

DRAFT RESPONSE MEMORANDUM

To: Ash Feeney, Sherri Metzker, and Kellie Bruton
From: David Zehnder and Tom Martens
Subject: Response to FBC ARC Ad Hoc Subcommittee Questions
(with revised Base Case)
Date: May 27, 2020

The Economics of Land Use



EPS has reviewed the questions provided by the ARC Ad Hoc Subcommittee regarding the ARC Fiscal Impact Analysis that was presented on May 11, 2020. Your comments and our discussion on these matters is reflected in some of the answers as noted in the memorandum. EPS's answers to each of the questions included in Part 1 of the document are provided below.

- 1. Number of Employees:** We would like to ask EPS to review the data around number of City of Davis employees as it appears that the number is inflated by UC Davis employees working on campus which is outside the city limits. If this number is inflated then we would ask for the model to be re-run with a more accurate persons served calculation, See Table B-2.

EPS Response

Employment measurements can either track employed residents, also referred to as employed labor force, or they can track what is known as "at-place" employment. Employed resident/labor force figures are based on where job holders or potential job holders live, regardless of where they work, while at-place employment figures are based on where job-holders work, regardless of where they live. The Persons-Served calculation uses an at-place employment estimate to account for the working population within the city, sometimes referred to as daytime population.

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At-place employment data for sub-county geographies is neither as readily available nor as frequently updated by collecting agencies as employed resident data; therefore, private data subscription services, such as ESRI/BAO, are frequently relied upon for updated estimates, particularly at the sub-county level. As one of the best regarded such data subscription services, ESRI/BAO was utilized by EPS for both the 2015 MRIC analysis and the current ARC analysis.

However, EPS has followed up with ESRI and its subsequent internal review identified an anomaly in the data it relied upon; specifically, what appears to be a “shell” company with a Davis address. The ESRI employment estimate has not been updated since this issue was identified, so a decision was made to use the same employment number that was used in the 2015 MRIC analysis. All fiscal impact analysis has subsequently been re-run using the 2015 employment number in the determination of Persons Served.

Using the 2015 City of Davis employment number to calculate the citywide Persons Served results in an increase of City expenditures of \$37,000 at the end of Phase 1, increasing to \$148,000 at Project buildout. Revenues increased slightly as well due to the change (\$28,000 at buildout). The net fiscal impact at buildout is reduced from a surplus of \$5.44 million annually to \$5.32 million annually. The revised net fiscal impact summary table is shown in **Table 1** below.

Table 1. Revised Net Fiscal Impact

Impact Category	Annual Project Fiscal Impact at Phase Completion (\$M)			
	Phase 1	Phase 2	Phase 3	Phase 4 / Buildout
Revenues [1]	\$1.65	\$3.82	\$6.53	\$8.07
Expenditures	\$0.69	\$1.63	\$2.29	\$2.75
Net Fiscal Impact	\$0.96	\$2.20	\$4.25	\$5.32

Source: City of Davis; EPS.

- 2. Reconciliation:** The 2015 Fiscal Impact Analysis by EPS of the then “MRIC” revealed a less favorable fiscal picture than the ARC 2020 analysis. We recognize that there are some differences in the projects, but could EPS provide a financial reconciliation of the difference between the two? We stress the term high-level as we are focused more on differences in assumptions and methodology rather than exact numbers. We seek an explanation that conveys the essence of the difference between the two projects fiscally.

EPS Response

Two of the largest components of the increased revenue from the Project over MRIC are Property Taxes and Sales and Use Taxes, as described below.

Property Tax

The residential component of the current Project contributes an additional \$400 million in assessed value that was not part of MRIC. Office and R&D valuation is about \$177 million more than MRIC due to a combination of higher rents found in the market and an additional 150,000 square feet.

In addition to the increased valuation estimate, the City's assumed allocation of the ad valorem tax revenue is significantly higher, based on the experience gained in the recent West Davis Active Adult Retirement Community (WDAARC) annexation. The previous MRIC analysis did not include the County Road District #2 allocation or the East Davis Fire District allocation. In the WDAARC annexation both of these funds, comprising over 12 percent of the ad valorem tax levy, were transferred to the City General Fund. The same conditions would apply to the ARC annexation, so these funds have been assumed transferred to the City.

Additionally, the MRIC analysis split the County General Fund and ACO Fund between the City and County after removing the County's ERAF share, which is significant. The City and County have considerably different ERAF shifts and the City portion of the divided funds would be subject to the City's ERAF shift rate, not the County's.

The total property tax revenue to the City increased from \$381,000 in the 2015 MRIC analysis to \$2.7 million in the current ARC analysis, a total increase of \$2.3 million in gross revenue to the City. The increase in assessed valuation accounts for 15 percent of the increase in property tax revenue to the City, with the bulk due to the City's increased share of the ad valorem tax.

Sales and Use Tax

Sales and Use Tax revenues have increased from \$993,000 (\$744,000 plus \$248,000 in property tax in-lieu of sales tax "Triple Flip" reimbursement) in the MRIC analysis to about \$2.2 million in the current ARC analysis. Retail sales within the Project are roughly the same as the MRIC analysis, with a somewhat higher assumed sales volume per square foot offsetting a reduction in retail square footage. The addition of new household spending citywide from the Project's residential units provides an additional \$17 million in taxable sales off-site. However, the overall amount subject to Sales and Use Tax has only increased from \$99 million to \$111 million between 2015 and 2020. The primary driver for the increase in Sales and Use Tax is the addition of Measure Q, which essentially doubled the City's sales tax rate. When the MRIC analysis was completed, Measure Q's predecessor, Measure O, was omitted due to its approaching sunset date. Measure Q will run throughout the Project timeline.

These changes in total result in an increase of gross revenues to the City of \$1.2 million above what had been forecasted in the MRIC 2015 analysis.

- 3. Non-Profit:** While there is no explicit mention of either UCD or another non-profit — and therefore tax exempt organization — as a key tenant for the ARC, there appears to be a strong desire as witnessed by the naming of the development as "Aggie" to

show an affiliation in some way with UCD. When questioned, the EPS team believed that the marketing pull of UC as a tenant would more than offset any revenue loss, but EPS did not model UCD or any non-profit in the mix. In addition, major commercial and industrial firms often seek substantial property tax abatements and other incentives in exchange for bringing jobs to an area. Therefore, we suggest that EPS model a 5 percent, as was done with the MRIC analysis, and a 10 percent mix of non-profit or tax-exempt entities.

EPS Response

EPS tested the 10 percent non-profit or tax-exempt scenario by reducing 10 percent of the square footage of office and R&D space that generates property tax as well as business-to-business sales and use tax revenues. Revenues generated by the residential units, the retail space, and the advanced manufacturing were assumed unaffected. Additionally, municipal expenditures were not adjusted; however, it is possible some of these could shift to other entities depending on the tax-exempt occupant. By the end of Phase 4 (buildout), the 10 percent tax-exempt scenario results in a reduction of property tax revenue from \$2.723 million to \$2.611 million, and a reduction of sales and use tax revenue from \$2.229 million to \$2.173 million. The net fiscal surplus declines from \$0.96 million to \$0.91 million at the end of Phase 1, and from \$5.32 million to \$5.12 million at buildout. The 5 percent scenario would halve those reductions.

In discussions with City staff, they noted that the city-county-campus MOU signed in 2018 contains provisions ending master leases of residential property and halting any further loss of property taxes from the ones that exist. Staff further noted to hedge against this for new projects where a Development Agreement is requested, several recently negotiated Development Agreements contain a provision requiring the developer/property owner to record a covenant on title stipulating a permanent obligation for the property owner to make payments to the City in lieu of the City's share of otherwise-required property taxes in the event that the Property is acquired or master leased by an entity exempt from payment of property taxes. The developer has publicly acknowledged this and committed to such a provision being part of the Development Agreement. This is consistent with the Ad Hoc Subcommittee suggestion that such provisions be included in a DA for ARC.

- 4. Property Valuation:** We would like to see a more conservative assumption for property valuation given both the substantial increase from the MRIC property value per square foot modeling and present economic realities. We would also like to see support for the valuations (e.g., anything that may have been gathered for the property valuations in the model that may have been obtained as part of model development).

EPS Response

Reducing the overall property valuation by 10 percent across uses reduces the property tax by \$65,000 at the end of Phase 1 and by \$272,000 at Project buildout, reducing the net fiscal surplus from \$5.32 million at buildout to \$4.95 million. Further sensitivity testing with residential valuation remaining the same and non-residential valuation reduced by 20 percent reduces the property tax by \$71,000 at the end of Phase 1 and by \$348,000 at Project buildout, reducing the net fiscal surplus from \$5.32 million at buildout to \$4.86 million.

The inputs into the calculation of value are in Table A-6, the Residual Land Value Calculation that was used in the Pro Forma Analysis. For most of the commercial uses in the analysis, the property valuation is determined using a capitalized income approach. Rent is a key driver of value for this. The rents assumed in the analysis are \$2.92 per square foot per month (\$35 annually) for office space and \$2.33 per square foot per month (\$28 annually) for flex/R&D and retail space. The office uses are modeled assuming full-service rents, with a corresponding deduction of operating expenses equal to 30 percent of rent from the net operating income.

The Technical Memorandum that accompanied the analysis includes key recent comparables. Supplemental information for the office and flex/R&D space includes the following: Rents for space comparable to the proposed flex/R&D use at ARC can be found in a few properties on Drew Avenue in Davis, with asking rates of \$30 per square foot annually for buildings ranging from 14 to 30 years old. Other comparable locations include a newer office building on 2nd Street at G Street in Davis with recent lease rates ranging from \$30 to \$44 per square foot, and current asking rent of \$34 per square foot. Elsewhere in the market, office space that is currently being marketed to similar types of tenants anticipated for ARC can be found in the Ice Blocks project on R Street in Midtown, Sacramento. Spaces there are asking \$36 to \$44 annually per square foot.

The advanced manufacturing uses are valued using the same per square foot value used in the 2015 MRIC analysis. These uses can vary significantly in value depending on the user, so the conservative assumption was used.

The residential sales prices and rents are based on the sales and rental comparables listed in the Technical Memorandum that accompanied the analysis.

Development costs and land prices in Davis are not conducive to attracting businesses seeking the lowest operating costs. Rather, businesses that seek to be in Davis do so for specific reasons, such as proximity to educated workers and related businesses. The Project is intended to build on these attributes and attract tenants that value being near UC Davis and being part of a R&D focused campus environment.

- 5. Affordable Housing:** The analysis assumes the payment of fees in lieu of including affordable housing. We would like to see a scenario in which rather than paying the fee, affordable housing in line with city guidance/requirements is included in the analysis.

EPS Response

The decision to use the in-lieu fee for purposes of financial feasibility was made in conjunction with City staff, since it represents the level of financial commitment required of a developer to meet the City's affordable housing requirements. The purpose behind using a fee number was to apply an affordable housing cost to the project. The actual method for meeting the affordable housing requirement can have many variations but will be determined during the planning/approvals process. According to our discussions with the City, this is a policy matter that relates to land-use and housing policy, which are the purview of other advisory commissions. The Baseline Project Features and the Development Agreement will resolve how the project complies with this requirement.

- 6. Capital Replacement Costs:** During the presentation, EPS discussed with the FBC the possibilities to account for, and ultimately reserve funds for, the future costs of repair and replacement of project infrastructure such as roads, sewer and drainage infrastructure (e.g. lift stations), park and street lighting, and landscaping. Possibilities discussed included a maintenance/repair/replacement CFD, a landscape and lighting district, and an owners' association that would reserve funds for infrastructure replacement. What is EPS's recommendation on how the City should account and reserve funds for long-term capital repair and replacement of project infrastructure?

EPS Response

Most capital replacement costs in the City are covered on a pay-as-you-go basis and it is assumed that any extra repair and replacement burden ARC residents and workers place on infrastructure throughout the city would be funded similarly. Establishing a requirement for a separate reserve fund for infrastructure for each development project would tie up funds that could be used to meet a higher priority for city needs. The sizeable fiscal surplus could be used to support these costs, as well as help the City to address its current shortfall. EPS recommends using the pay-as-you-go basis considering the sizable fiscal surplus the Project is expected to produce.

- 7. Property Tax:** Property tax is an important component of the analysis as it represents 45% of project revenue at build-out. We would like to see a more conservative split of allocated property tax for all elements of property tax (i.e., including the East Davis Fire District and the County Road District #2) done with a 50/50 city county split.

EPS Response

There has been a Davis annexation example since the MRIC analysis was completed, the West Davis Active Adult Community (WDAAC). In that annexation, East Davis Fire District and County Road District #2 Funds were allocated to the City and the same outcome is anticipated with the ARC annexation, since the annexation would remove the property from these two districts. State annexation policy links the allocation of tax revenues with the provision of public services that would be supported by those revenues. By way of example, since the City of Davis would bear the responsibility for providing fire services for ARC after annexation, it is a reasonable assumption for it to be allocated the property tax revenues to support this obligation. The county, in contrast, would not bear any responsibility for fire protection if annexation occurs. It would be illogical and problematic for it to receive fire district revenues once the land was annexed to the City of Davis.

EPS does recognize that the outcomes for a tax-sharing agreement has the possibility to differ from the 50/50 split included in the analysis. In conversations with staff, given past negotiations that resulted in a 50/50 split, this is the assumption that is recommended for the analysis. For the current County General Fund and ACO Fund, three scenarios for the split between City and County were tested: 40 percent City / 60 percent County; 50 percent City / 50 percent County (base case); and 60 percent City / 40 percent County. Property tax scenario impacts to final net fiscal impacts are presented in **Table 2** below.

Table 2. Property Tax Split Comparison

Impact Category	Annual Project Fiscal Impact at Phase Completion (\$M)			
	Phase 1	Phase 2	Phase 3	Phase 4 / Buildout
Expenditures	\$0.69	\$1.63	\$2.29	\$2.75
40 City / 60 County Split				
Revenues	\$1.57	\$3.65	\$6.28	\$7.76
Net Fiscal Impact	\$0.88	\$2.03	\$3.99	\$5.01
50 City / 50 County Split - Base Case				
Revenues	\$1.65	\$3.82	\$6.53	\$8.07
Net Fiscal Impact	\$0.96	\$2.20	\$4.25	\$5.32
60 City / 40 County Split				
Revenues	\$1.72	\$4.00	\$6.79	\$8.39
Net Fiscal Impact	\$1.03	\$2.37	\$4.50	\$5.64

Source: City of Davis; EPS.

- 8. Capital Improvement Costs:** We would like to see the effect of adding Capital Improvement Costs to the model as the ARC project would result in more people being served by the infrastructure and amenities of the city. Further the addition of

these people would result in additional wear and tear. Our suggestion for modeling this would be to take 5.4% (4,523 additional people divided by 83,710 people served = 5.4%) of the Capital Improvement budget as an expenditure. We are certainly open to other ways to model this.

EPS Response

Allocating the cost of capital expenditures to the Project on a Persons Served basis, in the same manner as they are for various operating expenditures would reduce the net fiscal surplus at buildout by \$386,000; with a resulting fiscal surplus of \$4.94 million. The Project also pays development impact fees to offset impact of new development on existing infrastructure and facilities. As discussed at the May 11 FBC hearing, the assumptions for the Project modeling not only cover future maintenance of internal infrastructure but also is forecasted to contribute revenues that could be used to address infrastructure deficiencies elsewhere in the City. Additionally, roadway maintenance would be required in the rest of the city regardless of the new persons at ARC. A fair portion of that is likely due to students, faculty and staff that do not reside or work within the City of Davis. The Project's fiscal surplus can help fund some of that expense.

- 9. Variable Costs:** We would like to see the effect of modeling city department costs at 100% (vs. 75%) of the average per person costs given:
- Overhead costs and other fixed costs would likely increase due to the effect of increased volume (e.g., more wear and tear on facilities, more equipment required due to the number of employees).
 - While it is true, for example, that there would still be a single police chief, it's also likely that s/he (and his/her managers and support staff) would reasonably seek a salary increase reflecting a larger department with more employees, more responsibility, and peer comparators from cities of greater size.

EPS Response

The decision was made in consultation with City staff to use a standard assumption of 75 percent variability in municipal expenditures, to reflect the fact that not all departmental cost items would be impacted by the Project. The analysis assumes that city services would be provided efficiently and effectively to ARC residents and workers. The proposal to model all costs at 100%, is to assume much higher costs to provide City services, is not justified. Most city departments have fixed costs that do not change as the city grows and variable costs that do change along with its population. The question proposes that the City assume that no departmental costs are fixed and thus that 100% of the average cost of providing services to each person served be allocated to the ARC project. The model assumes that about 25% of departmental costs are fixed and 75% are variable, which EPS believes to be the reasonable and appropriate way to model this.

However, to test the impact of different levels of variability, some alternative assumptions were used in the fiscal impact model. These included a scenario with Police and Fire at 100 percent variability, with the other departments remaining at 75 percent, and a more extreme scenario with all departments modeled at 100 percent variability. The results of the sensitivity analysis are shown in **Table 3** below.

Table 3. Expenditure Variability Comparison

Impact Category	Annual Project Fiscal Impact at Phase Completion (\$M)			
	Phase 1	Phase 2	Phase 3	Phase 4 / Buildout
Revenues	\$1.65	\$3.82	\$6.53	\$8.07
Base Case - 75% Variable Costs				
Expenditures	\$0.69	\$1.63	\$2.29	\$2.75
Net Fiscal Impact	\$0.96	\$2.20	\$4.25	\$5.32
Police and Fire at 100% Variable				
Expenditures	\$0.82	\$1.92	\$2.71	\$3.25
Net Fiscal Impact	\$0.83	\$1.90	\$3.83	\$4.82
All Cost Categories at 100% Variable				
Expenditures	\$0.93	\$2.17	\$3.05	\$3.67
Net Fiscal Impact	\$0.72	\$1.65	\$3.48	\$4.41

Source: City of Davis; EPS.

10. Substitution: We would like to see the potential substitution modeled as the SEIR indicated that more than 313,000 sq. ft. of existing space would potentially become vacant as a result of competition from the ARC (page 3-181). The SEIR further noted "ALH Economics concluded that the illustrative analysis suggests that regardless of the amount of space, some increment of existing office and industrial space is at risk of sustained vacancy following development of the ARC Project." (page 3-182).

EPS Response

We believe it is highly unlikely that 313,000 sq. ft. would become vacant at the same time. For that scenario to occur, the SEIR states that half of all innovation sector tenants currently located in Davis would need to relocate to ARC. Aside from the obligations of these entities' existing lease terms, there is no reason to believe they would incur the fit-out and moving costs of relocating to ARC unless they had compelling reasons. It should be noted that if they had such compelling reasons, they could also be candidates for relocation or expansion out of the city entirely due to lack of viable space options, if not for the presence of ARC. Additionally, that scenario assumes no other firms beside the ones already existing in Davis – at their present size – would be looking to occupy office/R&D space in the market. The Interland/ Research Center Drive and 2nd Street areas have extremely low vacancy rates, suggesting that current conditions inhibit potential economic activity within the city.

City staff also noted that the Davis Downtown Business Association and Davis Chamber of Commerce submitted letters of support to the FBC. These organizations are comprised of business and property owners in the City. These two organizations would raise cannibalization if they were concerned with it as their members have a direct stake in that situation. The lack of concern for cannibalization by the business community and the support of these organizations further demonstrates that there is a need for additional space.

11. Developer Financial Sensitivity: We believe that it would help the city in negotiating to understand the sensitivity of the analysis to additional capital investment at each stage of the project. For example, what is the effect of \$5M of additional investment at the beginning phase. Understanding the effect of changes to the project on the developer’s return could prove very useful.

EPS Response

To test the impact of changes to capital investment, additions were made to the upfront capital costs in the pro forma analysis. The amount added to upfront capital cost by phase for each sensitivity test is shown in **Table 4** below, with the resulting leveraged and unleveraged IRRs.

Table 4. Financial Return Sensitivity Tests

Rate of Return Measure	Phase 1	Phase 2	Phase 3	Phase 4	Overall
Base Case					
Unleveraged IRR	13.7%	17.0%	9.3%	8.9%	13.3%
Leveraged IRR	22.2%	28.3%	14.9%	11.6%	22.5%
\$5 Million Added Cost Phase 1 Only					
Unleveraged IRR	12.3%	17.0%	9.3%	8.9%	12.7%
Leveraged IRR	19.2%	28.3%	14.9%	11.6%	20.6%
\$5 Million Added Cost Each Phase					
Unleveraged IRR	12.3%	15.7%	8.5%	8.4%	12.1%
Leveraged IRR	19.2%	25.3%	13.0%	10.7%	19.7%
\$10 Million Added Cost Phases 1 & 2					
Unleveraged IRR	11.1%	14.6%	9.3%	8.9%	11.5%
Leveraged IRR	16.8%	23.0%	14.9%	11.6%	18.0%

Source: EPS.

It should be noted that the development costs in Phase 3 and Phase 4 include the construction of parking garages. It is likely that Transit Demand Management tools coupled with future transit options would result in less parking demand than what is modeled. The Project will be incentivized to explore other tools before constructing a parking garage. The Project pro forma modeling anticipates parking garage construction in Phase 3 to be \$28 million and in Phase 4 to be \$36 million (both in

2020\$). Should those requirements be reduced by 50%, the overall IRR improves significantly for those respective phases as demonstrated in **Table 5**, below.

Table 5. Parking Financial Return Sensitivity Test

Rate of Return Measure	Phase 1	Phase 2	Phase 3	Phase 4	Overall
Base Case					
Unleveraged IRR	13.7%	17.0%	9.3%	8.9%	13.3%
Leveraged IRR	22.2%	28.3%	14.9%	11.6%	22.5%
50% Parking Cost Reduction Phases 3 & 4					
Unleveraged IRR	13.7%	17.0%	12.2%	11.2%	14.2%
Leveraged IRR	22.2%	28.3%	23.0%	15.2%	23.4%

Source: EPS.

Additional Responses

COVID—19 Impact

It is very difficult to say at this time what the impact of COVID-19 will be on the fiscal impact of the Project. The fiscal impact has been analyzed at the end of each of the four phases, all in 2020 dollars and based on the 2019-20 Budget. Following a slower start than originally anticipated, the Project could be operating as projected by the time Phase 1 is complete. Since the fiscal analysis is in constant dollars, any delay in and of itself will not impact the results.

In an exceedingly pessimistic scenario, where Phase 1 values are only 80 percent of their pre-COVID projections, overall values by the end of Phase 4 would be back to 98 percent, assuming that Phases 2 through 4 were at their previous estimates of value. While the Phase 1 net fiscal impact from such a scenario would be a net surplus of \$0.78 million instead of \$0.96 million, by the end of Phase 4, the surplus is \$5.26 million instead of \$5.32 million.

Semiconductor Manufacturing

There has been some misinterpretation regarding the industry sectors that were included in the estimate of economic impact multipliers for the advanced manufacturing use. The sectors were chosen to be representative of industries representing the high-tech sector. Their inclusion does not imply that they are planned or recommended, but to provide samples of industry behavior in terms of employment and subsector purchasing behavior. The impact multipliers of these comparable industries were averaged together to develop a set of multipliers to estimate of the impact of advanced manufacturing uses.

City staff noted that should the City desire to potentially allow for this use, tools such as a Conditional Use Permit could be required to ensure a higher level of scrutiny is applied to ensure no public nuisance or safety hazards are presented. This is a land-use planning matter that is of the purview of the Planning Commission and City Council.