

**INDUSTRIAL LAND USE
STUDY**

**NAPA COUNTY GENERAL
PLAN UPDATE - DRAFT**

*Prepared for:
Napa County*

*Prepared by:
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INTRODUCTION

The following report is an analysis of future industrial land demand and supply conditions in Napa County to the County General Plan date of 2030. The report has been prepared by Keyser Marston Associates, Inc. (KMA) pursuant to a contract with Napa County.

The first portion of the report contains a market analysis of demand for industrial land compared to the supply in the major industrial areas of the county. The second portion of the report addresses alternatives for the development of specific sites or sub-areas of the County for use in the Environmental Impact Report (EIR) analysis of General Plan alternatives. The report also contains other General Plan projection figures for total employment, housing units, and population.

Purpose of the Napa County Industrial Land Study

The purpose of Napa County Industrial Land Study is to provide an analysis of industrial land demand compared to supply in Napa County to serve as the basis for the update of the County General Plan. The updated General Plan will be the guiding policy document for the County for the next 25 years, or until the Plan is updated again. The industrial land analysis will primarily serve as an input to the preparation of the Land Use Element, which in turn becomes the foundation for other elements of the General Plan, such as Transportation, Housing and Economic Development.

As part of the County's General Plan Update work program, the County identified five alternative plan scenarios (referred to as EIR Alternatives or Scenarios in this report). The County is conducting a comprehensive environmental impact analysis of the plan scenarios, to provide information to policy makers to assist in selecting and formulating a single final plan for Napa County. KMA also translated industrial land demand into industrial-related employment, total employment, population and households for each of the EIR scenarios. Given that EIR analyses are required to assess potential environmental impacts, the related employment and population projections used in this study reflect reasonable but possibly high estimates, in order to assess all potential impacts.

Prior Analyses and Sources Used

This current Napa County Industrial Land Study represents an update and expansion of previous market analyses undertaken by KMA for the Napa Airport Industrial Area (A.I.A.). In 1995, KMA prepared a Market and Jobs/Housing Analysis, which focused on the demand for land and building space in the industrial/business parks of the A.I.A. and other industrial parks

from Napa City south, or the “South County.” In 2004, KMA prepared a comprehensive update analysis. These two analyses serve as major resources for pre-2006 historical context of industrial land activity in the County, particularly in the A.I.A.

Other documents reviewed and sources utilized in preparing the current study include the industrial land use database maintained by Napa County, the land use inventories of the cities of Napa and American Canyon, the Napa Valley Economic Development Corporation (NVEDC) business survey, ABAG Projections and the U.S. Census 2000.

In addition, KMA met with representatives from the Cities of Napa and American Canyon, and Napa County, to discuss past and recent industrial activities in their respective jurisdictions. We also met with NVEDC to elicit its perspective on the type and nature of industrial firms that are expressing interest in locating in Napa County.

Focus of Current Study

The current study differs from the prior KMA assignments in that this study is broadened to include more information on other industrial areas in the South County. In addition, more research was undertaken to clarify the status of industrial lands in the cities of Napa and American Canyon. In the five EIR alternative scenarios, several large industrially-zoned sites within the unincorporated area of the County, such as Napa Pipe, Pacific Coast/Boca, and Hess properties, are assumed to be developed with a range of industrial and non-industrial uses for EIR analysis purposes.

This study also assesses industrial demand by building type sub-sectors: manufacturing, warehouse, office/R&D, winery and commercial - as they vary significantly in land-use intensity (Floor-Area-Ratio) and employment density, both of which impact projected land demand and associated employment.

This study also provides another segmentation of industrial users by the nature of their use: those that are in some way wine-related (i.e., grape growing/wine production); those that support or relate to other Napa or subregional activities, such as construction, service or storage; and those that are “footloose” or could be located elsewhere but have selected Napa because of its desirability as a place to live or other factors. This distribution is largely drawn from a survey conducted by NVEDC.

Report Organization

Following this introduction, the report is organized as follows:

Summary of Findings and Projections

Section I – Historical Industrial Land Absorption & Building Construction, which provides a synopsis of the major industrial activities by time periods, in Napa County.

Section II – Distribution of Demand by Building Type & by Business Sector, which describes the evolution of the industrial user mix by building type and business categories.

Section III – Existing Industrial Land Inventory & Capacity, which summarizes the amount of industrial land estimated to be available for development, and adjustments to estimate future capacity.

Section IV – Projected Industrial Land Demand, which presents low and high range projections of industrial land demand, and compares projected demand with estimated capacity.

Section V – EIR Alternatives, which briefly describes the different land development scenarios identified by the County for EIR analysis.

Section VI – EIR Alternatives Development Assumptions, which identifies the major input assumptions underlying KMA's projections of future employment in the County, as applied to the five EIR Alternatives.

Section VII – Employment and Housing Unit Projections, which summarizes projections of future employment, housing units, and population in the unincorporated County for the five EIR Alternatives. These totals are compared to projections prepared by the Association of Bay Area Government (ABAG) for the unincorporated County, and added to ABAG projections for Napa's cities so that total countywide growth can be evaluated.

Disclaimers

The analysis contained in this document is based, in part, on data from secondary sources such as the data maintained by Napa County; Napa City; City of American Canyon; NVEDC; and other federal, state and local government planning agencies; real estate brokers; and other third parties. While KMA believes that these sources are reliable, we cannot guarantee their accuracy.

The analysis assumes that the national and/or regional economy will not experience any major or prolonged market downturn.

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SUMMARY OF FINDINGS AND PROJECTIONS

- The purpose of the Keyser Marston Associates, Inc. (KMA) analysis is to determine the supply and demand for industrial land through the General Plan period to 2030 to serve as an input to the EIR analysis and General Plan decisions regarding land use. One application of the information generated from the study is to determine the impacts of redeveloping selected large industrial sites into alternative uses, such as residential.
- A solid data base of industrial development activity over the past 20 years has been maintained by the Napa County and other entities enabling good documentation of experience by geographic subarea and covering different economic cycles.
- The KMA analysis is based on the databases, other sources, and on prior industrial land analyses conducted by KMA for Napa County in 1995 and 2004.

Historical Industrial Land Absorption and Building Construction:

- In each of three periods analyzed (pre-1985, 1985–1994, 1995–2005) annual land absorption and building construction accelerated over the previous period.
- In the most recent 10-year period, the average industrial land absorption was 43 acres per year, of which a little over half was in the Airport Industrial Area (A.I.A.) All references to the A.I.A and American Canyon are after adjustments for the annexation in late 2004.
- In the most recent 10-year period, average industrial building construction was 564,000 square feet per year, the A.I.A. accounting for a little under half.
- In each successive period, industrial land utilization or Floor Area Ratio (FAR) has increased substantially.
- An estimated 10% of the industrial-zoned acreage has been improved with non-industrial uses, such as retail, office, public facilities, and residential, etc.

Distribution of Demand by Building Type and Business Sector

- The most notable change over the past 20-year period has been the increasing share of building space in large warehouse operations. Over 70% of the space added in the A.I.A. in the last decade has been warehousing.
- Green Island space construction was over 70% warehousing in the decade from 1985 to 1995. In the most recent period the percent dropped to 44% with 25% added in a

category termed “Winery,” which can be viewed as a variation of warehousing, since so much winery space is storage.

- Napa Valley Corporate Park has attracted 50% or more of its total development in office/research and development (R&D)-type space. Far less space in this park has been developed in warehousing in the recent decade.
- Manufacturing is an important use in all three industrial parks or areas, ranging from 13% to 42% of the space depending on the park and the period.
- Napa Valley Economic Development Corporation (NVEDC) conducted a recent survey to determine which industrial park businesses were in some way wine related. The finding was 56% overall, but as high as 78% in Green Island and 49% in the A.I.A.
- KMA further analyzed the NVEDC survey data to identify businesses that provide support in some manner to other Napa businesses or activities, or support to activities in adjacent North Bay Counties. Examples include construction support, certain types of office uses, etc. This analysis determined that 35% of the businesses fit this classification. Only 7% of the businesses (by space) could be termed “footloose” or having no particular need to be in Napa other than finding Napa a generally desirable place to live or operate a business.

Existing Industrial Land Inventory and Capacity

- There are approximately 3,472 acres of industrially zoned land in Southern Napa County, inclusive of Napa City and American Canyon. Almost two-thirds of the inventory is in the unincorporated area of the County (post the 2004 annexation).
- Of the total industrial land inventory, approximately 1,866 acres were built upon by the end of 2005, or a little over half the inventory.
- The remaining vacant industrial land is 1,452 acres, of which 60% is in the A.I.A.
- An adjustment to the inventory was made to account for the very low intensity of use of many parcels and high potential for redevelopment or “recycling.” For analysis and projection purposes, 10% of the built land was assumed to be readily available for recycling over the 25-year period, increasing the land inventory by 187 acres.
- A negative adjustment to the land inventory was made to recognize the difficulties and constraints associated with developing some of the parcels. Constraints include presence of wetlands, difficulty of supplying infrastructure, parcels not for sale, and other like obstacles to being readily developable.
- The net inventory is concluded to be 1,324 acres, of which two-thirds is in the A.I.A. This inventory has the capacity to accommodate approximately 19 million square feet of industrial building space.

Projected Industrial Land Demand

- The industrial parks of the Napa South County do not compete “head to head” with the industrial parks in the adjacent counties because so much of the activity drawn to Napa is in relation to the wine industry and to support other Napa economic activities.
- The primary factor supporting continued demand for industrial land in Napa is the continually increasing strength of Napa as a wine center of international stature. Trends within the wine industry will likely lead to more demand for industrial land in the South County due to both relocations of certain activities from the vineyard areas and the need for additional support facilities.
- Other trends and conditions in Napa point to more demand for industrial land. Some uses and activities currently in the City of Napa will seek relocation to industrial park sites due to price and space pressures in the city.
- Demand for industrial land is projected on a range basis starting at about 50 acres per year and accelerating slightly over the timeframe. The demand for the 25-year period to 2030 is projected at roughly 1,300 to 1,600 acres. The higher-range demand level includes a 150-acre allowance for unusually large single-user projects, which could include as an example a corporate headquarters campus, or a very large consolidation of wine operations.
- The low end of the range at 1,300 acres is about 100% of the identified inventory (of 1,324 acres) excluding consideration of certain redevelopment sites such as Napa Pipe. The higher range projection at 1,600 acres would exceed the identified supply inventory by 20%.

EIR Alternatives and Development Assumptions

- Five alternative EIR scenarios identified by the County were applied to eleven specific sites or generic site areas by County staff working with its team of consultants. Differing development programs were assigned to most sites, consistent with the EIR scenario concept. KMA assisted by providing inputs in the process, particularly with the industrial sites and development programs.
- KMA then developed estimates of building area, jobs, residential units and population to accompany each site assumption and to produce totals for each EIR Scenario. These estimates form the basis for other EIR analyses for infrastructure needs, such as for the traffic/transportation system, and other General Plan concerns such as balanced growth in jobs and housing.
- The total number of jobs and residential units associated with the five EIR scenarios is as follows (see next page):

Alternative	Jobs	Residential Units
A. Existing Plan	10,832 jobs	2,235 du
B. Plan Update (modest change)	11,053 jobs	3,885 du
C. Plan Update with Residential Emphasis (high residential)	8,603 jobs	7,635 du
D. Resource Preservation Emphasis (lowest growth)	9,713 jobs	1,951 du
E. Infrastructure and Development (high economic growth)	14,376 jobs	6,535 du

- The resulting projections of jobs and population were compared to the projections prepared by ABAG. It was determined that the projections for the unincorporated area in all scenarios are far higher than the ABAG projections prepared in 2005. ABAG's Projection 2005 assumes land use policies based on a shift of future growth to urban areas that is in place throughout the Bay Area. For many years, Napa County has implemented what are now called "Smart Growth" policies. Measure J is a further reinforcement. Nothing changed by way of County actions or policies over the 2002-2005 period to warrant the significant fluctuation in ABAG's projection. The change by ABAG is a result of changes to ABAG's regional allocation model assigning most growth to existing urban areas. The ABAG projections prepared in 2002 without this shift are far more similar to the EIR Scenario projections. The lower-growth EIR scenarios produce fewer jobs and units than the 2002 ABAG projections, but the higher-growth EIR scenarios exceed the 2002 ABAG projections by significant margins.
- When growth in the incorporated cities is added to the growth in the unincorporated areas per the five scenarios, differences among the scenarios are reduced and somewhat overshadowed by the growth in the cities.
- The demand for industrial land relative to the supply is a little under 100% in most EIR scenarios. The exception is the high residential scenario, Alternative C, where the high-range industrial land demand is projected to exceed supply by 20%. However, it should be noted that the future balance of industrial land supply and demand is often difficult to anticipate as the loss and/or entry of a single, major user (i.e., Syar, Cultured Stone, or the like) can easily shift the balance in an industrial market as small as Napa.

SECTION I. HISTORICAL INDUSTRIAL LAND ABSORPTION & BUILDING CONSTRUCTION

This section briefly summarizes historical and recent industrial land-development activity in Napa County, which serves as a basis for projecting future industrial demand. Activity is described for the three major industrial submarkets in the South County, where most of the county's industrial land is located: unincorporated Napa County, primarily the Airport Industrial Area, Napa City and the City of American Canyon.

The industrial areas of the South County have been experiencing active industrial development for many decades. The development activity has been sufficiently monitored for the last 20 years to provide a solid base of information on the magnitude and type of activity that has been occurring over the period, and how activity has changed over the period. All three jurisdictions maintain information on development activity through their building departments; the County and the major industrial parks track land "absorption" or permits to build on vacant land. As a result, the historical record now provides a good foundation for looking forward over the projection timeframe, while taking into account anticipated trends and changes.

The industrial land database is not without its shortcomings, which must be recognized. For example, absorption information does not always reflect the full development potential of the land, as reflected in low Floor Area Ratio (FAR) of developed parcels. The pattern of buying for future expansion is typical of newer parks with abundant acreage and relatively low holding costs. Thus the potential capacity of industrial land is not just dependent on vacant undeveloped parcels but is also a function of further intensification of already "developed" land. In this analysis we have attempted to address this matter through adjustments, but, as always, such adjustments are imprecise and represent judgments about future behavior. Other shortcomings include inconsistent classification of buildings and timing imprecision.

Two tables summarize historical activity in terms of land acres and building square feet. Due to prior studies, we are able to readily divide the information into three time periods: pre-1985, 1985 to 1994, and 1995 to 2005. These time periods provide a good breakdown by maturity of the industrial parks and cover a range of economic cycles, as well as the "coming of age" of the wine industry in the County. Both tables are accompanied by lengthy footnotes to explain sources and assumptions. The following text provides a very brief overview and highlights, leaving the details to the footnotes.

Pre-1985 Period

Prior to 1985, much of the industrial activity in Napa County was concentrated in the unincorporated, southern part of the County. Major industrial uses in these areas included steel manufacturing, rock extraction, trucking, construction material production and other heavy

industrial operations. There were also a number of large industrial warehouse and storage uses. During this period, the dominant industrial park in Napa County was the approximately 1,600-acre Napa Airport Industrial Area (A.I.A.), which actually includes six master-planned industrial parks, plus the Napa County Airport and other large parcels. As of 1985, there were an estimated 310 improved acres in the A.I.A. and at least 542 acres in other unincorporated areas of the South County (e.g. Napa Pipe, industrial sites along the Syar Corridor, and Pacific Coast/BOCA) as shown on Table I-1. Industrial building development in the A.I.A. was estimated at 456,000 square feet (sq. ft.) (Table I-2).

Napa City also attracted a number of industrial and quasi-industrial users prior to 1985, including auto-related uses along Soscol Ave. and mini-storage facilities in the Tannery Bend area. Based on data available from the city, approximately 113 industrial acres (with a total of about 1.0 million sq. ft. of space) are estimated to have been developed in Napa City before 1985.

Prior to the opening of the Green Island Industrial Park in 1989, industrial activities within the area that is now the City of American Canyon were limited. No historical data on industrial activities before 1985 are available from the City.

1985 to 1994

Most of the activity in the Napa County business and industrial parks occurred post-1985. The 244-acre Napa Valley Corporate Park (NVCP) opened in 1985 and, as a business park pioneer, represented the first “modern” park in the County. The developer (Bedford Properties) made a substantial up-front investment in infrastructure and site amenities, and actively marketed to the corporate sector. These efforts attracted an array of office and industrial uses more typical of users in higher-end, campus parks. Napa City, which consists primarily of the NVCP and the Enterprise Industrial Park, is estimated to have absorbed a total of approximately 165 acres between 1985 and 1994, or an average of 16 acres per year. An estimated 1.5 million sq. ft. of industrial building space was developed during this 10-year period.

In 1986, the County adopted a Specific Plan to guide development in the A.I.A. This was followed by the opening in 1988 of the Napa Airport Corporate Park, one of the six business/industrial parks in the A.I.A. Users were predominately manufacturing and warehousing operations. In 1991, the Napa Valley Gateway Business Park opened with 386 acres of industrial parcels, making it the largest master-planned park in the County. Together with other activities in the A.I.A., this period saw land absorption of about 140 acres and space development of approximately 1.1 million sq. ft. This period also saw a slight decline in manufacturing activity in the A.I.A., as other types of industrial uses picked up the incremental difference.

The 325-acre (before annexation of additional County land in 2004) Green Island Industrial Park (GIIP) opened in 1989 and represented a major milestone for the American Canyon area. It had many of the amenities of an industrial park and, more significantly, was aggressively marketed to warehouse and industrial users, both as sites for build-to-suit facilities and speculative for-rent space. Green Island has been actively selling land and building space since it first opened. As shown on Table I-1, an estimated 72 acres were improved between 1985 and 1994. A high proportion of the estimated 900,000 sq. ft. of industrial space developed during this timeframe in GIIP has been in warehouse and heavier industrial uses.

1995 to 2005

This period saw the increased establishment of Napa County in general and the A.I.A. in particular as industrial locations within the context of the larger region. More importantly, the Napa wine industry evolved into a wine center of international stature, generating increased demand for support facilities in the South County and the use of the Napa name for operations of even non-locally produced grapes. Land absorption and building construction accelerated in the A.I.A. during this period, along with more intense land utilization. As shown on Tables I-1 and I-2, an estimated total of 250 acres were absorbed and nearly 2.9 million sq. ft. of industrial space were built in the A.I.A. from 1995 to 2005, a substantial increase over the prior period. Industrial development would have been even stronger were it not for both the lawsuits that hampered the County's ability to entitle new projects and the recessionary conditions that prevailed after the end of the boom in 2000. This period saw a dramatic shift to a higher level of warehouse space: warehouse went from roughly 50% of the industrial activity to nearly 80% during the late 1990s, the vast majority wine-related.

Industrial activities slowed in Napa City between 1995 and 2005 as vacant industrially-zoned land in the Napa Valley Corporate Park, Enterprise Industrial Park and other parts of the City became in short supply. As shown on Tables I-1 and I-2, industrial land absorption and building construction declined by nearly half from that experienced over the previous 10-year period, or from an estimated 165 to 93 acres and from 1.5 million to .9 million sq. ft. in 1995 to 2005.

Similar to the A.I.A., the Green Island Industrial Park saw rapid growth in the last decade. An estimated 135 acres were absorbed and nearly 2.4 million sq. ft. of industrial space were built during the 1995 to 2005 period. Lower-cost land, fewer regulatory requirements and the availability of water in American Canyon have made this area increasingly attractive to industrial users.

Industrial activity for the three periods is summarized below and further detailed in Tables I-1 and I-2 (next page).

Historical Industrial-Zoned Land Absorption (Gross Acres)

	Pre-1985	1985–1994		1995–2005	
Unincorporated Napa County	852 Ac.	140 Ac.	14 Ac./Yr.	250 Ac.	23 Ac./Yr.
City of Napa	113 Ac.	165 Ac.	16 Ac./Yr.	93 Ac.	8 Ac./Yr.
City of American Canyon	N.A.	72 Ac.	7 Ac./Yr.	135 Ac.	12 Ac./Yr.
Total Napa County	965 Ac.	377 Ac.	38 Ac./Yr.	478 Ac.	43 Ac./Yr.

In summary, land absorption on an annual basis for the three major industrial locations went from 38 acres per year during the 1985 to 1994 period to 43 acres per year during the 1995 to 2005 period. This represents a 13% increase from one period to the next.

Historical Building Construction (Square Feet)

	Pre-1985	1985–1994		1995–2005	
Unincorporated Napa County	.5 M SF	1.1 M SF	107K SF/Yr.	2.9 M SF	263K SF/Yr.
City of Napa	1.0 M SF	1.5 M SF	147K SF/Yr.	.9 M SF	84K SF/Yr.
City of American Canyon	N.A.	.9 M SF	90K SF/Yr.	2.4 M SF	217K SF/Yr.
Total Napa County	1.5 M SF	3.4 M SF	343K SF/Yr.	6.2 M SF	564K SF/Yr.

Industrial building space construction went from 343,000 sq. ft. per year to 564,000 sq. ft. per year, or a 64% increase from one period to the next. As will be demonstrated, this increase is partly a function of more warehouse space which is built at a higher FAR than other industrial building types, and an increase in land utilization in general.

Land Utilization

A notable trend over these periods has been the increase in land utilization as the area matures. FAR (building area to land area) relationships have increased with each period. Development experience in the early periods produced far lower FARs than is typical in industrial and business parks. This was due to a number of factors, such as uses developed with outdoor storage, older uses developed when land was less expensive, and land purchased for expansion or additional buildings in the case of more recent activity, etc. However, development densities have increased as the County has become more built out and “matures” and existing built parcels have become more highly utilized, as illustrated by the following:

- As of 1985, the average FAR was extraordinarily low, or 0.04 to 1.
- During the 1985 to 1994 period, the average FAR was 0.19 to 1 or slightly under 0.2.
- In the post-1994 period, the FAR of newly developed parcels doubled to over 0.4. Much of the increase can be attributed to the large amount of warehouse space which was developed at a FAR in excess of 0.45:1.

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- The higher utilization with each successive period is primarily a function of the types of users and to a lesser extent the higher value of the land.

In summary, with the exception of Napa City, which is primarily built-out, industrial land absorption and land utilization have generally increased in unincorporated Napa County and the City of American Canyon from 1985 forward. Indications are that the use intensification of land will continue into the future as the industrial market expands in Napa County.

Summary

In the industrial areas of southern Napa County, both annual land absorption and annual building construction have increased in each of the three periods reviewed: pre-1985, 1985–1994, and 1995–2005. The rate of building construction has accelerated faster than land absorption, reflecting a more intense utilization of land due to more warehouse structures and more efficient land utilization overall. As a consideration for future rates of land absorption and building construction, it is important to recognize that activity during the most recent decade was probably constrained in the late 90s due to legal complications in entitling projects in the unincorporated area. In the post-2000 period, a recession severely impacted multi-tenant for-lease space everywhere in the South County. Such constraints should be taken into consideration in assessing future demand projections as any 25-year period is as likely to contain recessing periods as well as high growth periods.

TABLE I-1.
HISTORICAL LAND ACREAGE ABSORPTION IN NAPA COUNTY
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA

Location	INDUSTRIAL-ZONED ACRES (Gross Ac.) ¹											
	Total Industrial-Zoned Land ²	% Total	Total Dev. - Pre-1985	% Total	Total Dev. - 1985 - 1994	% Total	Avg./Yr.	Total Dev. - 1995 - 2005	% Total	Avg./Yr.	Total Dev. - To End 2005	% Total
UNINCORPORATED NAPA COUNTY												
A.I.A.	1,596 Ac.	³	310 Ac.	⁴	140 Ac.	⁴	14 Ac.	250 Ac.	⁵	23 Ac.	700 Ac.	
Other Unincorporated Areas ⁶	542 Ac.		542 Ac.		NA	NA	NA	NA	NA	NA	542 Ac.	
TOTAL UNINCORPORATED NAPA COUNTY	2,138 Ac.	62%	852 Ac.	88%	140 Ac.	37%	14 Ac.	250 Ac.	52%	23 Ac.	1,242 Ac.	67%
CITY OF NAPA												
Napa Valley Corporate Park (NVCP)	244 Ac.	^{7,8}	NA	⁹	104 Ac.	¹¹	10 Ac.	72 Ac.	⁷	7 Ac.	176 Ac.	
Enterprise Industrial Park	66 Ac.	^{7,8}	NA	⁹	32 Ac.	¹¹	3 Ac.	11 Ac.	⁷	1 Ac.	43 Ac.	
Remainder of City	158 Ac.	^{7,8}	113 Ac.	¹⁰	28 Ac.	¹⁰	3 Ac.	10 Ac.	⁷	1 Ac.	152 Ac.	
TOTAL CITY OF NAPA	468 Ac.	13%	113 Ac.	12%	165 Ac.	44%	16 Ac.	93 Ac.	19%	8 Ac.	371 Ac.	20%
AMERICAN CANYON												
Green Island Industrial Park (GIIP)	327 Ac.	¹²	0 Ac.	¹³	72 Ac.	¹³	7 Ac.	135 Ac.	¹⁴	12 Ac.	207 Ac.	¹⁵
Remainder of City ¹⁶	539 Ac.	¹²	NA		NA	NA	NA	NA	NA	NA	46 Ac.	¹⁵
TOTAL AMERICAN CANYON	866 Ac.	25%	0 Ac.	0%	72 Ac.	19%	7 Ac.	135 Ac.	28%	12 Ac.	253 Ac.	14%
TOTAL NAPA COUNTY¹⁷	3,472 Ac.		965 Ac.		377 Ac.		38 Ac.	478 Ac.		43 Ac.	1,866 Ac.	

**TABLE I-1.
HISTORICAL LAND ACREAGE ABSORPTION IN NAPA COUNTY
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

Notes:

- ¹ For the purpose of this analysis, gross acres are defined as total land acres exclusive of major access roads (but inclusive of internal roads).
² Includes land w/built Industrial, Light Industrial, Heavy Industrial, Warehouse, Office in Industrial Area, Winery (excluding Vineyards), and Public/RR.
Includes land designated as Vacant and land developed as vineyards, older Commercial, SFR and Other - which are typically interim uses and/or underutilized.
³ Excludes Airport property and areas annexed to American Canyon in 2004.
⁴ Based on KMA's 2004 Market and Job/Housing Projections Update A.I.A.
⁵ Based on County database dated 1/06/06.
⁶ Includes Napa Pipe property (160 ac.+/-), Syar Corridor (57 ac. +/-), and Syar Quarry (245 ac. +/-), and Pacific Coast/BOCA (80 ac+/-) or approximately 542 ac. in total.
⁷ Estimates based on net acreage data provided by City for 1995 to 2005 and for total to date.

Net acreages from City's database were adjusted to gross (from KMA and NVEDC's database) as follows:

	<u>Gr. Ac.</u>	<u>Net Ac.</u>	<u>Ratio of Gr. To Net Ac.</u>
NVCP	244	197	1.24
Enterprise	66	45	1.47

- Unknown when remainder of city industrial-zoned areas were established.
⁸ Estimates for remainder of City is derived from the City's calculation that there is a total of 367.5 net acres in the City's RUL designated for Corporate Park, Light Industrial Uses, or Mixed Use and Zoned Light Industrial. According to the City, of this total, 75.7 acres are vacant. Thus, total for the Remainder of the City is estimated at 158 gross acres (assuming an average gross to net ratio of approximately 1.25. [368 (total) -197 (NVCP) -45 (Enterprise)]*1.25 = 158 acres.
⁹ None estimated for years prior to 1985 as NVCP and Enterprise parks were not yet established.
¹⁰ Estimate per KMA as data breakdown is not available from City. According to County staff, most of the activity in the remainder of the city occurred pre-1985.
¹¹ Estimates for 1985 to 1994 based on difference between total net acreage developed, less acreage in 1995 to 2005 and remaining vacant acreage (per City data).
¹² Based on City of American Canyon 2004 Land Use Survey and clarifications with City Planning staff in December 2005.
¹³ Per Table 4, p. 17 of KMA's July 1995 Market and Jobs/Housing Analysis.
¹⁴ Estimates based on Total Dev. To End 2005 less Total Dev. 1985 - 1994.
¹⁵ Based on City of American Canyon 2004 Land Use Survey and Napa County GIS information from <http://gisnapa.ca.gov>; does not include land that is underutilized or contains interim uses such as older Commercial, SFR, and Other. No information available from the City as to when the acreage was developed.
¹⁶ Includes annexation area adjacent to and north of GIIP, and other locations. (Area has been removed from A.I.A.). Historic absorption data not available.
¹⁷ Excludes isolated industrial sites in the unincorporated area and smaller incorporated cities with minimal remaining capacity.

**TABLE I-2.
HISTORICAL BUILDING CONSTRUCTION IN NAPA COUNTY
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

CONSTRUCTION ON INDUSTRIAL-ZONED LAND										
<u>Location</u>	Total Built - Pre-1985	% Total	Total Built - 1985 - 1994	% Total	Avg./ Yr.	Total Built - 1995 - 2005	% Total	Avg./ Yr.	Total Built to End 2005	% Total
UNINCORPORATED NAPA COUNTY¹										
A.I.A.	456,000 SF		1,066,000 SF		106,600 SF	2,890,463 SF		262,769 SF	4,412,463 SF	
Other Unincorporated Areas	NA		NA		NA	NA		NA	NA	
TOTAL UNINCORPORATED NAPA COUNTY	456,000 SF	31%	1,066,000 SF	31%	106,600 SF	2,890,463 SF	47%	262,769 SF	4,412,463 SF	39%
CITY OF NAPA										
Napa Valley Corporate Park (NVCP)	NA		873,500 SF		87,350 SF	578,700 SF		52,609 SF	1,452,200 SF	
Enterprise Industrial Park	NA		337,500 SF		33,750 SF	113,700 SF		10,336 SF	451,200 SF	
Remainder of City	1,023,421 SF		255,855 SF		25,586 SF	230,724 SF		20,975 SF	1,510,000 SF	
TOTAL CITY OF NAPA	1,023,421 SF	69%	1,466,855 SF	43%	146,686 SF	923,124 SF	15%	83,920 SF	3,413,400 SF	30%
AMERICAN CANYON										
Green Island Industrial Park (GIIP)	NA		901,100 SF		90,110 SF	2,386,300 SF		216,936 SF	3,287,400 SF	
Remainder of City ¹⁰	NA		NA		NA	NA		NA	208,100 SF	
TOTAL AMERICAN CANYON	NA	NA	901,100 SF	26%	90,110 SF	2,386,300 SF	38%	216,936 SF	3,495,500 SF	31%
TOTAL NAPA COUNTY¹¹	1,479,421 SF		3,433,955 SF		343,396 SF	6,199,887 SF		563,626 SF	11,321,363 SF	

**TABLE I-2.
HISTORICAL BUILDING CONSTRUCTION IN NAPA COUNTY
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

Notes:

- ¹ Excludes Airport property. Includes Public/RR land zoned IP/GI.
- ² Based on KMA's 2004 Market and Job/Housing Projections Update A.I.A.
- ³ Based on County database dated 1/06/06.
- ⁴ Estimate per KMA as data breakdown is not available from City. According to County staff, most of the activity in the remainder of the city occurred pre-1985.
- ⁵ Difference between total built to end of 2005 and 1995-2005 built square footage from City.
- ⁶ Source: City of Napa data base for 1995-2005.
- ⁷ Per Table 5, p. 18 of KMA's July 1995 Market and Jobs/Housing Analysis.
- ⁸ Total Built To End 2005 less Total Built 1985 - 1994.
- ⁹ Based on City of American Canyon 2004 Land Use Survey and Napa County GIS information from <http://gjsnapa.ca.gov>; does not include buildings on land that is underutilized or contains interim uses such as older Commercial, SFR, and Other. No information available from City as to when the acreage was developed.
- ¹⁰ Includes annexation area adjacent to and north of GIIP, and other locations. (Area has been removed from A.I.A.). Historic absorption data not available.
- ¹¹ Excludes isolated industrial sites in the unincorporated area and smaller incorporated cities with minimal remaining capacity.

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SECTION II. DISTRIBUTION OF DEMAND BY BUILDING TYPE & BUSINESS SECTOR

In addition to land absorption, building construction and land utilization changes, the evolution of user types is of particular interest as it impacts the distribution of future demand in each of the submarkets. This section provides a brief review of the changes in the composition of building types in each of the submarkets and also of the results of the survey on business activity.

Activity by Building Type

Building or user types are classified in the County's database as Manufacturing, Office/R&D, Warehouse, Winery (a few projects only) and Commercial/Other. Often more than one activity is housed within a single structure for a firm or group of tenants, but the dominant use determines the classification for the entire building. To illustrate the change in the evolution of industrial uses over time, we focused our review on the major industrial park within each submarket. Table II-1 summarizes the building types in each of the following areas by major period: Napa A.I.A. in unincorporated Napa County, Napa Valley Corporate Park in Napa City and Green Island Industrial Park in the City of American Canyon.

In general, the Napa A.I.A. attracted predominately manufacturing and warehouse uses, with a smaller amount of office/R&D; the Napa Valley Corporate Park has been more successful in attracting "high-end" park uses (i.e., office/R&D/industrial), with its campus-like setting; and the Green Island Industrial Park attracted mostly warehouse and some manufacturing uses. Following is a summary of the changes in user type over time in each of the submarkets, as shown on Table II-1:

- In the 1985 to 1994 period, development activity in the A.I.A was approximately half manufacturing and half warehouse, with only a small amount of other uses. The 1995 to 2005 period saw a dramatic shift to a high level of warehouse space while manufacturing activities declined. Warehouse went from roughly 50% of the activity to over 70% during the late 1990s. Office and R&D space in the A.I.A. has always represented a minor part of the total activity, or under 5% in the earlier years. Since 1999, however, the development of several major projects increased the percentage of office and R&D to an estimated 13% of the total.
- During these same two periods, office, mixed with an increasing amount of industrial space, remained the dominant use (at 50% to 58% of the total) at the Napa Valley Corporate Park. (Pure, or 100%, office use is very limited in the Park.) The more recent period of 1995 to 2005 saw an increase in manufacturing firms locating to the Corporate Park, while the amount of warehouse space declined percentage-wise, as a result of the dwindling amount of land available in the Park and its increasing costs.

- While warehouse and manufacturing were the principal uses (75% and 25%, respectively, of the total) in the Green Island Industrial Park during the 1985 to 1994 period, uses have widely diversified since. Between 1995 and 2005, warehouse use at Green Island gave way to a mix of winery (25%) and commercial uses (10%).
- Reflecting these use trends in the three submarkets, Napa County as a whole and unincorporated Napa County are estimated to have attracted the following distribution of uses during the 1995–2005 period:

Building Type	All South Napa County	Unincorporated Napa County
Manufacturing	19%	14%
Office/R&D	12%	13%
Warehouse	54%	71%
Winery	10%	0%
Commercial/Other	5%	1%
Total	100%	100%

Activity by Business Sector

A recent business survey conducted by the Napa Valley Economic Development Corporation (NVEDC) sought to determine the type of activity or business sector of the various users of South County industrial parks. Of particular interest is the attempt to identify the businesses that have located in Napa County since 1985 that are predominately wine-related (“Wine and Wine-Related”). KMA further worked with the NVEDC survey results to identify businesses that are locally-based or support local and subregional activities, such as the construction trade. A third category was established to separate out the businesses that had no particular need to locate in Napa but chose Napa for reasons such as its desirability as a place to live or work. These businesses are termed “footloose” by economists.

A description of the three main business categories and examples of businesses in each sector are summarized below:

Wine and Wine-Related Businesses – Generally includes those businesses for which the Napa Valley location is crucial to their operations. These businesses have located in Napa County due to their direct linkages, dependency and/or access requirement to Napa Valley’s wine industry. Examples include:

- Vineyard/Grape Cultivation
- Wine Production and Warehousing (e.g., wineries)
- Associated Trucking and Distribution
- Associated On-Site Retail Sales (e.g., tasting rooms)
- Associated Equipment and Supplies (e.g., bottling, labeling, corking)
- Associated Management/Vineyard Management Companies

-
- Associated Testing, Education and Research
 - Wine Sales and Distribution Companies (including online wine marketing companies)
 - Other Services to the Grape Growing/Wine Industry

Local or Subregional-Related - Generally includes all non-wine-related businesses for which the Napa Valley location is important to operations. These businesses need to be in Napa County to serve their customer or client base, which may be Napa or other North Bay counties. An estimated 75% of their customer base is expected to be located in some combination of Napa, Sonoma, Solano and West Contra Costa counties. Examples include:

- Construction Industry Support Services (e.g., contractors, suppliers)
- Support Professionals (e.g., medical, technical, legal, financial)
- Food-related (e.g., catering kitchens, specialty products)

In addition, any commercial space, including lodging, would fall into this category since the customer base is clearly local.

Footloose Businesses/Uses – This category includes businesses that have no need to locate in Napa Valley and could have easily located elsewhere outside of the northern Bay Area with minimum impact on operations. Examples include:

- Some Office Users/Services (e.g., insurance/accounting firms)
- Telecommunication/Biotechnology Firms
- Manufacturing/Production Not Dependent on Local Resources

As shown on Table II-2 Wine/Wine-Related uses are most heavily concentrated in the Green Island Industrial Park in the City of American Canyon, followed by Napa A.I.A. and the Napa Valley Corporate Park. These uses comprise an estimated 78% of the space at Green Island, 49% at A.I.A. and 28% at the Corporate Park. Napa Valley Corporate Park, however, has the highest concentration of Local/Subregional Napa businesses, which represents approximately 65% of its mix. This category represents 40% of the mix at A.I.A. and 15% of the mix at Green Island. A small percentage (between 5% to 9%) of each park's mix of uses belongs to the Footloose category and up to 2% belongs to the Other category. It is also notable that none of the major footloose firms operating in Napa came to Napa during the past 10-year period.

Using this classification system, we find that an astounding 90% of the users in southern Napa County industrial parks are either wine-related or serve other local economic activity in some way. Less than 10% of the activity could readily go elsewhere outside of Napa or the adjacent counties.

**TABLE II-1.
ESTIMATED HISTORICAL INDUSTRIAL BUILDING AREA DISTRIBUTION BY BUILDING TYPE
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

Estimated Land Use Distribution	NAPA A.I.A. ¹				NAPA VALLEY CORPORATE PARK (NVCP)				GREEN ISLAND INDUSTRIAL PARK (GIIP)				MAJOR NAPA COUNTY INDUSTRIAL PARKS (Wt. Avg.)			
	1985-1994 ²	Est. Bldg. SF	1995-2005 ³	Est. Bldg. SF	1985-1994 ⁴	Est. Bldg. SF	1995-2005 ⁵	Est. Bldg. SF	1985-1994 ⁶	Est. Bldg. SF	1995-2005 ⁷	Est. Bldg. SF	1985-1994	Est. Bldg. SF	1995-2005	Est. Bldg. SF
	Manufacturing	42%	447,700	14%	414,600	13%	117,900	32%	183,400	25%	227,200	21%	503,700	28%	792,800	19%
Office/R&D	3%	33,000	13%	374,300	50%	434,700	58%	335,300	0%	0	0%	0	16%	467,700	12%	709,600
Warehouse	49%	521,300	71%	2,063,900	37%	320,900	10%	60,000	75%	673,900	44%	1,050,900	53%	1,516,100	54%	3,174,800
Winery	3%	34,000	0%	0	0%	0	0%	0	0%	0	25%	598,900	1%	34,000	10%	598,900
Commercial	3%	29,900	1%	37,700	0%	0	0%	0	0%	0	10%	232,900	1%	29,900	5%	270,600
TOTAL	100%	1,066,000	100%	2,890,463	100%	873,500	100%	578,700	100%	901,100	100%	2,386,300	100%	2,840,500	100%	5,855,600

¹ Estimates include all industrial, office, warehousing, wineries and commercial built in A.I.A.

² Based on KMA's 2004 Market and Job/Housing Projections Update A.I.A.

³ Percentages and approximate building SF based on County's 1995 to 2005 database.

⁴ Percentages based on 1985-1994 data in KMA's 1995 Market and Jobs/Housing Analysis, applied to building SF estimate in Historical Absorption Table.

⁵ Percentages based on City of Napa industrial database 1995 to 2005, as roughly assigned by KMA.

⁶ Percentages based on Table 6, p. 19 of KMA's July 1995 Market and Jobs/Housing Analysis.

⁷ Percentages based on total from City of American Canyon 2004 Land Use Survey and clarifications with City planning staff in December 2005, less 1985-1994 information.

TABLE II-2.
 ESTIMATED HISTORICAL INDUSTRIAL BUILDING AREA DISTRIBUTION BY BUSINESS SECTOR
 NAPA COUNTY INDUSTRIAL LAND USE STUDY
 NAPA COUNTY, CA

Napa Sectors	NAPA A.I.A. ¹		NAPA VALLEY CORPORATE PARK (NVCP)		GREEN ISLAND INDUSTRIAL PARK (GIIP)		NAPA COUNTY MAJOR BUSINESS PARKS	
	1985 - 2005 ²	Est. Bldg. SF	1985 - 2005 ²	Est. Bldg. SF	1985 - 2005 ²	Est. Bldg. SF	1985 - 2005	Est. Bldg. SF
BUILDING SF								
Wine/Wine-Related	49%	2,152,900	28%	399,900	78%	2,558,800	56%	5,111,600
Local/Subreg. Napa - Construction-Related	40%	1,777,600	65%	938,900	15%	501,800	35%	3,218,300
	5%	218,100	1%	7,800	1%	23,200	3%	249,100
Footloose	9%	387,600	8%	113,300	5%	157,100	7%	658,000
Other	2%	94,400	0%	0	2%	69,700	2%	164,100
TOTAL	100%	4,412,463	100%	1,452,200	100%	3,287,400	100%	9,152,000

¹ Estimates include all industrial, office, warehousing, wineries and commercial built in A.I.A.

² Based on NVEDC's 2005 Database of businesses, roughly assigned to business types by KMA. Reflects only the sample of businesses surveyed by NVEDC, which may not be complete at this time.

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SECTION III. EXISTING INDUSTRIAL LAND INVENTORY & CAPACITY

A key component of this Industrial Land Use Study for General Plan purposes is an estimate of the current inventory of undeveloped industrial land in Napa County. A further step is to estimate capacity following some adjustments to the inventory as will be explained. Again, the tables provide the summary estimates supported by extensive footnotes on specific sources and assumptions.

Existing Industrial Land Inventory

Table III-1, Estimated Industrial Land Inventory, was prepared based on industrial data provided by Napa County, Napa City and the City of American Canyon. Based on the data and interviews with these sources, KMA's prior analyses, and the NVEDC survey, our estimate is that, as of the beginning of 2006, there are a total of 3,472 gross acres of industrial-zoned land in the southern portion of Napa County. This total represents acreages with built industrial uses (light industrial, heavy industrial, warehouse, office, winery and public right-of-ways) as well as vacant land, vineyards, commercial, residential, and other uses built on land designated as industrial. The inventory does not include small scattered industrial sites throughout the County or sites that are designated or zoned for other land uses but developed with industrial buildings, or industrial land within the Upvalley cities of Yountville, St. Helena and Calistoga.

As shown on Table III -1, the bulk of the existing industrial land inventory is located in unincorporated Napa County: of the estimated 3,472 gross acres, about two-thirds, or 2,138 acres, are located in the unincorporated area, primarily in the A.I.A. For the purpose of this analysis, gross acres are defined as total land acres exclusive of major access roads (but inclusive of internal roads). An estimated 468 acres, representing about 14% of the total County inventory, are located in Napa City. The City of American Canyon has an estimated total of 866 acres, of which about 300+ acres were unincorporated Napa County land annexed into the City in 2004. The City of American Canyon's share of the total county industrial land inventory has therefore increased from approximately 17% to 26%.

According to the industrial activity data from the City of Napa, the city is virtually built-out. As shown on Table III -1, nearly 371 acres of Napa City's total of 468 industrially-zoned land have been improved, or about 80% of its inventory, while only an estimated 56% (1,162 acres) of unincorporated Napa County inventory has been developed. Despite the recent annexation of land into the City, American Canyon still has the lowest percentage of improved industrial land, 29% or 253 acres.

The amount of land remaining—and therefore available for future industrial development—is estimated to be in the range of 896 acres in the unincorporated area, 97 acres in Napa City, and about 613 acres in the City of American Canyon. These acreages include land designated as

vacant and land currently developed as vineyards, and some parcels where there are older commercial, residential and other non-industrial structures.

The fourth column in Table III-1 provides for adjustments to the industrial land inventory due to planned changes in land use designation. In this column we indicate the acres in the A.I.A. that will become resort use and 131 acres in American Canyon that will be changed to residential and commercial designation.

The summary by the three jurisdictions is indicated below.

Estimated Industrial Land Inventory (Acres)

	Total Industrially-Zoned Land	Total Built (2005)	Net Remaining*
Unincorporated Napa County	2,138 Ac.	1,242 Ac.	876 Ac.
City of Napa	468 Ac.	371 Ac.	94 Ac.
City of American Canyon	866 Ac.	253 Ac.	482 Ac.
Total Napa County	3,472 Ac.	1,868 Ac.	1,452 Ac.

* After reduction for industrially-zoned land that will be removed from this designation.

In conclusion, an estimated 1,452 acres of industrially-zoned land remains available for future development. It should be noted, however, that not 100% of the “available” acreages is readily developable since some parcels lack infrastructure and cannot be easily served, some may be undesirable parcels due to various physical problems, and many are not for sale. Thus, not all 1,452 are readily developable.

Adjustments to Estimated Industrial Development Capacity

The capacity of the industrial land supply is a function of the acres available as determined above plus adjustments to account for other dynamics that serve to either increase or constrain the development capacity of industrial land in Napa.

As a first step, we examine the square foot area of building space that can be accommodated on the 1,452 acres available. The test is made using alternative average FARs which represent different mixes of building types. The two levels tested are 3.0 and 4.0, both considerably higher than the existing built inventory but within the range of new construction. The lower FAR translates to a lower share of the space in warehouse uses, while the higher FAR translates to more building area in warehouse and distribution-type operations. Also built into the analysis is a net to gross land factor of 90% to allow for internal roads and other site amenities or improvements.

As shown on Table III-2, under the above assumptions, the estimated amount of available land in unincorporated Napa County is projected to be able to accommodate roughly 10.3 million to

13.7 million sq. ft. of industrial development at build-out. For Napa City, which is mostly built-out, the projected development capacity of its remaining industrial land is in the range of 1.1 million to 1.5 million sq. ft. For the City of American Canyon, the projected capacity is between 5.7 million to 7.6 million sq. ft. total. Thus, the total holding capacity in the major undeveloped industrial land in Napa County is estimated at about 17 million to 23 million sq. ft.

The second step is to make adjustments to recognize the intensification of both newly developed land and further intensification of already “developed land.” We also make a negative adjustment to reflect the fact that some industrial area has significant problems and may never be developed within the projection timeframe.

Table III-3 presents the additional capacity as a result of development intensification (or “recycling”) of currently under-utilized sites and/or sites with older/obsolete uses. For the purpose of this projection, we have assumed that 10% of the industrial land that has been improved to date (or an estimated 187 acres of the total 1,866 acres) will be recycled in the next 25 years. This could be viewed as a conservative or low estimate.

A negative adjustment to the inventory has been made to recognize undevelopable or undesirable acreages, such as land that is difficult to develop due to wetlands, land that has major access problems, land owned by unwilling sellers, etc. An estimated 20% of the inventory is netted from the gross available acreage to arrive at total net useable capacity for Napa County. As shown on Table III -3, these adjustments result in an estimated net useable capacity of about 1,324 acres, with holding capacity in the range of 19 million sq. ft. of industrial space, for Napa County as a whole.

Table III- 4 presents a distribution of this capacity to the major industrial submarkets, based on known plans for development, the nature of the industrial uses in each of the submarkets, and the amount of estimated industrial land acreage available in each. The distributed capacity is shown below for each major submarket:

Distribution of Adjusted Net Available Acres (to build-out)

	Projected Net Available Acres
Unincorporated Napa County	808 Ac.
City of Napa	105 Ac.
City of American Canyon	409 Ac.
Total Napa County	1,324 Ac.

In summary, after adjustment for undevelopable and/or undesirable acreage, the net amount of industrially-zoned land available in Napa County is estimated at 1,324 acres. This does not include consideration of several major sites separately analyzed as part of the EIR Alternatives analysis.

**TABLE III-1.
ESTIMATED INDUSTRIAL LAND INVENTORY IN NAPA COUNTY
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

<u>Location</u>	INDUSTRIAL-ZONED ACRES (Gross Ac.)¹				
	Total Industrial-Zoned Land²	Total Built - End of 2005	Total Remaining	Addition/Reduction	Total Available
UNINCORPORATED NAPA COUNTY					
A.I.A.	1,596 Ac. ³	700 Ac. ⁴	896 Ac. ⁵	-20 Ac. ⁶	876 Ac.
Other Unincorporated Areas ⁷	542 Ac.	542 Ac.	0 Ac.	0 Ac.	0 Ac.
TOTAL UNINCORPORATED NAPA COUNTY	2,138 Ac.³	1,242 Ac.⁴	896 Ac.⁵	-20 Ac.⁶	876 Ac.
CITY OF NAPA					
Napa Valley Corporate Park (NVCP)	244 Ac. ^{8,9}	176 Ac.	68 Ac.	-3 Ac. ¹⁰	65 Ac. ¹¹
Enterprise Industrial Park	66 Ac. ^{8,9}	43 Ac.	23 Ac.	0 Ac.	23 Ac. ¹¹
Remainder of City	158 Ac. ^{8,9}	152 Ac.	6 Ac.	0 Ac.	6 Ac. ¹¹
TOTAL CITY OF NAPA	468 Ac.	371 Ac.	97 Ac.	-3 Ac.	94 Ac.
AMERICAN CANYON					
Green Island Industrial Park (GIIP)	327 Ac. ¹²	207 Ac. ¹³	120 Ac.	0 Ac.	120 Ac.
Remainder of City ¹⁴	539 Ac. ¹²	46 Ac. ¹³	493 Ac.	-131 Ac. ¹⁵	362 Ac.
TOTAL AMERICAN CANYON	866 Ac.	253 Ac.	613 Ac.	-131 Ac.	482 Ac.
TOTAL NAPA COUNTY¹⁶	3,472 Ac.	1,866 Ac.	1,606 Ac.	-154 Ac.	1,452 Ac.

**TABLE III-1.
ESTIMATED INDUSTRIAL LAND INVENTORY IN NAPA COUNTY
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

Notes:

- ¹ For the purpose of this analysis, gross acres are defined as total land acres exclusive of major access roads (but inclusive of internal roads).
- ² Includes land w/built Industrial, Light Industrial, Heavy Industrial, Warehouse, Office in Industrial Area, Winery (excluding Vineyards), and Public/RR. Includes land designated as Vacant and land developed as vineyards, Commerical, SFR and Other - which are typically interim uses and/or under-utilized.
- ³ Excludes Airport property and areas annexed to American Canyon in 2004.
- ⁴ Based on KMA's 2004 Market and Jobs/Housing Projections Update A.I.A. and County's updated database (1/06/06). Includes land with built industrial (land use codes 410 to 420) and built commercial (land use codes 510 to 514) uses.
- ⁵ Includes land designated as Vacant and land developed as vineyards, older Commerical, SFR and Other - which are typically interim uses and/or underutilized.
- ⁶ Represents Net Additions/Reductions - Reductions include projects pending or approved as of January 2006 (2.7 ac. for shooting range + 72.2 ac. for Montalcino + 9.86 ac. for Gateway Plaza and miscellaneous others) totaling approximately 90 acres. Additions include sites in active use as junk yards, outdoor storage, and flea market (total approx. 70 ac.).
- ⁷ Includes Napa Pipe property (160 ac.+/-), Syar Corridor (57 ac. +/-), Syar Quarry et al. inside Industrial Area (245 ac. +/-), and Pacific Coast/BOCA (80 ac.+/-), or approximately 542 ac. in total.
- ⁸ Estimates based on net acreage data provided by City for 1995 to 2005 and for total to date. Net acreages from City's database were adjusted to gross (from KMA and NVEDC's database) as follows:

	<u>Gr. Ac.</u>	<u>Net Ac.</u>	<u>Ratio of Gr. To Net Ac.</u>
NVCP	244	197	1.24
Enterprise	66	45	1.47

Unknown when remainder of city industrial-zoned areas were established.

- ⁹ Estimates for remainder of City is derived from the City's calculation that there is a total of 367.5 net acres in the City's RUL designated for Corporate Park, Light Industrial Uses, or Mixed Use and Zoned Light Industrial. According to the City, of this total, 75.7 acres are vacant. Thus, total for the Remainder of the City is estimated at 158 gross acres (assuming an average gross to net ratio of approximately 1.25. [368 (total)-197 (NVCP) -45 (Enterprise)]*1.25 = 158 acres)
- ¹⁰ Source: City of Napa database 2005. Represents 3 ac. of constrained sites at NVCP. (Note: acreage for Meritage resort is assumed completed in 2005.)
- ¹¹ City has estimated that there are an estimated 76 net acres available: 55 acres at NVCP (including 3 acres of constrained site), 15.5 acres at Enterprise Park, remainder (or approximately 5 acres). These acreages are adjusted to gross using the gross to net ratio for each subarea.
- ¹² Based on City of American Canyon 2004 Land Use Survey and clarifications with City Planning staff in December 2005.
- ¹³ Based on City of American Canyon 2004 Land Use Survey and Napa County GIS information from <http://gisnapa.ca.gov>; does not include land that is underutilized or contains interim uses such as older Commercial, SFR, and Other.
- ¹⁴ Includes annexation area adjacent to and north of GIIP, and other locations. (Area has been removed from A.I.A.).
- ¹⁵ Reductions per City of American Canyon's Pending and Potential Projects list, November 7, 2005; and information from Assistant Planner Denise Miraldi on December 19, 2005. Includes land that is being master-planned and re-zoned for other uses in Oat Hill (137 ac. total less 34 ac. already unavailable, for a net reduction of 103 ac.), and Napa Junction III (28 ac., none of which are unavailable), for a total reduction of 131 ac.
- ¹⁶ Excludes isolated industrial sites in the unincorporated area and smaller incorporated cities with minimal remaining capacity.

**TABLE III-2.
ESTIMATED INDUSTRIAL DEVELOPMENT CAPACITY
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

<i>Location</i>	INDUSTRIAL DEVELOPMENT			
	Completed to End of 2005 ¹	Total Avail. Gross Acres ²	Building Area (Assumes 90% Net Ac.) ³	
			@ 0.30 FAR	@ 0.40 FAR
UNINCORPORATED NAPA COUNTY				
A.I.A.	4,412,463 SF	876 Ac.	10,307,000 SF	13,743,000 SF
Other Unincorporated Areas	NA	0 Ac.	0 SF	0 SF
TOTAL UNINCORPORATED NAPA COUNTY	4,412,463 SF	876 Ac.	10,307,000 SF	13,743,000 SF
CITY OF NAPA				
Napa Valley Corporate Park (NVCP)	1,452,200 SF	65 Ac.	766,000 SF	1,021,000 SF
Enterprise Industrial Park	451,200 SF	23 Ac.	267,000 SF	356,000 SF
Remainder of City	1,510,000 SF	6 Ac.	74,000 SF	98,000 SF
TOTAL CITY OF NAPA	3,413,400 SF	94 Ac.	1,107,000 SF	1,475,000 SF
AMERICAN CANYON				
Green Island Industrial Park (GIIP)	3,287,400 SF	120 Ac.	1,411,000 SF	1,882,000 SF
Remainder of City	208,100 SF	362 Ac.	4,258,000 SF	5,677,000 SF
TOTAL AMERICAN CANYON	3,495,500 SF	482 Ac.	5,669,000 SF	7,559,000 SF
TOTAL NAPA COUNTY	11,321,363 SF	1,452 Ac.	17,083,000 SF	22,777,000 SF
Or, Say			17 M SF	23 M SF

Notes:
¹ See Table I-2. Estimates includes all industrial, office, warehousing, wineries and commercial built.
² See Table III-1. For the purpose of this analysis, gross acres are defined as total land acres exclusive of major access roads (but inclusive of internal roads).
³ Assumes more intensive future development - net to gross land area @ 90% of total available acres.

**TABLE III-3.
TOTAL ADJUSTED INDUSTRIAL DEVELOPMENT CAPACITY
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

		<u>Estimated Gross Land Acres ¹ (end of 2005)</u>	<u>Total Theoretical Holding Capacity (Building SF) ²</u> <i>assumes 0.4 FAR</i>
1.	Total Available ³	1,452 Ac.	22,776,995 sf
2a.	Additional from Development Intensification (2006 - 2030)		
	<i>Total built to end of 2005</i>	1,866 Ac. ³	
	<i>Estimated Future Redevelopment of</i>	10%	187 Ac.
2b.	Incremental from Development Intensification		
	<i>Estimated Future Redevelopment at</i>	0.40 FAR	2,926,067 sf
	<i><Less> Existing Development at ⁴</i>	0.23 FAR	<u>(1,698,893 sf)</u>
	Total Incremental SF		1,227,174 sf
3.	<Less> Estimated Undevelopable/Undesireable @ of Total Available ⁵	<u>(315 Ac.)</u>	<u>(4,947,439 sf)</u>
4.	Net Useable Capacity - Adjusted	1,324 Ac.	19,056,730 sf

Notes:

¹ For the purpose of this analysis, gross acres are defined as total land acres exclusive of major access roads (but inclusive of internal roads).

² Assumes an FAR of 0.4 and net to gross acreage ratio of 90%

³ See Table III-1.

⁴ Uses average FAR from 1985 to 1994 of 0.23, assuming that most intensification will come from earlier developments. Acreage and building SF information is not available for all parcels. Thus, FAR estimates are rough approximations only.

⁵ Undevelopable/undesireable acres include land that is difficult to develop, such as wetlands, parcels with major access problems, or land not available for purchase. In addition to 20% of the total available acres, includes 25 acres from three constrained parcels in the NVCP.

**TABLE III-4.
TOTAL ADJUSTED INDUSTRIAL DEVELOPMENT CAPACITY DISTRIBUTION BY LOCATION
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

<i>Location</i>	Total Available Gross Acres ¹	% of Intensification ²	Intensification	% of Undevelopable/ Undesireable ³	Undevelopable/ Undesireable	Net Available Gross Acres
UNINCORPORATED NAPA COUNTY						
A.I.A.	876	80%	149	69%	(218)	808
Other Unincorporated Areas	0	0%	0	0%	0	0
TOTAL UNINCORPORATED NAPA COUNTY	876	80%	149	69%	(218)	808
CITY OF NAPA						
Napa Valley Corporate Park (NVCP)	65	0%	0	8%	(25)	40
Enterprise Industrial Park	23	0%	0	0%	0	23
Remainder of City	6	20%	37	0%	0	44
TOTAL CITY OF NAPA	94	20%	37	8%	(25)	106
AMERICAN CANYON						
Green Island Industrial Park (GIIP)	120	0%	0	6%	(18)	102
Remainder of City	362	0%	0	17%	(54)	308
TOTAL AMERICAN CANYON	482	0%	0	23%	(73)	409
TOTAL NAPA COUNTY ⁴	1,452	100%	187	100%	(315)	1,324

Notes:

¹ See Table III-1.

² Estimated intensification is roughly distributed according to amount of older development and likelihood of intensification (A.I.A. = approx. 80%, remainder of Napa City = approx. 20%).

³ Estimated undevelopable/undesireable acres are roughly distributed according to total available acres (A.I.A. = approx. 75%, American Canyon = approx. 25%), less 8%, or 25 acres, that are constrained in the NVCP.

⁴ Estimated intensification of 179 ac. is based on 10% of acres built to the end of 2005; 315 ac. of undevelopable/undesireable land is based on 20% of available acres, plus 25 acres from three constrained sites in the NVCP (see Table III-3).

SECTION IV. PROJECTED INDUSTRIAL LAND DEMAND

This section provides a projection of industrial land demand to 2030, based on past trends and expectations for the future. Before the projections, a brief review of the conditions with which Napa most directly competes is reviewed, recognizing that a huge share of the Napa activity is related to the local wine industry. However, another major share is local and subregional support. As a result conditions in other subregional locations are relevant.

Areas Most Directly Competitive to Napa County

The areas that most directly compete with the Napa County industrial parks are the industrial areas in the northern Bay Area and along the Sacramento/I-80 Corridor. These areas share some of the same user types with the Napa County industrial market, and are described as follows:

- In the northern Bay Area, most of the existing industrial uses are concentrated in Marin and Sonoma Counties, between Highway 101 and State Route 128/29. The Marin County industrial market is small, with a building inventory of approximately 6.4 million sq. ft. and very low vacancy levels. (Source: Keegan & Coppin County Profiles and Market Overviews.) The market is constrained by a shortage of developable land, high land values and a labor force not suitable for many industrial activities. In sum, Marin is not a significant player in the industrial land market.
- Unlike Marin County, Sonoma County has a significant industrial base, with an estimated inventory of 18 million sq. ft. in 2005. Historically, approximately 80% of the total industrial space has been in warehousing and manufacturing use, concentrated in industrial parks or areas in or near Santa Rosa, Rohnert Park and Petaluma. In the late 1990's Sonoma had notable success in its attraction of telecommunications related firms, labeling itself "Telecom Valley." Development in recent years has slowed considerably as sublease space and existing inventory still absorbs much of the demand—although most of the over-supply is concentrated primarily in the Santa Rosa Airport and Petaluma submarkets for some product types. Leasing activity has remained active and the market is still optimistic due to the diversity of the County's economy. Continued economic growth is projected across its many sectors: from food and wine industries, manufacturing, and wholesale to business services.
- Warehouse/distribution and manufacturing facilities have dominated development in the Sacramento Corridor, which extends along I-80 from Sacramento to Vallejo, Vacaville, Fairfield and Benicia in Solano County on I-680. The Solano County industrial market has an inventory of nearly 25 million sq. ft., with an estimated 2,500 acres of available vacant land ready for development, excluding Mare Island. This market is driven by Bay Area relocations, with very limited development spawned by the local market. Even though the

economic slowdown has slowed this migration, the availability of relatively affordable land has kept construction activity fairly strong in Solano County. While the Benicia/South Solano area has little land for expansion, adequate supplies for the next 8 to 10 years are available as growth moves north along I-80 to Vacaville.

- This corridor is often marketed as Biotech Corridor and has successfully attracted a number of large and smaller users, even though they may still represent a small share of overall activity.
- The industrial and business parks in Fairfield and Vacaville which have targeted manufacturing and distribution users have been successful. New office users are also being attracted to the new Green Valley Corporate Park. There is abundant land for future growth in the Fairfield and Vacaville area.
- Vallejo is an older, more established industrial market, with little remaining inventory available, with the exception of the former Mare Island Naval Shipyard. Reuse plans for the Shipyard call for a mixture of industrial, commercial, residential, recreational and educational space. Remediation of toxics leftover from its former use is expected to be completed by 2006–07. Certain sites targeted for industrial development will require substantial infrastructure. Industrial space will be provided through a mixture of existing buildings and new construction for an anticipated total of approximately 6 million sq. ft. on the island. Of this total, approximately 2 million sq. ft. have already been absorbed and are in use by over 70 companies and organizations. The remaining 4 million sq. ft. are expected to be absorbed over the period to 2015.
- On Mare Island, some existing tenants are engaged in heavy industrial work, notably storage, construction and fabrication work for the Bay Bridge and Richmond-San Rafael Bridge retrofits. Other users include a variety of boat repair, educational and governmental organizations. The sole wine-bottling, shipping and storage facility operating on Mare Island experienced a fire in late 2005. The primary objective for new industrial construction is to attract light industry or office/R&D, in order to create high-paying jobs and increase land values.
- Industrial land values have risen dramatically over the last 3 to 4 years—by as much as 50% in Sonoma County, according to Keegan & Coppin. The average rents (triple net) and land prices for counties in the North Bay are estimated as follows:

	Rent Ranges (NNN)		Est. Land Price (/SF)	
	Warehouse	Office/R&D	Warehouse	Office/R&D
Napa County	\$.40 – \$.65	\$1.10 – \$1.75	\$6 – \$9	\$8 – \$12
Solano County	\$.30 – \$.85	\$.75 – \$1.60	\$3 – \$5	N/A
Sonoma County	\$.60 – \$.85	\$1.05 – \$1.35	\$7 – \$8	\$10 – \$14
Marin County	\$.90 – \$1.50	\$1.50 – 2.20	N/A	N/A

The comparison of land prices and rent levels demonstrates that Napa continues to be less expensive on average than Sonoma and Marin, but more expensive than the Solano County corridor. Outside of averages, the high end of the range in Napa is as high or higher than Sonoma in some cases. Within the near-term, we would expect the pricing structure of Napa industrial land and building space to become more like Sonoma. Solano will always be the less-expensive alternative to Napa. Sonoma, which also has a huge wine industry, will not be less expensive but could offer capacity for wine-related industrial space if Napa capacities become constrained.

Long-Term Projection Considerations

Projections for General Plan purposes are, by definition, long-term projections. The General Plan Update time horizon is 2030, or 25 years “out.” As such, near-term fluctuations resulting from economic cycles and other factors are of less interest than longer term trends and potential conditions that can only be predicted based on an understanding of current local conditions and what has evolved elsewhere. Also, projections prepared for General Plan purposes usually look to the higher side of a probable range in order to insure planning for sufficient infrastructure that can accommodate growth.

Factors Supporting Higher Demand Levels

In selecting a projection level of industrial land acres and building construction, a range of factors are considered. Among the conditions and trends in Napa, the following conditions and changes occurring within the wine industry were considered most relevant:

- The continually increasing strength of Napa as a center of grape-growing and wine production of international stature. A very significant share of all construction activity in the South County industrial parks over the past 20 years has been wine-related in one way or another. The industry is expected to continue growing by most measures - acres planted, tons of grapes produced, gallons of wine manufactured, and most of all, value of production.
- It is understood that two major trends are in effect in the wine industry—consolidation of the larger operations which are increasingly being bought by large corporate entities, and fragmentation of the small operations as more small operations (5,000 cases or less) set up operations in Napa. It is difficult to fully predict how these two major trends will affect

demand for industrial land in the South County, but both phenomena suggest continued demand for warehouse and distribution operations in the South County.

- In addition to more warehouse and distribution operations, we expect that the non-agricultural aspects of the wine and vineyard operations, such as management offices, will continue to relocate into business parks in the South County. Opportunities to use precious building space in the vineyards for higher value hospitality functions put pressure on relocating office functions elsewhere. While office operations can be accommodated in the cities of Napa County and elsewhere, including San Francisco, abundant and efficient space in the industrial parks ought to draw a significant share of the relocated space.
- The Wine Definition Ordinance (WDO) has governed wine operations in the County since it was adopted in 1990. The only area in the County not covered by the WDO has been the A.I.A. One outcome in the late 1990's and early 2000's has been the large bottling operations for wines not grown in Napa County, capitalizing on the Napa name. While recent court decisions have limited the labeling of non-local wines, the ability to continue bottling in Napa and so stating on the label continues. It is unclear whether more large operations for bottling non-Napa grapes are likely to be drawn to Napa, but the potential clearly remains.
- The ongoing changes in the distribution of wine could result in more distribution companies operating in the South County. These companies could be related to the large operators and the consolidation process. Alternatively, the many very small producers are increasingly likely to use specialized distribution companies spawned to serve their needs.

Outside of the wine industry, other factors suggesting continued growth in the South County industrial parks are:

- The continued need for South County industrial land as a location for support for the Napa construction industry and other functions of an industrial, service and office nature. These uses are increasingly being priced out of the Highway 29 corridor and typically include owners, operators and/or employees who are also area residents. These users are typically looking for a 1,000- to 10,000-sq. ft. space and represent some of the buyers for the new office industrial/flex space condominiums being developed in some of the business parks.
- The process of gentrification in the city of Napa will drive out certain types of activities that can function in industrial parks. The pressures to move will be due to price and need for more space. Also, nuisance factors could play a role as gentrified residential areas become less tolerant of trucks and noise from nearby industrial operations.
- The Highway 29 and 221 frontage locations in the A.I.A. and elsewhere will continue to be in demand for commercial development, either local or visitor serving.
- Napa name branding opportunities for specialty foods and other life style products will continue to draw small manufacturing and other activities to the county.

Constraints

- For the most part, the County is perceived as having a restrictive regulatory environment.
- The supply of a suitable local labor force for most business and industrial park uses is limited in the County.
- Traffic congestion on the regional highways and local streets constrains the ability of businesses to attract suitable labor from neighboring counties. Were access to the counties to east and west substantially upgraded, then labor force access would be improved.
- For warehouse and distribution operations not related to Napa products, the location of Napa is seen as “off” the major transportation network and Interstate Highway system. This will constrain Napa as a warehousing center for other than local products. Other locations in the Solano I-80 corridor will continue to be preferred for operations that do not have a need to be in Napa.
- Office space suffered severe vacancy levels following the post-2000 and 2001 recession. Space that had been built to service the telecom industry spillover from Sonoma County has been particularly slow to fill, but as of the time of this writing, the space is finally becoming absorbed. The Napa Valley has been unable to establish itself as a “pure,” or higher-end, office location. Pure office activity in Napa County, including biotech and other R&D operations, has had only spotty success records. As noted in Section II, the share of activity that is termed “footloose” is very small and has been notably absent in coming to Napa over the past 10-year period.

As the Napa industrial land inventory becomes more constrained over time, land prices and rent levels will likely increase, further pricing out all except those that have a compelling reason for being in Napa. In the near-term, while land and building space are still abundant, non-local supporting users may be attracted but in the longer term, the future would appear to rest far more securely with the activities that support Napa industries.

Projection Estimates

Projection estimates of land absorption and building construction to 2030 have been prepared for General Plan analysis purposes. The projections have been prepared based on:

- Past trends of absorption and construction as presented in Section I. It is recalled that during the 1995 to 2005 period, 43 acres per year was the annual average absorption, an increase of 13% over the prior period. It is also recalled that during the early part of this period the A.I.A. was beset with legal challenges to processing permits. Then there was the post-2000 recession, which affected all of Napa South County.

- An understanding of the distribution of building types and types of businesses drawn to the industrial parks, as presented in Section II.
- An understanding of the supply conditions, including opportunities for redeveloping and reintensifying already “built” parcels.
- A review of the industrial areas in adjacent counties with which Napa competes.
- A review of major trends, changes in the wine industry, and other factors that could affect the rate of industrial land demand in Napa County.

Table IV-1 and IV-2 present a low-range and high-range set of projection figures. The higher range figure is based on slightly higher annual absorption levels. The inset tables below summarize the two sets of figures. The figures are also compared to the initial indications of capacity, without adding the capacity of major sites under consideration for alternative land uses in the EIR Alternatives analysis.

Projected Industrial Land Demand (Gross Acres) – Low Range

	Annual Absorption Earlier Years	Annual Absorption Later Years	Total Absorption	% of Capacity
Unincorporated Napa County	26 Ac.	37 Ac.	800 Ac.	100%
City of Napa	7 Ac.	2 Ac.	101 Ac.	96%
City of American Canyon	16 Ac.	15 Ac.	425 Ac.	104%
Total Napa County	49 Ac.	54 Ac.	1,326 Ac.	101%

Projected Industrial Land Demand (Gross Acres) – High Range

			Total	% of Capacity
Unincorporated Napa County	26 Ac.	40 Ac.	865 Ac.	108%
City of Napa	9 Ac.	2 Ac.	131 Ac.	125%
City of American Canyon	16 Ac.	19 Ac.	430 Ac.	105%
Allowance for Large Projects			150 Ac.	
Total Napa County	51 Ac.	61 Ac.	1,576 Ac.	120%

Special Allowance for Large Projects: The higher range projection contains a line entitled “Allowance for Large Projects” with the figure of 150 acres. This insertion is a recognition that one or more large projects of 50 acres or more could seek to locate within the county. One example would be the Beringer project which totaled over 218 acres and was entitled but is now not likely to proceed. On a slightly less ambitious scale, it is foreseeable that some user, an Upvalley winery perhaps, could seek a corporate headquarters campus or other sort of presence in the South County. The vast majority of the users currently in the South County are fewer than 10 acres in size. In both the A.I.A. and Green Island, there is a handful users in the 10- to 20-acre size range. Sutter Home in Green Island is the County’s largest at 27 acres (excluding Napa Pipe and Syar). The annual absorption figures anticipate a continuation of the

trend that the vast majority of activity will be in users of fewer than 10 acres. The allowance has been added to recognize that over the projection timeframe, one or several large users could also seek larger amounts of land that would not be accommodated within the annual absorption levels projected above.

Total Industrial Land Demand 2005 to 2030: Total demand for industrial land is calculated at 1,326 acres per the lower range assumption and 1,576 acres per the higher range assumption, or say 1,300 to 1,600 acres in more round numbers.

Projected Demand Compared to Capacity: Under the low-range scenario, the projected demand closely approximates the projected capacity and would fill up the three major subareas. Under the high-range scenario, the projected demand exceeds the projected capacity by a factor of 20%. As noted at the outset, this capacity does not take into consideration several key sites that are candidates for industrial redevelopment or development with other land uses, such as residential.

It is also recalled that the capacity estimate includes some important adjustments. The supply of land is increased by the assumption of some level of redevelopment and intensification of existing "built" parcels. The estimate used is 10% of the built parcels or 179 acres. Clearly if the land supply is depleted pressures to redevelop more of the low utilization parcels will be increased. The other adjustment is downward to recognize that not all vacant land is readily buildable for a combination of potential reasons. With more intense market pressure, developers will find solutions to correct some of the problems facing the more difficult and "challenged" parcels.

Overall, it is concluded that the industrial land demand will outstrip the industrial land inventory in the South County industrial parks by the end of the 25-year timeframe. It should be noted, however, that the future balance of industrial land supply and demand is often difficult to anticipate as the loss and/or entry of a single major tenant (i.e., Syar, Cultured Stone or the like) can easily shift the balance in an industrial market area as small as Napa. Additionally, several major properties (i.e., Hess Vineyards and Hess Environs) have not been included in the industrial inventory as they are currently zoned agricultural but actually have an Industrial General (I.G.) Plan land use designation. All or a portion of these sites could potentially be held in reserve with an Industrial designation to ensure that enough land inventory is available to meet projected demand.

TABLE IV-1.
 PROJECTED INDUSTRIAL LAND DEMAND - LOW RANGE
 NAPA COUNTY INDUSTRIAL LAND USE STUDY
 NAPA COUNTY, CA

Location	Historical Average Annual Gross Land Acres				Projected Average Annual Gross Land Acres								Projected 25-Year Total	Net Total Avail. ¹	% of Avail.		
	1985 - 1994		1995 - 2005		Proj. 2006 - 2010		Proj. 2011 - 2015		Proj. 2016 - 2020		Proj. 2021 - 2025					Proj. 2026 - 2030	
	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.				% Tot.	% Tot.
UNINCORPORATED NAPA COUNTY																	
A.I.A.	14	37%	23	52%	26	53%	29	54%	32	60%	36	65%	37	69%	800	808	99%
Other Unincorporated Areas	NA	NA	NA	NA	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
TOTAL UNINCORPORATED NAPA COUNTY	14	37%	23	52%	26	53%	29	54%	32	60%	36	65%	37	69%	800	808	99%
CITY OF NAPA																	
Napa Valley Corporate Park (NVCP)	10	28%	7	15%	4	8%	3	6%	1	2%	0	0%	0	0%	40	40	100%
Enterprise Industrial Park	3	9%	1	2%	2	4%	2	4%	1	1%	0	0%	0	0%	23	23	99%
Remainder of City	3	8%	1	2%	1	1%	1	2%	2	4%	2	4%	2	4%	38	44	87%
TOTAL CITY OF NAPA	16	44%	8	19%	7	14%	6	11%	4	7%	2	4%	2	4%	101	106	95%
AMERICAN CANYON																	
Green Island Industrial Park (GIIP) ²	7	19%	12	28%	8	16%	7	13%	6	11%	3	5%	1	2%	125	102	123%
Remainder of City ³	NA	NA	NA	NA	8	16%	12	22%	12	22%	14	25%	14	26%	300	308	98%
TOTAL AMERICAN CANYON	7	19%	12	28%	16	33%	19	35%	18	34%	17	31%	15	28%	425	409	104%
TOTAL NAPA COUNTY	38	100%	43	100%	49	100%	54	100%	54	100%	55	100%	54	100%	1,326	1,324	100%

Notes:

- ¹ Net available acres have been adjusted for estimated intensification (179 acres) and loss of undevelopable/undesireable land (315 acres) per tables III-3 and III-4.
- ² The City of American Canyon's November 2005 Pending and Potential Projects list includes projects on 53 acres in the GIIP. It is assumed that 75% of these acres, or 8 acres per year, will be completed from 2006 - 2010. After this, it is estimated that absorption of demand will taper off as availability becomes constrained.
- ³ The City of American Canyon's November 2005 Approved Project Status Report and Pending and Potential Projects list include approved projects on 19 acres and a project under discussion on 5 acres. It is assumed that projects will continue to be approved from 2006 - 2010, with slightly less than half of those approved, or 8 acres, completed each year. Demand is estimated to continue to increase until 2021 - 2025, after which it may stabilize as availability becomes constrained.

**TABLE IV-2.
PROJECTED INDUSTRIAL LAND DEMAND - HIGH RANGE
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

Location	Historical Average Annual Gross Land Acres				Projected Average Annual Gross Land Acres								Projected 25-Year Total	Net Total Avail. ¹	% of Avail.		
	1985 - 1994		1995 - 2005		Proj. 2006 - 2010		Proj. 2011 - 2015		Proj. 2016 - 2020		Proj. 2021 - 2025					Proj. 2026 - 2030	
	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.	% Tot.				% Tot.	% Tot.
UNINCORPORATED NAPA COUNTY																	
A.I.A.	14	37%	23	52%	26	51%	31	56%	36	63%	40	66%	40	66%	865	808	107%
Other Unincorporated Areas	NA	NA	NA	NA	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
TOTAL UNINCORPORATED NAPA COUNTY	14	37%	23	52%	26	51%	31	56%	36	63%	40	66%	40	66%	865	808	107%
CITY OF NAPA																	
Napa Valley Corporate Park (NVCP)	10	28%	7	15%	6	12%	4	7%	3	5%	0	0%	0	0%	65	40	164%
Enterprise Industrial Park	3	9%	1	2%	2	4%	2	4%	1	1%	0	0%	0	0%	23	23	99%
Remainder of City	3	8%	1	2%	1	1%	2	4%	2	3%	2	3%	2	3%	43	44	99%
TOTAL CITY OF NAPA	16	44%	8	19%	9	17%	8	15%	6	10%	2	3%	2	3%	131	106	123%
AMERICAN CANYON																	
Green Island Industrial Park (GIIP) ²	7	19%	12	28%	8	16%	6	11%	3	5%	3	5%	1	2%	105	102	103%
Remainder of City ³	NA	NA	NA	NA	8	16%	10	18%	13	23%	16	26%	18	30%	325	308	106%
TOTAL AMERICAN CANYON	7	19%	12	28%	16	32%	16	29%	16	28%	19	31%	19	31%	430	409	105%
TOTAL NAPA COUNTY	38	100%	43	100%	51	100%	55	100%	58	100%	61	100%	61	100%	1,426	1,324	108%
ALLOWANCE FOR VERY LARGE PROJECTS (> 50 Acres) - 2-3 estimated over the 25-year period															150	0	NA
TOTAL INCLUDING VERY LARGE PROJECTS															1,576	1,324	119%

Notes:

¹ Net available acres have been adjusted for estimated intensification (179 acres) and loss of undevelopable/undesireable land (315 acres) per tables III-3 and III-4.

² The City of American Canyon's November 2005 Pending and Potential Projects list includes projects on 53 acres in the GIIP. It is assumed that 75% of these acres, or 8 acres per year, will be completed from 2006 - 2010. After this, it is estimated that absorption of demand will taper off as availability becomes constrained.

³ The City of American Canyon's November 2005 Approved Project Status Report and Pending and Potential Projects list include approved projects on 19 acres and a project under discussion on 5 acres. It is assumed that projects will continue to be approved from 2006 - 2010, with slightly less than half of those approved, or 8 acres, completed each year. Demand is estimated to continue to increase through 2026 - 2030.

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SECTION V. EIR ALTERNATIVES

A major purpose of the study of industrial land demand and supply is to provide a framework for understanding the adequacy of industrial land under varying General Plan Environmental Impact Report (EIR) scenario assumptions. This section provides a brief description of the scenarios and the major sites that have alternative development programs or land use build-out, depending on the scenario concept.

The County initiated the General Plan update process and received public input in the selection and description of the scenarios. Originally, eight alternative scenarios were identified, a number that was reduced to five as a result of the public process. Working with staff, eleven sites or generic site areas were identified as potentially accommodating differing development programs, depending on the scenario concept.

Alternatives Concepts

The concepts behind the alternatives as articulated by the County are:

Alternative A. *Existing Plan*

- *Policy and Regulatory:* Alternative A would update the existing General Plan without substantive policy changes, except that planned expansions in highway capacity would not occur. There would be no changes to agricultural or industrial areas, to the Winery Definition Ordinance, or to the Conservation Regulations. No new sites would be made available for affordable or workforce housing.
- *Development Implications:* Slow housing and employment growth would continue principally within existing urban areas. This alternative would result in continued reliance on incorporated cities to meet the County's housing needs.

Alternative B. *Plan Update*

- *Policy and Regulatory:* This alternative would modify the existing General Plan and implementing ordinances by redesignating selected industrial sites for residential use and commercial mixed use. Several sites with land that is currently in industrial designation, but being used for agriculture or vacant, would be redesignated for agricultural use. Consistent with the City of Napa's General Plan, the County would support increased residential density within downtown Napa. Incentives would be offered for on-site farm worker housing.
- *Development Implications:* Housing and employment growth would occur within areas redesignated from industrial to residential or commercial mixed use in addition to existing urban areas, with the goal of maintaining a reasonable balance in the growth of

jobs and housing in the County. The alternative would see a net increase in agricultural land.

Alternative C. Plan Update with Residential Emphasis

- *Policy and Regulatory:* Alternative C would include the same changes as the Plan Update Alternative (Alternative B), except that more sites would be designated for residential use and at higher residential densities to produce more units. The alternative also includes incentives for the reuse of historic buildings in agricultural areas such as Pope Valley, and the adjustment of urban boundaries to match zoning and uses in Angwin.
- *Development Implications:* Substantial residential growth would occur in unincorporated County areas, along with less employment growth since sites will be used for residential rather than job producing land uses. There would be also a modest increase in the amount of land designated for agricultural use.

Alternative D. Resource Preservation Emphasis

- *Policy and Regulatory:* In Alternative D, the existing General Plan and implementing ordinances would be modified to prohibit new parcel splits (probably by increasing minimum parcel sizes) and preserve existing land uses within unincorporated Napa County. As in alternatives B and C, certain industrially-designated lands now in agriculture or vacant would be re-designated as agricultural. The Agriculture, Watershed & Open Space (AWOS) district would be split into an AOS district and a WOS district, the latter of which would include areas where policies would be developed to achieve greater forest protection, riparian habitat preservation, and water quality improvements than under the current plan.
- *Development Implications:* Little new development would occur and major infrastructure improvements would not be feasible due to lack of growth and fiscal resources.

Alternative E. Infrastructure and Development

- *Policy and Regulatory:* This alternative would include enhanced transportation improvements including redesigning Highway 29 around St. Helena and Calistoga and extending Flosden/Newell to South Kelly Road. In addition, this concept envisions ferry and light rail service between Vallejo and Napa, and potentially between Fairfield and Napa if feasible. Residential uses would be permitted on certain sites that are currently industrial, and a mix of commercial uses appropriate for a conference facility and the possible relocation of the Expo Center could be accommodated on one of the available sites. This alternative would also permit increased residential development in hillside areas. Potential policy changes could include smaller minimum parcel sizes for wineries and residences and expansions of sewer and water infrastructure. Increased residential

densities in downtown Napa would be encouraged, as in Alternatives B and C, as well as on the Expo site, which would be available if the current uses are relocated.

- *Development Implications:* Substantial residential and job growth would occur, including industrial development on sites that are currently used for agriculture or are vacant, but have an industrial land use designation. This alternative allows for the highest level of overall development in Napa County over the next 25 years and would both require and support the highest level of infrastructure development.

Sites with Alternative Development Potential

The following eleven sites or generic site areas (such as vineyards) were identified by County staff and its team of consultants. The County staff, with its team, also identified the land uses and conceptual development programs for each of the sites or site areas. KMA provided input to assist in formulating the development programs, such as magnitude of development, mix of uses, and FAR or density ranges. The KMA input for industrial uses was based on the tasks summarized in Sections I through IV of this report. KMA input for other uses was based on experience in Napa and similar planning programs elsewhere.

Napa Pipe

This site contains 150 acres between the Napa River and Highway 221, just north of Highway 29. Since the recent closure of Napa Pipe, the area continues in interim, low-investment, industrial uses until a future land use designation is determined. The property is primarily used for storage, lay down, and manufacturing activities that require large amounts of outdoor space. Businesses in operation include Transbay Steel, which produces supports for the reconstruction of the Bay Bridge, and Cultured Stone, a manufacturer of stone-like products for residential and commercial exteriors. Due to the nature of the activities on the site, there are currently only about 150 employees, according to County staff estimates.

Given the size, central location at the junction of several major Napa County highways and along the Napa River, the proximity of the Napa Airport and the flatness of the site, Napa Pipe could readily be developed into a variety of other higher value uses. Alternative scenarios range from more intense industrial activities — contemplated in Alternatives A and D — to mixed commercial (Alternative B) to residential (Alternative C). The site could accommodate a conference center and relocation of the Expo Center, with meeting facilities, hotels, and commercial space in Alternative E.

Site constraints include restrictions on portions that are within the flight zone of Napa County Airport. In addition, there is possible need for site clean-up after decades of heavy industrial use. Flooding could be an issue that would require mitigation for development to occur.

Pacific Coast/BOCA

This area consists of approximately 80 industrial acres on the east side of the Napa-Vallejo Highway (Highway 221), across from Napa Pipe. Pacific Coast/BOCA contains several aging manufacturing/distribution buildings as well as large outdoor areas. It is fairly under-utilized, with few buildings and low activity levels. Approximately 50 workers are estimated to be currently employed on the site, according to County staff.

Pacific Coast/BOCA has good access and visibility from Highway 221, and has a prominent location at the southern entrance to the city of Napa. The site could be reused for more intense business park industrial development with an emphasis on Office/R&D, as in Alternatives A and D, or for residential mixed-use, as in Alternatives B, C, and E. Given the highway frontage, Alternatives B and C also assume potential for the development of a neighborhood or community commercial center. Like Napa Pipe, the site may be contaminated and require clean-up. In addition, if surrounding industrial uses remain in place, a buffer zone would be needed to accommodate residential development.

Hess Vineyard

The Hess Vineyard site is located on the east side of Highway 29, north of the city of American Canyon and diagonally across from Green Island Industrial Park. The 230-acre site has an Industrial GP designation, but is zoned agricultural and is in use as a vineyard. It would be a candidate for development within the planning timeframe (to year 2030) if existing zoning remains in place, given its size, location, proximity to existing development, lack of “dirty” uses, and lack of topographical constraints. Many options for future development are possible given the site’s amenities. Alternative E envisions an industrial/business park.

The current agricultural use offers a green space between American Canyon and Napa City, and presents a vineyard entry statement at the “gateway” to the Napa Valley. Alternatives A, B, C, and D maintain the property in agricultural use.

Hess Environs

Hess Environs refers to a series of parcels in the vicinity of the Hess Vineyard site, also east of Highway 29. These parcels combine to a total of approximately 150 acres, excluding the two existing golf courses, Eagle Vines and Chardonnay. The parcels are generally in agricultural use, or contain small ranchettes. Some are vacant. This area is well located along the highway, with visibility and accessibility, like the Hess Vineyard. It is bordered by existing development, does not contain significant structures or topographic issues, and would be capable of accommodating a range of higher value uses. As with the Hess Vineyard site, Alternatives A through D assume the Hess Environs parcels remain under current uses, and Alternative E contemplates an industrial/business park.

Angwin, Other “Bubbles” and Agricultural Areas

Angwin is a relatively-large area that could accommodate resident development. In addition, there is land throughout the County’s unincorporated areas that would permit residential development under the different EIR scenarios. These site areas include parcels in the vicinity of the community of Angwin, east of Highway 29 on Howell Mountain, and similar unincorporated but urbanized areas, as well as locations distributed in the agricultural zones. Although total land in these areas is 410 acres, 5,700 acres, and 475,000 acres respectively, only a few scattered sites are identified by the County as candidates for consideration of future development. All of the alternatives anticipate residential growth in these areas, with the most new units appearing in Alternatives C and E, and the fewest in Alternative D.

Airport Industrial Area

The Airport Industrial Area (A.I.A.) consists of existing industrial/business parks and extensive undeveloped parcels in the unincorporated County lands near the Napa Airport. The total area encompasses approximately 1,600 acres, of which about 800 are available for development (see Section III). All alternative scenarios anticipate the same continued industrial build-out of the area, based on the County policy and the market demand projections summarized in Sections I through IV of this report. Good sites for industrial uses will become constrained toward the end of the General Plan period as more desirable parcels are built on, particularly if other industrial land options are precluded by non-industrial use alternatives.

County Sites within the City of Napa

The County of Napa owns or controls several sites within Napa City, including the County Administrative Complex and corporation yard. These sites contain a variety of uses including existing office buildings and open storage areas. In anticipation of the two jurisdictions working together to further their objectives, some Alternatives (B, C, and E) envision residential redevelopment of these County sites.

Wineries and Vineyards

While specific sites were not analyzed for potential winery or vineyard development, there is land to accommodate more wineries and vineyards if needed. For EIR purposes and based on past experience, the County estimates that a total of approximately nine wineries could potentially be developed per year for all the Alternatives over the next 25 years, or a total of 225 over the course of the General Plan period. Under this assumption, land in use as vineyards could grow by 25%, or by 11,250 acres, in addition to the 45,000 vineyard acres currently planted, as envisioned in Alternative E.

The alternative EIR concepts described above, together with the identification and analysis of potential development sites, provide the basis for evaluation of the adequacy of industrial land, as discussed in the following sections.

SECTION VI. EIR ALTERNATIVES DEVELOPMENT ASSUMPTIONS

In order to analyze the Napa County General Plan EIR scenarios, KMA organized the alternatives and sites in the matrix shown in Table VI-1, presented in five pages. A development program was articulated for each individual site and each scenario.

The major assumptions and procedures used in the identification of development programs are described below. Further details are elaborated in extensive footnotes following the tables.

- *Gross versus Net Acres.* For industrial and/or commercial uses, site areas were expressed in gross acres. It was then assumed that 10% of the site would be utilized for major circulation and infrastructure, reducing buildable land area to 90% of the total available land. The ratio of net to gross for residential was not fixed, but depends on the site and scenario. In some (e.g. Napa Pipe in Alternative C, which would be affected by airport flight paths and need buffers from industrial uses), net buildable acres could be as little as 50% of total available land.
- *Industrial Land Use Distribution.* Non-residential land was distributed by building type depending on the Alternative Scenario concept. Four alternative mixes of land use and building type were identified and applied to the Alternatives as indicated below.

Acreage in each site was allocated to Manufacturing, Warehouse, Office/R&D, Retail and Other uses. Alternative E added Expo and Conference Center uses which include Commercial and Hotel. The "Other" category covers wineries and vineyards. Consistent with the concept and the unique characteristics of each site, the distributions were applied as follows:

	1 (All Alts: A.I.A.; Alt E: Hess Vineyard, Hess Environs)	2 (Alt A: Napa Pipe, Pacific Coast/BOCA; Alt D: Pacific Coast/BOCA)	3 (Alt B: Napa Pipe)	4 (Alt D: Napa Pipe)
Manufacturing	15%	30%	25%	25%
Warehouse	70%	45%	20%	75%
Office/R&D	15%	25%	55%	0%

The first distribution reflects the existing land use mix in the A.I.A., which is expected to continue on the Hess sites. Distribution 2 is adjusted to be more reflective of the Napa Valley Corporate Park and extension of Napa City in Alternatives A and D. Distribution 3 is further adjusted to allow a commercial mixed-use business park in Alternative B. Distribution 4 reflects a building mix for a large distribution and warehousing complex.

- *Intensity, Density, and Development.* Floor area ratios, or FARs, measure the relationship of building area to site area. FARs vary by land use and building type, as presented previously. As presented in Sections I through IV, FARs in the industrial areas

are expected to continue intensifying from the low current level in the A.I.A. to more traditional industrial park densities, and closer to those permitted under current zoning. The FARs used to identify the development programs are 0.30:1 for Manufacturing, 0.45:1 for Warehouse, 0.30:1 for Office/R&D, and 0.25:1 for Retail. (The FAR multiplied by net site area produces the total non-residential building development on a site.)

Working with County staff, dwelling unit concepts and counts for the residential sites were identified for EIR analysis purposes. For EIR evaluation, it is customary to run high or “worst case scenario” numbers to test infrastructure capacities. As such, it is important to recognize that some residential densities or number of units may overstate market realities or what the County might ultimately find to be appropriate for the sites. In addition, the development program assumptions for each Alternative on some sites have been formulated without the benefit of “on the ground” site planning which could alter conclusions about net developable area.

Employment Densities and Household Size. The building square footages and dwelling units determined above were translated to jobs and population. Two different sets of employment densities, generally measured by square feet of building area per employee, were used, as follows:

	Napa Historical Development Density	Higher Density/Urbanized
Manufacturing	900 SF/employee	not applicable
Warehouse	4,000 SF/employee	not applicable
Office/R&D	500 SF/employee	400 SF/employee
Retail	500 SF/employee	350 SF/employee
Hotel/Time Share	not applicable	1.2 employees per room
Expo Center	not applicable	35 employees
Wineries	5 employees per winery	not applicable
Vineyards	.067 employee per acre	not applicable

The Napa historical employment densities are based on past work on Napa industrial areas by KMA. The 2004 analysis particularly focused on the employment density of very large warehouse operations in Napa. All Napa historical densities are below typical urban averages. For the higher-density or more urbanized EIR scenario concepts, KMA estimates for employment densities were based on experience in comparable Bay Area business parks and conference/meeting facilities.

Dwelling units were converted to population based on data from U.S. Census 2000 and ABAG. Two different factors were used in the conversion process. First, an occupancy/vacancy factor was applied, based on U.S. Census findings. In urban Napa County areas, a typical vacancy level of 4% was determined. However, in the rural county areas, the Census found vacancy levels to be far higher, at 15%, as a result of

the second-home status of many units. For population per occupied household, the ABAG Projections 2005 estimates at 2.57 persons per household in 2030 was used.

Again, the matrix presented in the five-page Table VI-1 summarizes the development program assumptions, jobs, dwelling units, and population for each of the eleven sites or site areas. Extensive footnotes provide additional detail.

Tables VI-2 and VI-3 present the same information organized in a different manner. Table VI-2 lines up the summary figures on one page for jobs and on another page for residential units and population. Table VI-3 presents the totals by square foot area of various building types, complete with percentage composition adding across to total 100%. These tables were developed for use as tools for understanding how the totals are driven by the assumptions in the individual scenarios.

TABLE VI-1
GENERAL PLAN EIR ALTERNATIVES -
DEVELOPMENT PROGRAM ASSUMPTIONS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA

	Assumptions	A. Existing Plan Alternative						Total Non-Res.	Total Res.
		Manu.	Warehse	Office/R&D	Retail	Other			
Napa Pipe 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 45 ac. 529,000 s.f. 588 jobs 3, 4	0.45 FAR 68 ac. 1,191,000 s.f. 298 jobs 3, 4	0.30 FAR 38 ac. 441,000 s.f. 1,103 jobs 3, 5	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	150 ac. 2,161,000 s.f. 1,988 jobs (150) jobs 1,838 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Pacific Coast/BOCA ⁹ 80 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 24 ac. 282,000 s.f. 313 jobs 3, 4	0.45 FAR 36 ac. 635,000 s.f. 159 jobs 3, 4	0.30 FAR 20 ac. 235,000 s.f. 588 jobs 3, 5	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	80 ac. 1,152,000 s.f. 1,060 jobs (50) jobs 1,010 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Hess Vineyard ¹⁰ 230 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Hess Environs/ Industrial Zoning ¹² 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Angwin Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	400 du 987 pers.	
Other Bubbles Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	1,268 du 2,782 pers.	
Ag Areas Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	567 du 1,244 pers.	
A.I.A. ^{14, 11} 800 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 120 ac. 1,411,000 s.f. 1,568 jobs ₄	0.45 FAR 560 ac. 9,879,000 s.f. 2,470 jobs ₄	0.30 FAR 120 ac. 1,411,000 s.f. 2,822 jobs ₄	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	800 ac. 12,701,000 s.f. 6,860 jobs	0 du/ac 0 ac. 0 du 0 pers.	
City of Napa ¹⁵ Acres Not Avail.	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Wineries ¹⁶ Acres Not Avail.	Growth/Year New Wineries Jobs/Population ²					9/Yr. 225 wineries 1,125 jobs ₄	225 wineries 1,125 jobs		
Vineyards ¹⁷ 11,250 Acres	Site Area ¹ Jobs/Population ²					0 ac. 0 jobs ₄	0 ac. 0 jobs		
TOTAL	Built Area/Units Jobs/Pop'n Gross ac. used of 1,410 avail. (excl. vineyds)	2,222,000 s.f. 2,469 jobs	11,705,000 s.f. 2,926 jobs	2,087,000 s.f. 4,512 jobs	0 s.f. 0 jobs	0 s.f. 1,125 jobs	16,014,000 s.f. 10,832 jobs 1,030 ac.	2,235 du 5,013 pers.	

TABLE VI-1
GENERAL PLAN EIR ALTERNATIVES -
DEVELOPMENT PROGRAM ASSUMPTIONS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA

	Assumptions	B. Plan Update Alternative						
		Manu.	Warehse	Office/R&D	Retail	Other	Total Non-Res.	Total Res.
Napa Pipe 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 34 ac. 397,000 s.f. 441 jobs 6, 4	0.45 FAR 27 ac. 476,000 s.f. 119 jobs	0.30 FAR 74 ac. 873,000 s.f. 2,183 jobs 6, 5	0.25 FAR incl. in res. 50,000 s.f. 143 jobs 5	0 ac. 0 ac. 0 jobs	135 ac. 1,796,000 s.f. 2,885 jobs (150) jobs 2,735 jobs	50 du/ac 14 ac. 700 du 1,727 pers.
Pacific Coast/BOCA ⁹ 80 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 3 ac. 39,000 s.f. 98 jobs 5	0.25 FAR 10 ac. 100,000 s.f. 286 jobs 5	0 ac. 0 s.f. 0 jobs	14 ac. 139,000 s.f. 383 jobs (50) jobs 333 jobs	10 du/ac 48 ac. 500 du 1,234 pers.
Hess Vineyard ¹⁰ 230 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.
Hess Environs/ Industrial Zoning ¹² 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.
Angwin Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	400 du 987 pers.
Other Bubbles Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	1,268 du 2,782 pers.
Ag Areas Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	767 du 1,683 pers.
A.I.A. ^{14, 11} 800 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 120 ac. 1,411,000 s.f. 1,568 jobs 4	0.45 FAR 560 ac. 9,879,000 s.f. 2,470 jobs 4	0.30 FAR 120 ac. 1,411,000 s.f. 2,822 jobs 4	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	800 ac. 12,701,000 s.f. 6,860 jobs	0 du/ac 0 ac. 0 du 0 pers.
City of Napa ¹⁵ Acres Not Avail.	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	250 du 617 pers.
Wineries ¹⁶ Acres Not Avail.	Growth/Year New Wineries Jobs/Population ²					9/Yr. 225 wineries 1,125 jobs 4	225 wineries 1,125 jobs	
Vineyards ¹⁷ 11,250 Acres	Site Area ¹ Jobs/Population ²					0 ac. 0 jobs 4	0 ac. 0 jobs	
TOTAL	Built Area/Units Jobs/Pop'n Gross ac. used of 1,410 avail. (excl. vineyds)	1,808,000 s.f. 2,009 jobs	10,355,000 s.f. 2,589 jobs	2,323,000 s.f. 5,102 jobs	150,000 s.f. 429 jobs	0 s.f. 1,125 jobs	14,636,000 s.f. 11,053 jobs 1,030 ac.	3,885 du 9,029 pers.

TABLE VI-1
GENERAL PLAN EIR ALTERNATIVES -
DEVELOPMENT PROGRAM ASSUMPTIONS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA

	Assumptions	C. Plan Update Alternative 2						Total Non-Res.	Total Res.
		Manu.	Warehse	Office/R&D	Retail	Other			
Napa Pipe 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR incl. in res. 50,000 s.f. 150 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 50,000 s.f. 150 jobs (150) jobs 0 jobs	40 du/ac 80 ac. 3,200 du 7,895 pers.	
Pacific Coast/BOCA ⁹ 80 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 3 ac. 39,000 s.f. 98 jobs	0.25 FAR 10 ac. 200,000 s.f. 571 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	14 ac. 14 ac. 239,000 s.f. 669 jobs (50) jobs 619 jobs	10 du/ac 48 ac. 500 du 1,234 pers.	
Hess Vineyard ¹⁰ 230 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Hess Environs/ Industrial Zoning ¹² 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Angwin Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	600 du 1,480 pers.	
Other Bubbles Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	1,768 du 3,879 pers.	
Ag Areas Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	1,067 du 2,341 pers.	
A.I.A. ^{14, 11} 800 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 120 ac. 1,411,000 s.f. 1,568 jobs	0.45 FAR 560 ac. 9,879,000 s.f. 2,470 jobs	0.30 FAR 120 ac. 1,411,000 s.f. 2,822 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	800 ac. 800 ac. 12,701,000 s.f. 6,860 jobs	0 du/ac 0 ac. 0 du 0 pers.	
City of Napa ¹⁵ Acres Not Avail.	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	500 du 1,234 pers.	
Wineries ¹⁶ Acres Not Avail.	Growth/Year New Wineries Jobs/Population ²					9/Yr. 225 wineries 1,125 jobs	225 wineries 1,125 jobs		
Vineyards ¹⁷ 11,250 Acres	Site Area ¹ Jobs/Population ²					0 ac. 0 jobs	0 ac. 0 jobs		
TOTAL	Built Area/Units Jobs/Pop'n Gross ac. used of 1,410 avail. (excl. vineyds)	1,411,000 s.f. 1,568 jobs	9,879,000 s.f. 2,470 jobs	1,450,000 s.f. 2,920 jobs	250,000 s.f. 721 jobs	0 s.f. 1,125 jobs	12,990,000 s.f. 8,603 jobs 980 ac.	7,635 du 18,063 pers.	

TABLE VI-1
GENERAL PLAN EIR ALTERNATIVES -
DEVELOPMENT PROGRAM ASSUMPTIONS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA

	Assumptions	D. Resource Preservation Alternative						Total Non-Res.	Total Res.
		Manu.	Warehse	Office/R&D	Retail	Other			
Napa Pipe 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 38 ac. 441,000 s.f. 490 jobs 7,4	0.45 FAR 113 ac. 1,985,000 s.f. 496 jobs 7,4	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	150 ac. 2,426,000 s.f. 986 jobs (150) jobs 836 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Pacific Coast/BOCA ⁹ 80 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 24 ac. 282,000 s.f. 313 jobs 3,4	0.45 FAR 36 ac. 635,000 s.f. 159 jobs 3,4	0.30 FAR 20 ac. 235,000 s.f. 470 jobs 3,4	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	80 ac. 1,152,000 s.f. 942 jobs (50) jobs 892 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Hess Vineyard ¹⁰ 230 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Hess Environs/ Industrial Zoning ¹² 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Angwin Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	400 du 987 pers.	
Other Bubbles Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	1,268 du 2,782 pers.	
Ag Areas Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	283 du 621 pers.	
A.I.A. ^{14, 11} 800 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 120 ac. 1,411,000 s.f. 1,568 jobs ₄	0.45 FAR 560 ac. 9,879,000 s.f. 2,470 jobs ₄	0.30 FAR 120 ac. 1,411,000 s.f. 2,822 jobs ₄	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	800 ac. 12,701,000 s.f. 6,860 jobs	0 du/ac 0 ac. 0 du 0 pers.	
City of Napa ¹⁵ Acres Not Avail.	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 ac. 0 ac. 0 s.f. 0 jobs	0 du/ac 0 ac. 0 du 0 pers.	
Wineries ¹⁶ Acres Not Avail.	Growth/Year New Wineries Jobs/Population ²					9/Yr. 225 wineries 1,125 jobs ₄	225 wineries 1,125 jobs		
Vineyards ¹⁷ 11,250 Acres	Site Area ¹ Jobs/Population ²					0 ac. 0 jobs ₄	0 ac. 0 jobs		
TOTAL	Built Area/Units Jobs/Pop'n Gross ac. used of 1,410 avail. (excl. vineyds)	2,134,000 s.f. 2,371 jobs	12,499,000 s.f. 3,125 jobs	1,646,000 s.f. 3,292 jobs	0 s.f. 0 jobs	0 s.f. 1,125 jobs	16,279,000 s.f. 9,713 jobs 1,030 ac.	1,951 du 4,390 pers.	

TABLE VI-1
GENERAL PLAN EIR ALTERNATIVES -
DEVELOPMENT PROGRAM ASSUMPTIONS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA

	Assumptions	E. Infrastructure & Development Alternative								Total Non-Res.	Total Res.
		Manu.	Warehse	Office/R&D	Retail	Expo Center	Conf. Center	Other			
Napa Pipe 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.29 FAR 50 ac. 625,000 s.f. 1,563 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	35 ac. 75,000 s.f. 35 jobs	65 ac. 500 rm 600 jobs	0 ac. 0 s.f. 0 jobs	150 ac. 700,000 s.f. 2,198 jobs (150) jobs 2,048 jobs	0 du/ac 0 ac. 0 du 0 pers.	
				8, 5		8, 5	8, 5				
Pacific Coast/BOCA ⁹ 80 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 3 ac. 39,000 s.f. 98 jobs	0.25 FAR 10 ac. 100,000 s.f. 286 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 rm 0 jobs	0 ac. 0 s.f. 0 jobs	14 ac. 139,000 s.f. 383 jobs (50) jobs 333 jobs	21 du/ac 48 ac. 1,000 du 2,467 pers.	
				5	5						
Hess Vineyard ¹⁰ 230 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 35 ac. 406,000 s.f. 451 jobs	0.45 FAR 161 ac. 2,840,000 s.f. 710 jobs	0.30 FAR 35 ac. 406,000 s.f. 812 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 rm 0 jobs	0 ac. 0 s.f. 0 jobs	230 ac. 3,652,000 s.f. 1,973 jobs	0 du/ac 0 ac. 0 du 0 pers.	
		11, 4	11, 4	11, 4							
Hess Environs/ Industrial Zoning ¹² 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 23 ac. 265,000 s.f. 294 jobs	0.45 FAR 105 ac. 1,852,000 s.f. 463 jobs	0.30 FAR 23 ac. 265,000 s.f. 530 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 rm 0 jobs	0 ac. 0 s.f. 0 jobs	150 ac. 2,382,000 s.f. 1,287 jobs	0 du/ac 0 ac. 0 du 0 pers.	
		11, 4	11, 4	11, 4							
Angwin Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 rm 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	1,000 du 2,467 pers.	
Other Bubbles Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 rm 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	1,268 du 2,782 pers.	
Ag Areas Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 rm 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	2,567 du 5,632 pers.	
A.I.A. ^{14,11} 800 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 120 ac. 1,411,000 s.f. 1,568 jobs	0.45 FAR 560 ac. 9,879,000 s.f. 2,470 jobs	0.30 FAR 120 ac. 1,411,000 s.f. 2,822 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 rm 0 jobs	0 ac. 0 s.f. 0 jobs	800 ac. 12,701,000 s.f. 6,860 jobs	0 du/ac 0 ac. 0 du 0 pers.	
		4	4	4							
City of Napa ¹⁵ Acres Not Avail.	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.45 FAR 0 ac. 0 s.f. 0 jobs	0.30 FAR 0 ac. 0 s.f. 0 jobs	0.25 FAR 0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 rm 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	700 du 1,727 pers.	
Wineries ¹⁶ Acres Not Avail.	Growth/Year New Wineries Jobs/Population ²							9/Yr. 225 wineries 1,125 jobs	225 wineries 1,125 jobs		
Vineyards ¹⁷ 11,250 Acres	Site Area ¹ Jobs/Population ²							11,250 ac. 750 jobs	11,250 ac. 750 jobs		
TOTAL	Built Area/Units Jobs/Pop'n Gross ac. used of 1,410 avail. (excl. vineyds)	2,082,000 s.f. 2,313 jobs	14,571,000 s.f. 3,643 jobs	2,746,000 s.f. 5,824 jobs	100,000 s.f. 286 jobs	75,000 s.f. 35 jobs	500 rm 600 jobs	0 s.f. 1,875 jobs	19,574,000 s.f. 14,376 jobs 1,410 ac.	6,535 du 15,075 pers.	

**TABLE VI-1
GENERAL PLAN EIR ALTERNATIVES -
DEVELOPMENT PROGRAM ASSUMPTIONS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

Notes:

- ¹ Non-residential site areas are listed in gross acres; residential site areas in net acres.
- ² Population based on persons per household, occupancy, and ratio of total versus household population:

Persons/household (ABAG projections) =	2.57
Occupancy rate in urbanized areas (U.S. Census 2000) =	96%
Occupancy rate in outlying/rural areas (U.S. Census 2000) =	85%
- ³ Assumes a blend of A.I.A. and City business park user mix, i.e., 30% Manufacturing, 45% Warehouse, and 25% Office/R&D. Net to gross at 90%.
- ⁴ Jobs in areas expected to have traditional development densities based on employment ratios as follows:

Manufacturing	900 SF/Emp. ,	as estimated in KMA's 2004 Jobs/Housing Analysis for A.I.A.
Warehouse	4,000 SF/Emp. ,	as estimated in KMA's 2004 Jobs/Housing Analysis for A.I.A.
Office/R&D	500 SF/Emp. ,	as estimated in KMA's 2004 Jobs/Housing Analysis for A.I.A.
Comm./Other	500 SF/Emp. ,	as estimated in KMA's 2004 Jobs/Housing Analysis for A.I.A.
Jobs/Winery	5 Emp./Winery ,	per County staff.
Jobs/Vineyd-Ac.	0.067 Emp./Ac. ,	per MKF Research's Economic Impact of California Wine 2004.
- ⁵ Jobs in higher density/urban configurations and expo/conference center based on employment ratios as follows:

Office/R&D	400 SF/Emp. ,	per KMA estimate.
Comm./Other	350 SF/Emp. ,	per KMA estimate.
Hotel/Time Sh.	1.2 Emp./Rm. ,	per KMA estimate.
Expo Center	35 Emp. ,	per KMA estimate.
- ⁶ Assumes 25% Manufacturing, 20% Warehouse, and 55% Office/R&D, with some live/work units and retail on 10% of the available land. Net to gross @ 90%.
- ⁷ Assumes the majority of industrial acres in warehousing (75%) and the remainder in manufacturing (25%). Net to gross @ 90%.
- ⁸ In Alternative E, the Napa Pipe site is projected to develop as a conference center with hotel, time share, recreation, and office/retail; and a new home for the Expo Center.
- ⁹ Pacific Coast/BOCA site is 80 gross acres/100% developable for industrial with net to gross at 90%; 60 net acres with 80% residential and 20% buffer commercial in the non-industrial scenarios, per Napa County staff.
- ¹⁰ Assumes 230 industrially-zoned acres, per County staff.
- ¹¹ Assumes Napa County A.I.A. mix of users, i.e., 15% Manufacturing, 70% Warehouse, and 15% Office/R&D. Net to gross @ 90%.
- ¹² Assumes 150 industrially-zoned acres, per County staff, excluding golf courses.
- ¹³ Although acreage (per County staff) in Angwin (410 acres), Other Bubbles (5,700 acres), and Ag Areas (475,000 acres) is quite large, development is only expected to occur on a few scattered sites.
- ¹⁴ Assumes 800 acres, per Phase I Table 5b (1/23/06 package).
- ¹⁵ Assumes 250 to 500 units, per County staff. Alternative E assumes 500 units plus 200 units on the vacated Expo site, for a total of 700 units.
- ¹⁶ Assumes 9 wineries per year, per County staff.
- ¹⁷ Assumes negligible increase, say 25% over 45,000 acre base, or 11,250 acres, in Alt. E, per County staff.

**TABLE VI-2
EIR ALTERNATIVES DEVELOPMENT PROGRAMS SUMMARY
NON-RESIDENTIAL AND RESIDENTIAL TOTALS BY SITE
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

	Assumptions	Total Non-Residential Development				
		A. Existing Plan Alternative	B. Plan Update Alternative	C. Plan Update Alternative 2	D. Resource Preservation Alternative	E. Infrastructure & Development Alternative
Napa Pipe 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	150 ac. 2,161,000 s.f. 1,988 jobs <i>(150) jobs</i> 1,838 jobs _{3, 4, 5}	135 ac. 1,796,000 s.f. 2,885 jobs <i>(150) jobs</i> 2,735 jobs _{6, 4, 5}	0 ac. 50,000 s.f. 150 jobs <i>(150) jobs</i> 0 jobs ₅	150 ac. 2,426,000 s.f. 986 jobs <i>(150) jobs</i> 836 jobs _{7, 4}	150 ac. 700,000 s.f. 2,198 jobs <i>(150) jobs</i> 2,048 jobs _{8, 5}
Pacific Coast/BOCA ⁹ 80 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	80 ac. 1,152,000 s.f. 1,060 jobs <i>(50) jobs</i> 1,010 jobs _{3, 4, 5}	14 ac. 139,000 s.f. 383 jobs <i>(50) jobs</i> 333 jobs ₅	14 ac. 239,000 s.f. 669 jobs <i>(50) jobs</i> 619 jobs ₅	80 ac. 1,152,000 s.f. 942 jobs <i>(50) jobs</i> 892 jobs _{3, 4}	14 ac. 139,000 s.f. 383 jobs <i>(50) jobs</i> 333 jobs ₅
Hess Vineyard ¹⁰ 230 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	230 ac. 3,652,000 s.f. 1,973 jobs _{11, 4}
Hess Environs/ Industrial Zoning ¹² 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	150 ac. 2,382,000 s.f. 1,287 jobs _{11, 4}
Angwin Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs
Other Bubbles Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs
Ag Areas Scattered Sites ¹³	Built Area/Units Jobs/Population ²	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs	0 s.f. 0 jobs
A.I.A. ^{14, 11} 800 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	800 ac. 12,701,000 s.f. 6,860 jobs ₄	800 ac. 12,701,000 s.f. 6,860 jobs ₄	800 ac. 12,701,000 s.f. 6,860 jobs ₄	800 ac. 12,701,000 s.f. 6,860 jobs ₄	800 ac. 12,701,000 s.f. 6,860 jobs ₄
City of Napa (County- Controlled) ¹⁵ Acreage Not Avail.	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs	0 ac. 0 s.f. 0 jobs
Wineries ¹⁶ Acreage Not Avail.	Growth/Year New Wineries Jobs/Population ²	225 wineries 1,125 jobs ₄	225 wineries 1,125 jobs ₄	225 wineries 1,125 jobs ₄	225 wineries 1,125 jobs ₄	225 wineries 1,125 jobs ₄
Vineyards ¹⁷ 11,250 Acres	Site Area ¹ Jobs/Population ²	0 ac. 0 jobs ₄	0 ac. 0 jobs ₄	0 ac. 0 jobs ₄	0 ac. 0 jobs ₄	11,250 ac. 750 jobs ₄
TOTAL UNINCORP. AREAS	Built Area/Units Jobs/Pop'n Gross ac. used of 1,410 avail. (excl. vineyds)	16,014,000 s.f. 10,832 jobs 1,030 ac.	14,636,000 s.f. 11,053 jobs 1,030 ac.	12,990,000 s.f. 8,603 jobs 980 ac.	16,279,000 s.f. 9,713 jobs 1,030 ac.	19,574,000 s.f. 14,376 jobs 1,410 ac.

TABLE VI-2
EIR ALTERNATIVES DEVELOPMENT PROGRAMS SUMMARY
NON-RESIDENTIAL AND RESIDENTIAL TOTALS BY SITE
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA

	Assumptions	Total Residential Development				
		A. Existing Plan Alternative	B. Plan Update Alternative	C. Plan Update Alternative 2	D. Resource Preservation Alternative	E. Infrastructure & Development Alternative
Napa Pipe 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0 du/ac 0 ac. 0 du 0 pers.	50 du/ac 14 ac. 700 du 1,727 pers.	40 du/ac 80 ac. 3,200 du 7,895 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.
Pacific Coast/BOCA ⁹ 80 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ² <Less Extg Jobs> Net Job Increase	0 du/ac 0 ac. 0 du 0 pers.	10 du/ac 48 ac. 500 du 1,234 pers.	10 du/ac 48 ac. 500 du 1,234 pers.	0 du/ac 0 ac. 0 du 0 pers.	21 du/ac 48 ac. 1,000 du 2,467 pers.
Hess Vineyard ¹⁰ 230 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.
Hess Environs/ Industrial Zoning ¹² 150 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.
Angwin Scattered Sites ¹³	Built Area/Units Jobs/Population ²	400 du 987 pers.	400 du 987 pers.	600 du 1,480 pers.	400 du 987 pers.	1,000 du 2,467 pers.
Other Bubbles Scattered Sites ¹³	Built Area/Units Jobs/Population ²	1,268 du 2,782 pers.	1,268 du 2,782 pers.	1,768 du 3,879 pers.	1,268 du 2,782 pers.	1,268 du 2,782 pers.
Ag Areas Scattered Sites ¹³	Built Area/Units Jobs/Population ²	567 du 1,244 pers.	767 du 1,683 pers.	1,067 du 2,341 pers.	283 du 621 pers.	2,567 du 5,632 pers.
A.I.A. ^{14, 11} 800 Acres	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.	0 du/ac 0 ac. 0 du 0 pers.
City of Napa (County- Controlled) ¹⁵ Acreage Not Avail.	Intensity/Density Site Area ¹ Built Area/Units Jobs/Population ²	0 du/ac 0 ac. 0 du 0 pers.	250 du 617 pers.	500 du 1,234 pers.	0 du/ac 0 ac. 0 du 0 pers.	700 du 1,727 pers.
Wineries ¹⁶ Acreage Not Avail.	Growth/Year New Wineries Jobs/Population ²					
Vineyards ¹⁷ 11,250 Acres	Site Area ¹ Jobs/Population ²					
TOTAL UNINCORP. AREAS	Built Area/Units Jobs/Pop'n Gross ac. used of 1,410 avail. (excl. vineyds)	2,235 du 5,013 pers.	3,885 du 9,029 pers.	7,635 du 18,063 pers.	1,951 du 4,390 pers.	6,535 du 15,075 pers.

**TABLE VI-2
EIR ALTERNATIVES DEVELOPMENT PROGRAMS SUMMARY
NON-RESIDENTIAL AND RESIDENTIAL TOTALS BY SITE
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

Notes:

- ¹ Non-residential site areas are listed in gross acres; residential site areas in net acres.
- ² Population based on persons per household, occupancy, and ratio of total versus household population:

Persons/household (ABAG projections) =	2.57
Occupancy rate in urbanized areas (U.S. Census 2000) =	96%
Occupancy rate in outlying/rural areas (U.S. Census 2000) =	85%
- ³ Assumes a blend of A.I.A. and City business park user mix, i.e., 30% Manufacturing, 45% Warehouse, and 25% Office/R&D. Net to gross at 90%.
- ⁴ Jobs in areas expected to have traditional development densities based on employment ratios as follows:

Manufacturing	900 SF/Emp. , as estimated in KMA's 2004 Jobs/Housing Analysis for A.I.A.
Warehouse	4,000 SF/Emp. , as estimated in KMA's 2004 Jobs/Housing Analysis for A.I.A.
Office/R&D	500 SF/Emp. , as estimated in KMA's 2004 Jobs/Housing Analysis for A.I.A.
Comm./Other	500 SF/Emp. , as estimated in KMA's 2004 Jobs/Housing Analysis for A.I.A.
Jobs/Winery	5 Emp./Winery , per County staff.
Jobs/Vineyd-Ac.	0.067 Emp./Ac. , per MKF Research's Economic Impact of California Wine 2004.
- ⁵ Jobs in higher density/urban configurations and expo/conference center based on employment ratios as follows:

Office/R&D	400 SF/Emp. , per KMA estimate.
Comm./Other	350 SF/Emp. , per KMA estimate.
Hotel/Time Sh.	1.2 Emp./Rm. , per KMA estimate.
Expo Center	35 Emp. , per KMA estimate.
- ⁶ Assumes 25% Manufacturing, 20% Warehouse, and 55% Office/R&D, with some live/work units and retail on 10% of the available land. Net to gross @ 90%.
- ⁷ Assumes the majority of industrial acres in warehousing (75%) and the remainder in manufacturing (25%). Net to gross @ 90%.
- ⁸ In Alternative E, the Napa Pipe site is projected to develop as a conference center with hotel, time share, recreation, and office/retail; and a new home for the Expo Center.
- ⁹ Pacific Coast/BOCA site is 80 gross acres/100% developable for industrial with net to gross at 90%; 60 net acres with 80% residential and 20% buffer commercial in the non-industrial scenarios, per Napa County staff.
- ¹⁰ Assumes 230 industrially-zoned acres, per County staff.
- ¹¹ Assumes Napa County A.I.A. mix of users, i.e., 15% Manufacturing, 70% Warehouse, and 15% Office/R&D. Net to gross @ 90%.
- ¹² Assumes 150 industrially-zoned acres, per County staff, excluding golf courses.
- ¹³ Although acreage (per County staff) in Angwin (410 acres), Other Bubbles (5,700 acres), and Ag Areas (475,000 acres) is quite large, development is only expected to occur on a few scattered sites.
- ¹⁴ Assumes 800 acres, per Phase I Table 5b (1/23/06 package).
- ¹⁵ Assumes 250 to 500 units, per County staff. Alternative E assumes 500 units plus 200 units on the vacated Expo site, for a total of 700 units.
- ¹⁶ Assumes 9 wineries per year, per County staff.
- ¹⁷ Assumes negligible increase, say 25% over 45,000 acre base, or 11,250 acres, in Alt. E, per County staff.

**TABLE VI-3
EIR DEVELOPMENT PROGRAMS SUMMARY
NON-RESIDENTIAL AND RESIDENTIAL TOTALS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

Building Area/Units

Alternative	Manufacturing	%	Warehouse	%	Office/R&D	%	Comm./ Other	%	Expo/ Conf. Ctr.	%	Total Non- Resid. SF	Total Resid. Units
A. Existing Plan	2,222,000 s.f.	14%	11,705,000 s.f.	73%	2,087,000 s.f.	13%	0 s.f.	0%	0 s.f.	0%	16,014,000 s.f.	2,235 du
B. Plan Update (modest change)	1,808,000 s.f.	12%	10,355,000 s.f.	71%	2,323,000 s.f.	16%	150,000 s.f.	1%	0 s.f.	0%	14,636,000 s.f.	3,885 du
C. Plan Update 2 (high residential)	1,411,000 s.f.	11%	9,879,000 s.f.	76%	1,450,000 s.f.	11%	250,000 s.f.	2%	0 s.f.	0%	12,990,000 s.f.	7,635 du
D. Resource Preservn. (lowest growth)	2,134,000 s.f.	13%	12,499,000 s.f.	77%	1,646,000 s.f.	10%	0 s.f.	0%	0 s.f.	0%	16,279,000 s.f.	1,951 du
E. Infrastrx. & Devel. (high econ. devel.)	2,082,000 s.f.	11%	14,571,000 s.f.	74%	2,746,000 s.f.	14%	100,000 s.f.	1%	75,000 s.f.	0%	19,574,000 s.f.	6,535 du

Jobs/Population

Alternative	Manufacturing	%	Warehouse	%	Office/R&D	%	Comm./ Other	%	Expo/ Conf. Ctr.	%	Wineries/ Vineyards	%	Total Unincorp. Area Jobs ¹	Total Population
A. Existing Plan	2,469 jobs	23%	2,926 jobs	27%	4,512 jobs	42%	0 jobs	0%	0 jobs	0%	1,125 jobs	10%	10,832 jobs	5,013 pers.
B. Plan Update (modest change)	2,009 jobs	18%	2,589 jobs	23%	5,102 jobs	46%	429 jobs	4%	0 jobs	0%	1,125 jobs	10%	11,053 jobs	9,029 pers.
C. Plan Update 2 (high residential)	1,568 jobs	18%	2,470 jobs	29%	2,920 jobs	34%	721 jobs	8%	0 jobs	0%	1,125 jobs	13%	8,603 jobs	18,063 pers.
D. Resource Preservn. (lowest growth)	2,371 jobs	24%	3,125 jobs	32%	3,292 jobs	34%	0 jobs	0%	0 jobs	0%	1,125 jobs	12%	9,713 jobs	4,390 pers.
E. Infrastrx. & Devel. (high econ. devel.)	2,313 jobs	16%	3,643 jobs	25%	5,824 jobs	41%	286 jobs	2%	635 jobs	4%	1,875 jobs	13%	14,376 jobs	15,075 pers.

¹ Adjusted to remove 200 currently existing jobs in various land uses on the Napa Pipe and Pacific Coast/BOCA sites.

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SECTION VII. EMPLOYMENT, HOUSING UNIT AND POPULATION PROJECTIONS

This last section presents a summary of the total incremental job, residential unit and population growth in the County unincorporated area from 2005 to 2030.


The totals are drawn from Tables VI-1, VI-2 and VI-3, as described previously. The resulting total incremental jobs and population for the unincorporated area from 2005 to 2030 for the five EIR Alternative Scenarios is as follows:

Alternative	Unincorporated Napa County Job Growth 2005–2030	Unincorporated Napa County Population Growth 2005–2030
A. Existing Plan	10,832 jobs	5,013 persons
B. Plan Update (modest change)	11,053 jobs	9,029 persons
C. Plan Update with Residential Emphasis (high residential)	8,603 jobs	18,063 persons
D. Resource Preservation Emphasis (lowest growth)	9,713 jobs	4,390 persons
E. Infrastructure & Development (high development)	14,376 jobs	15,075 persons

As would be expected, Alternative E produces the most jobs and Alternative C and D the fewest new jobs. For population, the highest growth is in Alternative C, which emphasizes residential growth, and the lowest growth in Alternative D. The Existing Plan Alternative (Alternative A) is not very different from Alternative D. Alternative E, the highest growth scenario, has the highest level of new population after Alternative C, as well as having the most jobs.

Comparison with ABAG Projections

Approximately every two years, the Association of Bay Area Governments (ABAG) produces a set of projections for employment, households and population growth for the jurisdictions within the nine Bay Area counties. ABAG projections are used by various regional and local agencies for all manner of planning applications. The most recent projections series are those issued in 2003 and 2005.

From the issuance of 2003 Projection series onward, ABAG re-evaluated its projection assumptions to reflect the use of “smart growth” policies in the Bay Area. Smart growth encourages infill development and intensification of already developed areas as opposed to lower density growth on undeveloped lands. Assuming the application of smart growth policies in the future, ABAG’s 2003 and 2005 projections allocate the highest levels of growth in and around already developed areas and cities. This policy framework produced a major change in the Napa County projections compared to the prior 2002 Projection series: the result was a decrease in growth of jobs and housing in the County as a whole. Of greater significance is the lower growth projected to take place in incorporated areas.  many years, Napa County has implemented what are now called “Smart Growth” policies. Measure J is a further reinforcement.

Nothing changed by the way of County actions or policies over the 2002-2005-period to warrant the significant fluctuation in ABAG's projection. The change by ABAG is a result of changes to ABAG's regional allocation model assigning most growth to existing urban areas. It is noted that the next ABAG series could be different again, possibly representing more of a return to historical trends as was reflected in the pre-Smart Growth series.

Table VII-1 compares dwelling unit and jobs projections associated with EIR Alternatives to ABAG projections in 2002 and 2005. A summary is presented below.

Alternative	Unincorporated Napa County Job Growth 2005–2030			Unincorporated Napa County Unit Growth 2005–2030			
	EIR Alts	ABAG 2005	ABAG 2002	EIR Alts	ABAG 2005	ABAG 2002	County Limit
A. Existing Plan	10,832	4,440	9,294	2,235	890	2,593	3,350
B. Plan Update	11,053	4,440	9,294	3,885	890	2,593	3,350
C. Plan Update 2	8,603	4,440	9,294	7,635	890	2,593	3,350
D. Resource Presvn.	9,713	4,440	9,294	1,951	890	2,593	3,350
E. Infrastrx. and Devel.	14,376	4,440	9,294	6,535	890	2,593	3,350

As shown, the EIR Alternative job and dwelling unit projections for the unincorporated County from 2005 to 2030 are far above ABAG Projections 2005. ABAG Projections 2002 are closer to the EIR Alternative's. It is noted that ABAG actually provides households, which KMA adjusted for vacancy to reflect residential units.

Another point of comparison is the Napa County residential growth limitation mandated by voter initiative, or "County Limit." Residential building permits are limited to 114 units per year, 17 of which are for very-low, low or moderate-income units. Because fewer affordable units have been built than are permitted, and since the "affordable" permits can accumulate indefinitely and be issued at any time, there is currently an inventory of about 500 "affordable" permits. Including the affordable inventory, the County growth limit would enable the production of 3,350 new dwelling units in the next 25 years. Additional units above this limit can only be permitted pursuant to a development agreement or upon adjustment to the County's annual limit. More units could also be created if they are located in an area that is annexed to an incorporated city.

Total New Napa County Jobs, Dwelling Units, and Population, 2005–2030

The job, dwelling unit, and population projections prepared by KMA in this study apply only to the unincorporated areas of the County. To estimate total new jobs, dwelling units, and population in all County jurisdictions for the 25 year period under the different EIR Alternatives, the ABAG projections for the Napa cities were used. As indicated in Table VII-2, the number of incremental jobs in City Jurisdictions (i.e., the five cities) totaled 15,330 in the ABAG 2005 series and 16,713 jobs in the ABAG 2002 series. Incremental dwelling units totaled 7,614 and

14,413 in ABAG's 2005 and 2002 series, and new population was 17,000 and 33,625 persons, respectively. Totals with all jurisdictions are summarized below.

EIR Alt.	Job Growth All Jurisdictions 2005–2030		Dwelling Unit Growth All Jurisdictions 2005–2030		Population Growth All Jurisdictions 2005–2030	
	ABAG 2005*	ABAG 2002*	ABAG 2005*	ABAG 2002*	ABAG 2005*	ABAG 2002*
A	26,162 jobs	27,545 jobs	9,849 du	16,648 du	22,013 pers.	38,638 pers.
B	26,383 jobs	27,766 jobs	11,499 du	18,298 du	26,029 pers.	42,654 pers.
C	23,933 jobs	25,316 jobs	15,249 du	22,048 du	35,063 pers.	51,688 pers.
D	25,043 jobs	26,425 jobs	9,565 du	16,364 du	21,390 pers.	38,015 pers.
E	29,706 jobs	31,088 jobs	14,149 du	20,948 du	32,075 pers.	48,700 pers.

* ABAG figures for the incorporated cities added to EIR Alternative estimates for the unincorporated areas.

When added to the other jobs, dwelling units, and population growth in the cities, the marginal differences among the EIR Alternatives are tempered by the bigger figures. This pattern will be exhibited in the various infrastructure analyses, particularly traffic, in the EIR analysis process.

Comparison of Industrial Land Capacity and Demand

A key charge of the Industrial Land Use Study and the analysis of EIR Alternatives is to gauge the adequacy of industrial land vis-à-vis the projected demand to 2030.

As presented at the end of Section IV of this report, total industrial land demand for all South County industrial locations was concluded to be in the range of 1,326 to 1,576 acres over the 25-year period. In more round numbers, we could quote the range as 1,300 to 1,600 acres. This demand represents a continuation of past trends with some minor acceleration to account for a range of factors such as adjustment for the recession cycle experienced over the past five years, the assumed end of lawsuits which made entitlements in the A.I.A. more difficult during the late 1990's, and the continued maturity of Napa as an international center of the wine industry. As indicated in Section II, the overwhelming majority of users in the AIA and other South County industrial parks are either wine related or in some way providing support to other Napa or subregional based businesses.

The analysis in Section III developed conclusions regarding the available industrial land capacity in the A.I.A. and in the cities of American Canyon and Napa City. The conclusions take into account both intensification of already "developed" parcels, which increases capacity, and a factor to recognize that some of the acreage in the A.I.A. and Green Island is not readily available or faces constraints, a factor that decreases capacity.

Table VII-3 presents a summary of the industrial land in each of the five Alternative Scenarios by major site, and in the A.I.A. and the two South County cities. At the bottom of the table the demand as a share of capacity is indicated in percentage terms.

It is notable that, in most of the EIR Alternatives, demand related to capacity hovers around 100%. Only in Alternative C, the high residential alternative that converts several key industrial sites to residential use, is the demand greater than the capacity to any significant degree (reaching 120% in the high range demand scenario). Alternative E has the most industrial land capacity and as a result demand by the end of the period would leave some industrial land remaining, but not a substantial amount.

This evaluation shows that, in general, although development programs reflect different growth scenarios, the supply of land available under all except Alternative C would be in the range of industrial land demand. Even in the high range demand scenario, three of the five alternatives would be able to meet the expected need for industrial acres, and in the low-range scenario demand would be exceeded or met in all five alternatives.

There is a low range demand scenario with the assumption that two or more large users (i.e., of 50 acres or more) would locate in Napa County over the course of the next 25 years. In this scenario, there appears to be a sufficient supply to meet demand in four of the five alternatives.

Available acres did not dramatically exceed or fall short of projected demand in any of the scenarios. In addition, several major properties, i.e., Hess Vineyards and Hess Environs, have not been included in the industrial inventory as they are currently zoned Agricultural but actually have an Industrial General (IG) Plan land use designation. Thus, all or a portion of these sites could potentially be held in reserve with an Industrial designation to ensure that enough land inventory is available to meet projected demand.

**TABLE VII-1
EIR DEVELOPMENT PROGRAMS
UNIT AND JOBS PROJECTIONS VS ABAG AND COUNTY LIMITS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

	2005-2030 Residential Units - Unincorporated Areas			
	EIR Alternatives	ABAG Projections 2005¹	ABAG Proj. 2002^{1,2}	County Limit³ (114 du/yr)
A. Existing Plan Alternative	2,235 du	890 du	2,593 du	3,350 du
B. Plan Update Alternative (modest change)	3,885 du	890 du	2,593 du	3,350 du
C. Plan Update Alternative 2 (high residential)	7,635 du	890 du	2,593 du	3,350 du
D. Resource Preservation Alternative (lowest growth)	1,951 du	890 du	2,593 du	3,350 du
E. Infrastructure & Development Alternative (high econ. devel.)	6,535 du	890 du	2,593 du	3,350 du

	2005-2030 Jobs - Unincorporated Areas⁴		
	EIR Alternatives	ABAG Projections 2005	ABAG Projections 2002²
A. Existing Plan Alternative	10,832 jobs	4,440 jobs	9,294 jobs
B. Plan Update Alternative (modest change)	11,053 jobs	4,440 jobs	9,294 jobs
C. Plan Update Alternative 2 (high residential)	8,603 jobs	4,440 jobs	9,294 jobs
D. Resource Preservation Alternative (lowest growth)	9,713 jobs	4,440 jobs	9,294 jobs
E. Infrastructure & Development Alternative (high econ. devel.)	14,376 jobs	4,440 jobs	9,294 jobs

Notes:

¹ Households based on ABAG jurisdictional boundaries (not subregional study areas).

Translated to units assuming an overall Napa County occupancy rate, per U.S. Census 2000, of 94%

² ABAG 2002 projections cover through 2025. Numbers are projected to 2030 using the same rate of growth.

³ County limit includes a backlog of 500 affordable units that would have been allowed but have not been used in the past.

⁴ ABAG jobs based on jurisdictional boundaries (not subregional study areas).

**TABLE VII-2
EIR SCENARIO DEVELOPMENT PROGRAMS SUMMARY
TOTAL JOBS, DWELLING UNITS, AND POPULATION PROJECTIONS WITH CITY JURISDICTIONS
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA COUNTY, CA**

	EIR Alternatives	ABAG Projections 2005		ABAG Projections 2002 ²	
		Other Jurisdictions	Total Napa County	Other Jurisdictions	Total Napa County
TOTAL 2005-2030 JOBS WITH OTHER JURISDICTIONS¹					
A. Existing Plan Alternative	10,832 jobs	15,330 jobs	26,162 jobs	16,713 jobs	27,545 jobs
B. Plan Update Alternative (modest change)	11,053 jobs	15,330 jobs	26,383 jobs	16,713 jobs	27,766 jobs
C. Plan Update Alternative 2 (high residential)	8,603 jobs	15,330 jobs	23,933 jobs	16,713 jobs	25,316 jobs
D. Resource Preservation Alternative (lowest growth)	9,713 jobs	15,330 jobs	25,043 jobs	16,713 jobs	26,425 jobs
E. Infrastructure & Development Alternative (high econ. devel.)	14,376 jobs	15,330 jobs	29,706 jobs	16,713 jobs	31,088 jobs
TOTAL 2005-2030 DWELLING UNITS WITH OTHER JURISDICTIONS^{1,3}					
A. Existing Plan Alternative	2,235 du	7,614 du	9,849 du	14,413 du	16,648 du
B. Plan Update Alternative (modest change)	3,885 du	7,614 du	11,499 du	14,413 du	18,298 du
C. Plan Update Alternative 2 (high residential)	7,635 du	7,614 du	15,249 du	14,413 du	22,048 du
D. Resource Preservation Alternative (lowest growth)	1,951 du	7,614 du	9,565 du	14,413 du	16,364 du
E. Infrastructure & Development Alternative (high econ. devel.)	6,535 du	7,614 du	14,149 du	14,413 du	20,948 du
TOTAL 2005-2030 POPULATION WITH OTHER JURISDICTIONS¹					
A. Existing Plan Alternative	5,013 pers.	17,000 pers.	22,013 pers.	33,625 pers.	38,638 pers.
B. Plan Update Alternative (modest change)	9,029 pers.	17,000 pers.	26,029 pers.	33,625 pers.	42,654 pers.
C. Plan Update Alternative 2 (high residential)	18,063 pers.	17,000 pers.	35,063 pers.	33,625 pers.	51,688 pers.
D. Resource Preservation Alternative (lowest growth)	4,390 pers.	17,000 pers.	21,390 pers.	33,625 pers.	38,015 pers.
E. Infrastructure & Development Alternative (high econ. devel.)	15,075 pers.	17,000 pers.	32,075 pers.	33,625 pers.	48,700 pers.

Notes:

¹ ABAG data based on jurisdictional boundaries (not subregional study areas).

Other jurisdictions refers to the five cities in Napa County.

² ABAG 2002 projections cover through 2025. Numbers are projected to 2030 using the same rate of growth.

³ Based on ABAG projections households data and Census 2000 occupancy rates 96% in the Napa County cities.

**TABLE VII-3
EIR DEVELOPMENT PROGRAMS
INDUSTRIAL LAND CAPACITY vs. DEMAND
NAPA COUNTY INDUSTRIAL LAND USE STUDY
NAPA, CA**

<u>INDUSTRIAL LAND CAPACITY</u>	<i>Acres of Industrial Capacity</i>				
	Alt. A	Alt. B	Alt. C	Alt. D	Alt. E
Major Industrial Areas					
Napa Pipe	150	135	---	150	50
Pacific Coast/BOCA	80	3	3	80	3
Hess	---	---	---	---	230
Hess Environs	---	---	---	---	150
A.I.A. ¹	808	808	808	808	808
Total Unincorporated County	1038	946	811	1038	1241
Napa City ¹	105	105	105	105	105
American Canyon ¹	409	409	409	409	409
TOTAL INDUSTRIAL LAND CAPACITY	1552	1460	1325	1552	1755
INDUSTRIAL LAND DEMAND RELATED TO SUPPLY					
Low Range: 1326 Ac.					
Demand As % of Capacity	85%	91%	100%	85%	76%
Low Range + 150 Ac.: 1476 Ac.					
Demand As % of Capacity	95%	101%	111%	95%	84%
High Range: 1576 Ac.					
Demand As % of Capacity	102%	108%	119%	102%	90%

¹ See Table III-4.