

MEMORANDUM

To: Shannon Allen, City of Berkeley

From: Ben Sigman and Jason Moody

Subject: Economic Review of 2211 Harold Way Community Benefits Proposal; Project 141166

Date: September 22, 2015

The Economics of Land Use



The City of Berkeley has engaged Economic & Planning Systems (EPS) to assist with review of the community benefits proposed by the 2211 Harold Way applicant. The 2211 Harold Way project, an 18-story, 180-foot mixed-use tower, is the first project to request approval under the Downtown Area Plan and its 2012 zoning ordinance, which requires "significant community benefits" for structures taller than 75 feet. While the City's Zoning Ordinance does not provide specific requirements regarding community benefits, the Berkeley City Council has provided specific guidance regarding the value of community benefits that shall be sought by the City. EPS has reviewed the applicant's proposal and assessed the magnitude of the proposed community benefits package. This memorandum provides a summary of the EPS review.

There are a number of important caveats to this review that should be acknowledged in advance of considering the findings:

- The review relies on the applicant's characterization of the baseline project that would be developed in the absence of the requirement for significant community benefits (i.e., a smaller project that does not include a cinema);
- The review considers real estate development costs presented by the applicant in the context of readily available construction cost data and EPS experience, but does not include any original cost estimation work;
- The review does not include a movie theater market analysis, consider competitive trends in cinema development (e.g., technology innovations), or comment on the potential for a redeveloped theater to economically or fiscally outperform the existing cinema; and

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- The review does not explore the potential for a redeveloped movie theater to sustain or enhance downtown Berkeley as a cultural and entertainment center within the city and region.¹

Key Findings

In general, EPS finds the approaches used by the applicant to value the proposed significant community benefits associated with 2211 Harold Way to be reasonable. However, to better characterize the range of potential value, the EPS review explores alternative valuation techniques and includes a sensitivity analysis.

EPS finds that the applicant's community benefits package is worth roughly \$11 million to \$17 million (2015\$). **Figure 1** below summarizes the applicant's valuation of significant community benefits in comparison to EPS calculations and analysis. The EPS range reflects uncertainties associated with key project variables, including project construction cost and commercial lease rates.

Figure 1 Summary of Community Benefits

Community Benefit	Applicant Estimate (nominal \$)	EPS Estimate (2015\$)
Project Labor Agreement	\$10.0 million	\$6.0 million
Movie Theater Construction	\$12.7 million (Revised data / EPS calc.)	\$4.4 - \$10.4 million
Additional Community Benefit	\$0.35 million	\$0.35 million
Total	\$23 million	\$11 - \$17 million

Project Labor Agreement

The applicant's proposal indicates that 2211 Harold Way will be constructed under a Project Labor Agreement (PLA) that requires the project to employ 100 percent union construction jobs. To estimate the value of this community benefit, the applicant solicited estimates from two Bay Area construction contractors. These sources indicate that the share of the total construction cost attributable to the PLA, including use of 100 percent union labor (above a project constructed with partial union labor) is approximately 5 to 10 percent.

¹ In this analysis, the cost borne to provide a community benefit is interpreted as a reasonable proxy for the value of the community benefit within the City of Berkeley.

Figure 2 Project Cost Attributable to Project Labor Agreement

Source	Value Estimate	Percent of Construction Cost
1. Suffolk Construction	\$11,750,000	10 Percent of Total Construction Cost
2. Rudolph and Sletten Inc.	\$7,500,000 to \$13,000,000	5 to 10 Percent of Total Construction Cost

The applicant's value estimates are consistent with EPS experience concerning the cost premium attributable to a PLA. In prior EPS work conducted for the Bay Area Rapid Transit District (BART), EPS has found that PLAs are likely to have an appreciable impact on project costs, though cost effects vary depending on the size and complexity of the project. Academic literature on project cost effects attributable to PLAs suggests that costs may increase by 2.0 to 20 percent above a "prevailing wage" project.^{2,3} Further, local developers interviewed by EPS have indicated that for some projects a prevailing wage requirement (independent of a PLA) can add 20 percent to project cost.

It is the opinion of EPS that the cost premium associated with a PLA is likely to be relatively modest for 2211 Harold Way. Tower projects that use steel frame and/or concrete construction techniques typically require highly-skilled and relatively expensive labor. EPS believes it is appropriate to attribute 5.0 percent of 2211 Harold Way project cost to the PLA. This finding is consistent with City Council guidance that the community benefit attributable to the PLA shall be valued at 5.0 percent of the project's construction cost.⁴

The applicant has estimated construction cost for the 2211 Harold Way project at \$120 million, about \$300 per square foot.⁵ This cost estimate is roughly 15 percent higher than the conceptual construction cost estimate for a generic 18-story residential tower in Berkeley (steel/concrete panel construction using union labor) according to RS Means (a well-regarded national source of construction cost data). However, the proposed project is a unique urban infill development, with a range of environmental features that will support LEED Gold certification, and it is anticipated to be developed with a variety of high-end finishes inside and out. Further, EPS commonly finds RS Means estimates to be somewhat low compared with project bid documents in urban

² Paul Bachman, Darlene Chisholm, Jonathan Haughton and David Tuerck of the Beacon Hill Institute at Suffolk University; Dale Belman, Russell Ormiston (Michigan State University) and Richard Kelso and William Schriver (University of Tennessee); National University System Institute for Policy Research.

³ Research indicates that hourly union wage rates are equivalent to or slightly higher than prevailing wages, and thus these increased construction costs are largely attributed to efficiency losses associated with union work rules and administrative costs.

⁴ Establishing A Process And Standards For Evaluating "Significant Community Benefit" Packages For Buildings Over 75 Feet In The Downtown, July 14, 2015.

⁵ The EIR estimates the building size at approximately 390,000 square feet, which suggests a per-square-foot cost of about \$310. Design documents dated July 22, 2015 indicate a total project size of 401,000 square feet, which suggests a per-square-foot cost of about \$300.

locations throughout the Bay Area. For these reasons, EPS believes the \$120 million cost figure is a reasonable estimate for the proposed 2211 Harold Way project.

While there are cost implications associated with the PLA, it is important to note that there will be offsetting benefits to the project. PLAs create uniformity in labor contracts and to minimize disruptions that can occur. Though the 2211 Harold Way PLA has not been provided to the City, most contain provisions that assure that all types of trades agree to guidelines for the particular project, assurances that work on the project will continue without disruption, and that any work disputes will be resolved without causing delays to the project schedule. Another benefit of the PLA is that the final product of the construction project will be higher quality than comparable non-union projects.⁶

Movie Theater Construction

The applicant's proposed community benefit package includes the construction of a 10-screen movie theater. The applicant values the community benefit associated with the proposed movie theater by calculating the public rent subsidy that would be necessary (in the absence of the requirement for significant community benefits) to make the theater financially viable for 20 years. While EPS generally concurs with the applicant's approach, we conduct sensitivity analysis around key rent and cost variables to illustrate the range of community benefit that might be realized. In addition, EPS presents an alternative approach to the theater benefit valuation that largely re-confirms the applicant's estimates.

EPS finds that the community benefit value of movie theater construction is likely to be between roughly \$2.2 million and \$10.4 million (2015\$). The low end of the spectrum results in the event that the gross rent paid by the theater is 25 percent above the current rent level and construction costs are 25 percent lower than those presented by the applicant. The upper end of the value spectrum results from continuation of the current lease rate in a new cinema that costs \$15.2 million to build. The midpoint estimate established by this comparison analysis is \$6.3 million.

⁶ Personal communication with Andreas Cluver, Alameda County Building and Construction Trades Council.

Figure 3 Estimated Community Benefit from Theater Construction (2015\$)

Valuation		Sensitivity Results (vs. base est.)
Applicant's Methodology		
Base Estimate	\$9,300,000	0%
Higher Rent	\$6,200,000	-33%
Lower Construction Cost	\$5,300,000	-43%
Higher Rent & Lower Cost	\$2,200,000	-76%
EPS Methodology		
Base Estimate	\$10,400,000	0%
Higher Rent	\$8,200,000	-24%
Lower Construction Cost	\$6,600,000	-41%
Higher Rent & Lower Cost	\$4,400,000	-65%
Summary of Analysis		
Minimum	\$2,200,000	
Maximum	\$10,400,000	
Midpoint Estimate	\$6,300,000	

Construction Cost

The applicant indicates that the cinemas within 2211 Harold Way will cost approximately \$15.2 million to construct.⁷ This projected construction cost, which includes all finishes, is lower than the two initial estimates provided by two Bay Area construction contractors.

Figure 4 Initial Construction Cost Estimates

Source	Cinema Cost Estimate
1. Suffolk Construction	\$16,470,000
2. Rudolph and Sletten Inc.	\$16,000,000 to \$17,000,000

With the theaters occupying approximately 28,250 square feet of the development project, the per-square-foot construction cost is approximately \$537. At this level, theater construction will cost approximately 80 percent more on a per-square-foot basis than the building overall (\$537 versus \$300).

⁷ Detail Break-Out Pricing for the Cost of the Cinema, Suffolk Construction, September 18, 2015.

The cost estimate provided indicates that a significant share of the construction cost, about 31 percent of the total, is attributable to the interior finishes associated with the theater use (including theater seats and lobby fit out but excluding audio/visual equipment). In addition, the super structure (steel and concrete) required to frame the theater box within a tower podium accounts for more than 20 percent of the total cost. The site work required to develop the subterranean theater space also is costly, accounting for about 13 percent of the total cost. EPS sensitivity analysis evaluates the possibility that the theater construction cost is 25 percent lower than reported by the applicant.

Applicant's Valuation Method

The applicant's memorandum concerning community benefits (September 3, 2015) presents a financial feasibility analysis which indicates that the anticipated market-rate rent from the theater does not justify the investment in theater development. In this analysis, the applicant indicates that development investors require at least a 6.0 percent yield on cost, which is a reasonable return based on EPS experience. The analysis goes on to calculate that the theater rent (including expenses) would need to be over \$5 per square foot per month to justify the \$16.5 million investment in the theater.⁸ On September 21, 2015 the applicant clarified the cost and size of the theater. Using the applicant's method, the revised project data suggest that gross rent of \$3.59 per square foot per month would be needed to justify the \$15.2 million investment in the theater.

With the applicant reporting current rent of about \$2.04 per square foot per month (unconfirmed by EPS), an additional \$1.55 ($=\$3.59 - \2.04) per square foot per month would be required to make the theater financially attractive to development investors. That is, in the absence of the community benefit requirement associated with the project, the City would need to subsidize cinema rent by \$1.55 per square foot per month (about \$525,000 per year) to make the development of the theater project attractive to investors. The applicant's analysis goes on to aggregate this subsidy over 20 years assuming rents escalate at 2.0 percent per annum. The 20-year subsidy calculated is \$12.7 million in nominal dollars.⁹ EPS discounts future dollars at a rate of 3.0 percent per year to calculate the present value "base estimate" of \$9.3 million (2015\$) shown in **Figure 3**. The analytical method employed by the applicant is valid, though somewhat imperfect since the period of time over which the return is aggregated is subjective.

Due to uncertainty concerning the construction cost of the theater, as well as the potential that a redeveloped theater could support a rent level that exceeds the current rent paid, EPS conducted sensitivity analysis around these two key variables. The sensitivity calculations explore the potential that gross rent paid by the cinema to the landlord might be 25 percent above current rent, that construction costs could be 25 percent below those reported, as well as the combined effect of these two potential variations in project assumptions. These alternative analytical assumptions have the effect of reducing the estimated community benefit value by 33 percent, 43 percent, and 76 percent, respectively (**Figure 3**). In the sensitivity scenario where rents are

⁸ This calculation assumes \$0.90 per square foot in expenses, an increase above the \$0.79 current level of expenses borne by retail tenants (reported by applicant, not confirmed by EPS).

⁹ In the September 3 community benefit proposal, the applicant had calculated this figure at \$17.4 million based on a \$16.5 million cost estimate for a 20,000-square-foot theater. EPS calculates \$12.7 million based on a \$15.2 million cost estimate for a 28,249-square foot theater.

higher and costs are lower than assumed in the applicant’s analysis, the community benefit value estimated using the applicant’s method is about \$2.2 million.

EPS Valuation Method

Similar to real estate appraisers, EPS commonly employs the income capitalization method to estimate the market value of income-producing real estate assets. In this approach, real estate net operating income (rent net of expenses) is divided by a market-based capitalization rate to establish the real estate asset’s market value. EPS relies on rent and expense assumptions from the applicant’s analysis and a market capitalization rate of 8.0 percent, which is consistent with theater transactions data and recent literature from the Appraisal Journal.¹⁰ EPS believes that this approach yields an alternative, defensible estimate of the community benefit from movie theater construction.

EPS compares the capitalized value of net operating income from theater rent to the construction cost estimate to determine the value shortfall associated with the theater. In this analysis, the shortfall is interpreted as community benefit, since this value gap will be absorbed by the project (rather than the City or other public fund source). **Figure 5** presents the data that underlie EPS’s base estimate of value.

Figure 5 Income Capitalization Base Estimate of Movie Theater Community Benefit

Cash Flow	Monthly Per-Square-Foot Value	Annual Value
Gross Rental Revenue*	\$2.04	\$691,536
Operating Expenses*	-\$0.90	-\$305,089
Net Income	\$1.14	\$386,446
Valuation		
Capitalized Value (@ 8.0 Percent)		\$4,830,579
Construction Cost		-\$15,183,575
Net Value / Community Benefit Measure		-\$10,352,996
* The base estimate assumes rent for the new cinema is the same as the existing and expenses are 15 percent higher, on a per-square-foot basis, consistent with the applicant’s analysis. Current data are not confirmed by EPS.		

Overall, the results of the income capitalization valuation and sensitivity analysis are comparable in magnitude to the applicant’s findings, with community benefits estimated to be between roughly \$4 million and \$10 million (2015\$). The base estimate is calculated at \$10.4 million (see **Figure 5**), while consideration of the potential for higher rent and lower construction cost indicate community benefit value might only be about \$4.4 million.

Similar to the PLA, it is important to note that the inclusion of the movie theater within the project may have cost-offsetting benefits to the project which are not quantified here. For example, the theater may enhance the market potential of the retail spaces within the project, leading to more rapid leasing and/or higher levels of rent. In addition, it is possible that some

¹⁰ Application of CMBS Global Property Evaluation Methodology in U.S. And Canadian Transactions, Standard and Poor’s; Gimmy and Condon, The Business of Show Business: Appraising the Movie Theater; Appraisal Journal Spring 2013.

residential tenants may consider the theater an amenity, again resulting in stronger leasing and/or rents. Overall, since the theater is likely to continue to be a leisure destination within downtown, it will drive foot traffic around the building and support vibrancy on the streets proximate to the site, which likely will be viewed as a positive project characteristic by most tenants.

Additional Significant Community Benefits

The applicant is proposing to provide additional cash payment of \$350,000. Assuming that the payment is made promptly, it is fair to value the proposed payment at face value. If payment is deferred, the value should be discounted to appropriately reflect the time value of money. EPS includes the payment at face value in the estimate of total community benefit value (see **Figure 1**).