

## B. POPULATION, EMPLOYMENT AND HOUSING

This section describes existing and projected population, employment and housing statistics in Benicia and Solano County and evaluates potential socioeconomic environmental impacts that could result from implementation of the Draft Specific Plan.

### 1. Setting

The following section utilizes data from the U.S. Census Bureau (Census), California Department of Finance (DOF), the Association of Bay Area Governments (ABAG),<sup>1</sup> the City of Benicia General Plan, and the *Draft Market Conditions and Recommendations* prepared for the Draft Specific Plan.<sup>2</sup>

**a. Population.** Founded in 1847 and incorporated in 1850, Benicia was the first city in the new State of California to be incorporated and at the same time was named the first county seat of Solano County. Benicia was also the third home of the State Capitol (from 1853 to 1854), after which time the Capitol was moved to its final destination in Sacramento.<sup>3</sup> Benicia’s population grew rapidly in its first decade as a city; however the City did not experience any significant population growth again until World War II, when the population doubled to 7,000 residents. As shown in Table IV.B-1, between 1970 and 2000, the population of Benicia grew steadily at a rate ranging from 31 percent to 43 percent per decade, and the City evolved primarily into a bedroom community for persons with jobs in urban centers like San Francisco and Oakland.

**Table IV.B-1: Benicia Population Growth**

Year	Population	10-Year Percent Increase
2000	26,865	9%
1990	24,437	37%
1980	15,376	43%
1970	8,763	31%
1960	6,070	-20%
1950	7,284	

Source: California Department of Finance, 2000. Historical Census Populations of California Cities, Places, and Towns 1850-2000.

Benicia’s population increased by 18,102 between 1970 and 2000, a 207 percent increase; however, ABAG projects only a small, steady increase for the next 30 years. The City’s 2005 population is estimated by ABAG at 27,100 and the 2010 population is projected to reach 27,900, representing only 3 percent growth during the five year period.<sup>4</sup> In 2030, it is anticipated that the population of Benicia will increase to 31,100, representing only a 13.6 percent increase over the 2000 population.<sup>5</sup> Average annual growth rates under such projections would be approximately 0.5 percent.

The County’s estimated 2005 population is 421,600, and is projected to increase by 7 percent, to 455,200 by 2010. Between 2000 and 2030, the population of Solano County is projected to increase

<sup>1</sup> Some ABAG data is for the City’s “subregional study area,” or its sphere of influence, and not its corporate boundaries. Subregional data is only used when no City level data is available. When subregional data is used, it is explicitly noted.

<sup>2</sup> Strategic Economics, 2006. *Lower Arsenal Mixed Use Specific Plan: Draft Market Conditions and Recommendations*. November.

<sup>3</sup> Benicia Historical Museum, 2006. *1847: Benicia is Born*. Website: [beniciahistoricalmuseum.org/History/1847.htm](http://beniciahistoricalmuseum.org/History/1847.htm).

<sup>4</sup> The City’s 2007 population is estimated at 27,916 by the Department of Finance. This is higher than ABAG’s 2010 population projection. ABAG projections are used here for the purposes of this environmental analysis.

<sup>5</sup> Association of Bay Area Governments, 2006. *Projections 2007, Forecasts for the San Francisco Bay Area to the Year 2035*. December.

by 30 percent, from 394,542 to 562,900. Average annual growth rates for the County under such projections would be approximately 1 percent, or double that of the City of Benicia.

**b. Housing.** The following section describes the housing characteristics of Benicia and Solano County.

**(1) Households.** ABAG defines a household as an occupied dwelling unit. In 2000, Benicia had 10,328 households, comprising approximately 11.6 percent of the 130,403 households in Solano County. By 2035, ABAG estimates the number of Benicia households will increase by 19 percent to 12,260 households.<sup>6</sup>

The Department of Finance estimates that the average household size for Benicia was 2.6 persons in 2005, which was slightly less than the Solano County average of 2.8 persons per household.<sup>7</sup> Average household size has declined slightly in Benicia and remained relatively steady in Solano County since 1990, when it was 2.65 and 2.88, respectively. ABAG projects household sizes for Benicia and Solano County will remain relatively constant through 2035 at 2.6 and 2.99, respectively.

**(2) Existing Housing Stock.** Benicia's projected 2005 housing stock of 10,810<sup>8</sup> total units is characterized by a majority of single-family detached and attached homes (74 percent of total), a smaller percentage of multi-family units (23 percent of total) and relatively low vacancy rates (2.1 percent of total).<sup>9</sup> In 2000, the median value for an owner-occupied housing unit in Benicia was \$274,600.<sup>10</sup> By 2005, the median value had increased to approximately \$579,500.<sup>11</sup>

**c. Employment.** The City has traditionally been a "bedroom community" for residents commuting to jobs in other cities throughout the Bay Area, although there are several large industrial employers within the City itself. Two types of employment data are described below: 1) total jobs – which indicate the number of all jobs within the community; and 2) employed residents – which indicate the number of residents of working age who actively participate in the civilian labor force. A comparison of these data can provide an indication of commute patterns in a community (i.e., if significant out-commuting or in-commuting occurs).

The civilian labor force includes: those who are employed (excepting those in the armed forces); and those who are unemployed but actively seeking employment. Those residents who have never held a job, who have stopped looking for work, or who have been unemployed for a long period are not considered to be in the labor force.

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<sup>6</sup> Ibid.

<sup>7</sup> California Department of Finance, 2005. Demographic Research Unit. Table 2: E-5 City/County Population and Housing Estimates, Revised 1/1/2005.

<sup>8</sup> The City's 2007 housing stock is estimated at 11,229 by the Department of Finance.

<sup>9</sup> California Department of Finance, 2005. op. cit.

<sup>10</sup> United States Census Bureau, 2000b. Summary File 3 (SF 3), Profile of Selected Housing Characteristics, Table DP-4..

<sup>11</sup> Strategic Economics, 2006. op. cit.

(1) **Total Jobs.** According to ABAG, Solano County will experience the highest rate of job growth of any Bay Area county in the 2000 to 2015 period. This is due to the availability of large amounts of land designated for commercial and industrial development. However, the City of Benicia is expected to experience a lower percentage rate of job growth than the County over this period. According to ABAG's subregional study data, in 2000, Benicia had 14,560 total jobs, which comprised approximately 11 percent of all jobs in Solano County. The total number of jobs in Benicia increased by 6.7 percent to 15,530 total jobs over the 5-year period between 2000 and 2005. By 2035, ABAG projects that the total number of jobs in Benicia will increase an additional 34 percent from 2005, reaching approximately 20,870 total jobs. Total jobs in the County are projected to have increased from 136,740 in 2000 to 150,520 in 2005 (a 9.2 percent increase over the 5-year period) and to 227,870 in 2035 (or 34 percent from 2005). Benicia jobs are expected to remain at 9 percent of the County total and the City is projected to contribute to only 6.9 percent of the total increase in County jobs through the year 2035.

(2) **Lower Arsenal Jobs.** Currently, there are over 300 jobs in the Lower Arsenal, of which approximately 35 percent are in the construction, manufacturing, and wholesale trade sectors. Approximately 37 percent are in the professional services sector and 20 percent are in "other services," which range from auto repair to personal services. Remaining jobs (8 percent) are made up of education and health services, retail, and arts and entertainment industries.<sup>12</sup> In 2005, jobs within the Lower Arsenal comprised approximately 1.9 percent of total jobs within Benicia.

(3) **Employed Residents.** According to ABAG, the City housed 14,455 employed residents in 2000. ABAG defines employed residents as employed people who "live in the identified community or county but do not necessarily work there." Unemployed residents are not counted as employed residents, even if they are actively seeking employment.

ABAG projects that the number of employed residents in the City will increase to 16,360 in 2015, 19,300 in 2025, and 20,710 in 2035. This growth in employed residents represents an approximately 43 percent increase from 2000 to 2035, lower than the County-wide increase expected during the same time period. The number of employed residents in the County is expected to increase 78 percent, from 182,964 in 2000 to 326,600 in 2035.

**d. Jobs-to-Housing Balance.** The jobs-to-housing concept is used to determine whether a community has an adequate number of jobs available to provide employment for all the residents within the community seeking employment. Understanding this concept can be useful in understanding the interconnections among housing affordability, traffic flows and congestion, and air quality within a community and its larger region. However, the jobs/housing ratio is best analyzed at the sub-regional or regional level due to tendency of people to commute to jobs outside of their community.

(1) **Methods.** Typically, the term "jobs-to-housing balance" is used to refer to a relationship between jobs and housing units within a community. A jobs-to-housing units ratio of 1.5 is considered ideal, which takes into account residents who do not participate in the labor force (e.g. those who are retired, disabled, or students). A community with a 1.5 jobs-to-housing units ratio is one in

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<sup>12</sup> Ibid.

which there is an adequate number of jobs to meet the demand for employment by its residents, and therefore is in balance.

A more helpful indicator of balance, however, is the relationship between the number of jobs provided to the number of residents seeking employment (i.e., employed residents). An ideal jobs-to-employed residents ratio is 1.0, which indicates that every resident seeking a job can find one within the community.

A jobs-to-employed residents ratio that is greater than 1.0 indicates that the community provides more jobs than it has residents seeking jobs. With this out-of-balance condition, the community is likely to experience traffic congestion associated with people coming to jobs from outside the area, as well as intensified pressure for additional residential development to house the labor force. Conversely, a jobs-to-employed residents ratio of less than 1.0 indicates that a community has fewer jobs than employed residents demanding employment. With this converse, out-of-balance condition, many residents need to commute outside of the community (i.e. out-commute) for employment. The resulting commuting patterns can lead to traffic congestion and adverse effects on both local and regional air quality.

One of the shortcomings of this ratio method is that it does not account for regional in- or out-commuting due to job/labor mismatches or housing affordability issues. Even if a community has a numerical balance between jobs and housing/employed residents, sizeable levels of in- and out-commuting are still possible, especially where employment opportunities do not match local skills and educational characteristics of the local labor force. In such instances, regional commuting tends to occur. For example, a numerically balanced community may have high housing costs and low-wage jobs, thus encouraging its residents to out-commute for their high wage jobs, and its workers to in-commute from places outside the community, where housing costs are affordable in relation to their low wage incomes. This condition is often referred to as a jobs-to-housing *mismatch*. A jobs-to-housing match occurs when the types of jobs provided in a community “match” the income needs of the employed workers within the community.

**(2) Jobs-to-Employed Residents in Benicia and Solano County.** According to ABAG, Solano County had more employed residents than total jobs in 2000 and 2005, indicating a somewhat higher-than-balanced level of out-commuting. Benicia’s jobs-to-employed residents ratios in 2000 and 2005 of 1.01 and 1.06, respectively, indicate the community is nearly balanced, with an adequate number of jobs available to accommodate Benicia’s demand for jobs (however, as noted above, this balance may obscure a job/labor mismatch). Solano County, however, has more employed residents than total jobs available, with a jobs-to-employed residents ratio of 0.75 in 2000, and 0.77 in 2005. By 2035, ABAG projects that Benicia’s jobs-to-employed residents ratio will remain balanced at 1.01. Solano County’s jobs-to-employed residents ratio will remain relatively constant through 2035 at 0.70, with more workers than jobs County-wide.

Table IV.B-2 provides housing and employment data for Benicia and Solano County. This table also provides data indicating what the jobs-to-housing units ratios would be if this more general methodology is applied. As described earlier in this section, a jobs-to-housing units ratio of 1.5 is considered ideal and indicates that a balanced number of jobs is provided, given the number of housing units within the community.

**Table IV.B-2: Housing and Employment Data – City of Benicia and Solano County**

	2000		2005		2020		2035	
	City	County	City	County	City	County	City	County
Total Jobs	14,560	136,740	15,530	150,520	18,360	187,810	20,870	227,870
Employed Residents	14,455	182,964	14,590	194,900	17,440	262,000	20,710	326,600
Housing Units	10,352	130,403	10,670	142,040	11,330	172,050	12,290	196,220
Jobs-to-Housing Unit Ratio (Ideal is 1.5)	1.41	1.05	1.45	1.06	1.62	1.09	1.70	1.16
Jobs-to-Employed Residents Ratio (Ideal is 1)	1.01	0.75	1.06	0.77	1.05	0.71	1.01	0.70

Source: ABAG, 2006. *Projections 2007*; LSA Associates, Inc., 2007

**e. City of Benicia General Plan and Housing Element.** Applicable population, employment and housing goals from the City of Benicia General Plan and Housing Element are presented below.

**Community Development and Sustainability**

- *Economic Development Goal 2.5:* Facilitate and encourage new uses and development which provide substantial and sustainable fiscal and economic benefits to the City and the community while maintaining health, safety, and quality of life.
- *Economic Development Goal 2.6:* Attract and retain a balance of different kinds of industrial uses in Benicia.
- *Economic Development Goal 2.7:* Attract and retain industrial facilities that provide fiscal and economic benefits to – and meet the present and future needs of – Benicia.
- *Economic Development Goal 2.11:* Encourage the retention and continued evolution of the lower Arsenal into a historic/cultural/commercial/industrial center of mutually compatible uses.
  - *Economic Development Policy 2.11.1:* Retain and expand the mix of compatible and balanced uses in the Lower Arsenal area.
  - *Economic Development Policy 2.11.2:* Continue to allow live/work uses in the Lower Arsenal where it can be demonstrated that adequate buffers exist, including noise buffers, and that the presence of residents would not significantly constrain industrial operations, including the flow of goods and materials.

**Housing Element**

- *Housing Stock Goal 2:* Promote the development of an adequate supply and mix of housing to meet existing and future housing needs.

**2. Draft Specific Plan**

The Draft Specific Plan contains the following goals, policies, and action items relating to the provision of housing and employment opportunities within the Plan Area.

- *Economic Development Goal 2:* Engage in a strong leadership role in the marketing and development of the Specific Plan area, including enhancement of opportunities for the arts community, development of a destination campus, establishment of heritage tourism, renovation of the period architecture, and support of infrastructure improvements.
  - *Economic Development Policy 1:* Establish an attractive and historic business climate, including well-designed mixed-use functions, maintenance of historic character, waterfront orientation, vibrant public spaces, and developed cultural amenities.
    - *Economic Development Action 1:* Monitor land use and development trends to ensure an adequate supply of land that offers diverse uses and development intensities and fits the criteria for planned economic activities.

- *Economic Development Action 2:* Encourage a mix of large and small businesses to support a strong and diverse economic base.
- *Economic Development Action 3:* Encourage private-sector retail and business support services.
- *Economic Development Policy 2:* Proactively engage in partnerships with business and industrial groups to market and develop the Specific Plan area.
  - *Economic Development Action 1:* Maintain a Business and Visitation Program for the Arsenal District to ensure that mutual goals between the City and business leaders remain compatible.
  - *Economic Development Action 2:* Encourage full cooperation between public and private sectors in formulating economic development plans and programs.
  - *Economic Development Action 3:* Develop a marketing plan to produce tourism and visitor guides, artisan space brochures, and a historic profile for publication in selected regional magazines and publications.
- *Economic Development Policy 3:* In collaboration with business, education, and arts leaders, maintain a business attraction program for the Plan Area and include appropriately designed business incentives.
  - *Economic Development Action 1:* Coordinate a business attraction program to assist new businesses with site identification, incentive programs, permit assistance, and other relocation factors.
  - *Economic Development Action 2:* Prioritize development entitlements for those projects that conform to identified criteria, such as providing significant capital investment, creating new jobs or public revenue, or promoting key development policies.
  - *Economic Development Action 3:* Develop a range of strategic business incentives for use with serious investors in the final stages of negotiation. Establish criteria for return on investment and other accountability mechanisms under contractual performance agreements.
  - *Economic Development Action 4:* Maintain public capital facilities infrastructure, taxation, and regulatory incentives that will foster new business development.
  - *Economic Development Action 5:* Establish an inventory of ready-to-go non-residential sites, complete with zoning, infrastructure, and environmental clearances for heritage tourism and artist living and working space.
- *Culture, Arts and Heritage Tourism Policy 6:* Develop artist live/work space as a strategy to accommodate a growing and vital art community within the Specific Plan area.
  - *Culture, Arts and Heritage Tourism Action 4:* Use inclusionary requirements for low-income units or other means to assure that artist live/work units serve low-income artists and craftspeople.
  - *Culture, Arts and Heritage Tourism Action 5:* Allow the conversions of existing industrial and commercial buildings to joint live/work units in specific commercial and industrial locations while considering the impacts on nearby viable businesses.

### 3. Impacts and Mitigation Measures

This section includes an analysis of impacts related to population, employment and housing that could result from implementation of the Draft Specific Plan. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant. The latter part of this section presents the impacts associated with the proposed project and identifies mitigation measures, as appropriate.

**a. Criteria of Significance.** The proposed project would have a significant impact on population, employment, and housing if it would:

- Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere; or

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

**b. Less-than-Significant Population, Employment and Housing Impacts.** The following discussion examines potential less-than-significant impacts of the proposed project.

**(1) Displacement of Housing or People.** Implementation of the policies and actions of the Draft Specific Plan would not directly displace existing housing. New development within the Plan Area would include up to 22 new residential units. While existing housing or informal live/work units could be converted to other uses with implementation of the Draft Specific Plan, the net result of development (including the 22 residential units and new and redeveloped live/work units) would be an increase in the number of housing units within the Plan Area. In addition, the Draft Specific Plan includes policies and actions to preserve the artists' community within the Plan Area, and would do so by permitting live/work uses, which are currently a conditional use, within the Grant Street, Adams Street, and South of Grant Street zones. The Draft Specific Plan also includes policies and actions that would encourage the development of live/work uses, including inclusionary units for lower-income households. Therefore, implementation of the Draft Specific Plan would not displace existing housing or people within the Plan Area.

**(2) Induce Substantial Population Growth.** Based on the buildout assumptions discussed in Chapter III, it is expected that existing uses within the Plan Area would intensify by 20 percent resulting in a net increase of 320,413 square feet of new and redeveloped mixed uses (existing uses are also expected to increase by 20 percent without implementation of the Draft Specific Plan). These uses would include 22 new residential units and a mixture of work/live units, recreation and community center uses (66,044 square feet), retail and shopping center uses (63,252 square feet), office space (73,298 square feet), and light industrial/infrastructure uses (66,248 square feet).

Based on the average household size of 2.6 persons, the addition of 22 residential units would result in an increase of approximately 57 new residents within the Plan Area. This population growth would represent a substantial increase in the residential population within the Plan Area itself; however, this increase would only represent less than 0.25 percent of the City's current (2005) and projected (2035) population. Although live/work uses would be permitted within the Plan Area, the exact number of units is not known at this time. As more of these types of uses are developed within the Plan Area, the residential population would increase. It is expected that uses such as live/work or work/live would result in smaller household sizes and would thus not generate a substantial number of new residents within the Plan Area. Therefore, the implementation of the Draft Specific Plan would not result in substantial direct population growth beyond that planned for the City.

Population growth can also be induced by development of land uses which would generate new employment opportunities, thus increasing the demand for housing within the community. Although the development of new and redeveloped recreation and community center, retail, office, and light industrial uses within the Plan Area would stimulate economic growth within the Plan Area, these uses would not be expected to indirectly induce substantial residential growth beyond the 22 units of residential and live/work space discussed above, or beyond that planned for the City. In addition, the opportunity for further residential development within the Plan Area, beyond that envisioned by the Draft Specific Plan, does not exist due to the limited amount of land available for large-scale

residential development and the limited number of buildings available for live/work conversion. Jobs created within the Plan Area may also be filled by residents who already live in the area, reducing the demand for additional housing that would otherwise develop if all employees originated outside of the Plan Area.

In addition, population growth can also be induced by extending public services, utilities, and infrastructure onto sites not currently receiving these services, thus increasing the opportunity for the future development of currently undeveloped lands. Although implementation of the Draft Specific Plan would include some new roadways and upgraded and improved infrastructure and service connections, these improvements are necessary to better serve both existing and future infill development in the Plan Area and would not facilitate development of surrounding areas. Therefore, the Draft Specific Plan would not indirectly induce substantial population growth.

**(3) Jobs-to-Housing Imbalance.** As discussed above, it is expected that implementation of the Draft Specific Plan and anticipated intensification of existing uses in the Plan Area would result in the development of 66,044 square feet of new recreation and community center uses, 63,252 square feet of retail and shopping center uses, 73,298 square feet of office space, and 66,248 square feet of light industrial/infrastructure uses. This would result in approximately 268,842 square feet of employment-generating uses.

Employment generation for each of the land use categories described above was developed using empirical data collected as part of a comprehensive study prepared for the Southern California Association of Governments, which estimates employment densities for various land uses.<sup>13</sup> Although employee-per-square-foot ratios are very common inputs for regional planning and economic analyses, relatively little formal research has been done to statistically derive these types of factors. This study is intended for use in estimating employment impacts from certain types of development projects and for projecting the demand for new office and industrial space. The study derives “building area per employee” factors for ten major land use categories. Although the land use categories used in the study do not directly correspond to the land uses described in this EIR, the study is a useful tool in developing assumptions for employee generation that would occur with implementation of the Draft Specific Plan. Table IV.B-3 shows corresponding Draft Specific Plan land use categories, the estimated square footage for each employee for each type of use, and expected Draft Specific Plan employment rates.

**Table IV.B-3: Employee Generation Assumptions**

Employment Density Study Land Use Categories	Draft Specific Plan Land Use Categories	Median Square Feet Per Employee	Square Footage	Employee Generation
Other Retail/Services	Recreation Community Center	585	66,044	113
Low-Rise Office	General Office	466	73,298	158
Other Retail/Services	Retail/Shopping Center	585	63,252	108
Light Manufacturing	Light Industrial/Infrastructure	925	66,248	72
<b>Total</b>			<b>268,842</b>	<b>451</b>

Source: LSA Associates, Inc., 2007 and The Natelson Company, Inc., 2001.

<sup>13</sup> The Natelson Company, Inc., 2001. *Employment Density Study*. October 31.

As shown in Table IV.B-3, it is estimated that implementation of the Draft Specific Plan would create approximately 451 new jobs within the Plan Area. This would represent a substantial 150 percent increase in job growth within the Plan Area. However, the 451 new jobs added within the Plan Area would only represent approximately 7.1 percent of the overall job growth projected for the City through 2035, and less than 0.5 percent of job growth projected for the County. Assuming Draft Specific Plan buildout occurs by 2035, jobs within the Lower Arsenal would comprise approximately 3.5 percent of total projected jobs within Benicia and less than 0.3 percent of jobs Countywide.

The addition of 451 jobs and 22 housing units within the Plan Area would not substantially increase the projected (2035) jobs-to-housing balance within the City or the County. The City and County's jobs-to-housing balance would remain relatively constant at 1.73 and 1.16, respectively.

**c. Significant Population, Employment and Housing Impacts.** Implementation of the proposed project would not result in any significant population, employment, or housing impacts.

