

**DRAFT MEMORANDUM**

To: City of Pleasanton  
From: Jason Moody and Michael Nimon  
Subject: EPSP Infrastructure Feasibility Analysis;  
EPS #121090  
Date: July 25, 2013

*The Economics of Land Use*



**Introduction**

Over the past year, the City of Pleasanton has been planning for new development in East Pleasanton through the East Pleasanton Specific Plan (EPSP). The City's General Plan calls for a potential mix of housing, office, retail, and industrial uses as well as parks and open space. The EPSP area comprises approximately 1,110 acres on the northeast edge of the City and consists of mostly undeveloped land, combined with previously used industrial and mining uses and lakes. About 406 acres are considered developable.

Economic & Planning Systems (EPS) has been involved in assessing a variety of economic and financial issues associated with the EPSP program options. These initial financial feasibility screens have informed the allocation and magnitude of potential development options based on the infrastructure burden relative to the potential finished value of each program option. Four revised options have been prepared based on input from the Task Force over the last several months, with revised infrastructure cost estimates prepared by Kier & Wright Civil Engineers Surveyors. This analysis also evaluates an additional development alternative (option 7), prepared based on discussion with City staff and summarized in **Appendix B<sup>1</sup>**.

*Economic & Planning Systems, Inc.  
2501 Ninth Street, Suite 200  
Berkeley, CA 94710-2257  
510 841 9190 tel  
510 841 9208 fax*

*Berkeley  
Denver  
Los Angeles  
Sacramento*

**[www.epsys.com](http://www.epsys.com)**

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<sup>1</sup> This alternative represents an offshoot from Option 5 and reflects the residential product types discussed at the June 19<sup>th</sup> Taskforce Meeting.

This infrastructure feasibility analysis provides a more in-depth look at specific product types and development options. The analysis evaluates financial feasibility of each land use and building prototype (i.e. density) and compares major infrastructure improvements with resulting residual land values. Although not the final answer on feasibility, since actual outcomes will depend on a variety of unresolved factors, including development costs (both infrastructure and buildings), pricing, absorption, and regulatory issues, the analysis does provide an additional level of confidence on the relative economic performance of the various alternatives under consideration.

EPS also retained its previously used feasibility threshold measures, updated to reflect small changes the type and amount of development in each option, estimated market values, infrastructure cost estimates, and development impact fees. In EPS's experience, an infrastructure program cost burden of about 15 percent of the finished value of the real estate program is supportable. EPS also employs another infrastructure feasibility test that considers the potential annual cost burden, assuming that a Community Facility District is used to finance EPSP infrastructure, to determine whether total tax burden (property tax and CFD together) might exceed a 2.0 percent threshold.

## Key Findings

The key findings from this financial feasibility analysis are described below and summarized in **Table 1**.

- Given current market prices, market rate residential and retail uses are estimated to result in positive residual land values, while inclusionary housing, office and industrial uses with a 0.36 FAR are estimated to result in negative residual land values. While the 8 dwelling units per acre density is estimated to generate the highest values on a per acre basis, for-sale residential uses result in land values ranging between \$1.2 and \$2.3 million per acre, as shown in **Table 1**. While high density rental development appears as the weakest residential prospect given today's prices, small real appreciation in multi-family rents would improve this result. Likewise for office and industrial uses, higher FARs and gradual market improvements would also make this product type more appealing to a vertical builder.
- While the residual land value provides an indication of relative feasibility among land uses, it has limitations when applied to overall feasibility of the EPSP. Most notably, overall EPSP market and financial performance will require product diversity to facilitate absorption and creation of a unique place. In addition, initial conclusions about relative feasibility among land uses are highly sensitive to the inclusionary housing policy that has not been specified for the Project. Inclusionary housing requirements have substantial impacts on land values and have historically varied for developments in the City. While this analysis assumes that the Project will meet its inclusionary requirement of 20 percent of for-sale units and 15 percent of rental units, all inclusionary uses are assumed to be accommodated in the high density product type. To the extent that lower density product types would be responsible for their respective share of inclusionary housing, development feasibility of the Project would be weakened.
- Another key factor affecting development will be the timing for development and absorption, which will be driven by both market and regulatory factors. Full development and absorption of the EPSP is likely to occur over a relatively long time frame (e.g. 7 – 12 years or longer)

given the size of the EPSP and growth management requirements imposed by the City. The relative market and financial performance of various product types can change substantially during this time. Nevertheless, land uses with negative or zero land values are unlikely to be able to contribute to backbone infrastructure through a CFD special tax or other mechanisms.

- As noted, the implications of land value on development feasibility of the EPSP are complex and will depend on a range of variables, including inclusionary housing requirements, absorption, infrastructure financing, and cost allocation mechanisms. However, given current market conditions, development options 6 and 7 appear to be the most feasible, while options 4, and 5 appears to be marginally feasible from the perspective of a real estate developer(s), while option 1 appears to be the least feasible. These findings are based on the relationship between potential finished building values, the resulting residual land values, and the required infrastructure investments and other costs necessary to create this value. It should be noted that this assessment assumes that land uses with negative land values result in zero impact on project-wide feasibility (i.e. they do not contribute to the financing of project-wide infrastructure).<sup>2</sup> This feasibility ranking is comparable to the previous EPS findings that relied on a more generic infrastructure cost to value tests.
- The evaluated options do not differ significantly in terms of infrastructure costs. As in the prior EPS analysis, estimates of applicable development fees and connection charges have been included. These fees and charges are significant, especially for sewer and water services, and combined represent between 60 and 70 percent of the total backbone infrastructure burden. Development impact fees and in-tract costs are assumed to be paid for by vertical developers (e.g., home builders) and thus are accounted for in the residual land value estimates.

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<sup>2</sup> Affordable housing is excluded from this assumption; negative land values resulting from affordable housing development are deducted from the positive values of other development prototypes.

**Table 1 – Residual Land Value Summary**

Item	Assumed Price per unit	Resulting Land Value		Notes
		per unit or sq.ft.	Per Acre	
<b>Residential (market rate)</b>				
4 du/acre	\$1,400,000	\$320,000	\$1,281,000	
8 du/acre	\$975,000	\$300,000	\$2,397,000	
11 du/acre	\$800,000	\$203,000	\$2,233,000	
23 du/acre	\$450,000	\$93,000	\$2,137,000	
30 du/acre	\$372,000	\$18,167	\$545,000	surface
30 du/acre	\$372,000	(\$57,000)	(\$1,699,000)	podium
<b>Commercial</b>				
Retail		\$73	\$958,000	0.3 FAR
Office		(\$109)	(\$1,658,000)	class B/surface
Office		(\$183)	(\$2,786,000)	class A/podium
Industrial		(\$23)	(\$354,641)	0.36 FAR

## Residual Land Value Analysis

For a large-scale development project, the infrastructure cost burden must bear a reasonable relationship to the value of the development being created and must not onerously impact the developer and/or the eventual property owners. To conduct this financial feasibility analysis, EPS developed a set of vertical pro forma models for each land use and estimated a residual land value based on previously determined finished market values. The pro forma models are structured to solve for the difference between finished product revenues and vertical development costs (including impact fees), which reflect residual land value for each option. The summary of residual land values by land use is provided in **Table 1** with detailed calculations included in **Appendix C**.

**Table 2** compares the difference between improved land values for each EPSP option to development cost along with the required developer return to estimate raw unimproved land value. This raw land value is what a developer would be willing to pay prior to any infrastructure improvement work. Feasibility of each development option is tested by determining whether the raw land value falls above the minimum threshold that would justify private investment. The calculation represents a snapshot in time, assuming full build-out. While this test may either overstate or understate the true financial performance of each option, it provides a *relative* performance comparison between development options.

**Table 2 - Land Value Test Feasibility Summary**

Item	Option			
	1	4	5	6
<b>Infrastructure Costs (rounded)</b>				
Backbone Infrastructure	\$61,471,000	\$63,312,000	\$62,087,000	\$62,087,000
Off-Site Improvements <sup>1</sup>	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Potential Relocation of OSC and TS <sup>2</sup>	\$10,000,000	\$0	\$10,000,000	\$10,000,000
Predevelopment/Developer Return <sup>3</sup>	<u>\$19,117,750</u>	<u>\$17,078,000</u>	<u>\$19,271,750</u>	<u>\$19,271,750</u>
Total Infrastructure Cost Burden	\$95,588,750	\$85,390,000	\$96,358,750	\$96,358,750
Improved Residual Land Value	\$160,077,772	\$190,424,938	\$181,386,172	\$312,751,138
<b>Raw Land Value</b>	<b>\$64,489,022</b>	<b>\$105,034,938</b>	<b>\$85,027,422</b>	<b>\$216,392,388</b>
Land Value (per acre)	\$158,840	\$258,707	\$209,427	\$532,986

<sup>1</sup> Reflects a conservative "place-holder" assumption of \$4 million to cover any upgrades to recycled water exchange program to attain required water supply and \$1 million to cover Stanley Boulevard frontage cost to County and any additional off-site improvements that may be necessary.

<sup>2</sup> This assumption will be refined once the actual relocation cost is determined; does not include land value.

<sup>3</sup> Assumed at 25 percent of the backbone infrastructure and off-site utility improvement costs; excludes land acquisition costs. This return reflects various development risks, including City growth management, unforeseen infrastructure expenses, and changes in land values, among others.

Source: Kier & Wright Civil Engineers Surveyors and EPS.

As shown in **Table 2**, resulting raw land value ranges between \$155,000 and \$535,000 per acre. Land values are highly variable and subject to a number of site-specific and market factors. Based on EPS research and input from developer and real estate professionals active in the Tri-Valley, a raw unimproved but entitled land is likely to range between \$100,000 and \$300,000 per acre, as shown in **Appendix A**. As a result, this feasibility test suggests that development option 6 and 7 could justify a development investment, while options 4 and 5 are marginally feasible<sup>3</sup>. Development option 1 appears to be the least feasible.

In addition, EPS has assessed project-wide feasibility based on the more general infrastructure cost-to-value test utilized in previous analysis, as summarized in **Table 3**. This analysis generally supports the relative feasibility ranking described above with option 6 resulting in the strongest feasibility prospects, while other options fall within the marginal feasibility range (these infrastructure feasibility tests have not yet been conducted on option 7).

<sup>3</sup> An analysis for Option 7 is included in **Appendix B**.

**Table 3 – Cost/Value Ratio and Tax Burden Feasibility Summary**

Item	Option			
	1	4	5	6
<b>Cost/Value Ratio Test</b>				
<b>Infrastructure Costs (rounded)</b>				
Backbone Infrastructure	\$61,471,000	\$63,312,000	\$61,138,000	\$62,087,000
Off-Site Utility Improvements <sup>1</sup>	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Potential Relocation of OSC and TS	\$10,000,000	\$0	\$10,000,000	\$10,000,000
Fees and Connection Charges <sup>2</sup>	<u>\$115,587,450</u>	<u>\$143,241,954</u>	<u>\$134,887,864</u>	<u>\$186,124,558</u>
<b>Total Infrastructure Cost Burden</b>	<b>\$192,058,450</b>	<b>\$211,553,954</b>	<b>\$211,025,864</b>	<b>\$263,211,558</b>
<b>Development Value</b>	<b>\$1,111,711,000</b>	<b>\$1,159,306,000</b>	<b>\$1,215,029,000</b>	<b>\$1,646,179,000</b>
<b>Infrastructure Cost/Value Ratio</b>	<b>17.3%</b>	<b>18.2%</b>	<b>17.4%</b>	<b>16.0%</b>
<b>Tax Burden Threshold Test</b>				
CFD Bond Proceeds and Issuance Cost <sup>3</sup>	\$69,794,550	\$71,727,600	\$69,444,900	\$70,441,350
Proceeds Required for Annual Debt Service <sup>4</sup>	\$6,334,302	\$6,509,738	\$6,302,569	\$6,393,003
Debt Coverage Factor	120%	120%	120%	120%
Special Tax Revenue Required (Annual)	\$7,601,162	\$7,811,686	\$7,563,083	\$7,671,604
<b>Potential Special Tax (% of Development Value)</b>	<b>0.68%</b>	<b>0.67%</b>	<b>0.62%</b>	<b>0.47%</b>

<sup>1</sup> Reflects a conservative "place-holder" assumption of \$4 million to cover any upgrades to recycled water exchange program to attain required water supply and \$1 million to cover Stanley Boulevard frontage cost to County and any additional off-site improvements that may be necessary.

<sup>2</sup> Include water, wastewater, impervious surface, public facilities, traffic development, Tri-Valley Transportation Committee, school, park dedication, and GIS fees based on the City's January 2013 fee schedule.

<sup>3</sup> Assumes a Community Facilities District bond (CFD) is used to cover backbone and off-site infrastructure, but not fees (bond issuance costs assumed at 5 percent of bond value).

<sup>4</sup> Assumes an Interest rate 6.5% for a 20-year term.

Source: Kier & Wright Civil Engineers Surveyors and EPS.

Given that some product values may not be realized due to the negative residual land values, EPS also conducted a sensitivity test with these uses excluded. These results are shown in **Table 4**. While this feasibility sensitivity supports option 6 as the most feasible, it highlights the broader feasibility challenge to the extent that development would not fully materialize.

**Table 4 – Cost/Value Ratio and Tax Burden Feasibility Summary (adjusted building values)**

Item	Option			
	1	4	5	6
<b>Cost/Value Ratio Test</b>				
<b>Infrastructure Costs (rounded)</b>				
Backbone Infrastructure	\$61,471,000	\$63,312,000	\$61,138,000	\$62,087,000
Off-Site Utility Improvements <sup>1</sup>	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Potential Relocation of OSC and TS	\$10,000,000	\$0	\$10,000,000	\$10,000,000
Fees and Connection Charges <sup>2</sup>	\$115,587,450	\$143,241,954	\$134,887,864	\$186,124,558
<b>Total Infrastructure Cost Burden</b>	<b>\$192,058,450</b>	<b>\$211,553,954</b>	<b>\$211,025,864</b>	<b>\$263,211,558</b>
<b>Development Value</b>	<b>\$878,807,000</b>	<b>\$845,272,000</b>	<b>\$1,010,055,000</b>	<b>\$1,441,205,000</b>
<b>Infrastructure Cost/Value Ratio</b>	<b>21.9%</b>	<b>25.0%</b>	<b>20.9%</b>	<b>18.3%</b>
<b>Tax Burden Threshold Test</b>				
CFD Bond Proceeds and Issuance Cost <sup>3</sup>	\$69,794,550	\$71,727,600	\$69,444,900	\$70,441,350
Proceeds Required for Annual Debt Service <sup>4</sup>	\$6,334,302	\$6,509,738	\$6,302,569	\$6,393,003
Debt Coverage Factor	120%	120%	120%	120%
Special Tax Revenue Required (Annual)	\$7,601,162	\$7,811,686	\$7,563,083	\$7,671,604
<b>Potential Special Tax (% of Development Value)</b>	<b>0.86%</b>	<b>0.92%</b>	<b>0.75%</b>	<b>0.53%</b>

<sup>1</sup> Reflects a conservative "place-holder" assumption of \$4 million to cover any upgrades to recycled water exchange program to attain required water supply and \$1 million to cover Stanley Boulevard frontage cost to County and any additional off-site improvements that may be necessary.

<sup>2</sup> Include water, wastewater, impervious surface, public facilities, traffic development, Tri-Valley Transportation Committee, school, park dedication, and GIS fees based on the City's January 2013 fee schedule.

<sup>3</sup> Assumes a Community Facilities District bond (CFD) is used to cover backbone and off-site infrastructure, but not fees (bond issuance costs assumed at 5 percent of bond value).

<sup>4</sup> Assumes an Interest rate 6.5% for a 20-year term.

Source: Kier & Wright Civil Engineers Surveyors and EPS.

## Feasibility Considerations

While this analysis provides a number of feasibility measures for the EPSP development options, there are still *unresolved* factors that will affect development feasibility of new growth. These key factors are described below.

### Inclusionary Housing Requirements

This analysis assumes that the Project will meet its inclusionary requirement of 20 percent of for-sale units and 15 percent of rental units based on the City's existing affordable housing policy. All inclusionary units are assumed to be accommodated in the high density product type. Inclusionary housing requirements have substantial impacts on land values and have historically varied for developments in the City. To the extent that lower density product types would be responsible for their respective share of inclusionary housing, development feasibility of the Project would be weakened.

For illustrative purposes of bracketing a range of potential outcomes, EPS evaluated residential land values for each residential product type under the existing inclusionary housing fee as well

as with the inclusionary housing requirement<sup>4</sup>. As shown in **Table 5**, these policies have substantial implications for the land values in the Project ranging as much as \$1 million per acre. Particularly notable is the impact on the lower density housing that has higher development cost and is more costly to accommodate inclusionary requirements in. However, some of the land value reductions could be remedied with tax credits and other tools.

**Table 5 – Comparison of Land Values Under Various Inclusionary Housing Requirements**

Item	Assumed Price per unit	Resulting Land Value		Notes
		per unit or sq.ft.	Per Acre	
<b>Residential (with inclusionary fees)</b>				
4 du/acre	\$1,400,000	\$308,000	\$1,232,000	
8 du/acre	\$975,000	\$287,000	\$2,298,000	
11 du/acre	\$800,000	\$191,000	\$2,097,000	
23 du/acre	\$450,000	\$100,000	\$2,290,000	
30 du/acre	\$372,000	\$15,000	\$450,000	surface
<b>Residential (blended)</b>				
		<u>Inclusionary Requirement</u>		
4 du/acre	\$1,177,639	20%	\$102,200	\$409,400
8 du/acre	\$837,639	20%	\$165,200	\$1,320,000
11 du/acre	\$697,639	20%	\$102,600	\$1,129,600
23 du/acre	\$417,639	20%	\$63,200	\$1,452,600
30 du/acre	\$346,050	15%	(\$7,808)	(\$233,350) surface

**Cost Allocation and Fee Credits**

As described above, there are significant differences in the financial performance of various land use types, with lower to medium density single family units performing the best and industrial uses performing the worst. This suggests, among other things, that an effective development program will require a strategic allocation of project-wide costs across land uses. In addition, cost sharing tools would need to be developed to ensure that revenue and cost allocation between property owners is equitable.

Another key cost allocation issue has to do with the availability of outside funding. As noted, the current analysis assumes that all EPSP developers and/or builders pay applicable development impact fees and connection charges. These fees are designed to cover a variety of off-site and on-site infrastructure costs. To the extent that credits or contributions towards transportation or other infrastructure improvements in EPSP would be provided to the Project, such as traffic fee credits, overall feasibility would improve. The fees allocated to regional serving transportation

<sup>4</sup> The current affordable housing fee is currently being updated.

infrastructure range from \$14 million to \$19 million are not currently allocated to on-site EPSP improvements. Conversely, it should be noted, that the fees do not cover the entire cost associated with building the park and recreation-related improvements envisioned for the plan.

## Phasing

Specific phasing of the EPSP could have substantial implications on its feasibility. There are two phasing considerations that include absorption and geographic positioning of subareas within the plan. Given the level of uncertainty about future development timing and conditions, phasing is not considered in this analysis.

The EPSP will take a number of years to build out. Given the amount of development, the plan will be subject to various changes in economic and real estate conditions over multiple economic cycles that will impact absorption of new space. The relationship between market absorption and the phasing of infrastructure costs will determine the creation of real estate value over time. To the extent that absorption is strong and real estate values are high, the overall feasibility of the plan would improve. It is worth noting that growth area and growth management allocations create absorption challenges due to a residential development cap, which would adversely impact development feasibility of the EPSP.

The geographic phasing of subareas could also have an important implication on performance. Large-scale development projects often require “over-sizing” of backbone infrastructure in early phases. To the extent that large infrastructure items, such as the El Charro Road/Stanley Boulevard undercrossing and El Charro Road Improvements could be deferred, the overall feasibility of the EPSP would improve. The gap between infrastructure costs and subsequent land or building sales in each phase should be minimized to reduce the cost burden for the Project. A detailed phasing strategy should be developed in the subsequent planning efforts.

## Financing

The development community is likely to pursue a variety of financing mechanisms to cover the infrastructure costs, including conventional debt, private equity, CFD proceeds, and others. A more strategic approach to financing, for example, one that combines both CFD proceeds with developer equity and conventional debt, could increase the financial feasibility of the program options.

## Methodology and Assumptions

This section describes the key methodology and assumptions. **Appendix A** presents detailed data and calculations, including the program options use mix, development values (also discussed below), impact fee calculations, and residual land value estimates by land use.

### Development Value

The Cost Burden Review analysis considers the potential market value of various development types envisioned by the EPSP, including residential, retail, office, and industrial/flex uses (see **Appendix A** for detailed market value assumptions). EPS assumes real estate values that are typical of the Pleasanton real estate market. This analysis relies on value assumptions that are representative of new development projects. These values are generally conservative, with the analysis seeking to avoid overestimation of building values and supportable infrastructure cost.

Additional valuation considerations were applied in the analysis of higher-density housing, affordable housing and industrial/flex uses, as discussed below.

EPS relies on a variety of sources to estimate real estate values, including current market data concerning residential and commercial transactions occurring in the City and surrounding areas. In particular, EPS reviewed residential sales data from The Gregory Group and commercial sales data from CoStar Group. EPS also considered real estate values developed as part of continuing work on the Fiscal Impact Analysis of the City of Pleasanton General Plan, to ensure basic consistency.

Based on guidance from the EPSP team, EPS assumes that the 30 dwelling units per acre product will be rental and affordable housing is provided within this category. The analysis assumes that the affordable units will represent 20 percent of the for-sale and 15 percent of the rental residential program. For the residual land value feasibility test, negative land values resulting from affordable housing development are deducted from the positive values of other development prototypes. For the purposes of the cost to value ratio infrastructure cost burden screen, EPS assumes that the affordable housing included in the EPSP options will not contribute to funding of the infrastructure costs. That is, affordable housing is valued at zero.

The Specific Plan options call for between 1.1 million and 2.3 million square feet of industrial/flex space. The relative magnitude of this particular use within the overall program makes it critical to the infrastructure feasibility evaluation. To address this notion, the EPS analysis conservatively assumes that infrastructure/flex value is at the lower end of the value spectrum, \$95 per square foot (the observed range of value is roughly \$95 to \$500 per square foot). The assumption of low-value industrial/flex reflects an \$8 million soil mitigation cost required to support new industrial/flex development<sup>5</sup>. This value also reflects uncertainty associated with the specific nature of the industrial/flex space development as well as the probability that such a large amount of industrial/flex space could be developed over a longer-term time horizon. To the extent that certain real estate product types do not generate sufficient economic value to allow for a "fair share" contribution to project-wide infrastructure costs, the overall Project feasibility will be more challenging.

### Improved Land Value

As described above, EPS developed a set of vertical pro formas for each land use and estimated a residual land value based on the difference between finished market values and vertical development costs. Improved land values are commonly used feasibility indicators and typically range between 15 and 25 percent of total building value. If the land value does not achieve this range, the project is not likely to be feasible as values do not support land costs.

Improved land for each development option is shown in **Table 1**. For land uses with negative land value (with the exception of inclusionary residential units), EPS assumes the value of zero. Land values are highly variable and subject to a number of site-specific and market factors. It is

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<sup>5</sup> Given that the soil mitigation cost applies predominantly to industrial uses, it is netted out of finished industrial value for the purpose of this analysis, which translates into a lower industrial land value.

worth noting that developers' estimates of residential land values at EPSP range between \$1.0 and \$1.5 million per acre, below the EPS estimates.

### Development Cost

EPS relies on planning-level development cost estimates provided by Kier & Wright Civil Engineers Surveyors. These data are provided as part of the **Appendix A** to this memorandum. Kier & Wright has estimated costs for the on-site planning area, including major roadway improvements, sewer improvements, water line improvements, and soil mitigation (for compacted soils, as needed). Additionally, Kier & Wright estimated development fees and connection charges for the development options. Development is assumed to pay applicable school and park fees and/or dedicate land for these purposes. Any additional park improvement or school costs would need to come from other sources.

A critical point regarding the infrastructure cost estimates is that all options include costs associated with the future connection of El Charro Road to Stanley Boulevard. No fee credit to the traffic fees, regional or local, is assumed for traffic improvements. To the extent that any fee credit is granted by the City, the feasibility of the EPSP will improve.

The analysis also considers the cost burden associated with development impact fees and other off-site fees. Off-site costs are assumed to be incurred by a master developer, while development impact fees are assumed to be paid by vertical builders in the residual land value analysis and their impact is reflected in the value estimates. Given the substantial size of the fees, the cost is also considered as a horizontal cost for the purpose of the cost/value ratio test and tax burden threshold tests. Fees include charges on development from water, wastewater, impervious surface, public facilities, traffic development, Tri-Valley Transportation Committee, school, park dedication, and GIS fees, as estimated by Kier & Wright. Due to inclusion of park dedication fees, park development costs are excluded from this analysis. Affordable housing requirements are assumed to be met onsite.

EPS also assumes that the destination uses do not contribute to program value. That is, these uses are not valued as part of the infrastructure feasibility tests. The analysis also assumes that the Operations Service Center (OSC) and Transfer Station are relocated except for development option 4, opening up additional capacity for new development<sup>7</sup>. While the relocation cost is unknown, this analysis assumes a cost of \$10 million as a "place holder" and does not reflect any land value that may be internal to the deal. If these uses are not relocated, either total development would be reduced or density would need to increase.

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<sup>7</sup> Option 4 assumes that the Operations Service Center and Transfer Station remain on their existing sites.

APPENDIX A



**Table A-1 Program Options Summary**

Use	EPSP Option Program			
	1	4	5	6
<b>Residential (Dwelling Units)</b>				
<u>Attached</u> <sup>1</sup>				
30 du/ac (MR)	130	167	214	89
30 du/ac (BMR)	175	225	252	391
23 du/ac	195	250	249	322
<u>Detached</u>				
11 du/ac	0	0	360	748
8 du/ac	0	641	0	504
4 du/ac	<u>500</u>	<u>0</u>	<u>355</u>	<u>100</u>
Residential Total	1,000	1,283	1,430	2,154
<b>Retail (Square Feet)</b>				
0.3 FAR	91,000	91,000	91,000	91,000
<b>Office Campus (Square Feet)</b>				
0.35 FAR	442,000	442,000	442,000	442,000
<b>Industrial/Flex (Square Feet)</b>				
0.36 FAR	1,442,000	2,296,000	1,148,000	1,148,000
<b>Destination Use</b> <sup>2</sup>	Yes	Yes	Yes	Yes

<sup>1</sup> Includes a mix of Market Rate (MR) and Below Market Rate (BMR) units. BMRs comprise 20% of for sale units and 15% of rentals and are provided in high-density residential projects.

<sup>2</sup> EPS conservatively assumes that Operations Service Center (OSC) and Transfer Station (TS) do not contribute to infrastructure feasibility. However, the land for the OSC and TS is assumed to be developed with value-generating uses.

Source: Gates + Associates and EPS

**Table A-2 Program Options Improved Land Value**

Use	Land Value Unit/SF	EPSP Option Value			
		1	4	5	6
<b>Residential</b>					
<u>Attached</u>					
30 du/ac (MR)	\$18,167	\$2,361,666.67	\$3,033,833	\$3,887,667	\$1,616,833
30 du/ac (BMR)	(\$154,800)	(\$27,090,000)	(\$34,830,000)	(\$39,009,600)	(\$60,526,800)
23 du/ac	\$93,000	\$18,135,000	\$23,250,000	\$23,157,000	\$29,946,000
<u>Detached</u>					
11 du/ac	\$203,000	\$0	\$0	\$73,080,000	\$151,844,000
8 du/ac	\$300,000	\$0	\$192,300,000	\$0	\$151,200,000
4 du/ac	\$320,000	<u>\$160,000,000</u>	<u>\$0</u>	<u>\$113,600,000</u>	<u>\$32,000,000</u>
Residential Total		\$153,406,667	\$183,753,833	\$174,715,067	\$306,080,033
<b>Retail</b>					
0.3 FAR	\$73	\$6,671,105	\$6,671,105	\$6,671,105	\$6,671,105
<b>Office Campus</b>					
0.35 FAR	\$0	\$0	\$0	\$0	\$0
<b>Industrial/Flex</b>					
0.36 FAR	\$0	\$0	\$0	\$0	\$0
<b>Destination Use</b>					
	-	-	-	-	-
<b>Total Value</b>		<b>\$160,077,772</b>	<b>\$190,424,938</b>	<b>\$181,386,172</b>	<b>\$312,751,138</b>

**Table A-3 Program Options Building Value**

Use	Value Unit/SF	EPSP Option Value			
		1	4	5	6
<b>Residential</b>					
<u>Attached<sup>1</sup></u>					
30 du/ac (MR)	\$372,000	\$57,660,000	\$74,400,000	\$79,608,000	\$33,108,000
30 du/ac (BMR)	\$0	\$0	\$0	\$0	\$0
23 du/ac	\$450,000	\$87,750,000	\$112,500,000	\$112,050,000	\$144,900,000
<u>Detached</u>					
11 du/ac	\$800,000	\$0	\$0	\$288,000,000	\$598,400,000
8 du/ac	\$975,000	\$0	\$624,975,000	\$0	\$491,400,000
4 du/ac	\$1,400,000	<u>\$700,000,000</u>	<u>\$0</u>	<u>\$497,000,000</u>	<u>\$140,000,000</u>
Residential Total		\$845,410,000	\$811,875,000	\$976,658,000	\$1,407,808,000
<b>Retail</b>					
0.3 FAR	\$367	\$33,397,000	\$33,397,000	\$33,397,000	\$33,397,000
<b>Office Campus</b>					
0.35 FAR	\$217	\$95,914,000	\$95,914,000	\$95,914,000	\$95,914,000
<b>Industrial/Flex</b>					
0.36 FAR	\$95	\$136,990,000	\$218,120,000	\$109,060,000	\$109,060,000
<b>Destination Use<sup>2</sup></b>					
	-	-	-	-	-
<b>Total Value</b>		<b>\$1,111,711,000</b>	<b>\$1,159,306,000</b>	<b>\$1,215,029,000</b>	<b>\$1,646,179,000</b>

1 Attached housing program includes a mix of Market Rate (MR) and Below Market Rate (BMR) units. BMRs comprise 20% of for sale and 15% of rental units and are provided in high-density residential projects.

2 EPS conservatively assumes that Operations Service Center (OSC) and Transfer Station (TS) do not contribute to infrastructure feasibility. However, the land for the OSC and TS is assumed to be developed with value-generating uses.

**Table A-4 Program Options Development Impact Fees**

Land Use	Water	Waste Water	Public Facilities	Traffic Development	Tri-Valley Transportation Committee Fee	Impervious Surface	In-lieu Park Dedication Fee	GIS Fee	School Impact Fee	TOTAL
Option 1	\$31,363,219	\$18,951,900	\$4,749,232	\$14,218,746	\$7,609,937	\$9,190,609	\$8,838,000	\$23,547	\$20,642,260	<b>\$115,587,450</b>
Option 4	\$42,701,739	\$25,396,835	\$6,216,151	\$19,190,101	\$10,549,416	\$10,081,807	\$11,338,285	\$24,954	\$17,742,666	<b>\$143,241,954</b>
Option 5	\$37,296,847	\$23,916,676	\$5,840,856	\$15,296,893	\$8,147,263	\$9,265,749	\$12,638,340	\$23,334	\$22,461,907	<b>\$134,887,864</b>
Option 6	\$53,785,220	\$34,249,082	\$8,496,339	\$18,412,973	\$9,725,136	\$10,606,860	\$19,515,002	\$26,659	\$31,307,287	<b>\$186,124,558</b>

**Table A-5 Infrastructure Cost Estimates**

<b>Infrastructure Costs</b>	<b>Option 1</b>	<b>Option 4</b>	<b>Option 5</b>	<b>Option 6</b>
<b>TRANSPORTATION</b>				
El Charro Rd/Stanley Blvd Undercrossing	\$18,023,500	\$18,023,500	\$18,023,500	\$18,023,500
Boulder Street Improvements	\$1,684,895	\$1,902,814	\$1,483,396	\$1,958,708
Busch Road Improvements	\$2,871,430	\$3,110,954	\$2,404,515	\$2,343,047
Traffic Signals	\$2,375,000	\$2,250,000	\$2,625,000	\$2,625,000
Arroyo Mocho Bridges	\$3,726,000	\$3,726,000	\$3,726,000	\$3,726,000
El Charro Road Improvements	\$7,109,948	\$7,577,777	\$7,577,777	\$7,536,924
Gateways	\$300,000	\$300,000	\$300,000	\$300,000
<b>SEWER</b>				
Sewer Improvements	\$5,317,000	\$5,564,500	\$5,252,500	\$5,356,000
<b>RECYCLED WATER</b>				
Recycled Water Lines	\$1,139,051	\$1,225,875	\$1,075,802	\$1,225,875
<b>WATER</b>				
Water improvements	\$1,621,261	\$1,745,164	\$1,530,774	\$1,530,774
Joint Trench Improvements	\$1,365,891	\$1,471,208	\$1,288,078	\$1,364,404
Subtotal	\$45,533,976	\$46,897,792	\$45,287,342	\$45,990,232
15% Contingency	\$6,830,096	\$7,034,669	\$6,793,101	\$6,898,535
20% Soft costs	<u>\$9,106,795</u>	<u>\$9,379,558</u>	<u>\$9,057,468</u>	<u>\$9,198,046</u>
<b>TOTAL</b>	<b>\$61,470,867</b>	<b>\$63,312,019</b>	<b>\$61,137,912</b>	<b>\$62,086,813</b>
Parks	\$35,283,600	\$35,283,600	\$35,283,600	\$35,283,600

**Table A-6 Raw Land Value Comparable Sales in the Tri-Valley**

<b>Address</b>	<b>City</b>	<b>Sale Date</b>	<b>Price</b>	<b>Acres</b>	<b>Price/AC</b>
Greenville Rd	Livermore	8/2/2012	\$5,290,000	16.50	\$320,606
Collier Canyon Rd	Livermore	1/6/2011	\$1,919,864	8.81	\$217,919
0 Las Positas Rd	Livermore	12/26/2012	\$275,000	1.40	\$196,429
752 Kalthoff Common, Livermore, CA 94550	Livermore	11/29/2011	\$1,800,000	18.04	<u>\$99,780</u>
<b>Average</b>					<b>\$208,683</b>
<b>Weighted Average</b>					<b>\$207,484</b>

Sources: Loopnet; CoStar; Economic & Planning Systems, Inc.

APPENDIX B - OPTION 7



This Appendix includes the analysis of Option 7. This is an additional development alternative prepared based on discussion with City staff and the developers based on the previously prepared Option 5. It reflects the residential product types discussed at the June 19th Taskforce Meeting.

**Table B-1      Option 7 Land Value Feasibility Test**

Item	EPSP Option 7
<b>Infrastructure Costs (rounded)</b>	
Backbone Infrastructure	\$61,138,000
Off-Site Improvements	\$5,000,000
Potential Relocation of OSC and TS	\$10,000,000
Predevelopment/Developer Return	<u>\$19,034,500</u>
Total Infrastructure Cost Burden	\$95,172,500
Improved Residual Land Value	\$244,270,372
<b>Raw Land Value</b>	<b>\$149,097,872</b>
Land Value (per acre)	\$367,236

**Table B-2 Program Option 7 Summary**

---

<b>Use</b>	<b>EPSP Option 7</b>
<b>Residential (Dwelling Units)</b>	
<u>Attached</u>	
30 du/ac (MR)	352
30 du/ac (BMR)	308
23 du/ac	221
<u>Detached</u>	
11 du/ac	110
8 du/ac	488
4 du/ac	<u>280</u>
Residential Total	1,759
<b>Retail (Square Feet)</b>	
0.3 FAR	91,000
<b>Office Campus (Square Feet)</b>	
0.35 FAR	442,000
<b>Industrial/Flex (Square Feet)</b>	
0.36 FAR	1,148,000
<b>Destination Use</b>	Yes

---

**Table B-3 Program Option 7 Improved Land Value**

<b>Use</b>	<b>Land Value per Unit/SF</b>	<b>EPSP Option 7</b>
<b>Residential</b>		
<u>Attached</u>		
30 du/ac (MR)	\$18,167	\$6,394,667
30 du/ac (BMR)	(\$154,800)	(\$47,678,400)
23 du/ac	\$93,000	\$20,553,000
<u>Detached</u>		
11 du/ac	\$203,000	\$22,330,000
8 du/ac	\$300,000	\$146,400,000
4 du/ac	\$320,000	<u>\$89,600,000</u>
Residential Total		\$237,599,267
<b>Retail</b>		
0.3 FAR	\$73	\$6,671,105
<b>Office Campus</b>		
0.35 FAR	\$0	\$0
<b>Industrial/Flex</b>		
0.36 FAR	\$0	\$0
<b>Destination Use</b>		
	-	-
<b>Total Value</b>		<b>\$244,270,372</b>



## APPENDIX C

**Table C-1**  
**Custom Lot New Single Family Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Unit	Total (per acre)
<b>DEVELOPMENT PROGRAM</b>			
Units			4
Gross Area	5,000 sq.ft. per unit		20,000 sq.ft.
Efficiency Ratio	100%		
Net Area			20,000 sq.ft.
Parking Ratio (spaces per unit)			2.0
<b>REVENUE ASSUMPTIONS</b>			
Sale Price	\$1,400,000 per unit	\$1,400,000	\$5,600,000
Options (net above costs)	1.0%	\$14,000	\$56,000
(less) Cost of Sale	3.0%	<u>(\$42,000)</u>	<u>(\$168,000)</u>
<b>Total Revenue</b>		<b>\$1,372,000</b>	<b>\$5,488,000</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost (1)	\$115 /GLA sq. ft.	\$575,000	\$2,300,000
Site Improvement Cost	\$7.00 /land sq. ft.	\$76,230	\$304,920
Parking Construction Cost	\$0 per space	<u>\$0</u>	<u>\$0</u>
Total Direct Costs		\$651,230	\$2,604,920
<b>Indirect Costs</b>			
<b>Impact Fees</b>			
Water	\$25,120 per unit	\$25,120	\$100,480
Wastewater	\$14,881 per unit	\$14,881	\$59,524
Public Facilities	\$4,487 per unit	\$4,487	\$17,948
Traffic Development	\$4,465 per unit	\$4,465	\$17,860
Tri-Valley Transportation Committee Fee	\$2,279 per unit	\$2,279	\$9,116
Impervious Surface	\$7,623 per unit	\$7,623	\$30,492
In-lieu Park Dedication Fee	\$9,707 per unit	\$9,707	\$38,828
GIS Fee	\$22 per unit	\$22	\$87
School Impact Fee	\$33,700 per unit	\$33,700	\$134,800
Other Indirect Costs (2)	<u>20.0%</u> of direct costs	<u>\$130,246</u>	<u>\$520,984</u>
Total Indirect Costs	35.7% of direct costs	\$232,530	\$930,119
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$883,760</b>	<b>\$3,535,039</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$44,188	\$176,752
Developer Return (% of direct and indirect costs)	14.0% of direct and indirect costs	\$123,726	\$494,905
<b>Total Costs</b>		<b>\$1,051,674</b>	<b>\$4,206,697</b>
<b>RESIDUAL LAND VALUE</b>		<b>\$320,000</b>	<b>\$1,281,000</b>

(1) Includes building permits.

(2) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-2**  
**New Single Family Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Unit	Total (per acre)
<b>DEVELOPMENT PROGRAM</b>			
Units			8
Gross Area	3,000 sq.ft. per unit		24,000 sq.ft.
Efficiency Ratio	100%		
Net Area			24,000 sq.ft.
Parking Ratio (spaces per unit)			2.0
<b>REVENUE ASSUMPTIONS</b>			
Sale Price	\$975,000 per unit	\$975,000	\$7,800,000
Options (net above costs)	1.0%	\$9,750	\$78,000
(less) Cost of Sale	3.0%	<u>(\$29,250)</u>	<u>(\$234,000)</u>
<b>Total Revenue</b>		<b>\$955,500</b>	<b>\$7,644,000</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost (1)	\$105 /GLA sq. ft.	\$315,000	\$2,520,000
Site Improvement Cost	\$13.50 /land sq. ft.	\$73,508	\$588,060
Parking Construction Cost	\$0 per space	<u>\$0</u>	<u>\$0</u>
Total Direct Costs		\$388,508	\$3,108,060
<b>Indirect Costs</b>			
<b>Impact Fees</b>			
Water	\$25,120 per unit	\$25,120	\$200,960.00
Wastewater	\$14,881 per unit	\$14,881	\$119,048
Public Facilities	\$4,487 per unit	\$4,487	\$35,896
Traffic Development	\$4,465 per unit	\$4,465	\$35,720
Tri-Valley Transportation Committee Fee	\$2,279 per unit	\$2,279	\$18,232
Impervious Surface	\$3,812 per unit	\$3,812	\$30,492
In-lieu Park Dedication Fee	\$9,707 per unit	\$9,707	\$77,656
GIS Fee	\$11 per unit	\$11	\$87
School Impact Fee	\$20,220 per unit	\$20,220	\$161,760
Other Indirect Costs (2)	<u>20.0%</u> of direct costs	<u>\$77,702</u>	<u>\$621,612</u>
Total Indirect Costs	41.9% of direct costs	\$162,683	\$1,301,463
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$551,190</b>	<b>\$4,409,523</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$27,560	\$220,476.16
Developer Return (% of direct and indirect costs)	14.0% of direct and indirect costs	\$77,167	\$617,333.24
<b>Total Costs</b>		<b>\$655,917</b>	<b>\$5,247,333</b>
<b>RESIDUAL LAND VALUE</b>		<b>\$300,000</b>	<b>\$2,397,000</b>

(1) Includes building permits.

(2) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-3****Duplexes Residual Land Value****East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Unit	Total (per acre)
<b>DEVELOPMENT PROGRAM</b>			
Units			11
Gross Area	2,500 sq.ft. per unit		27,500 sq.ft.
Efficiency Ratio	100%		
Net Area			27,500 sq.ft.
Parking Ratio (spaces per unit)			2.0
<b>REVENUE ASSUMPTIONS</b>			
Sale Price	\$800,000 per unit	\$800,000	\$8,800,000
Options (net above costs)	1.0%	\$8,000	\$88,000
(less) Cost of Sale	3.0%	<u>(\$24,000)</u>	<u>(\$264,000)</u>
<b>Total Revenue</b>		<b>\$784,000</b>	<b>\$8,624,000</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost (1)	\$110 /GLA sq. ft.	\$275,000	\$3,025,000
Site Improvement Cost	\$16.50 /land sq. ft.	\$65,340	\$718,740
Parking Construction Cost	\$0 per space	<u>\$0</u>	<u>\$0</u>
Total Direct Costs		\$340,340	\$3,743,740
<b>Indirect Costs</b>			
<b>Impact Fees</b>			
Water	\$25,120 per unit	\$25,120	\$276,320
Wastewater	\$14,881 per unit	\$14,881	\$163,691
Public Facilities	\$3,351 per unit	\$3,351	\$36,861
Traffic Development	\$4,465 per unit	\$4,465	\$49,115
Tri-Valley Transportation Committee Fee	\$2,279 per unit	\$2,279	\$25,069
Impervious Surface	\$3,168 per unit	\$3,168	\$34,848
In-lieu Park Dedication Fee	\$9,707 per unit	\$9,707	\$106,777
GIS Fee	\$8 per unit	\$8	\$87
School Impact Fee	\$16,850 per unit	\$16,850	\$185,350
Other Indirect Costs (2)	<u>20.0%</u> of direct costs	<u>\$68,068</u>	<u>\$748,748</u>
Total Indirect Costs	43.5% of direct costs	\$147,897	\$1,626,866
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$488,237</b>	<b>\$5,370,606</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$24,412	\$268,530
Developer Return (% of direct and indirect costs)	14.0% of direct and indirect costs	\$68,353	\$751,885
<b>Total Costs</b>		<b>\$581,002</b>	<b>\$6,391,021</b>
<b>RESIDUAL LAND VALUE</b>		<b>\$203,000</b>	<b>\$2,233,000</b>

(1) Includes building permits.

(2) Include architecture &amp; engineering, financing, and G &amp; A costs.

Source: Economic &amp; Planning Systems, Inc.

**Table C-4**  
**Surface Parking Condo Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Unit	Total (per acre)
<b>DEVELOPMENT PROGRAM</b>			
Units			23
Gross Area	1,200 sq.ft. per unit		27,600 sq.ft.
Efficiency Ratio	85%		
Net Area			23,460 sq.ft.
Parking Ratio (spaces per unit)			2.0
<b>REVENUE ASSUMPTIONS</b>			
Sale Price	\$440,000 per unit	\$440,000	\$10,120,000
Options (net above costs)	1.0%	\$4,400	\$101,200
(less) Cost of Sale	3.0%	<u>(\$13,200)</u>	<u>(\$303,600)</u>
<b>Total Revenue</b>		<b>\$431,200</b>	<b>\$9,917,600</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost (1)	\$140 /GLA sq. ft.	\$168,000	\$3,864,000
Site Improvement Cost	\$15.0 /land sq. ft.	\$28,409	\$653,400
Parking Construction Cost	\$3,500 per space	<u>\$7,000</u>	<u>\$161,000</u>
Total Direct Costs		\$203,409	\$4,678,400
<b>Indirect Costs</b>			
<b>Impact Fees</b>			
Water	\$5,401 per unit	\$5,401	\$124,223
Wastewater	\$9,807 per unit	\$9,807	\$225,561
Public Facilities	\$2,736 per unit	\$2,736	\$62,928
Traffic Development	\$3,125 per unit	\$3,125	\$71,875
Tri-Valley Transportation Committee Fee	\$1,450 per unit	\$1,450	\$33,350
Impervious Surface	\$1,610 per unit	\$1,610	\$37,026
In-lieu Park Dedication Fee	\$7,969 per unit	\$7,969	\$183,287
GIS Fee	\$4 per unit	\$4	\$87
School Impact Fee	\$8,088 per unit	\$8,088	\$186,024
Other Indirect Costs (2)	<u>20.0%</u> of direct costs	<u>\$40,682</u>	<u>\$935,680</u>
Total Indirect Costs	39.8% of direct costs	\$80,871	\$1,860,041
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$284,280</b>	<b>\$6,538,441</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$14,214	\$326,922
Developer Return (% of direct and indirect costs)	14.0% of direct and indirect costs	\$39,799	<u>\$915,382</u>
<b>Total Costs</b>		<b>\$338,293</b>	<b>\$7,780,745</b>
<b>RESIDUAL LAND VALUE</b>		<b>\$93,000</b>	<b>\$2,137,000</b>

(1) Includes building permits.

(2) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-5**  
**Garden Apartments Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Unit	Total (per acre)
<b>DEVELOPMENT PROGRAM</b>			
Units			30
Net Area	1,000 sq.ft. per unit		30,000 sq.ft.
Efficiency Ratio	85%		
Gross Area			35,294 sq.ft.
Parking Ratio (spaces per unit)			2.0
<b>REVENUE ASSUMPTIONS</b>			
Gross Revenue	\$28 /net sq. ft./year	\$28,000	\$840,000
(less) Operating Expenses	30%	(\$8,400)	(\$252,000)
(less) Vacancy Rate	5.0%	<u>(\$1,400)</u>	<u>(\$42,000)</u>
Subtotal, Annual Net Operating Income		\$18,200	\$546,000
Capitalized Value	4.8% cap rate	\$383,158	\$11,494,737
(less) Cost of Sale	3.0%	<u>(\$11,495)</u>	<u>(\$344,842)</u>
<b>Total Revenue</b>		<b>\$371,663</b>	<b>\$11,149,895</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost (1)	\$175 /GLA sq. ft.	\$205,882	\$6,176,471
Site Improvement Cost	\$5.0 /land sq. ft.	\$7,260	\$217,800
Parking Construction Cost	\$3,000 per space	<u>\$6,000</u>	<u>\$180,000</u>
Total Direct Costs		\$219,142	\$6,574,271
<b>Indirect Costs</b>			
<b>Impact Fees</b>			
Water	\$6,617 per unit	\$6,617	\$198,510
Wastewater	\$9,807 per unit	\$9,807	\$294,210
Public Facilities	\$2,736 per unit	\$2,736	\$82,080
Traffic Development	\$3,125 per unit	\$3,125	\$93,750
Tri-Valley Transportation Committee Fee	\$1,450 per unit	\$1,450	\$43,500
Impervious Surface	\$1,234 per unit	\$1,234	\$37,026
In-lieu Park Dedication Fee	\$7,969 per unit	\$7,969	\$239,070
GIS Fee	\$3 per unit	\$3	\$87
School Impact Fee	\$3,040 per unit	\$3,040	\$91,200
Other Indirect Costs (2)	<u>18.0%</u> of direct costs	<u>\$39,446</u>	<u>\$1,183,369</u>
Total Indirect Costs	34.4% of direct costs	\$75,427	\$2,262,802
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$294,569</b>	<b>\$8,837,072</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$14,728	\$441,854
Developer Return (% of direct and indirect costs)	15.0% of direct and indirect costs	<u>\$37.56</u>	<u>\$1,325,561</u>
<b>Total Costs</b>		<b>\$353,483</b>	<b>\$10,604,487</b>
<b>RESIDUAL LAND VALUE</b>		<b>\$18,167</b>	<b>\$545,000</b>

(1) Includes building permits.

(2) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-6**  
**Podium Parking Mid-Rise Apartments Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Unit	Total (per acre)
<b>DEVELOPMENT PROGRAM</b>			
Units			30
Net Area	1,000 sq.ft. per unit		30,000 sq.ft.
Efficiency Ratio	85%		
Gross Area			35,294 sq.ft.
Parking Ratio (spaces per unit)			2.0
<b>REVENUE ASSUMPTIONS</b>			
Gross Revenue	\$28 /net sq. ft./year	\$28,000	\$840,000
(less) Operating Expenses	30%	(\$8,400)	(\$252,000)
(less) Vacancy Rate	5.0%	<u>(\$1,400)</u>	<u>(\$42,000)</u>
Subtotal, Annual Net Operating Income		\$18,200	\$546,000
Capitalized Value	4.8% cap rate	\$383,158	\$11,494,737
(less) Cost of Sale	3.0%	<u>(\$11,495)</u>	<u>(\$344,842)</u>
<b>Total Revenue</b>		<b>\$371,663</b>	<b>\$11,149,895</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost (1)	\$225 /GLA sq. ft.	\$264,706	\$7,941,176
Site Improvement Cost	\$5.0 /land sq. ft.	\$7,260	\$217,800
Parking Construction Cost	\$0 per space	\$0	\$0
Total Direct Costs		\$271,966	\$8,158,976
<b>Indirect Costs</b>			
Impact Fees			
Water	\$6,617 per unit	\$6,617	\$198,510
Wastewater	\$9,807 per unit	\$9,807	\$294,210
Public Facilities	\$2,736 per unit	\$2,736	\$82,080
Traffic Development	\$3,125 per unit	\$3,125	\$93,750
Tri-Valley Transportation Committee Fee	\$1,450 per unit	\$1,450	\$43,500
Impervious Surface	\$1,234 per unit	\$1,234	\$37,026
In-lieu Park Dedication Fee	\$7,969 per unit	\$7,969	\$239,070
GIS Fee	\$3 per unit	\$3	\$87
School Impact Fee	\$3,040 per unit	\$3,040	\$91,200
Other Indirect Costs (2)	<u>18.0%</u> of direct costs	<u>\$48,954</u>	<u>\$1,468,616</u>
Total Indirect Costs	31.2% of direct costs	\$84,935	\$2,548,049
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$356,901</b>	<b>\$10,707,025</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$17,845	\$535,351.27
Developer Return (% of direct and indirect costs)	15.0% of direct and indirect costs	<u>\$45.50</u>	<u>\$1,606,054</u>
<b>Total Costs</b>		<b>\$428,281</b>	<b>\$12,848,430</b>
<b>RESIDUAL LAND VALUE</b>		<b>(\$56,633)</b>	<b>(\$1,699,000)</b>

(1) Includes building permits.

(2) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-7  
Inclusionary Garden Apartments Residual Land Value  
East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Unit	Total (per acre)
<b>DEVELOPMENT PROGRAM</b>			
Units			30
Net Area	1,000 sq.ft. per unit		30,000 sq.ft.
Efficiency Ratio	85%		
Gross Area			35,294 sq.ft.
Parking Ratio (spaces per unit)			2.0
<b>REVENUE ASSUMPTIONS</b>			
Gross Revenue (1)	\$14.96 /net sq. ft./year	\$14,963	\$448,875
(less) Operating Expenses	30%	(\$4,489)	(\$134,663)
(less) Vacancy Rate	5.0%	<u>(\$748)</u>	<u>(\$22,444)</u>
Subtotal, Annual Net Operating Income		\$9,726	\$291,769
Capitalized Value	4.8% cap rate	\$204,750	\$6,142,500
(less) Cost of Sale	3.0%	<u>(\$6,143)</u>	<u>(\$184,275)</u>
<b>Total Revenue</b>		<b>\$198,608</b>	<b>\$5,958,225</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost (2)	\$175 /GLA sq. ft.	\$205,882	\$6,176,471
Site Improvement Cost	\$5.0 /land sq. ft.	\$7,260	\$217,800
Parking Construction Cost	\$3,000 per space	<u>\$6,000</u>	<u>\$180,000</u>
Total Direct Costs		\$219,142	\$6,574,271
<b>Indirect Costs</b>			
Impact Fees			
Water	\$6,617 per unit	\$6,617	\$198,510
Wastewater	\$9,807 per unit	\$9,807	\$294,210
Public Facilities	\$2,736 per unit	\$2,736	\$82,080
Traffic Development	\$3,125 per unit	\$3,125	\$93,750
Tri-Valley Transportation Committee Fee	\$1,450 per unit	\$1,450	\$43,500
Impervious Surface	\$1,234 per unit	\$1,234	\$37,026
In-lieu Park Dedication Fee	\$7,969 per unit	\$7,969	\$239,070
GIS Fee	\$3 per unit	\$3	\$87
School Impact Fee	\$2,970 per unit	\$2,970	\$89,100
Other Indirect Costs (3)	<u>18.0%</u> of direct costs	<u>\$39,446</u>	<u>\$1,183,369</u>
Total Indirect Costs	34.4% of direct costs	\$75,357	\$2,260,702
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$294,499</b>	<b>\$8,834,972</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$14,725	\$441,748.62
Developer Return (% of direct and indirect costs)	15.0% of direct and indirect costs	<u>\$37.55</u>	<u>\$1,325,246</u>
<b>Total Costs</b>		<b>\$353,399</b>	<b>\$10,601,967</b>
<b>RESIDUAL LAND VALUE</b>		<b>(\$154,800)</b>	<b>(\$4,644,000)</b>

(1) Based on the even mix of low and moderate income thresholds as specified by HCD 2013 income limits for Alameda County.

(2) Includes building permits.

(3) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-8**  
**Retail Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Bldg. Sq.Ft.	Total
<b>DEVELOPMENT PROGRAM</b>			
Gross Leasable Area (sq.ft.)			13,068 sq.ft.
Efficiency Ratio	95%		
Net Leasable Area (sq.ft.)			12,415 sq.ft.
Parking Ratio (spaces per 1,000 sq.ft.)			4.0
Total Spaces			52
<b>REVENUE ASSUMPTIONS</b>			
Gross Revenue (NNN)	\$28.00 /NLA sq. ft.	\$28.00	\$347,609
(less) Commissions	3.0%	(\$0.84)	(\$10,428)
(less) Vacancy Rate	4.0%	<u>(\$1.12)</u>	<u>(\$13,904)</u>
Subtotal, Annual Net Operating Income		\$26.04	\$323,276
Capitalized Value	6.6% cap rate	\$374.82	\$4,898,124
(less) Cost of Sale	2.0%	<u>(\$7.50)</u>	<u>(\$97,962)</u>
<b>Total Revenue</b>		<b>\$367</b>	<b>\$4,800,162</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost	\$120 /GLA sq. ft.	\$120.00	\$1,568,160
Site Improvement Cost	\$10.0 /land sq. ft.	\$33.33	\$435,600
Parking Construction Cost (1)	\$0 /space	<u>\$0</u>	<u>\$0</u>
Total Direct Costs		\$153	\$2,003,760
<b>Indirect Costs</b>			
Tenant Improvements	\$40 /GLA sq. ft.	\$40.00	\$522,720
<b>Impact Fees</b>			
Water	\$124,230 /acre	\$9.51	\$124,230
Wastewater	\$44,170 /acre	\$3.38	\$44,170
Public Facilities	\$7,318 /acre	\$0.56	\$7,318
Traffic Development	\$163,219 /acre	\$12.49	\$163,219
Tri-Valley Transportation Committee Fee	\$19,863 /acre	\$1.52	\$19,863
Impervious Surface	\$37,026 /acre	\$2.83	\$37,026
In-lieu Park Dedication Fee	\$0 /acre	\$0.00	\$0
GIS Fee	\$87 /acre	\$0.01	\$87
School Impact Fee	\$6,142 /acre	\$0.47	\$6,142
Other Indirect Costs (2)	<u>15.0%</u> of direct costs	<u>\$23</u>	<u>\$300,564</u>
Total Indirect Costs	61.2% of direct costs	\$94	\$1,225,340
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$247.10</b>	<b>\$3,229,100</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$12	\$161,455
Developer Return (% of direct and indirect costs)	14.0% of direct and indirect costs	<u>\$35</u>	<u>\$452,074</u>
<b>Total Costs</b>		<b>\$294.05</b>	<b>\$3,842,629</b>
<b>RESIDUAL LAND VALUE</b>		<b>\$73.31</b>	<b>\$958,000</b>

(1) Covered under site improvements.

(2) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-9**  
**Class B Stand Alone Office Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Bldg. Sq.Ft.	Per Acre
<b>DEVELOPMENT PROGRAM</b>			
Gross Leasable Area (sq.ft.)			15,246 sq.ft.
Efficiency Ratio	90%		
Net Leasable Area (sq.ft.)			13,721 sq.ft.
Parking Ratio (spaces per 1,000 sq.ft.)			4.0
Total Spaces			
<b>REVENUE ASSUMPTIONS</b>			
Gross Office Revenue (FS)	\$24.00 /NLA	21.60	329,314
(less) Operating Expenses	30%	(6.48)	(98,794)
(less) Commissions	3.0%	(0.65)	(9,879)
(less) Vacancy Rate	10.0%	<u>(2.16)</u>	<u>(32,931)</u>
Annual Net Operating Income		12.31	187,709
Capitalized Value	6.5% cap rate	\$189.42	\$2,887,827
(less) Cost of Sale	2.0%	<u>(\$3.79)</u>	<u>(\$57,757)</u>
<b>Total Revenue</b>		<b>\$186</b>	<b>\$2,830,070</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost	\$150 /GLA sq. ft.	\$150.00	\$2,286,900
Site Improvement Cost	\$5.0 /GLA sq. ft.	\$5.00	\$76,230
Parking Construction Cost	\$3,000 /per space	<u>\$12.00</u>	<u>\$182,952</u>
Total Direct Costs		\$167.00	\$2,546,082
<b>Indirect Costs</b>			
Tenant Improvements	\$30.00 /GLA sq. ft.	\$30.00	\$457,380
<b>Impact Fees</b>			
Water	\$124,230 /acre	\$8.15	\$124,230
Wastewater	\$51,531 /acre	\$3.38	\$51,531
Public Facilities	\$12,959 /acre	\$0.85	\$12,959
Traffic Development	\$90,561 /acre	\$5.94	\$90,561
Tri-Valley Transportation Committee Fee	\$62,356 /acre	\$4.09	\$62,356
Impervious Surface	\$37,026 /acre	\$2.43	\$37,026
In-lieu Park Dedication Fee	\$0 /acre	\$0.00	\$0
GIS Fee	\$87 /acre	\$0.01	\$87
School Impact Fee	\$7,166 /acre	\$0.47	\$7,166
Other Indirect Costs (1)	<u>15.0%</u> of direct costs	<u>\$25.05</u>	<u>\$381,912</u>
Total Indirect Costs	48.1% of direct costs	\$80.36	\$1,225,209
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$247</b>	<b>\$3,771,291</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$12.37	\$188,565
Developer Return (% of direct and indirect costs)	14.0% of direct and indirect costs	<u>\$34.63</u>	<u>\$527,981</u>
<b>Total Costs</b>		<b>\$294</b>	<b>\$4,487,836</b>
<b>RESIDUAL LAND VALUE</b>		<b>(\$109)</b>	<b>(\$1,658,000)</b>

(1) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-10**  
**Class A Mid-Rise Office Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Bldg. Sq.Ft.	Total
<b>DEVELOPMENT PROGRAM</b>			
Gross Leasable Area (sq.ft.)			15,246 sq.ft.
Efficiency Ratio	90%		
Net Leasable Area (sq.ft.)			13,721 sq.ft.
Parking Ratio (spaces per 1,000 sq.ft.)			4.0
Total Spaces			
<b>REVENUE ASSUMPTIONS</b>			
Gross Office Revenue (FS)	\$28.00 /NLA	25.20	384,199
(less) Operating Expenses	30%	(7.56)	(115,260)
(less) Commissions	3.0%	(0.76)	(11,526)
(less) Vacancy Rate	10.0%	<u>(2.52)</u>	<u>(38,420)</u>
Annual Net Operating Income		14.36	218,994
Capitalized Value	6.5% cap rate	\$220.98	\$3,369,131
(less) Cost of Sale	2.0%	<u>(\$4.42)</u>	<u>(\$67,383)</u>
<b>Total Revenue</b>		<b>\$217</b>	<b>\$3,301,749</b>
<b>DEVELOPMENT COSTS</b>			
<b>Direct Costs</b>			
Building Construction Cost	\$150 /GLA sq. ft.	\$150.00	\$2,286,900
Site Improvement Cost	\$5.0 /GLA sq. ft.	\$5.00	\$76,230
Parking Construction Cost	\$20,000 /per space	<u>\$80.00</u>	<u>\$1,219,680</u>
Total Direct Costs		\$235.00	\$3,582,810
<b>Indirect Costs</b>			
Tenant Improvements	\$40.00 /GLA sq. ft.	\$40.00	\$609,840
Impact Fees			
Water	\$124,230 /acre	\$8.15	\$124,230
Wastewater	\$51,531 /acre	\$3.38	\$51,531
Public Facilities	\$12,959 /acre	\$0.85	\$12,959
Traffic Development	\$90,561 /acre	\$5.94	\$90,561
Tri-Valley Transportation Committee Fee	\$62,356 /acre	\$4.09	\$62,356
Impervious Surface	\$37,026 /acre	\$2.43	\$37,026
In-lieu Park Dedication Fee	\$0 /acre	\$0.00	\$0
GIS Fee	\$87 /acre	\$0.01	\$87
School Impact Fee	\$7,166 /acre	\$0.47	\$7,166
Other Indirect Costs (1)	<u>15.0%</u> of direct costs	<u>\$35.25</u>	<u>\$537,422</u>
Total Indirect Costs	42.8% of direct costs	\$100.56	\$1,533,178
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$336</b>	<b>\$5,115,988</b>
Contingency (% of direct and indirect costs)	5.0% of direct and indirect costs	\$16.78	\$255,799
Developer Return (% of direct and indirect costs)	14.0% of direct and indirect costs	<u>\$46.98</u>	<u>\$716,238</u>
<b>Total Costs</b>		<b>\$399</b>	<b>\$6,088,026</b>
<b>RESIDUAL LAND VALUE</b>		<b>(\$183)</b>	<b>(\$2,786,000)</b>

(1) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.

**Table C-11**  
**Warehouse/Distribution Residual Land Value**  
**East Pleasanton Specific Plan Infrastructure Feasibility Analysis; EPS #121090**

Item	Assumption	Per Bldg. Sq.Ft.	Total
<b>DEVELOPMENT PROGRAM ASSUMPTIONS</b>			
Gross Building Area (sq.ft.)			15,682
Efficiency Ratio	80%		
Net Building Area (sq.ft.)			12,545
Parking Ratio (spaces per 1,000 sq.ft.)			3.3
Total Spaces			41
<b>REVENUE ASSUMPTIONS</b>			
Gross Revenue (NNN)	\$13.00 /NLA	\$10.40	\$163,089
(less) Operating Expenses	0%	\$0.00	\$0
(less) Commissions	3%	(\$0.31)	(\$4,893)
(less) Vacancy Rate	3%	<u>(\$0.31)</u>	<u>(\$4,893)</u>
Subtotal		\$9.78	\$153,303
Capitalized Value	7.0% cap rate	\$139.66	\$2,190,047
(less) Cost of Sale	2.0%	<u>(\$2.79)</u>	<u>(\$43,801)</u>
<b>Total Revenue</b>		<b>\$137</b>	<b>\$2,146,247</b>
<b>COST ASSUMPTIONS</b>			
<b>Direct Costs</b>			
Building Construction Cost	\$85 /GLA sq. ft.	\$85.00	\$1,332,936
Site Improvement Cost	\$5.0 /land sq. ft.	\$13.89	\$217,800
Parking Construction Cost	\$0 /per space	<u>\$0.00</u>	<u>\$0</u>
Total Direct Costs		\$98.89	\$1,550,736
<b>Indirect Costs</b>			
Tenant Improvements	\$1.00 /GLA sq. ft.	\$1.00	\$15,682
<b>Impact Fees</b>			
Water	\$124,230 /acre	\$7.92	\$124,230
Wastewater	\$45,642 /acre	\$2.91	\$45,642
Public Facilities	\$6,887 /acre	\$0.44	\$6,887
Traffic Development	\$60,226 /acre	\$3.84	\$60,226
Tri-Valley Transportation Committee Fee	\$37,270 /acre	\$2.38	\$37,270
Impervious Surface	\$37,026 /acre	\$2.36	\$37,026
In-lieu Park Dedication Fee	\$0 /acre	\$0.00	\$0
GIS Fee	\$87 /acre	\$0.01	\$87
School Impact Fee	\$6,347 /acre	\$0.40	\$6,347
Other Indirect Costs (1)	15% of direct costs	<u>\$12.75</u>	<u>\$199,940</u>
Total Indirect Costs	34% of direct costs	\$34.01	\$533,337
<b>Subtotal, Direct and Indirect Costs</b>		<b>\$133</b>	<b>\$2,084,073</b>
Contingency (% of direct and indirect costs)	5%	\$6.64	\$104,203.64
Developer Return (% of direct and indirect costs)	15%	\$19.93	\$312,611
<b>Total Costs</b>		<b>\$159</b>	<b>\$2,500,887</b>
<b>RESIDUAL LAND VALUE</b>		<b>(\$23)</b>	<b>(\$354,641)</b>

(1) Include architecture & engineering, financing, and G & A costs.

Source: Economic & Planning Systems, Inc.