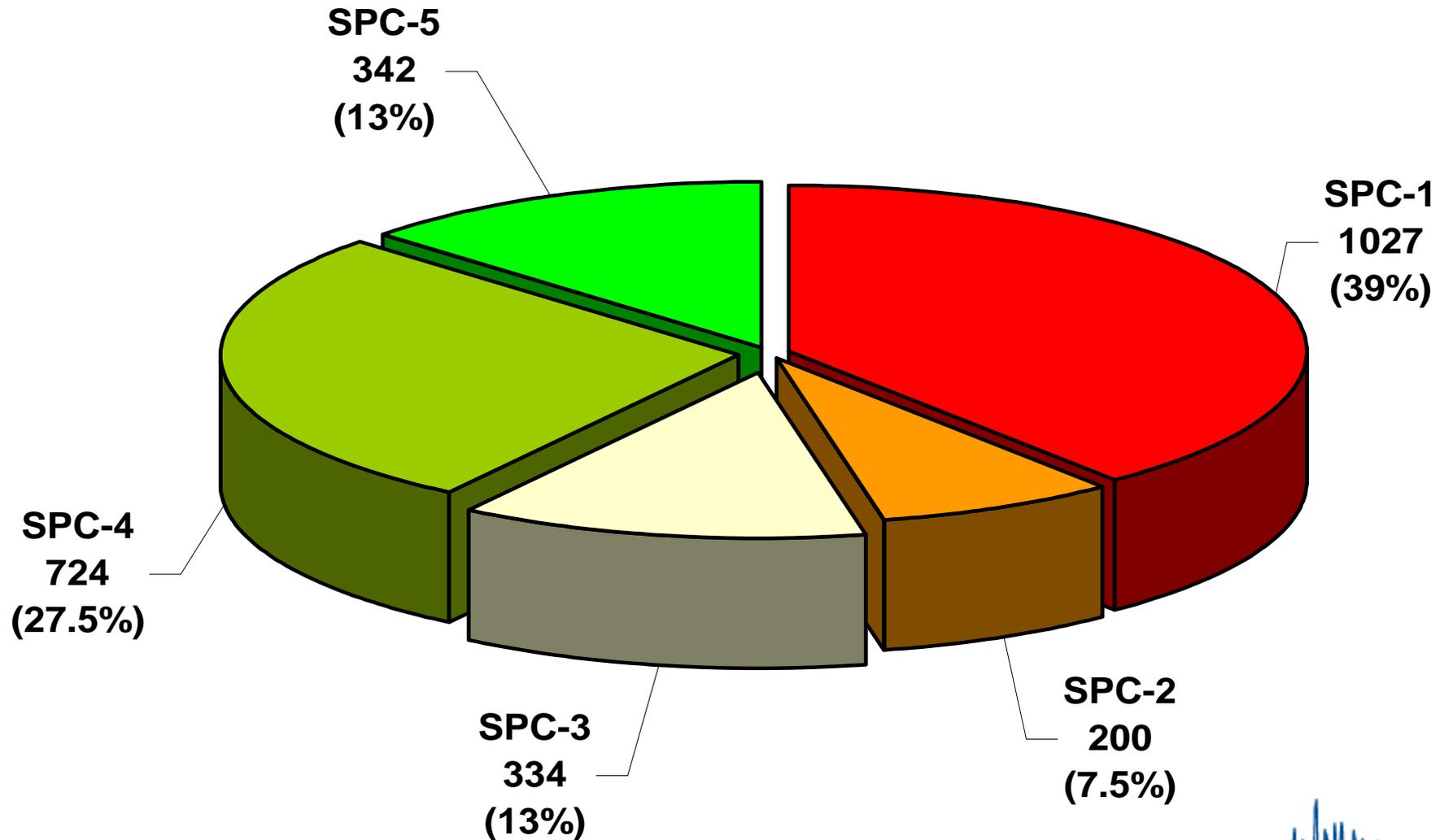
Low  
Risk of  
Collapse in  
a Major EQ

May be Capable of Providing Services  
to the Public after a Major EQ

2008/2013	2030	2030+	2030+	2030+
<b>SPC1</b>	<b>SPC2</b>	<b>SPC3</b>	<b>SPC4</b>	<b>SPC5</b>



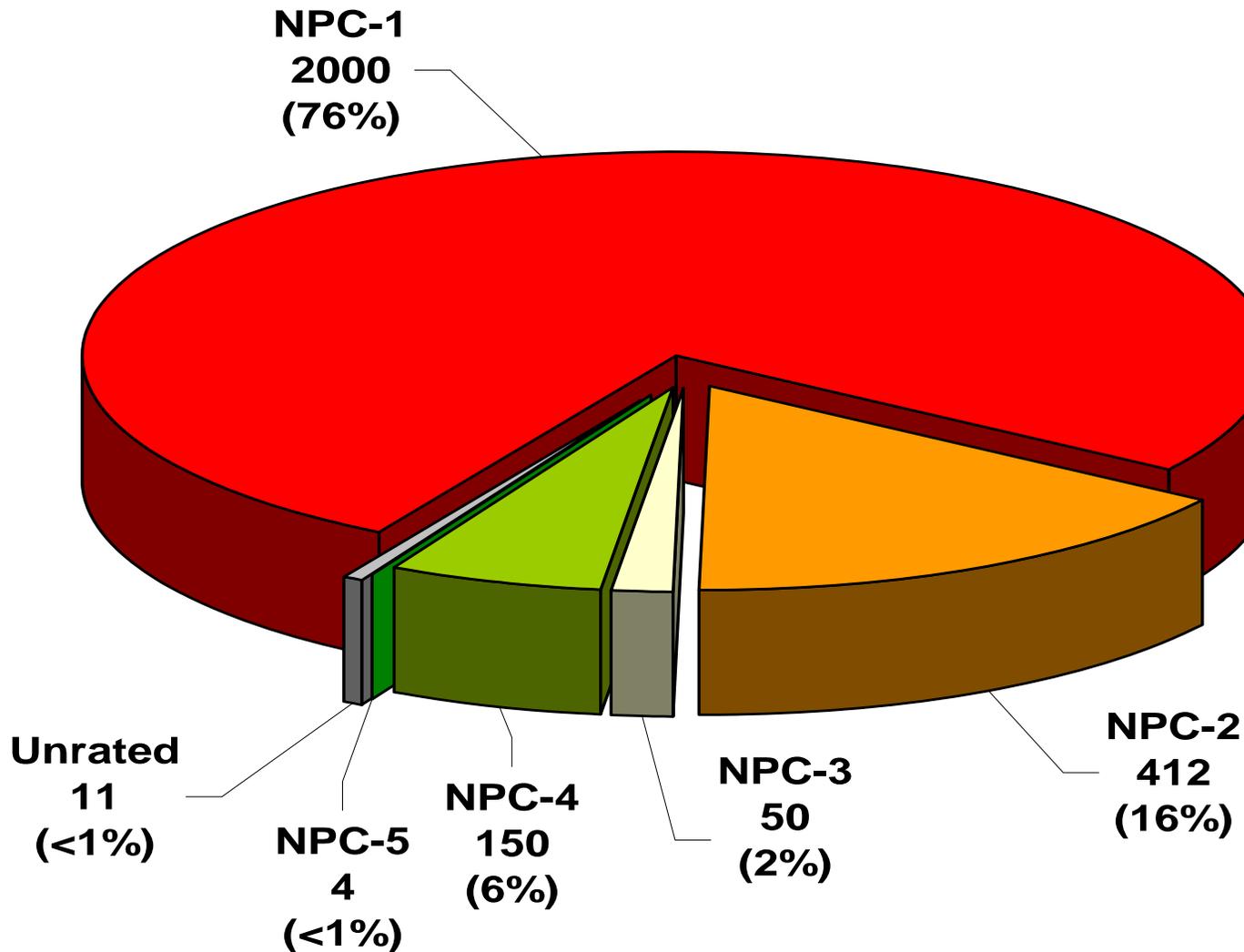
# Original Inventory of Hospital Buildings by Structural Performance Category: 2001



(\*By Hospital Self-Report)



# Initial NPC Ratings of Hospital Buildings (2001)



(\*By Hospital Self-Report)



# Module 2

## Hospital Seismic Safety Compliance



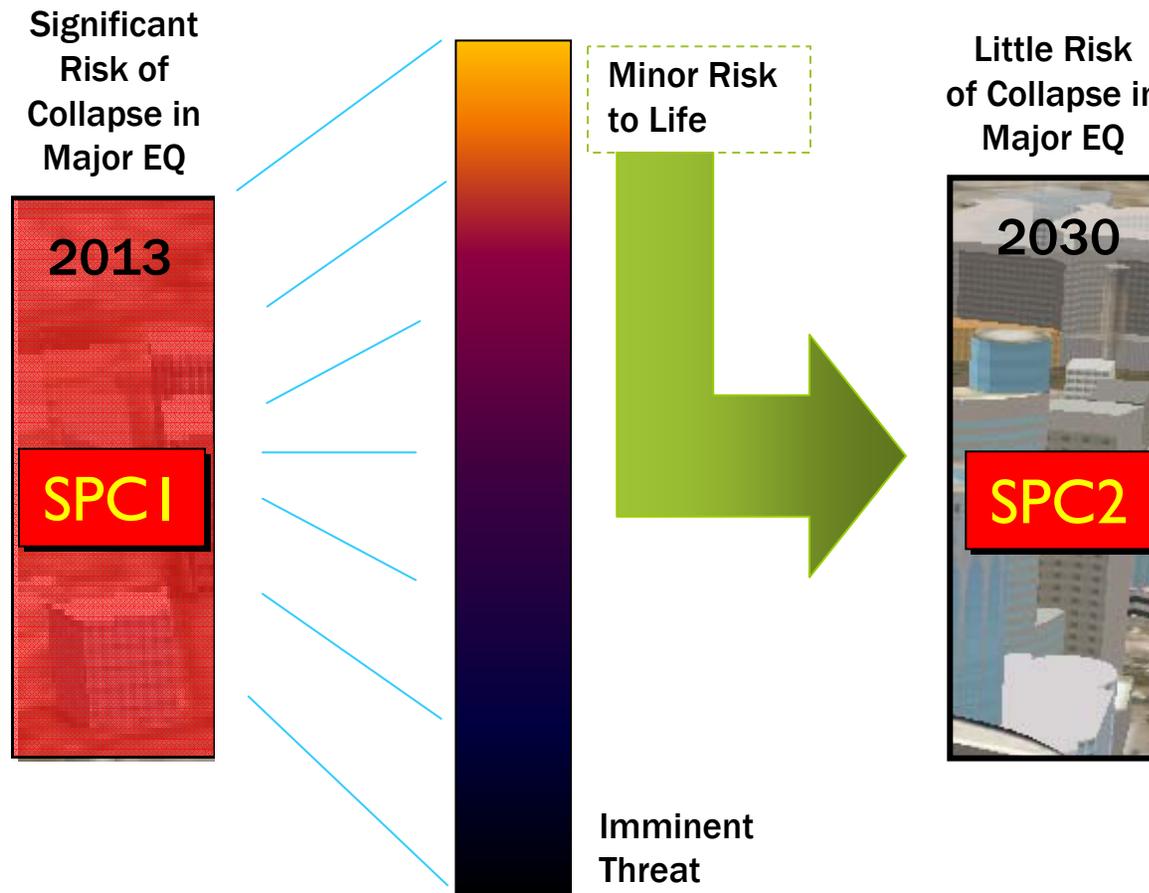
# Compliance Options

- Mitigation Strategies
  - Remove from service
  - Convert from patient care
  - Seismic Retrofit
  - Replacement
  - HAZUS
- Compliance Extensions
  - Diminished Capacity (from 2008 to 2013) – original SB 1953 legislation
  - SB 1801
  - SB 1661
  - SB 306
  - SB 499

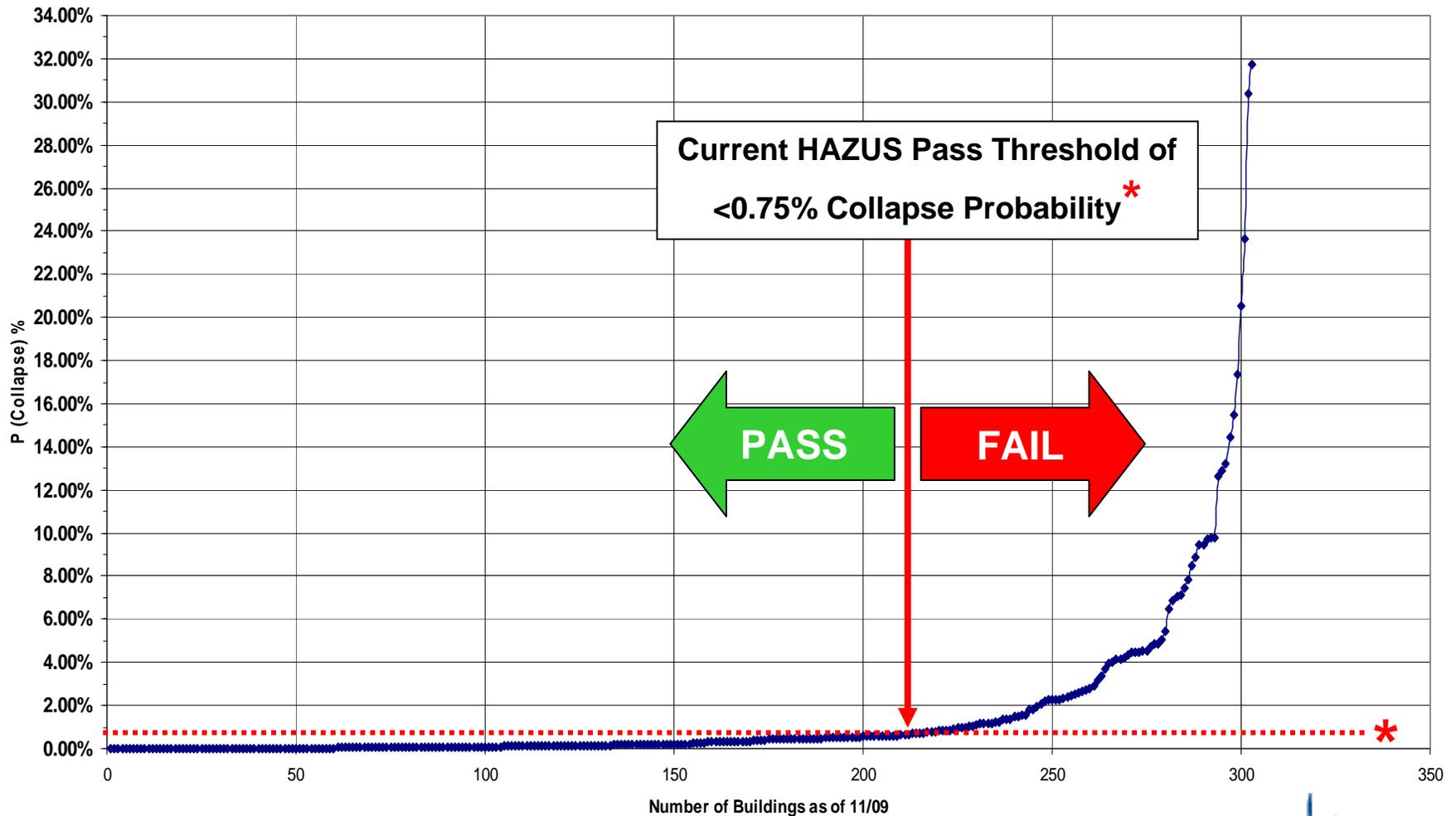


# What is HAZUS?

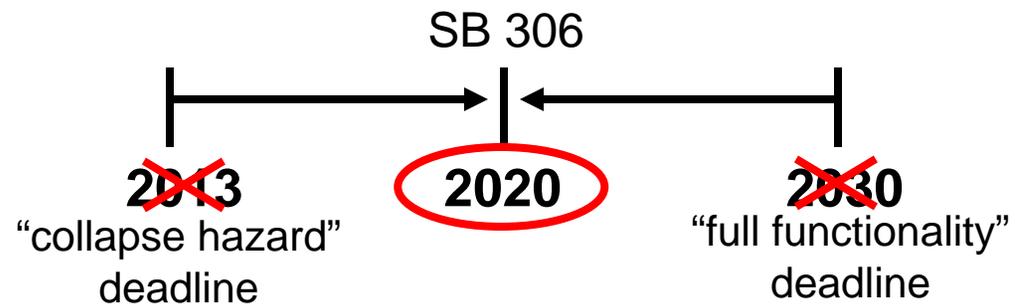
## SPC-1 Ratings – A Closer Look



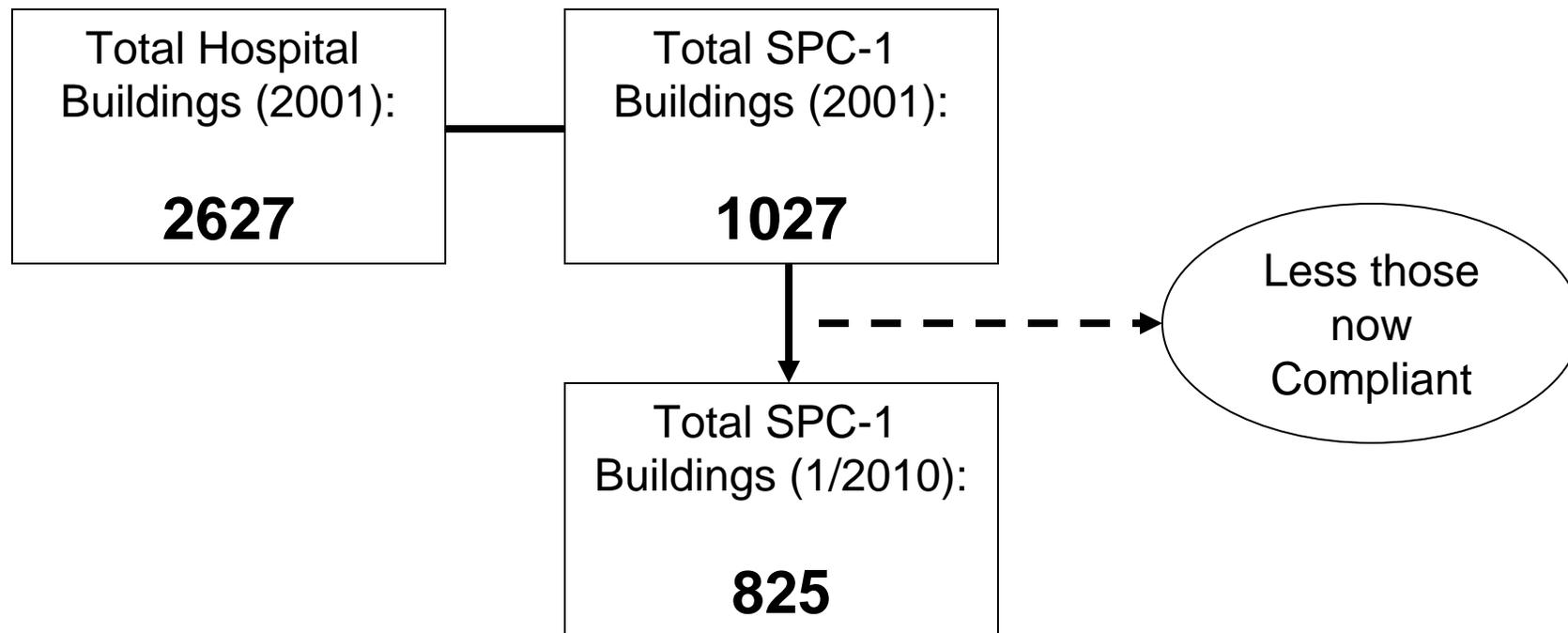
# Collapse Probability of 303 HAZUS-Evaluated Buildings



# What does SB 306 do?



# Summary of SB 1953 Compliance (1/2010)



# What does SB 1661 do?

- Allows hospitals with active “collapse hazard” mitigation projects under construction to extend the 2013 SPC-1 mitigation deadline to 2015
- Requires hospitals to report plans to mitigate SPC-1 “collapse hazard” risk
- Results of 2009 hospital report are presented today



# SB 1661 Hospital Report Results

**186 hospitals reported that 576 SPC-1 buildings presently have active compliance projects, SB 306 extensions, or will be withdrawn from acute care service by 2013.**

**These 576 buildings are considered Likely To Comply (Compliance Group 1)**



# SB 1661 Hospital Report Results (continued)

**Of the remaining 243 buildings, 104 SPC-1 buildings from 64 hospitals are presently under HAZUS review but have no other plans for compliance.**

**These 104 buildings are considered  
Possibly Compliant (Compliance Group 2)**



# SB 1661 Hospital Report Results (continued)

**The remaining 139 SPC-1 buildings from 65 hospitals report no plans for compliance by the 2013/15 deadline and are not under HAZUS review.**

**These 139 buildings are considered  
Potentially Non-Compliant (Compliance Group 3)**



# SB 1661 Hospital Report Results by Control Type (# SPC-1 bldgs.)

Control Type (# SPC-1 bldgs.)	Likely to Comply (Group 1)	Possibly Compliant (Group 2)	Potentially Non-compliant (Group 3)
City/County (n=82)	74 (90%)	5 (6%)	3 (4%)
District (n=79)	52 (66%)	12 (15%)	15 (19%)
Investor (n=149)	86 (58%)	41 (27%)	22 (15%)
Not-for-profit (n=480)	337 (70%)	46 (10%)	97 (20%)
University of California (n=29)	27 (93%)	0 (0%)	2 (7%)
<b>All Buildings (n=819)</b>	<b>576 (70%)</b>	<b>104 (13%)</b>	<b>139 (17%)</b>



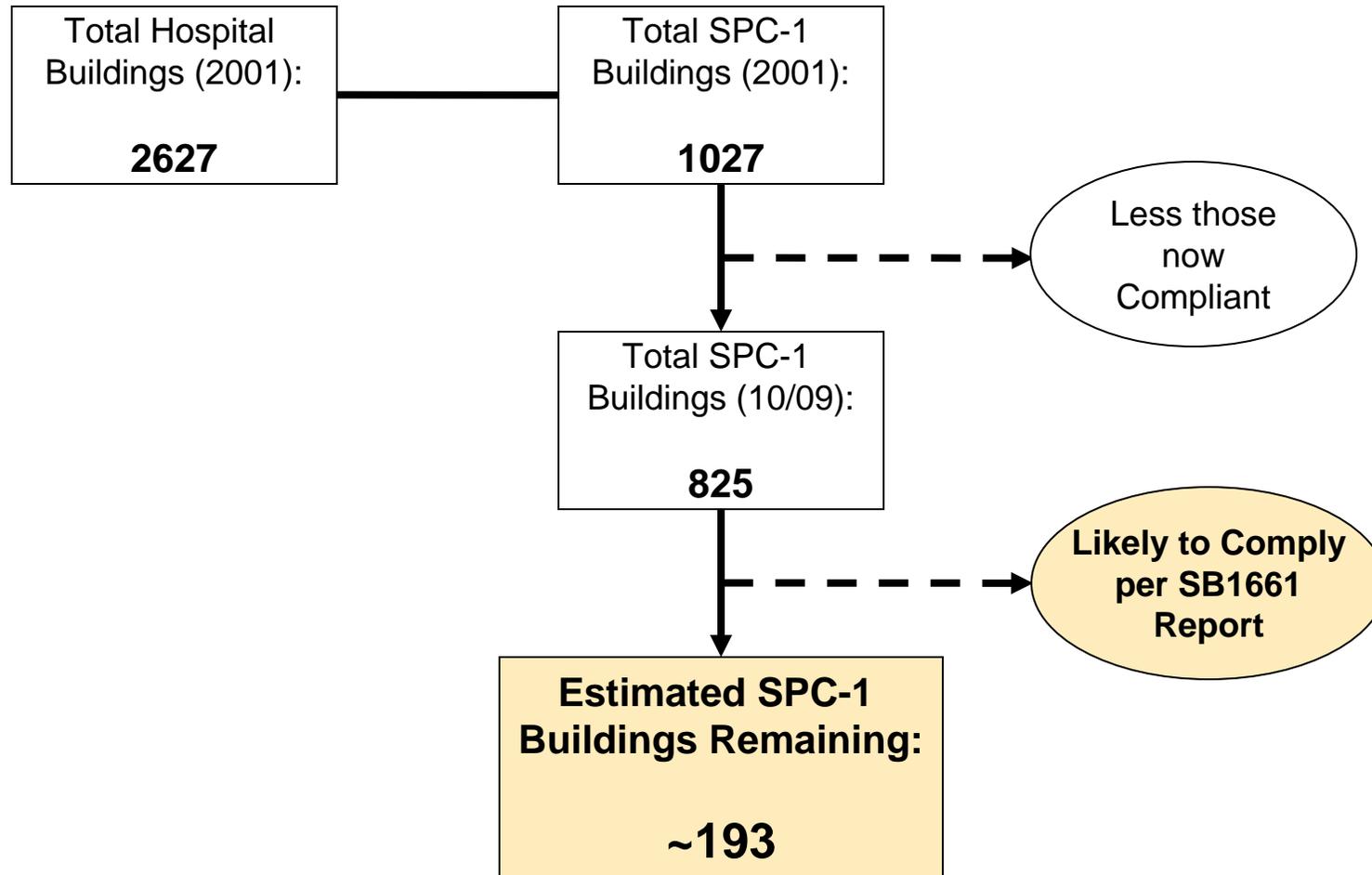
# SB 1661 Hospital Report Results by Largest Systems (# SPC-1 bldgs.)

System Affiliation (# SPC-1 bldgs)	Compliance Likely (Group 1)	Possibly Compliant (Group 2)	Potentially Non-Compliant (Group 3)
Sutter Health (n=70)	63 (90%)	3 (4%)	4 (6%)
Kaiser Foundation Hospitals (n=57)	51 (89%)	4 (7%)	2 (4%)
Catholic Healthcare West (n=55)	25 (45%)	7 (13%)	23 (42%)
Adventist Health System (n=40)	25 (62%)	10 (25%)	5 (13%)
University of California (n=29)	27 (93%)	0 (0%)	2 (7%)
unaffiliated (n=286)	198 (69%)	39 (14%)	49 (17%)



# Summary of SB 1953 Compliance (11/09)

*Includes SB 1661 Report Responses*

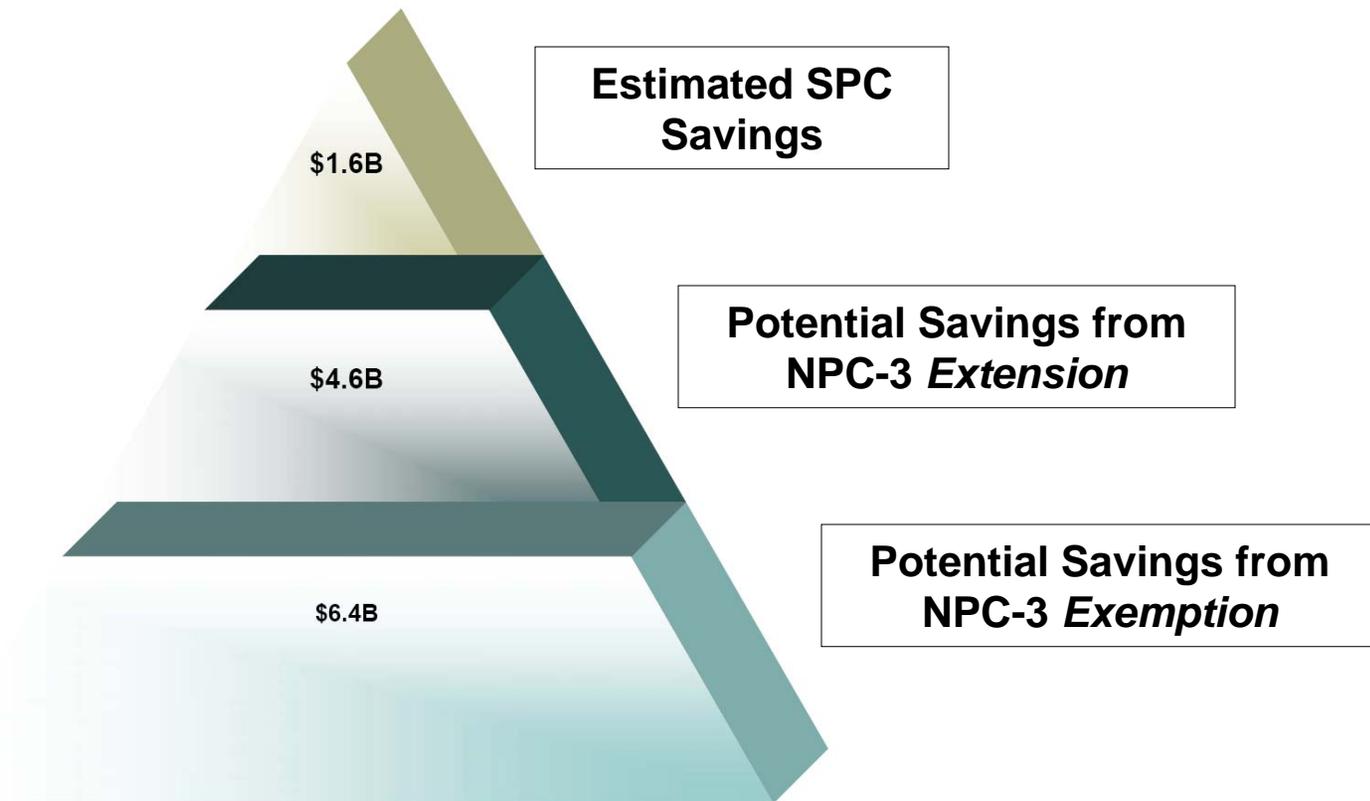


# Recent Legislative Change: SB 499

- Allows some hospitals another option to qualify for a two-year extension provided they are ranked by HAZUS as SPC-1 building and meet additional specified criteria
- Provides OSHPD with emergency authority to adopt new HAZUS regulations and revise NPC deadlines
- SPC-1 reporting Nov. 1, 2010, and annual reports thereafter
- Fine for not complying with reporting requirements (\$10 per bed/per day not to exceed \$1000 per day for each SPC-1 building)
- Generally re-aligns NPC compliance with SPC 2013/15, 2020, and 2030 deadlines



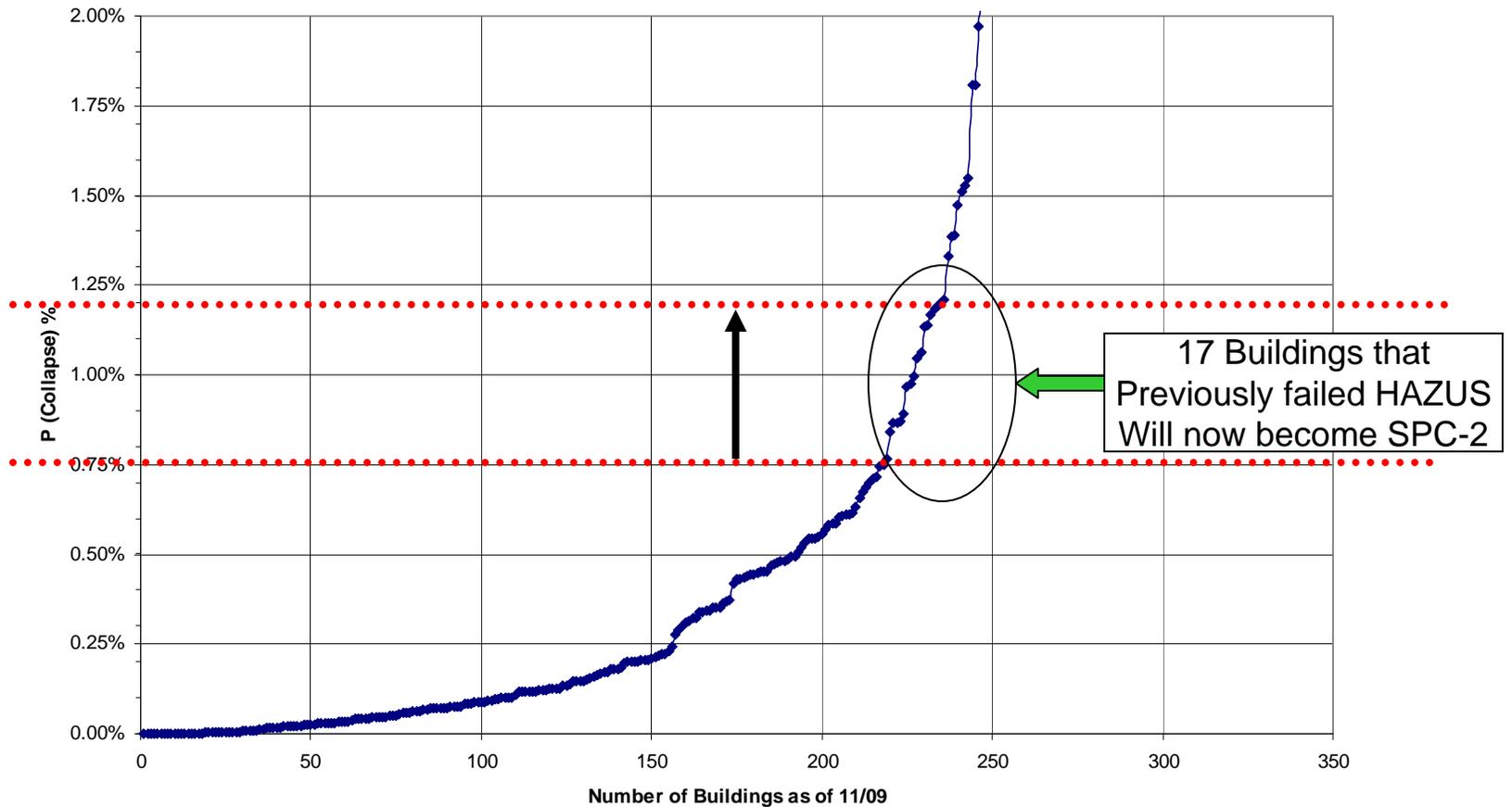
# Forecasted Economic and Fiscal Impact of SB 499 Regulations



**Total \$12.6B forecasted savings that hospitals may redirect to structural seismic safety**

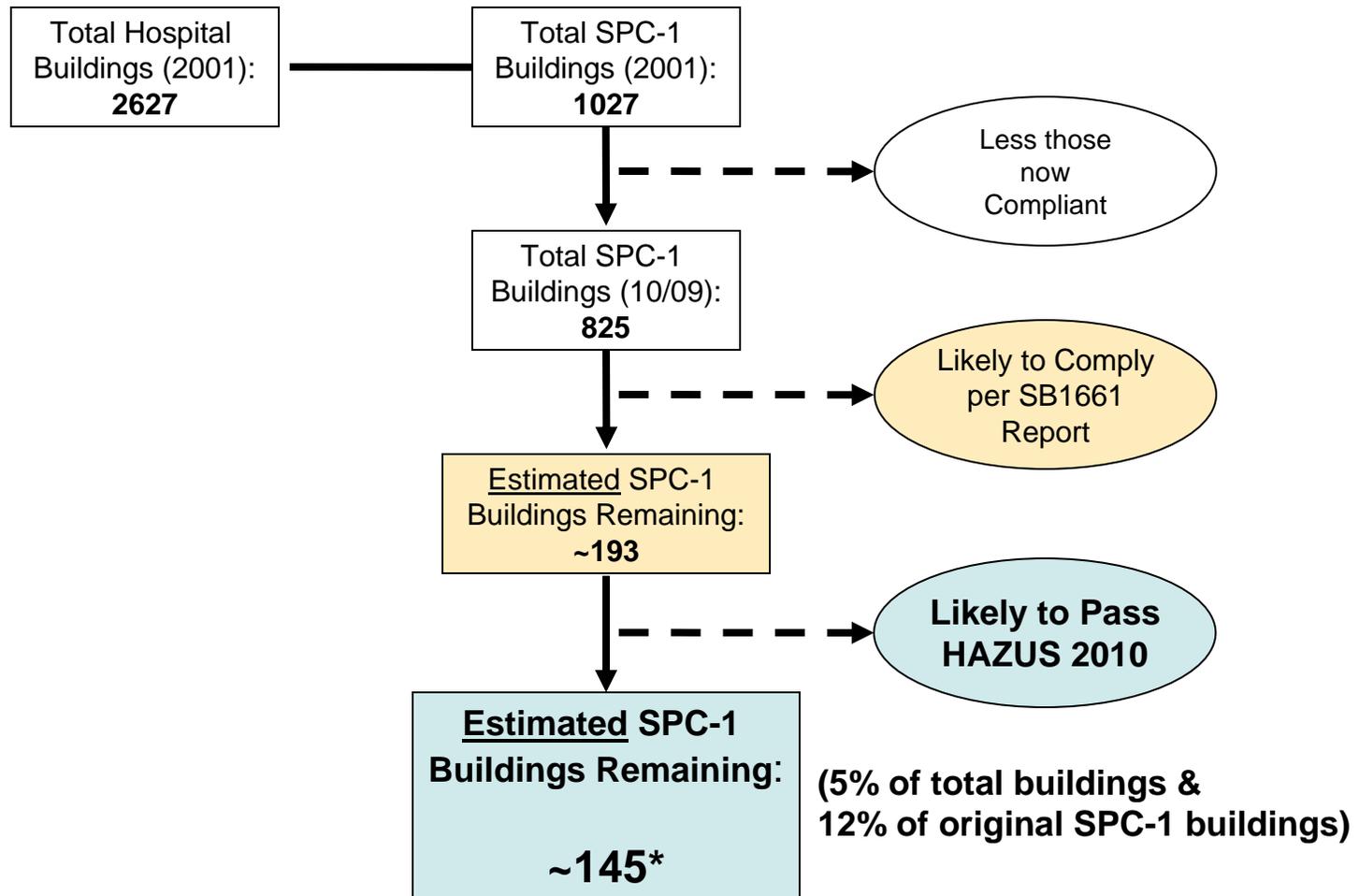


# Expected Effect of SB 499 on Hospital Seismic Safety Compliance



# Summary of SB 1953 Compliance (1/10)

## *Includes Estimated SB499 Effect*



# Summary of SB 1953 Compliance (1/10)

## *Includes Estimated SB499 Effect*

*However this number can...*

*...INCREASE because a number of facilities in Compliance Group 1 have placed their projects on hold*

For example, if 2/3rds of the 196 Group 1 buildings with projects “on hold” ultimately fail to comply, the final number of non-compliant buildings would increase from ~145 to ~278

*...DECREASE if the estimates of HAZUS 2010 participation and passage rates are too conservative*

An increase in estimated participation from 50% to 75% and an increase in estimated passage from 50% to 75% would decrease the estimated final number of non-compliant buildings from ~145 to ~85

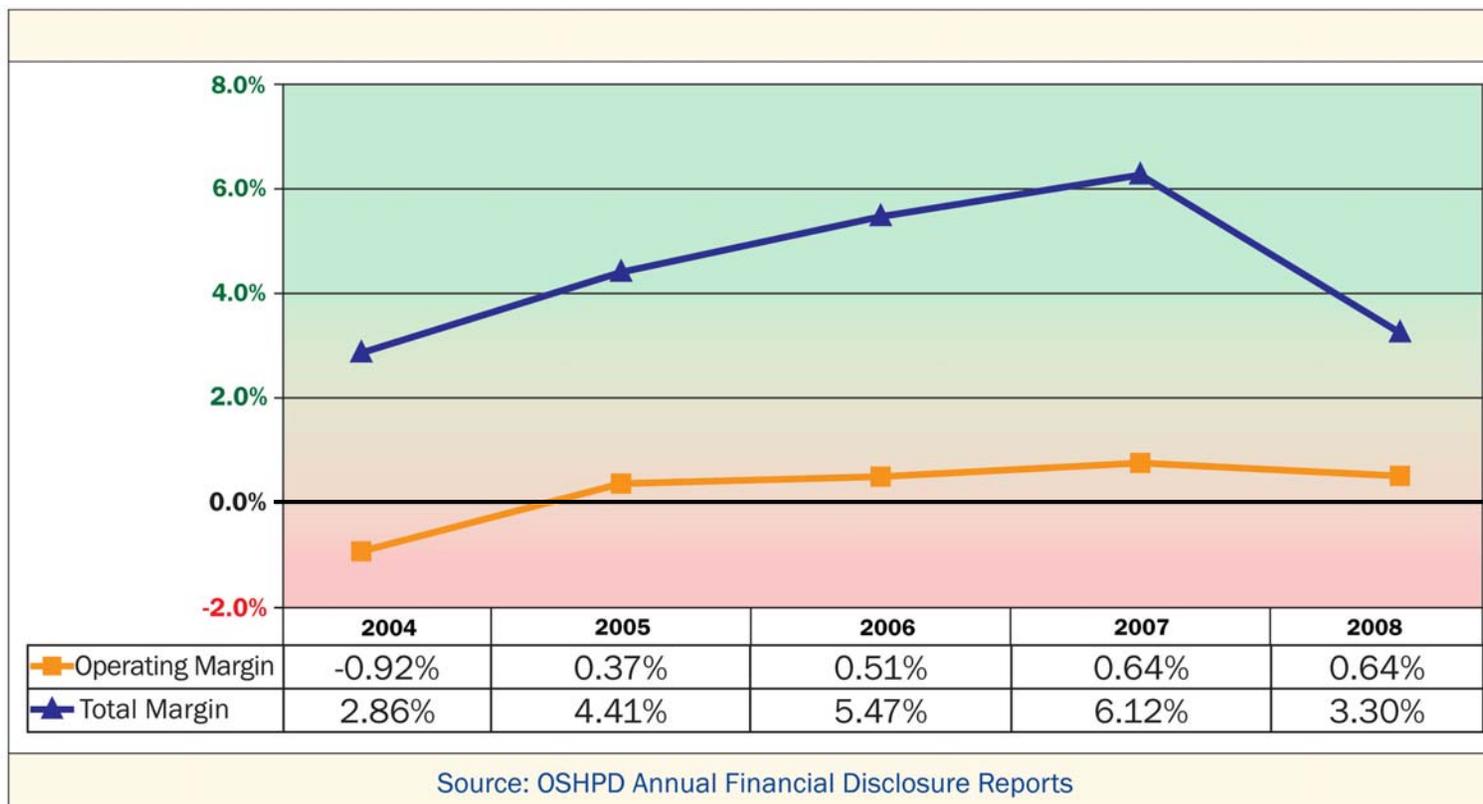


## Hospital Financial Condition and Seismic Safety Compliance



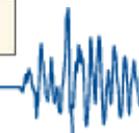
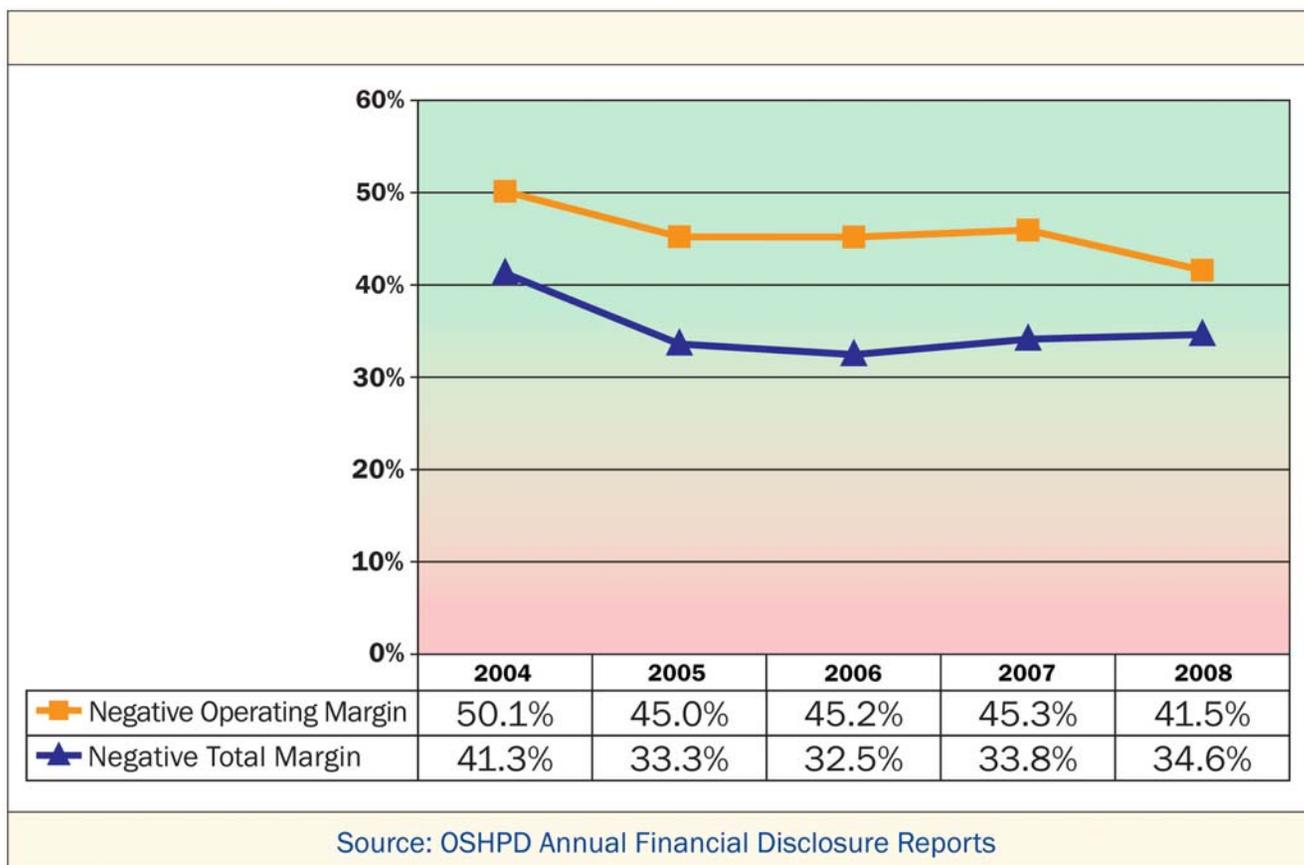
# Hospital Financial Margins for the Last Five Years

*Hospital Total Margins averaged +4.45% and Operating Margins averaged +0.25% from 2004 through 2008*



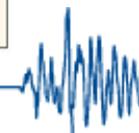
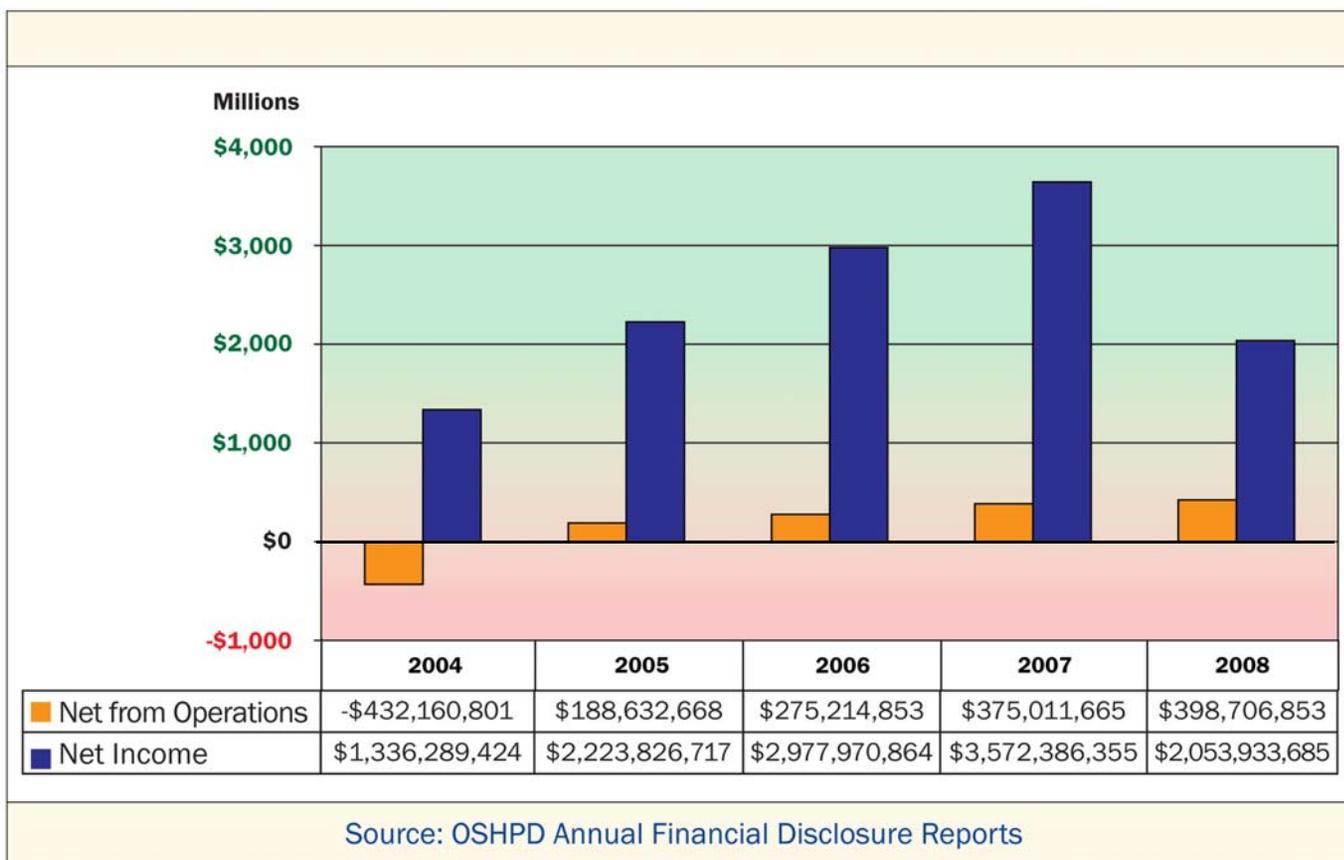
# Percent of Hospitals Operating at a Loss

*An average of 46% of Hospitals had Negative Operating Margins and 35% had Negative Total Margins from 2004 to 2008*



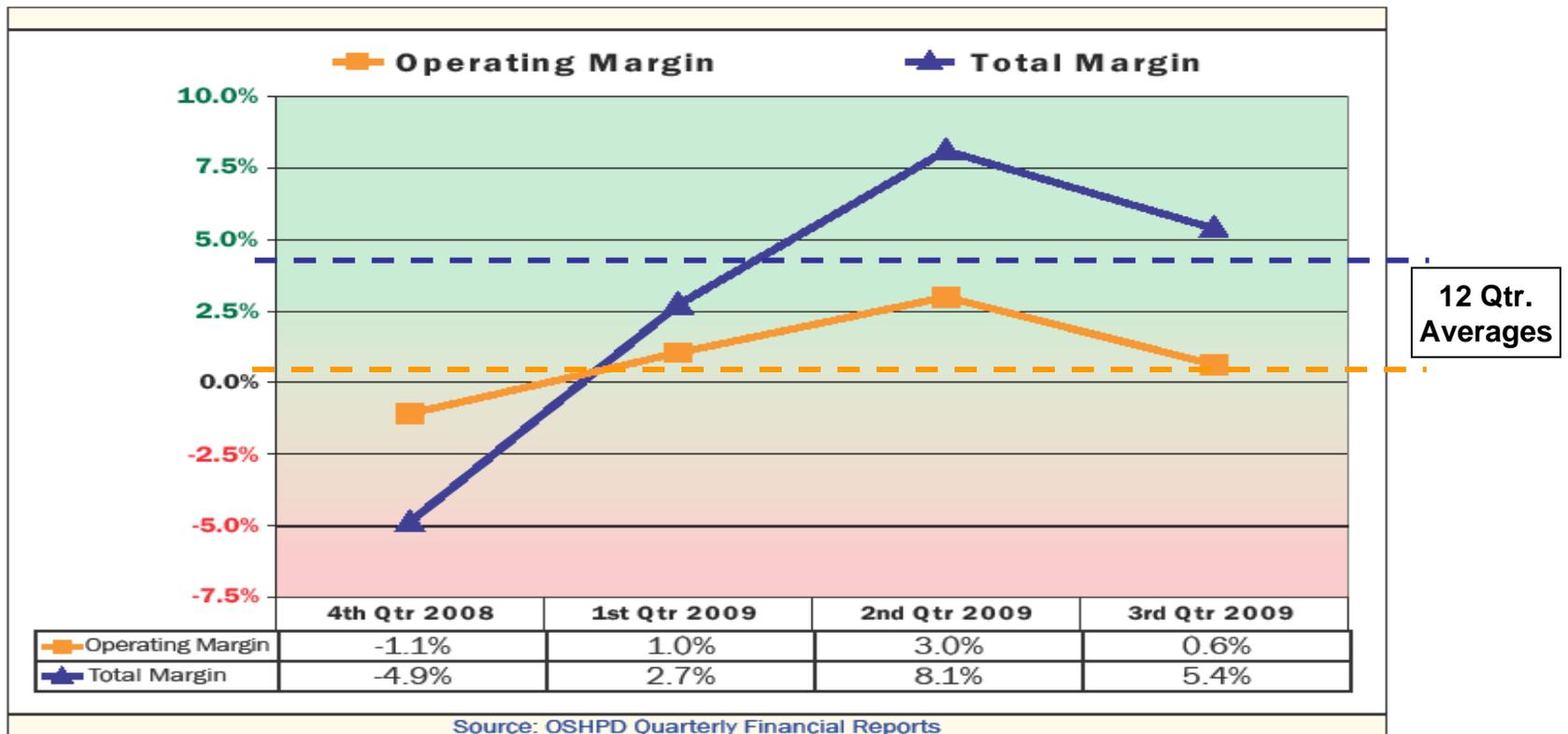
# Net from Operations vs. Net Income

*Hospital net income was \$12 billion (\$802 million from operations) from 2004 to 2008*



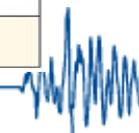
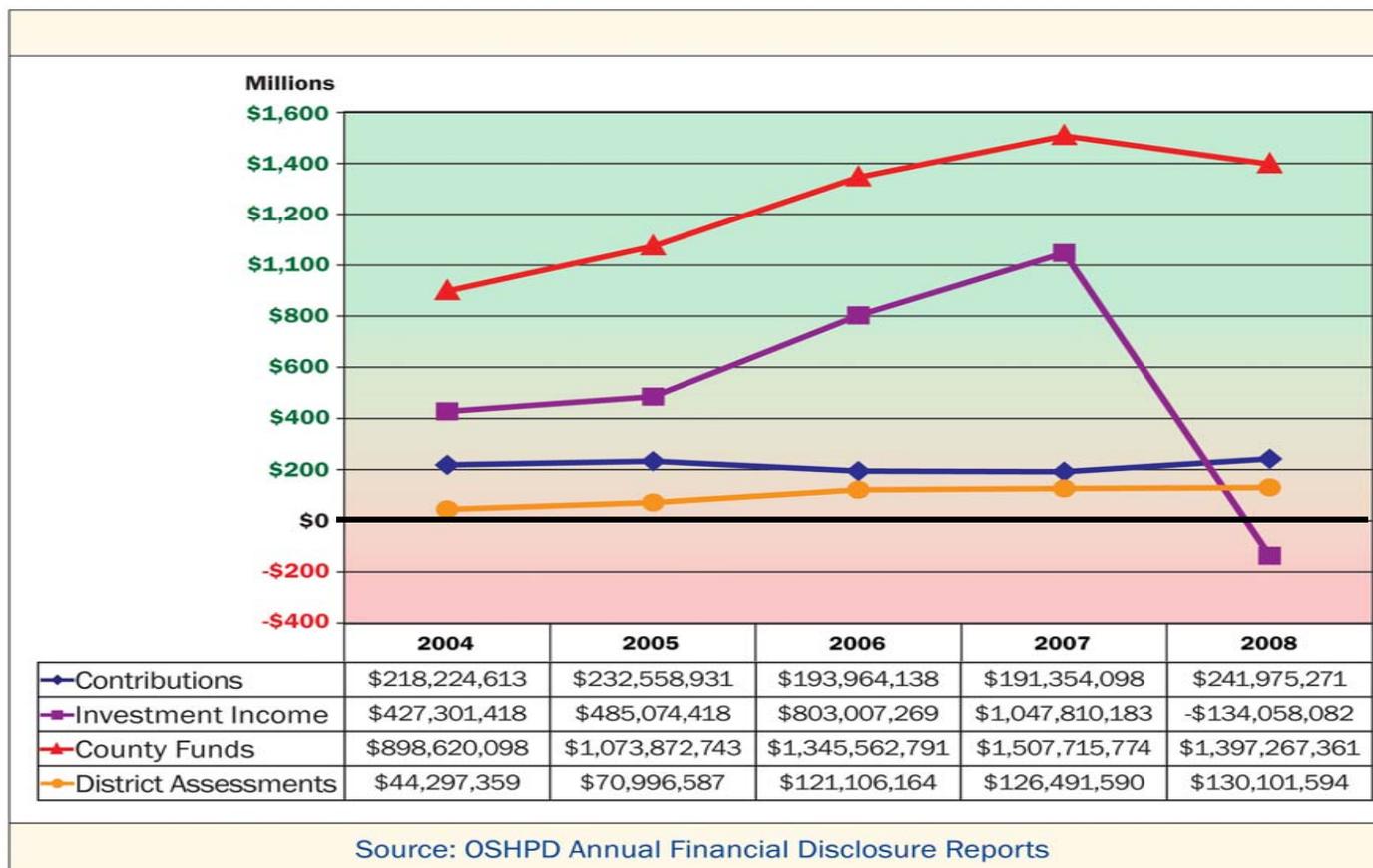
# Hospital Financial Margins for the Last Four Quarters

*During the most recent four quarters, both Operating Margin and Total Margin declined below and then returned to just above their three year averages of 0.3% and 4% respectively.*



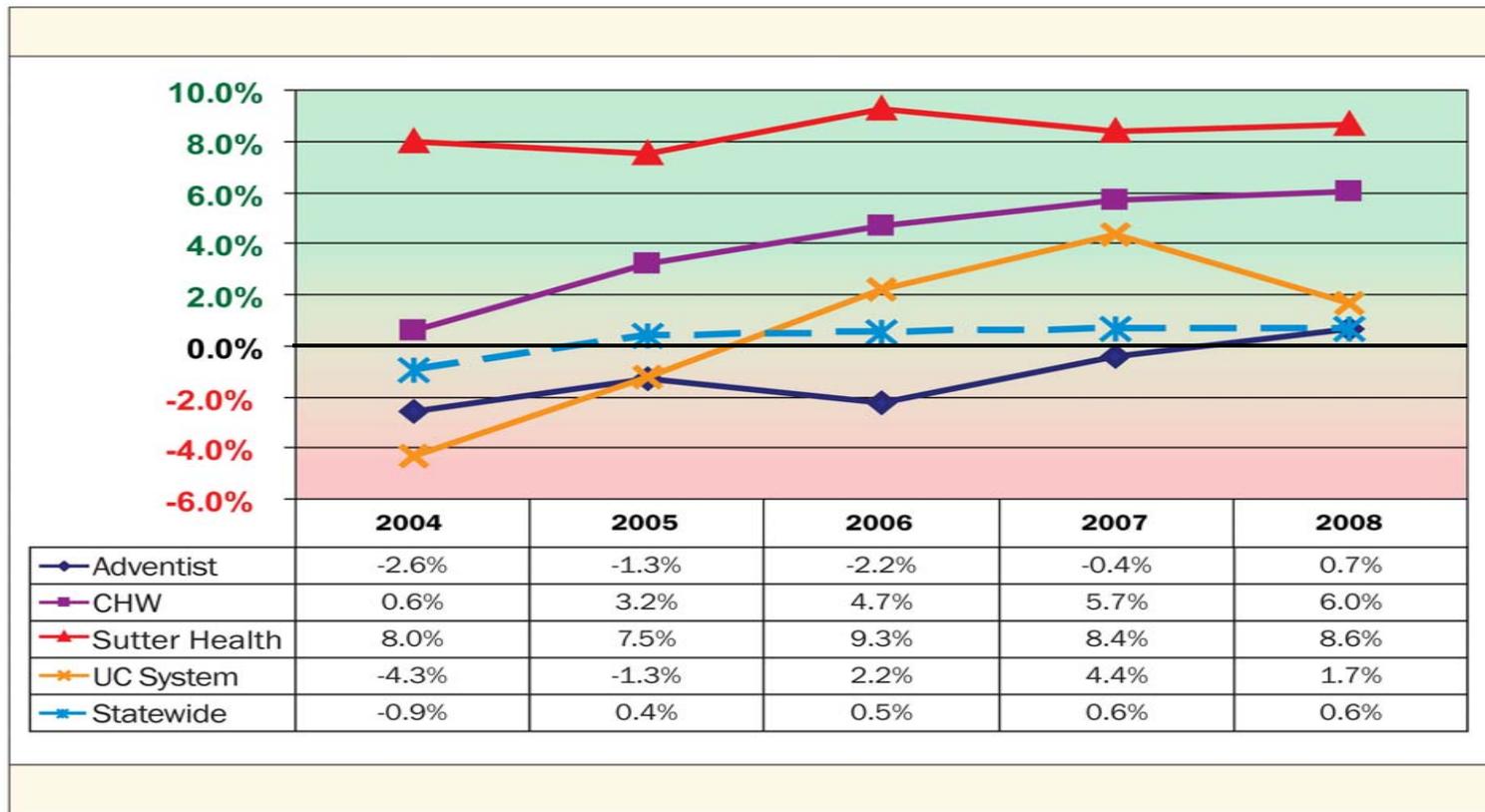
# Sources of Non-Operating Revenue

*Investment Income declined precipitously in 2008 (but was a net positive of \$2.6 billion from 2004 to 2008)*

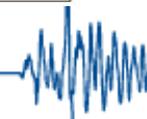


# Operating Margin for Four of the largest Health Systems

*Committee-Requested Examples of Operating Margin (by selected system compared to state average)*

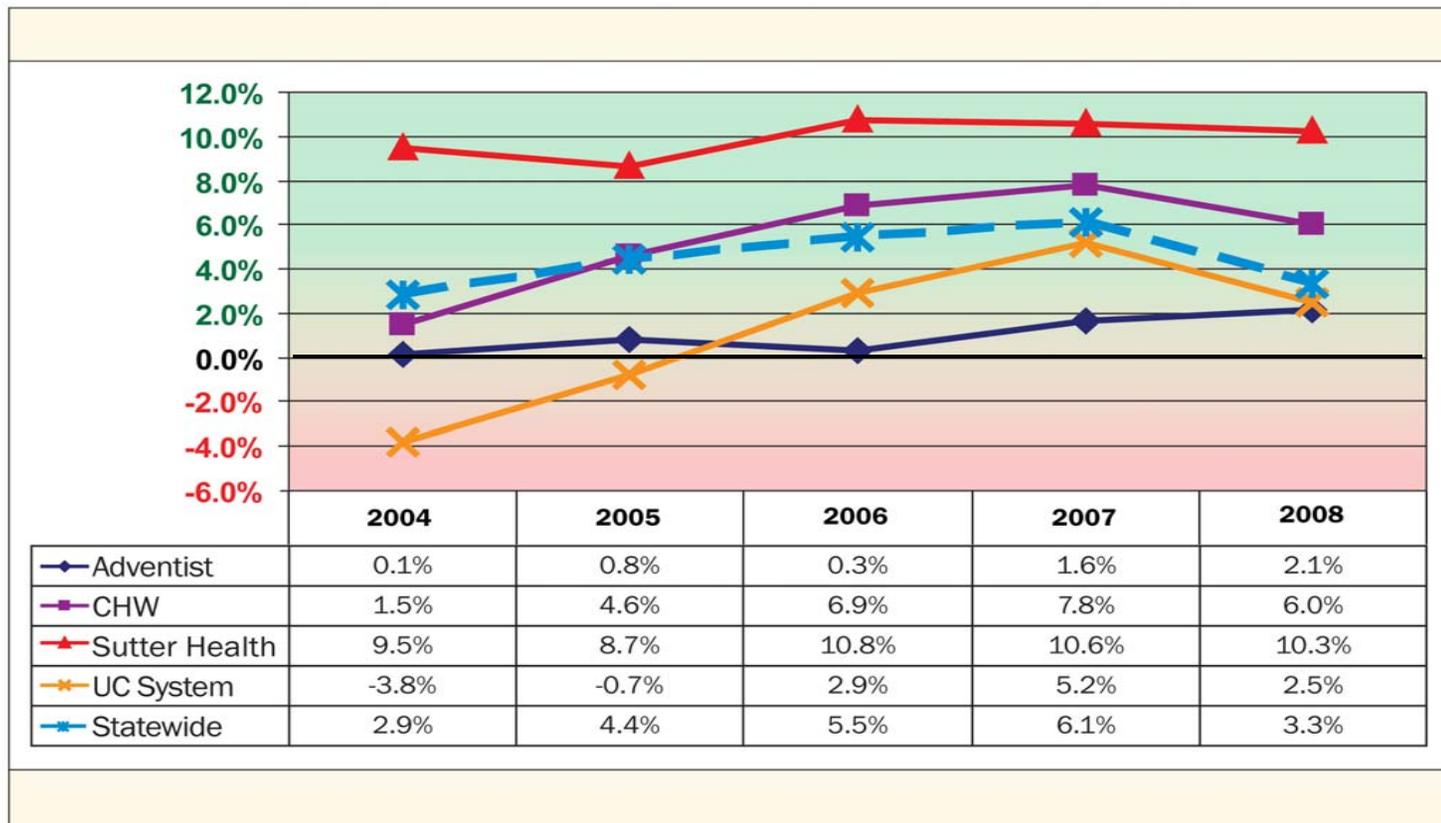


(Kaiser does not provide comparable financial information)



# Total Margin for Four of the largest Health Systems

*Committee-Requested Examples of Total Margin (by selected system compared to state average)*



(Kaiser does not provide comparable financial information)



# Detailed Financial Performance Data, 2008 Committee-Requested Financial Indicators

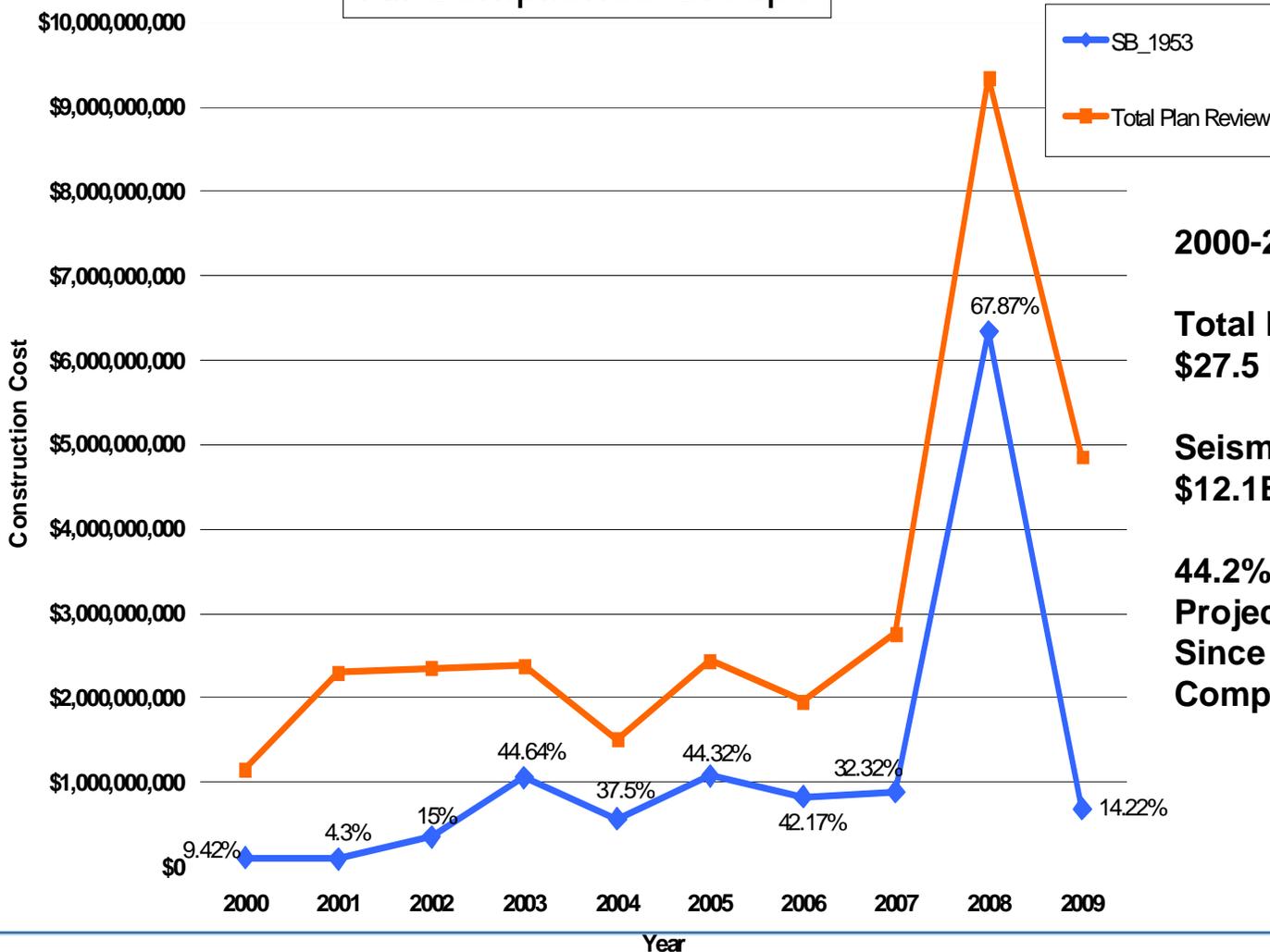
(67 hospitals had missing data)

	Facility Occ. Rate	Facility Current Ratio	Facility Days Cash on Hand	Facility Operating Cash Flow Margin	Facility Operating Margin	Facility Total Margin	Facility [Total – Operating Margin]
Compliance Group 1 “Compliance Likely”	59.0%	2.1	76	2.3%	-3.1%	1.0%	4.1%
Compliance Group 2 “Possibly Compliant”	60.3%	2.5	50	3.6%	-1.2%	0.8%	2.0%
Compliance Group 3 “Potentially Non-Compliant”	60.8%	2.0	42	2.3%	-2.1%	-1.1%	1.0%



# Investment in SB 1953/Seismic Compliance from 1/1/00 thru 12/31/09

All Compliance Groups



## 2000-2009 Plan Review Summary

**Total Plan Review**  
**\$27.5 B**

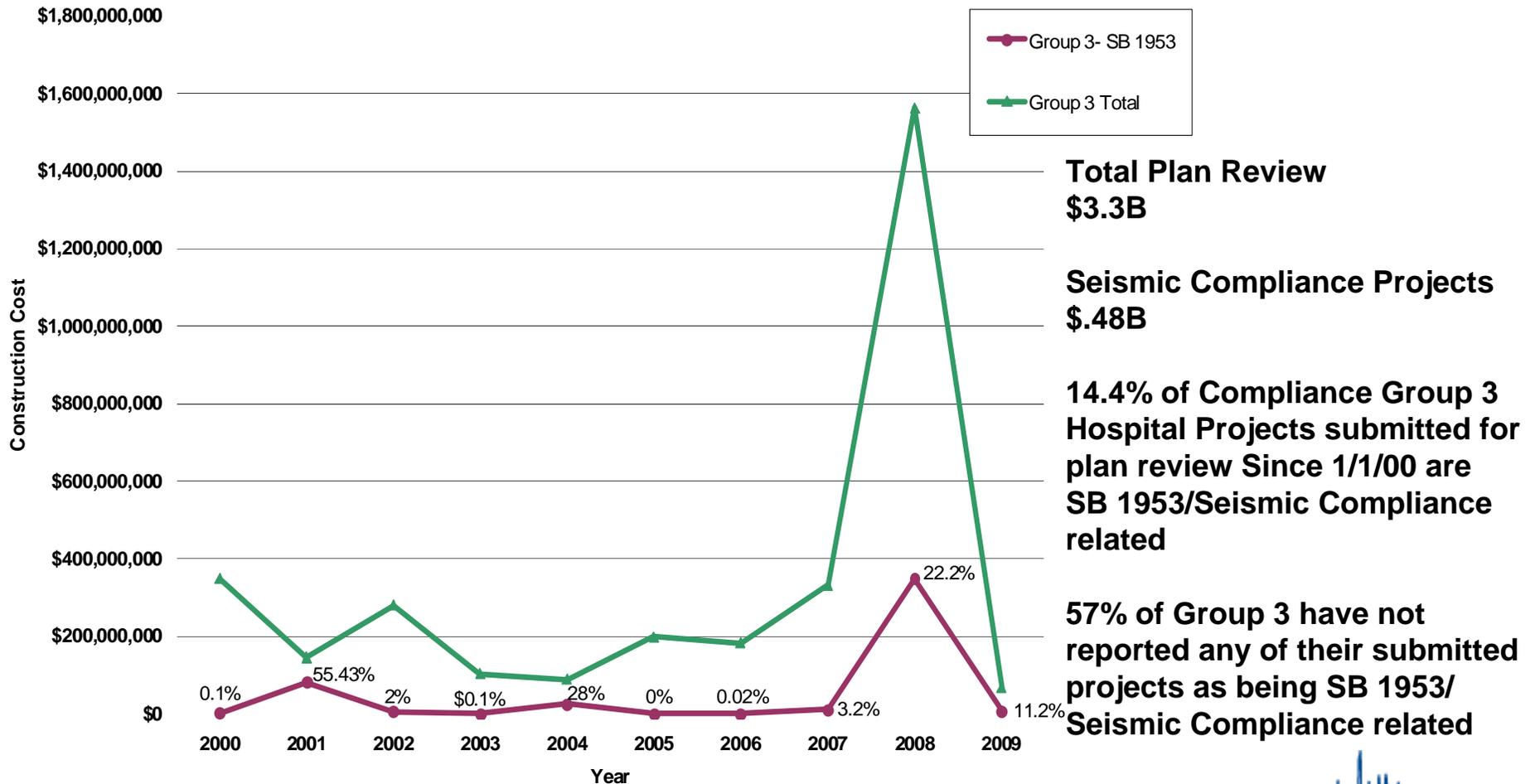
**Seismic Compliance Projects**  
**\$12.1B**

**44.2% of Acute Care Hospital  
Projects submitted for plan review  
Since 1/1/00 are SB 1953/Seismic  
Compliance related**



# Investment in SB 1953/Seismic Compliance from 1/1/00 thru 12/31/09

## Compliance Group 3



**Total Plan Review  
\$3.3B**

**Seismic Compliance Projects  
\$.48B**

**14.4% of Compliance Group 3  
Hospital Projects submitted for  
plan review Since 1/1/00 are  
SB 1953/Seismic Compliance  
related**

**57% of Group 3 have not  
reported any of their submitted  
projects as being SB 1953/  
Seismic Compliance related**



*End Slide....*

