APPENDIX C:

FINANCIAL FEASIBILITY ANALYSIS

Date:	June 26, 2015
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Project:	SEADIP Specific Plan
Subject:	Memorandum on Financial Feasibility Analysis

INTRODUCTION

This memorandum report summarizes the results of the financial feasibility analysis for four development scenarios in the SEADIP Plan Area. Strategic Economics built a pro forma model and conducted financial feasibility analysis to provide guidance on key questions for the SEADIP planning process, including:

- What types of development are likely to occur under current conditions?

- Are changes needed in order for new development to be economically feasible?

- What are the types of development that have the greatest capability to provide contributions to future infrastructure benefits (enhanced roadway/landscape improvements, wetlands restoration, etc.) in SEADIP that were desired by the community?

Financial feasibility analysis is often used by cities to test the impact of land use policies such as height limits, densities, and other zoning requirements on new development projects. This financial feasibility analysis is based on judgments about what may be possible in the SEADIP area given current construction costs, land costs, and market conditions. Rather than being a predictive model of the future, this financial feasibility analysis is a planning-level tool intended to allow decision-makers and community members to study and compare development scenarios based on today's conditions, and understand the implications of land use decisions they may wish to consider.

While this report predominantly focuses on the financial feasibility of the scenarios, the project team also used the scenarios to evaluate potential opportunities and limitations related to building scale, design, access, parking and open space requirements.

SUMMARY OF RESIDENTIAL PROTOTYPES

The financial analysis is based on four development scenarios for a prototypical 12-acre site in the SEADIP Plan Area. This hypothetical parcel was created to stimulate discussion regarding the financial feasibility and potential tradeoffs of different mixes of land use and development scenarios within the SEADIP Study Area. The prototypical site is conceptual in nature only; it does not reflect any particular parcel within the SEADIP project area. Two scenarios used the existing SEADIP (PD-1) maximum height standards of 35 feet (Scenario 1 and 2), and the remaining scenarios allowed for an increase in building height as noted below.

- ❖ **Scenario 1** shop only, 1-story
  - ▪ Potential under existing SEADIP
- ❖ **Scenario 2** shop + live, 1-3 stories
  - ▪ SEADIP height standards; introduce a mix of residential uses
- ❖ **Scenario 3** shop + live + stay, 1-5 stories
  - ▪ More mix of uses, variations for parking, increase in height from existing SEADIP
- ❖ **Scenario 4** shop + live + stay, 5-7 stories
  - ▪ Greater mix of uses, greater building height, reduced parking standards.

The scenarios include the following development types and land uses described in Figure 1. Figure 2 provides more detail on the land use and building type assumptions for each development scenario, and Figure 3 presents the parking assumptions.

Figure 1. Summary of Development Scenarios

	Scenario 1: Shop Only	Scenario 2: Shop + Live	Scenario 3: Shop, Live + Play	Scenario 4: Shop, Live + Play
Development Type	Shop Only, 1-Story	Shop + Live, 1-3 Stories	Shop, Live + Play, 1-5 stories	Shop, Live + Play, 4-7 Stories
Housing Units	None	72 townhomes	416 stacked flats	710 stacked flats
Ground-floor Retail	None	None	7,000 sq. ft.	109,000 sq. ft.
Single-Story Retail	140,000 sq. ft.	62,000 sq. ft.	29,000 sq. ft.	None
Hotel Rooms	None	None	60 rooms	90 rooms

Source: PlaceWorks, 2014.

Figure 2: Land Uses and Building Types in Development Scenarios

Building Types and Characteristics	Scenario 1	Scenario 2	Scenario 3	Scenario 4
TOTAL SITE AREA (square feet)	525,000	525,000	525,000	525,000
HOTEL				
Number of Rooms	0	0	60	90
Gross Square Footage	0	0	51,300	99,920
RESIDENTIAL				
Townhomes				
Housing Units	0	72	0	0
Net Square Footage	0	160,147	0	0
Gross Square Footage	0	168,576	0	0
Average Unit Size	0	2,341	0	0
Residential, 3-4 Stories				
Housing Units	0	0	416	0
Net Square Footage	0	0	408,378	0
Gross Square Footage	0	0	480,445	0
Average Unit Size	0	0	1,172	0
Residential, 5 Stories				
Housing Units	0	0	0	550
Net Square Footage	0	0	0	554,131
Gross Square Footage	0	0	0	651,919
Average Unit Size	0	0	0	1,188
Residential, 7 Stories				
Housing Units	0	0	0	160
Net Square Footage	0	0	0	155,009
Gross Square Footage	0	0	0	182,364
Average Unit Size	0	0	0	1,119
GROUND FLOOR MIXED-USE RETAIL				
Net Square Footage	0	0	6,979	109,083
Gross Square Footage	0	0	8,210	128,333
SINGLE-STORY RETAIL				
Net Square Footage	138,853	62,060	28,725	109,083
Gross Square Footage	163,356	73,012	33,794	128,333
OTHER SITE IMPROVEMENTS (Square Feet)				
Streets	223,412	161,350	167,687	73,050
Plazas	51,453	79,639	20,426	58,929
Open Space (courtyard, perimeter, setback)	92,730	130,778	125,615	142,759
Elevated Rooftop Garden	0	0	59,760	0

Definitions:

Net Square Footage - refers to the space within interior walls of rooms that are usable/ livable, excluding building service, circulation, mechanical, and structural areas.

Gross Square Footage - refers to all of the building area, including areas for service,circulation, mechanical, and other spaces.

Source: PlaceWorks, 2014.

Figure 3: Parking Assumptions for Development Scenarios

Parking Spaces	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Townhome	0	144	0	0
Surface	647	304	433	121
Structured	0	0	584	675
Podium	0	0	210	0
Subterranean	0	0	0	1,296

Source: PlaceWorks, 2014.

APPROACH TO THE ANALYSIS

Financial feasibility was tested using a pro forma model that measures the residual land value of a given development scenario. This method recognizes that the value of land is inextricably linked to what can be built on it, and that development potential is heavily influenced by zoning, lot size and configuration, neighborhood context, and other factors. The residual land value method tallies development costs (except for land) including construction costs, "soft" costs (e.g., entitlement, architecture and engineering, city fees, sales and marketing, etc.), and developer fees. Revenues from sales or rental leases are then summed. The total project costs are then subtracted from the total project revenues. If revenues exceed costs, the balance is the residual value, representing the price a developer would pay for the land if pursuing that project.

For the purposes of the analysis, Strategic Economics applied assumptions regarding revenues and costs based on market research. These are described in more detail below.

Revenues

Residential Uses - To estimate income from residential development, the analysis uses data gathered from a review of local and regional market data, supplemented by interviews with brokers and developers. For the residential land uses, housing prices and rents were established based on a review of data from CoStar, Trulia, Polaris Pacific, and Dataquick. For ownership housing (condominiums and townhomes), revenues are calculated by multiplying the unit count by the sales price shown in Figure 4 and Figure 5. Townhome prices are estimated at $342 per square foot, or $800,000 per unit. Condominium unit prices range from $575,000 to $630,000 depending on the height of the building, taking into account that units in higher buildings would command higher average values due to the views and amenities provided.

For rental projects, the revenues are calculated based on current market rental rates per square foot for new apartments in Long Beach and surrounding cities. Like condominium units, rental rates are higher in taller buildings to account for the amenities and view premiums offered in higher density projects. The total project value for each unit was estimated using an income capitalization approach. This valuation approach first estimates the annual net operating income (NOI) of the apartment prototype, which is the difference between total project income (annual rents) and project expenses, including operating costs[1] and vacancies. The NOI is then divided by the capitalization rate (cap rate) to derive total project value. Figure 6 summarizes the calculations and data source used for estimating the value of the apartment prototype.

Retail Uses – For retail uses, the revenues are estimated based on current rental rates for new retail space. The values were found to be higher for single-use, one-story retail, which tends to command slightly higher rents than ground-floor retail in mixed-use buildings. The project value for retail uses

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[1] Operating costs were calculated based on the Institute of Real Estate Management Survey of Apartment Buildings.

was estimated using an income capitalization approach (similar to apartments). Figure 7 summarizes the estimates and data sources used for calculating the value of new retail space in single-story and mixed-use buildings.

Figure 4. Estimated Townhome Sales Prices (per Unit)

	2-3 Stories
Price per Square Foot	$342
Price per Unit	$800,000

Source: Dataquick, 2014; Trulia, 2014; Polaris Pacific, 2014; Developer Interviews, 2014; Strategic Economics, 2014.

Figure 5. Estimated Condominium Sales Prices (per Unit)

	3-4 Stories	5Stories	7 Stories
Price per Square Foot	$491	$505	$563
Price per Unit	$575,000	$600,000	$630,000

Source: Dataquick, 2014; Trulia, 2014; Polaris Pacific, 2014; Developer Interviews, 2014; Strategic Economics, 2014.

Figure 6. Estimated Apartment Values (per Unit)

	3-4 Stories	5 Stories	7 Stories
Assumptions			
Monthly Rent per Square Foot	$2.60	$2.75	$3.00
Stabilized Vacancy Rate %	5%	5%	5%
Operating Expenses % of Gross Revenue	28%	28%	28%
Capitalization Rate	4.50%	4.50%	4.50%
Estimated Value			
Gross Annual Income per Sq. Ft.	$31.20	$33.00	$36.00
Less: Vacancy	-$1.56	-$1.65	-$1.80
Less: Operating Expenses	-$8.74	-$9.24	-$10.08
Net Operating Income	$20.90	$22.11	$24.12
Capitalized Value per Sq. Ft.	$464.53	$491.33	$536.00
Capitalized Value per Unit	$544,433	$583,704	$599,784

Source: CoStar, 2014; Developer Interviews, 2014; Marcus & Millichap, Q2 2014; Strategic Economics, 2014.

Figure 7. Estimated Retail Value (per Square Foot)

	Mixed-Use	Single-Story
Assumptions		
Monthly Rent (NNN) per Sq. Ft.	$2.90	$3.00
Stabilized Vacancy Rate	5%	5%
Non-Reimbursable Expenses %	10%	10%
Capitalization Rate	4.80%	4.80%
Estimated Value		
Gross Annual Income per Sq. Ft.	$34.80	$36.00
Less: Vacancy	-$1.74	-$1.80
Less: Non-Reimbursable Expenses	-$3.48	-$3.60
Net Operating Income	$29.58	$30.60
Capitalized Value per Sq. Ft.	$616	$638

Source: CoStar, 2014; Broker and Developer Interviews, 2014; Strategic Economics, 2014.

Hotel Uses – Hotel revenues were estimated based on available market data from STR Global and HVS on room rates and occupancy rates for hotels in the Long Beach area. Similar to apartments and retail uses, the value per room was calculated using an income capitalization approach, shown in Figure 8.

Figure 8. Estimated Hotel Value (per Room)

Assumptions	
Average Daily Rate per Room	$142.00
Other Revenue Per Room (Food,	$56.80
Vacancy Rate	25%
Operating Expenses	65%
Capitalization Rate	6.25%
Estimated Value	
Gross Annual Room Income per Room	$51,830
Gross Annual Other Revenue per Room	$20,732
Less: Vacancy	-$18,141
Less: Operating Expenses	-$47,165
Gross Operating Profit	$7,256
Capitalized Value per Room	$116,099

Source: STR Global, 2014; HVS, 2014; CBRE, 2014; Strategic Economics, 2014.

Development Costs

Cost estimates for the development scenarios include direct construction costs (site work, building costs, and parking), indirect costs, financing costs, and developer overhead and profit. Direct building construction cost estimates are based on RS Means, Engineering News-Record, HVS, and interviews with developers active in Los Angeles County. Soft costs were calculated based on a review of similar project pro formas in Southern California. Developer overhead and profit was estimated at 10 percent of total costs, excluding land, which is a conservative estimate. Actual profit expectations for any given project will vary depending on specific circumstances and investment objectives. Each of the cost factors used in the analysis is summarized in Figure 9.

Land Value

In order to understand the financial feasibility of different development scenarios, the residual land values for each scenario can be compared with the market value of residential land in the Long Beach area. If the residual value is higher than the market value, the project is feasible. If the residual value is lower than the market price, then the project is infeasible.

To determine the land value of sites in the SEADIP area, the Consultant Team analyzed recent sales transactions (sold from 2013-2014) in Long Beach and surrounding areas, and conducted interviews with real estate brokers. Figure 10 illustrates the results of the analysis of recent land transactions, showing that the average land value per acre is $3.8 million. Brokers estimated the average value of properties in the SEADIP area at $3 million per acre. For this financial analysis, the value was estimated as a range of between $3 and $4 million per acre, reflecting the fact that the land value of individual properties in the SEADIP area are likely to vary depending on location, access, size, and other conditions.

Figure 9. Estimated Development Costs

Development Costs	Cost	Metric
Direct Costs		
Hotel		
Building and Site Improvements	$135,000	per room
Furniture, Fixtures, & Equipment	$30,000	per room
Residential		
Townhomes	$150	per gross sq. ft.
3-4 Stories	$170	per gross sq. ft.
5 Stories	$190	per gross sq. ft.
7 Stories	$225	per gross sq. ft.
Ground Floor Mixed-Use Retail		
Building	$170	per gross sq. ft.
Tenant Improvements	$25	per net sq. ft.
Single-Story Retail		
Building	$150	per gross sq. ft.
Tenant Improvements	$20	per net sq. ft.
Parking		
Surface	$5	per gross sq. ft.
Structured/Podium	$55	per gross sq. ft.
Subterranean	$127	per gross sq. ft.
Site Improvements		
Site Prep	$2	per site sq. ft.
Streets, Plazas, Landscaping	$25	per sq. ft.
Elevated Rooftop Garden	$80	per sq. ft.
Indirect/Soft Costs	30%	of direct costs
Financing Costs		
Amount Financed	65%	of total costs
Average Outstanding Balance	55%	of loan
Construction Loan Fee	1.5%	of loan
Construction Interest	6.0%	annual rate
Term	1.25	years
Developer Overhead and Profit	10%	of total costs (excl. land)

Source: RS Means Square Foot Costs, 2013; Engineering News-Record, 2014; HVS, 2013/14; Developer Interviews, 2014; Strategic Economics, 2014.

Figure 10. Estimated Land Value per Acre

Site Address	Location	Sale Date	Price	Acres	Value/ Acre
4400 E Los Coyotes Diagonal	Long Beach	2014	$9,982,000	1.6	$6,178,908
20723 Elaine Ave	Lakewood	2014	$404,000	0.4	$1,126,215
4415 Parkview Drive	Lakewood	2014	$700,000	0.4	$1,978,202
1439 E Burnett St	Signal Hill	2012	$1,738,500	1.3	$1,333,845
1081 Long Beach Blvd	Long Beach	2013	$2,700,000	0.6	$4,443,722
1332 Locust Ave	Long Beach	2013	$1,900,000	0.4	$4,428,961
3855 N Lakewood Blvd	Long Beach	2014	$3,834,000	0.5	$7,111,912
Average Value per Sq. Ft.					$3,800,252
Broker Estimates*					$3,000,000

*Estimates of land value based on interviews with brokers.

Sources: Dataquick, 2014; Interviews with real estate brokers, 2014; Strategic Economics, 2014.

RESULTS

Figure 11 provides the pro forma results for the four development scenarios. (Results for Scenarios 3 and 4 are shown with two alternatives: condominium housing units and rental apartments units.) Below is a discussion of the findings.

Scenario 1: Shop Only

This scenario, which represents the construction of a single-story retail shopping center, is not feasible under current market conditions, generating a residual land value of $2.2 million per acre, under the threshold of $3 to $4 million required for feasibility. With today's land values, this type of construction is improbable except under special circumstances. Because this type of development generates lower residual land values, it is less likely that the development would significantly contribute towards additional public improvements in the SEADIP area.

Scenario 2: Shop + Live

The Shop + Live scenario includes two-and three-story townhomes and single-story retail uses. This scenario creates a residual land value of $1.65 million, which is approximately half of current land values in the SEADIP area. The revenues generated by the townhomes and retail are not sufficient to offset the cost of development (which is higher than single-story retail) in addition to paying for the land; therefore, Scenario 2 is not financially feasible. Because it is not financially feasible, it is improbable that a development scenario similar to Scenario 2 would contribute towards additional public improvements in the SEADIP area.

Scenario 3: Shop + Live + Play

Scenario 3 includes mixed-use development of up to five stories, with housing, retail, and hotel uses. This development scenario is financially feasible, generating a land value of $4.4 million per acre if the residential use is rental apartments, and $5.5 million per acre with condominiums. The construction costs of this development are significantly higher than other scenarios, but they are offset by the higher revenues generated from the condominium/ apartment units. Because Scenario 3 is financially feasible, it is reasonable to expect that a development of this type could contribute towards additional public improvements in the SEADIP area.

Scenario 4: Shop + Live + Play

Scenario 4 consists of mixed-use development, with building heights up to seven stories, and a combination of housing, retail, and hotel uses. Scenario 4 is also financially feasible, generating a land value of between $3.8 million and $4.9 million per acre. The construction costs of this development are higher than other scenarios because most of the parking spaces are provided in costlier underground garages. However, the housing units are valuable enough to create sufficient revenues to pay for the higher development costs. It is reasonable to expect that a development project that is similar to Scenario 4 could contribute towards additional public improvements in the SEADIP area.

Figure 11. Pro Forma Results by Scenario

	Scenario 1	Scenario 2	Scenario 3 - Apartments	Scenario 3 - Condominiums	Scenario 4 - Apartments	Scenario 4 – Condominiums
DEVELOPMENT COSTS (Excl. Land)						
Hard Costs						
Residential /Mixed-Use	$0	$25,332,962	$98,246,403	$98,246,403	$257,622,179	$257,622,179
Single-Story Retail	$28,365,890	$12,932,818	$5,988,870	$5,988,870	$0	$0
Hotel	$0	$0	$10,018,578	$10,018,578	$16,987,196	$16,987,196
Site Prep, Streets, LS	$10,239,875	$10,344,175	$13,674,000	$13,674,000	$7,918,450	$7,918,450
Contingency	$3,860,577	$4,860,996	$12,792,785	$12,792,785	$28,252,783	$28,252,783
Soft Costs	$11,581,730	$14,582,987	$38,378,355	$38,378,355	$84,758,348	$84,758,348
Financing Costs	$1,738,997	$2,189,635	$5,762,510	$5,762,510	$12,726,466	$12,726,466
Subtotal Development Costs	$55,787,068	$70,243,572	$184,861,500	$184,861,500	$408,265,421	$408,265,421
Developer Return	$5,578,707	$7,024,357	$18,486,150	$18,486,150	$40,826,542	$40,826,542
REVENUE/ VALUE						
Mixed-Use/Residential						
Ground-Floor Retail			$4,300,809	$4,300,809	$67,222,399	$67,222,399
Residential: 3-4 Stories			$226,484,156	$239,200,000		
Residential: 5 Stories					$321,037,200	$330,000,000
Residential: 7 Stories					$95,965,440	$100,800,000
Residential: Townhome		$57,600,000				
Single-Story Retail						
Retail	$88,518,788	$39,563,250	$18,312,188	$18,312,188	$0	$0
Hotel						
Hotel			$6,965,952	$6,965,952	$10,448,928	$10,448,928
Total Value	**$88,518,788**	**$97,163,250**	**$256,063,104**	**$268,778,948**	**$494,673,967**	**$508,471,327**
RESIDUAL LAND VALUE						
Residual Land Value Total	$27,153,013	$19,895,320	$52,715,454	$65,431,298	$45,582,004	$59,379,364
Residual Land Value per Acre	$2,253,362	$1,651,064	$4,374,726	$5,429,983	$3,782,739	$4,927,748

Source: PlaceWorks, 2014; DataQuick, 2014; RS Means, 2014; Engineering News-Record, 2014; HVS, 2013/14; CoStar, 2014; Broker and Developer Interviews, 2014; Marcus & Millichap, Q2 2014; Trulia, 2014; Polaris Pacific, 2014; Strategic Economics, 2014.