



PROJECT MEMO

California State Capitol Annex Project – Planning Study December 2017
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To: Debra Gravert, Chief Administrative Officer

COMPLETED BY

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Referencing: California State Capitol Annex Project – Planning Study December 2017
Discussion paper on: Opinion of Probable cost for budgeting.

Many factors influence the costs for the construction of a new building, and therefore it is common to use the costs associated with comparable projects built in the region of the anticipated construction project. For the Capitol Annex project, the comparable projects needed to be have been constructed by the government and located in the state. The project type desired for this evaluation should be public, high visibility, high use, with: office, assembly, and secure parking occupants at a minimum. The comparable projects are more valuable if there are many available as larger numbers of comparable costs will tend to devalue project cost anomalies of the individual projects. We were fortunate to have a significant source of past and current costs for the California courthouse projects. We found within this information new construction projects, associated construction costs, constructed building area, and matching the types of uses available which provided us a very rich comparable project dataset for our analysis.

A good source for additional information related to cost estimation of public buildings in California can be found at: Frequently Asked Questions: Court Construction Costs <http://www.courts.ca.gov/23308.htm>

The following information explains the process we used to create a cost per square foot price for the new Capitol Annex project. The values for the cost should be assumed to be budget numbers not final construction costs. The architectural and engineering design process can utilize this value in the design process. If the project experiences a significant delay in starting the illustrated values may need to be escalated.

California Capitol Annex Cost evaluation discussion sheet

For the purposes of evaluating the replacement cost for the Capitol Annex the following steps were conducted:

1. Evaluate existing costs of government buildings constructed within the past 10 years.
2. Utilize available cost per square foot (cost/sf) based on completed construction. For this purpose, costs (cost/sf) were ascertained from the California Courthouse building website (<http://www.courts.ca.gov/>)
 - a. The numbers on the website are whole project costs, not just construction costs.
 - b. In some cases, they include site costs, miscellaneous fees, design team fees, and other costs that we cannot discern from the information provided.
3. Adjust for inflation, unknown project cost as noted in 2.b. above, and project scale.

Efforts included:

- A. Database the projects
 - a. Name of project
 - b. Cost of total project
 - c. Year of construction
 - d. Total area related to the cost of construction
- B. Apply industry standards for escalation which notes from 2006 to 2017 the cost of construction in California (generalized) increased 30% over that timeframe. Spreading this escalation evenly over that timeframe indicates approximately 2.5% escalation per year.
- C. Allocate escalation to each individual database project based on year of occupancy/construction completion.
- D. Apply a reduction factor (generalized) to account for unknown project costs that may not apply to the Capitol Annex project. (value x 0.035)
- E. Rank the 24 projects based on cost/sf and remove the entries for the top and bottom 3 ranked projects to remove higher and lower than normal projects.
 - a. The average for **all 24 projects is \$959.52 cost/sf** and the average of the **selected 18 projects is \$977.60 cost/SF**. The list of projects included several significantly lower cost/sf projects which accounts for the variance in values. We also removed projects that were classified as Renovation projects.
 - b. In a separate evaluation, conducted by a third party, of projects provided from <http://www.courts.ca.gov/> a list of 24 specifically selected projects showed with escalation added a **cost/sf = \$917.16 with no adjustment for high/low cost/sf projects**.
 - c. We have used within our budgeting process a value of **\$950.00 cost/SF**.

Cost/sf table of evaluated projects:

Base Cost/SF	Used Cost/SF	Rank
\$1,181.61	Not used	1
\$1,181.54	Not used	2
\$1,105.09	Not used	3
\$1,103.13	\$1,103.13	4
\$1,087.19	\$1,087.19	5
\$1,045.01	\$1,045.01	6
\$1,036.87	\$1,036.87	7
\$1,027.11	\$1,027.11	8
\$1,019.81	\$1,019.81	9
\$1,010.56	\$1,010.56	10
\$1,010.48	\$1,010.48	11
\$958.65	\$958.65	12

\$956.86	\$956.86	13
\$956.07	\$956.07	14
\$940.00	\$940.00	15
\$916.29	\$916.29	16
\$916.09	\$916.09	17
\$906.02	\$906.02	18
\$905.67	\$905.67	19
\$903.23	\$903.23	20
\$897.66	\$897.66	21
\$872.05	Not used	22
\$761.44	Not used	23
\$330.04	Not used	24
Average	\$977.60/SF	

Evaluation of local construction activity and the economics related to the construction industry is a common way that preliminary cost estimates are generated. At this level of detail, a cost per square foot estimate is anticipated to achieve a good budget level cost. A few issues that modified the project's budget are as follows:

- A. Year of construction escalation value multiplied by cost/sf of example building.
- B. Reduction of the example building cost/sf by a factor which considers project specific costs related to the example building project. (such as: cost of land/property, relocation of utilities, relocation cost and a like.)
- C. Typically, the cost for a project is set at the beginning and should have included escalation to the middle of the project anticipated duration. The costs noted in the Courthouse database are those costs reported at the end of construction.
- D. Scale of project typically is evaluated as smaller projects typically cost more per square foot than large projects. Economics of scale was assumed in the cost/sf value that we have suggested.
- E. Costs of making the project site ready for the project was considered:
 1. The cost to remove the existing building.
 2. Maintaining the existing Capitol exterior enclosure after demolition.
 3. Secure the construction site while allowing the occupancy of the Capitol proper.
 4. The construction of a new underground parking structure.
- F. Construction economics based on current construction activity (and available labor forces.)
- G. Quality and durability of the desired construction.
- H. Aesthetic quality desired.
- I. Anticipated duration of the project.

First List (alphabetical)

1. Court of Appeal, Third District, Stanley Mosk Building Renovation
2. Division Three, Santa Ana
3. Plumas/Sierra Counties, Plumas/Sierra Courthouse
4. Superior Court of California, County of Alameda
5. Superior Court of California, County of Butte
6. Superior Court of California, County of Calaveras
7. Superior Court of California, County of Contra Costa
8. Superior Court of California, County of Fresno
9. Superior Court of California, County of Fresno
10. Superior Court of California, County of Kings
11. Superior Court of California, County of Lassen
12. Superior Court of California, County of Los Angeles
13. Superior Court of California, County of Madera
14. Superior Court of California, County of Merced
15. Superior Court of California, County of Merced
16. Superior Court of California, County of Mono
17. Superior Court of California, County of Riverside
18. Superior Court of California, County of San Benito
19. Superior Court of California, County of San Bernardino
20. Superior Court of California, County of San Diego
21. Superior Court of California, County of San Joaquin
22. Superior Court of California, County of Santa Clara
23. Superior Court of California, County of Solano
24. Superior Court of California, County of Sutter
25. Superior Court of California, County of Tehama
26. Superior Court of California, County of Tulare
27. Superior Court of California, County of Yolo

Second List (alphabetical)

1. Alameda County, East County Hall of Justice, Dublin
2. Butte County, Chico Courthouse
3. Calaveras County, San Andreas Courthouse
4. California Court of Appeal, Fifth District
5. California Court of Appeal, Fourth District
6. Contra Costa County, Richard E. Arnason Justice Center, Pittsburg
7. Fresno County, Juvenile Delinquency Court
8. Kings County, New Hanford Courthouse
9. Lassen County, Susanville Courthouse
10. Madera County Courthouse
11. Merced County Courthouse
12. Merced County, New Los Banos Courthouse
13. Mono County, Mammoth Lakes Courthouse
14. Plumas/Sierra Counties, Plumas/Sierra Courthouse
15. Riverside County, Banning Justice Center
16. San Benito County, Hollister Courthouse
17. San Bernardino County Courthouse
18. San Diego County, Central Courthouse
19. San Joaquin County, Stockton Courthouse
20. Santa Clara County, New Santa Clara Family Justice Center
21. Sutter County, New Yuba City Courthouse
22. Tehama County, Red Bluff Courthouse
23. Tulare County, Porterville Courthouse
24. Yolo County, New Woodland Courthouse

Grey – high/low cost/sf not used in calculations (6)

Yellow – renovation project not used in calculation (3)

California Capitol Annex - Replace

Construction Cost Analysis

	area (sf)	cost/sf	total budget
Construction of a new Capitol Annex	488,598	\$ 950.00	\$ 464,168,000
Demolition of the existing Capitol Annex	325,000	\$ 20.00	\$ 6,500,000
Totals			\$ 470,668,000
Escalation (yr 1)	2.50%		\$ 482,435,000
Escalation (yr 2)	2.50%		\$ 494,496,000
Escalation (yr 3)	2.50%		\$ 506,858,000
TOTAL NEW ANNEX COST			\$ 506,858,000

Note 1: Cost does not include swing space development for off-site temporary governmental functions for the duration of construction. Final swing space costs may include remodels of existing buildings, new construction, or rent.

Note 2: Cost does not include moving costs from Annex to swing space, and moving costs back into the Annex when completed.

California Capitol Annex - Parking Structure

Construction Cost Analysis

	number of cars	area per stall (sf)	area	cost/sf	total budget
Construction of a new underground parking structure	130	300	39,000	\$ 105.00	\$ 4,095,000
New loading dock budget number			8,000	\$ 70.00	\$ 560,000
New Governor's parking area			4,500	\$ 105.00	\$ 473,000
New Landscape costs on the Garage			51,500	\$ 16.00	\$ 824,000
Totals					\$ 5,952,000
Escalation (yr 1)	2.50%				\$ 6,100,000
Escalation (yr 2)	2.50%				\$ 6,253,000
Escalation (yr 3)	2.50%				\$ 6,409,000
TOTAL NEW PARKING STRUCTURE COSTS					\$ 6,409,000

Note 1: Landscape costs are assumed to be grasses and woody shrubs.

California Capitol Annex - Visitor's Center

Construction Cost Analysis

	area (sf)	circulation/ structure/ utility multiplier	total area	cost/sf	construction costs
Cost for additional circulation for Public Access	19,500.00	included in area	\$ 19,500.00	\$ 950.00	\$ 18,525,000.00
Public entrance/ visitor experience	6,000.00	included in area	6,000.00	\$ 1,050.00	\$ 6,300,000.00
Site modifications including wayfinding, grading, and new hardscape and landscape - Budget Cost					\$ 3,000,000.00
Totals					\$ 27,825,000
Escalation (yr 1)	2.50%				\$ 28,521,000
Escalation (yr 2)	2.50%				\$ 29,234,000
Escalation (yr 3)	2.50%				\$ 29,964,000
TOTAL VISITOR'S CENTER COST					\$ 29,964,000