BUSINESS PARK LAND STRATEGY

City of Davis
Community Development and Sustainability Department
Economic Development Division
October 27, 2010
## BUSINESS PARK LAND STRATEGY

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EXECUTIVE SUMMARY

What is Davis’ economic future? Addressing this important question represents the overarching objective of the Business Park Land Strategy (BPLS): to better understand Davis’ long-term economic future and provide guidance for future decisions regarding community economic development goals for the 2010-2035 timeframe.

The need for the BPLS was originally identified by the Davis City Council in December 2008, shortly after Lewis Planned Communities development application submittal for the ConAgra property at 1111 E. Covell Blvd. Lewis Planned Communities’ “Cannery Park” project application was primarily a residential development a portion of land dedicated for business park uses (approximately 20 acres). The City Council needed a better understanding of long-term business growth implications and land use tradeoffs should the property be rezoned for primarily residential uses. That is, how would the proposed project affect Davis’ commercial land supply and long term ability to accommodate future business growth? This study’s original purpose was to answer these questions.

As the project evolved, feedback received through business community interviews and the BEDC, made clear a need to also analyze the projected demand for and economic benefit of business growth. The City contracted with the Center for Strategic Economic Research (CSER) to conduct supplemental economic analysis in response to the following three key questions:

1. What are the benefits of knowledge-based businesses in Davis?
2. How much knowledge-based business growth is projected for Davis?
3. What is the economic benefit/revenue potential of business park development?

Though the original impetus for the BPLS was the Cannery Park application, this study addresses important issues relating to Davis’ economic future. Thus, the BPLS continued as a priority despite withdrawal of the Cannery Park application due to its importance for understanding the extent to which Davis’ existing land supply can accommodate economic growth.

This study’s role is to serve as a technical background report facilitating discussion of Davis’ economic future and subsequent policy considerations for a future update of the General Plan’s Economic Development element. It will also provide guidance for future land use decisions affecting opportunities for business growth. Finally, the study confirms the value of business growth and its importance in contributing to local economic health.

The timing is appropriate to assess Davis’ economic future. The General Plan is reaching the end of its analysis timeframe (2010) and the Housing Element has recently been updated addressing near-term residential land needs. In contrast, the BPLS addresses future business growth and accompanying land needs. It is important for Davis to plan and competitively position itself for desired business growth post-economic recession.
Study Focus Areas

The BPLS was conducted with a wide analytical scope. Focus areas included (in sequence):

- Summarizing current economic development policy
- Quantifying the value of knowledge-based business growth in Davis
- Analyzing the Davis economy, UC Davis activities contributing to business growth & entrepreneurialism, and economic development partnerships that will play a key role in future business growth
- Drawing conclusions regarding the Davis business climate via interviews with the Davis business community across a broad spectrum of “key informants”
- Providing 25-year business growth projections
- Quantifying the economic impact of two future business growth projection scenarios as well as a hypothetical “business park”
- Analyzing the Davis vacant commercial land inventory and ability to accommodate future business growth in the 25-year timeframe
- Providing a path for near and longer term land decisions to facilitate future business growth

Study Conclusions

Based on focus area analysis, this study draws several conclusions:

1. **Davis’ current economic development policies support knowledge-based business growth.** An overarching community economic development goal is to “…increase higher paying jobs, create greater job diversification, and create a more balanced economy for all economic segments of the community, while also maintaining the City’s fiscal and environmental integrity.” Knowledge-based business growth contributes to these goals.

2. **Knowledge-based business provides substantial local economic value.** Five industries most consistent with economic development goals and policies encouraging knowledge-based business include scientific research and development, computer system design services, clean technology manufacturing, life science & medical device manufacturing, and technical consulting. These were shown to have substantial local economic benefit.

3. **Growth in knowledge-based industries has been steady.** During the 1990 – 2008 period, Davis gained nearly 5,300 jobs. Twenty-eight percent of these occurred in the Combined Knowledge-Based employment sector\(^1\), trailing only the Retail, Leisure, and Hospitality sector (>39%) in percentage of total growth. Over the past five years (2003 – 2008), Combined Knowledge-Based

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\(^1\) For the purposes of this study, defined as: “Professional, Scientific, & Management” employment as well as high-value manufacturing industries. Excludes UC Davis.
employment sector growth represents over 44% of all Davis employment growth, followed by Education & Health (27%). The Combined Knowledge-Based employment sector has grown from 6.2% of total employment in Davis in 1990 to 12.6% in 2008.

4. **Opportunity for future business growth is strong.** 39 interviews from a wide range of Davis business community representatives confirm Davis has considerable untapped potential for future business growth, particularly in knowledge-based industries, as a critical mass of businesses has begun to emerge. A consensus among interviewees was Davis should proactively facilitate knowledge-based business growth and ensure the needs of knowledge-based businesses are met.

Five employment growth projections across the entire economy were conducted for this study suggesting a possible range between 3,665 and 8,050 net new jobs in the 2010 – 2035 period. Office and industrial jobs, those most closely associated with knowledge-based industry and business park land in Davis, are projected to increase from between 1,811 and 3,885 jobs.

5. **Future business growth will provide local economic benefit.** Economic impact analysis of two employment projections confirms local economic benefits result from future business growth. A third economic impact analysis of a hypothetical 100 acre (66 acres net) business park equals or exceeds the economic benefit of the two 25-year employment projections.

6. **Davis’ vacant commercial land inventory is limited, creating both immediate and future challenges for facilitating future business growth.** Davis currently has a total of 44 vacant commercial sites on 227.9 acres of land. This is considered theoretically sufficient for the purposes of this study as they demonstrate the relative magnitude of alternate growth scenarios, provided the ConAgra property is retained for business growth purposes. However, several factors create both immediate and future challenges for future business growth:

   1. If the ConAgra property is rezoned either entirely or primarily for other uses, Davis’ ability to accommodate business growth is significantly compromised.

   2. Davis has relatively few high quality sites to which business attraction prospects can be directed. A steady supply of high quality sites in a variety of sizes is needed both currently and in the future to facilitate business growth, particularly in knowledge-based industries.

   3. The Housing Element update recently completed considers residential development for eight sites on over 101 commercially zoned acres (including ConAgra property). If these sites are approved for housing, Davis’ commercial land supply is further reduced.

   4. Much of Davis’ existing inventory is not immediately deliverable due to the following factors:

      ○ The ConAgra property lacks infrastructure and parcel sizes appropriate for the Davis market.
Only a small amount of business park-type land is currently actively marketed for sale. This limits immediate business growth potential for those needing ownership and build-to-suit development opportunities.

Many remaining parcels are owned by relatively few individuals, including a few by UC Davis which may not be deliverable for private sector business. Current property owners influence the rate and extent of Davis’ current and future business growth.

Size, location and configuration of several parcels limit development feasibility.

Davis is well positioned for economic growth in industries consistent with existing economic development policy and local economic and workforce strengths. Davis has a unique opportunity to competitively position itself for knowledge-based business growth post-economic recession. With both an existing concentration of knowledge-based businesses and world-renowned UC Davis research strengths in fields expected to drive the future economy, Davis is well-positioned to capitalize on local economic strengths for strong growth in knowledge-based industries consistent with economic development goals and policies.

Key Policy Questions Raised by the Study

The primary objective of the BPLS is to inform and guide policy-making with respect to Davis’ land supply’s ability to facilitate long-term business growth. Several overarching policy questions raised by the BPLS appropriate have been identified:

1. How much and what type of business growth should the community pursue?
2. How much and what type of land is necessary to support desired business growth?
3. What actions should the City take to support and encourage desired business growth?
4. What actions should be taken to maximize the benefits from the current land supply?

Community priorities in response to these questions necessarily lead to questions regarding Davis’ available land supply including:

- How should the ConAgra site develop?
- How should Housing Element Conflict Sites develop?
- If the PG&E site is redeveloped, how should it be developed?

When community priorities for existing vacant land are established, it may then be appropriate to explore the subject of whether Davis should pursue additional commercial land to support business growth. Figure 5 illustrates a framework for immediate and long-term Business Park, Office, and Industrial land decision making.
Framework for Business Park, Office, and Industrial Land Decision Making

**Maximize Use of Existing Inventory:**
1. Preserve existing Business Park, Office, and Industrial land by discouraging conversion to uses such as housing, institutional, and commercial recreation.
2. Amend Business Park, Office, and Industrial zoned districts to increase consistency, certainty, and allow for streamlined processing.
3. Encourage higher intensity development on existing vacant commercial sites.
4. Work with existing vacant commercial property owners to collectively market vacant properties.

**Confirm Long-Term Land Inventory**
1. How should the Con Agra site develop?
2. How should Housing Element Conflict Sites develop?
3. If the PG &E site is redeveloped, how should it be developed?

**Should Davis Pursue Additional Business Park Land to Support Business Growth?**

**Assumption: Con Agra Site is Preserved for Business Growth:**
1. Facilitate construction of infrastructure at Con Agra property
2. Facilitate construction and occupancy of business park at ConAgra property.

**Assumption: Con Agra Site is NOT Preserved for Business Growth:**
1. Explore appropriate substitute business park sites for Con Agra property contiguous to City boundary.
2. Confirm preferred location for business park.
4. Facilitate construction and occupancy of business park.
Private sector business growth is an important factor of local economic health and prosperity. This study analyzes several components of the Davis economy and identified opportunities as well as constraints to future business growth. The community and decision-makers will find this study a useful resource to guide future economic development initiatives and land use decisions. Readers are encouraged to explore the Business Park Land Strategy and Technical Report for greater depth, detail, and context surrounding the key issues addressed in this study.
INTRODUCTION

What is Davis’ economic future? Addressing this important question represents the overarching objective of the Business Park Land Strategy (BPLS): to better understand Davis’ long-term economic future and provide guidance for future decisions regarding community economic development goals for the 2010-2035 timeframe.

Policy documents ranging from the 2000 General Plan to the 2006 – 2010 Economic Development Strategic Goals, to the 2009 – 2010 City Council Goals identify Davis economic development priorities. These emphasize growth in biotechnology, “green” technology, and other knowledge-based activities to facilitate expansion of this burgeoning sector and capitalize on proximity to UC Davis research strengths. As a result, Davis’ economic future will continue to be influenced by its economic development policy framework, a business climate conducive to business growth, the demand for local growth in knowledge-based business and across the economy, and the available land supply. How Davis ensures opportunity for future business growth and positions itself for growth in key industry sectors are important components in achieving a desired economic future. The BPLS provides background analysis for community consideration when addressing these issues. More specifically, this report:

- Summarizes current economic development policy
- Quantifies the value of knowledge-based business growth in Davis
- Analyzes the Davis economy as well as UC Davis activities contributing to business growth and entrepreneurialism,
- Draws conclusions regarding the Davis business climate based on interviews across a broad spectrum of “key informants” in the Davis business community.
- Provides 25-year business growth projections
- Quantifies the economic impact of two future business growth projection scenarios as well as a hypothetical “business park”
- Analyzes the Davis vacant commercial land inventory and its ability to accommodate future business growth in the 25-year timeframe
- Provides a path for near and longer term land decisions to facilitate future business growth.

The BPLS draws several primary conclusions resulting from the above analysis:

- The study confirms Davis’ economic development policy framework focusing on technology, life science, and knowledge-based business growth is appropriate and complements Davis economic and workforce strengths.
- Economic analysis of research and development and manufacturing activities by local technology companies confirms substantial local economic benefit.
- Based on historical business growth, 39 interviews with “key informants”, and business growth projections, Davis is poised for substantial growth in knowledge-based industries.
• Davis’ land supply represents immediate as well as future challenges to facilitating future business growth, particularly if the vacant 100 acre industrially zoned property at 1111 E. Covell Blvd (ConAgra property) is developed for other uses.

• The study confirms that while Davis has historically played a passive role in facilitating business growth, a more proactive role needs to be played in the future. This is needed particularly in knowledge-based industries to ensure Davis capitalizes on its competitive advantages and desired business growth opportunities are not lost to neighboring or regional communities.

Background

The need for the BPLS was originally identified by the Davis City Council in December 2008, shortly after Lewis Planned Communities development application submittal for the ConAgra property. Lewis Planned Communities’ “Cannery Park” project application was primarily a residential development with a portion of land dedicated for business park uses (approximately 20 acres). The City Council requested a better understanding of long-term business growth implications and land use tradeoffs should the property be rezoned for primarily residential uses. That is, the extent to which the proposed project would affect Davis’ commercial land supply and long term ability to accommodate future business growth.

Prior to accepting the Cannery Park development application, in February 2008 the City Council requested Lewis Planned Communities fund a city-initiated study assessing the site’s economic feasibility as a business park. The study was conducted by Economic Strategies Group and completed in August 2008. It concluded the site is viable as a business park provided a broad range of uses is allowed. If restricted to a narrow range of uses (e.g. research and technology uses only), it was projected to require an excessive, non-viable buildout time (39 years). The ESG Study also conducted an extensive analysis on Davis’ economy and provided contextual background of the greater Bay Area-Sacramento regional economy from which the BPLS builds.

BPLS Study Purpose

In January 2009 a processing timeline for the Cannery Park development application as well as process framework for the BPLS project was presented to the City Council. The BPLS objective focused on eight key questions:

1. What are the City’s long term needs for business park-type land?
2. What methodology and/or factors should be used to determine projected need?

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2 See Chapter 6: Existing Vacant Land Inventory & Land Adequacy, for uses consistent with the “Business Park” land use designation.
3 “Long term” defined as the 2010-2035 timeframe.
3. How is the market for business park land shifting? How is the modern “business park” changing? Are traditional business park land development patterns still appropriate or are they evolving into new land use patterns?

4. Is the City’s current land inventory sufficient to meet its long term needs for business park-type uses? If so, is this still true if the Cannery Park site is approved for other uses?

5. Is a dedicated “business park” needed?

6. What sites in addition to the existing land inventory should be considered for business park type uses; and/or a dedicated business park? How does this change if the Cannery Park site is rezoned? Do we need to consider additional business park sites if the Cannery Park site is not rezoned?

7. What criteria should be used to rank the relative merits of the possible sites?

8. What strategies should be developed or actions should be taken to assure that the City has an adequate supply of business park-type land available to support future development?

Originally, this study intended to rely upon ESG Study land absorption-based assumptions to determine the existing land supply’s adequacy in accommodating future business growth. As the project evolved, feedback received through business community interviews and the Business and Economic Development Commission (BEDC), made clear a need to also analyze the projected demand for and economic benefit of business growth. The City contracted with the Center for Strategic Economic Research (CSER) to conduct supplemental economic analysis in response to the following three key questions:

4. What are the benefits of knowledge-based businesses in Davis?

5. How much knowledge-based business growth is projected for Davis?

6. What is the economic benefit/revenue potential of additional business growth?

Davis economic development policies and strategies emphasize knowledge-based business growth5. As a result, this report emphasizes such business growth and conditions necessary to facilitate further development within these industries. However, as the ESG Study concluded, the Davis economy is dynamic and comprised of a wide range of businesses contributing to a high quality of life6. Thus, employment projections were generated for all industry sectors as reference points for future Davis business

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5 “Knowledge-Based Business” is occasionally used interchangeably with “High Intellectual Capital” firms, a term used in the ESG study and defined as “firms that use leading edge tech applications as a key element of their business” (Pg 36). Under this definition, knowledge-based business and high intellectual capital activities span all employment sectors. However, this study formally defines for Davis “Knowledge-Based” employment as a combination of North American Industry Classification System (NAICS) activities comprised primarily of “Professional, Scientific, and Technical Services” and a subset of high value activities in the “Manufacturing” employment sectors. The term, “Innovation Companies” used occasionally in the study reflects a subset of “knowledge-based” companies and typically represent technology firms focused on commercializing applied scientific research.

6 ESG Study, Pg 32.
growth in its entirety, and accompanying land needs. These employment growth
projections are converted to major use/building type categories to assess land needs:
office, industrial, retail, and public. Two major uses/building types most typically
associated with business park-type development – office and industrial - are
emphasized in this study7.

**Timing: Why Now?**

Though the original impetus for the BPLS was the Cannery Park application, this
study addresses important issues relating to Davis’ economic future. The BPLS
continued as a priority despite withdrawal of the Cannery Park application due to its
importance for understanding the city’s long-term economic health and extent to which
Davis’ existing land supply can accommodate economic growth.

The timing of the study is appropriate to assess Davis’ economic future. It is
important for Davis to plan and competitively position itself for desired business growth
post-economic recession. The BPLS will function as a technical background report for a
future update of the General Plan’s Economic Development element and/or future land
use decisions affecting business growth.

The City is nearing completion of the 2013 General Plan Housing Element. While
housing needs remain an important community issue, Davis’ economic future is equally
important, particularly in current economic recession and local budget contexts. The
Housing Element update focuses on housing needs and potential land supply. Several
sites deemed potentially appropriate for residential uses in the Housing Element update
are either already commercially zoned or are sites that may be appropriate for business
park-type development as well. The BPLS serves as a resource to assess costs and
benefits of alternate commercial or residential land use decisions allowing the
necessary contextual balance for fully informed land use decisions affecting the
community.

**Study Process**

The BPLS consisted of an 18 month process comprising the following five phases:

1. **Existing Inventory (January 2009 – November 2009)**

   An updated inventory of parcels appropriate for business park-type development
   was conducted for this study. Inventory metrics included total acreage,
   employment capacity, and building square footage.

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7 The BPLS Technical Report provides a greater level of detail.

39 semi-structured interviews with Davis business community members, 7 teleconferences/surveys of UC Davis spinoffs not located in Davis, regular BEDC meeting updates.8

3. Study (September 2009 – March 2010)


ECONOMIC DEVELOPMENT POLICIES & STRATEGIES AND VALUE OF KNOWLEDGE-BASED BUSINESS GROWTH

Economic Development is critical to a healthy local economy. On a broad scale, any community activity that enables a healthy economy can fall within the economic development realm. As many definitions for economic development exist as there are practitioners in the field. However, the California Association for Local Economic Development (CALED) succinctly defines economic development as9:

“..a concerted effort on the part of the responsible governing body in a city or county to influence the direction of private sector investment toward opportunities that can lead to sustained economic growth.”

Three components comprise economic development:

- Business Retention and Expansion (enhancing existing businesses)
- Business Attraction (attracting new businesses)
- Business Creation (encouraging new business start-ups)

Promoting business growth and generating wealth for community benefit is the primary objective of economic development. Communities benefit from economic development through:

- Increased tax base
- Job development
- Business retention
- Economic diversification
- Economic self-sufficiency
- Improved quality of life

Existing Economic Development Policies

Davis economic development activities are guided by existing policies and strategies in the 2001 General Plan, briefly discussed below. Additionally, 2006 – 2010 Economic

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8 See Chapter 4 of the BPLS Technical Report for additional outreach process details
Development Strategic Goals, and 2009 – 2010 City Council Goals reinforce General Plan policies.

**Visions Section:**

The General Plan Visions section highlights 15 broad-ranging community objectives forming the plan’s foundation. Included in the Visions element are three objectives relating to business growth\(^{10}\).

**Broad Range of Services and Businesses:**
- Develop a broad range of services and businesses to meet the daily needs of Davis citizens for employment, shopping, education and recreation
- Promote economic vitality by developing a diversity of enterprises

**Synergistic Partnership with UC Davis:**
- Recognize and strengthen the positive synergistic partnership between the City and UC Davis

**Regional Context:**
Recognize Davis’ role within the broader region
- Recognize Davis’ role within the broader region
- Make decisions on City policy with an understanding of regional impacts
- Maximize available resources through joint planning with other agencies and jurisdictions

**Land Use and Growth Management Section:**

The General Plan addresses components of business growth and business park-type development in the Land Use and Growth Management section. Many issues raised by an economic analysis conducted in 1996 remain and are intensified due to land absorption since then\(^{11}\). The study conclusions included:

- An unmet demand exists for new industrial space in Davis.
- High tech startups, R&D and manufacturing demand either more affordable space; larger lots than Davis has in inventory.
- Higher value-added, technology oriented industrial uses conducive to Davis' competitive advantages should be targeted.
- A variety of lot sizes for these industries should be offered, including start-up incubator facilities, flexible R&D space, and large lots for manufacturing firms and build-to-suit developments.
- The City should shorten the approval process with discretionary approvals completed upfront.

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\(^{10}\) City of Davis. *General Plan*. Pgs 43-44.

\(^{11}\) City of Davis. *General Plan*. Pgs 53-54.
Economic and Business Development Section:

The Economic and Business Development section emphasizes economic and business development as necessary, vital, and integral to maintaining and enhancing the city’s overall quality of life. Goals and Policies integral to this study are presented below.

**Goal ED 3.1:** Retain existing businesses and encourage new ones as means to increase higher paying jobs, create greater job diversification, and create a more balanced economy for all economic segments of the community, while also maintaining the City’s fiscal and environmental integrity.

**Policy ED 3.1:** Adopt policies that make Davis a more business-friendly community and eliminate unnecessary barriers to business.

**Goal ED 3.2** Encourage new businesses to locate in Davis, targeting business, which improves the city’s fiscal base, are consistent with the City’s values and identity, and match the employment skills of the population, such as those in the emerging technology and knowledge-based industries.

Value of Knowledge-Based Business Growth

Effective economic development programs can help create the climate that shapes the future economy by aligning resources with community values, competitive assets, and regional opportunities. At the most basic level, economic development programs focus on the creation of wealth derived from business growth and development within the local economy. Local economic development programs are generally organized around the objectives of creating and maintaining employment, expanding the tax base, and improving quality of life.

Economic restructuring has spurred a focus on the dynamics of a knowledge-driven economy and the potential for a community to present a competitive advantage in fostering and growing establishments in knowledge-based sectors. Many of these can be considered base sectors - active drivers of economic development from which other business growth is derived. Due to the high value activities of many knowledge-based sectors, a clustering of establishments tends to support further innovation, wealth creation, and locational advantages. The City of Davis is uniquely positioned to benefit from knowledge-based economic development. Successful economic development efforts in knowledge-based industries typically include:

- Strategies that create a business climate and quality of life that attracts and retains companies and workers;
- Promote the transfer of research into marketable products and services;
- Deploy new products and services in other sectors of the economy;
- Support entrepreneurship and start-up businesses;
- Build certainty into the regulatory process;
- Create linkages between companies and support organizations (e.g. capital, networking, and advocacy); and

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12 City of Davis. General Plan. Pgs 201-203.
Facilitate the development of appropriate facilities.

Davis has established an appropriate policy framework for supporting future business growth in knowledge-based industries. While encouraging growth in such industries is intuitive and appropriate for Davis, the economic value of continuing their growth has not been recently explored. This study conducted an analysis of the local economic benefit of five industries Davis economic development policy prioritizes including:

- Scientific Research & Development Services;
- Life Sciences & Medical Device Manufacturing;
- Clean Energy Component Manufacturing;
- Technical Consulting Services; and
- Computer System Design Services

While these five prototypes represent examples of targeted industries in the Economic Development Strategic Goals, this does not reflect a comprehensive list as additional activities associated with knowledge-based sector occur in Davis. Table 1 illustrates the annual economic benefit of every ten jobs in the five targeted industries, accounting for local economic structure and leakages.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Jobs</th>
<th>Additional Jobs through Direct &amp; Induced Activities</th>
<th>Total Output</th>
<th>Employee Compensation</th>
<th>Annual State &amp; Local Taxes</th>
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<tbody>
<tr>
<td>Scientific Research &amp; Development Services</td>
<td>10</td>
<td>4</td>
<td>$1.7 m</td>
<td>$680,000</td>
<td>$180,000</td>
</tr>
<tr>
<td>Technical Consulting Services</td>
<td>10</td>
<td>3</td>
<td>$1.9 m</td>
<td>$504,000</td>
<td>$198,000</td>
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<tr>
<td>Computer System Design Services</td>
<td>10</td>
<td>3</td>
<td>$1.9 m</td>
<td>$616,000</td>
<td>$208,000</td>
</tr>
<tr>
<td>Life Sciences &amp; Medical Device Manufacturing</td>
<td>10</td>
<td>20</td>
<td>$10.2 m</td>
<td>$2,400,000</td>
<td>$682,000</td>
</tr>
<tr>
<td>Clean Energy Component Manufacturing</td>
<td>10</td>
<td>3</td>
<td>$4.2 m</td>
<td>$916,000</td>
<td>$305,000</td>
</tr>
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As Table 1 shows, knowledge-based business growth increases jobs, wages, capital investment, and community revenue from both direct (sales & service) or indirect sources (business-to-business, supplies, or other supporting business services) beneficial to a local community. Success in creating and maintaining employment, expanding the tax base, and improving quality of life generates a number of positive outcomes including economic stability, employment opportunities for residents, increased standard of living, positive perceptions of the business climate, productive use of property, and tax revenue for services and infrastructure.
DAVIS ECONOMY

Understanding the local economy helps facilitate the type and amount of business growth appropriate for the community. Davis has experienced substantial economic change over the past 20 years. Building from the ESG Study, this section analyzes Davis’ economy in historical and present contexts.

Davis Employment

Historically, Davis’ economy has been greatly affected by and benefits from UC Davis’ presence. UC Davis accounts for nearly 49% of economic activity directly and another 25% indirectly in the community. UC Davis is by far the community’s largest employer. Table 2 provides Davis’ employment profile, including UC Davis.

Table 2: Davis Employment Profile (including UC Davis)

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<th>Employment Sector</th>
<th>2008</th>
<th>% of Total Employment (2008)</th>
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<tr>
<td>Combined Knowledge-Based</td>
<td>2,300</td>
<td>7.7%</td>
</tr>
<tr>
<td>&lt;Target Knowledge-Based&gt;</td>
<td>&lt;1,427&gt;</td>
<td>&lt;4.8%&gt;</td>
</tr>
<tr>
<td>&lt;Rest of Professional, Scientific, &amp; Technical Services&gt;</td>
<td>&lt;873&gt;</td>
<td>&lt;2.9%&gt;</td>
</tr>
<tr>
<td>Agriculture &amp; Natural Resources</td>
<td>367</td>
<td>1.2%</td>
</tr>
<tr>
<td>Construction</td>
<td>397</td>
<td>1.3%</td>
</tr>
<tr>
<td>Rest of Manufacturing</td>
<td>555</td>
<td>1.9%</td>
</tr>
<tr>
<td>Wholesale, Transportation, Utilities</td>
<td>961</td>
<td>3.2%</td>
</tr>
<tr>
<td>Retail, Leisure, Hospitality</td>
<td>6,109</td>
<td>20.6%</td>
</tr>
<tr>
<td>Business &amp; Financial Services</td>
<td>2,515</td>
<td>8.5%</td>
</tr>
<tr>
<td>Education &amp; Health</td>
<td>3,849</td>
<td>13.0%</td>
</tr>
<tr>
<td>Government &amp; Unclassified</td>
<td>1,196</td>
<td>4.0%</td>
</tr>
<tr>
<td>UC Davis</td>
<td>11,455</td>
<td>38.6%</td>
</tr>
<tr>
<td><strong>Total Including UC Davis</strong></td>
<td><strong>29,704</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Because the Davis market area economic base is substantially driven by UC Davis activity, it distorts local economic analysis in some areas. This is especially so for private sector business growth, the focus of this study. To address this issue, the City acquired the 1990 – 2008 National Employment Time Series Database (NETS) to analyze local employment absent UC Davis. This action was taken with the following considerations in mind:

- Private sector enterprises generate wealth and contribute property taxes.
- Davis economic development policy prioritizes private sector business growth, specifically knowledge-based industry.

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13 ESG Study, Pg 53. Refer to study for economic impact of other industry sectors
- Private sector business growth can be influenced through City policies and actions to improve business climate, increase demand for business growth, and assure land use policy facilitates business growth.

- City of Davis economic development and land use policies have minimal influence over UC Davis employment growth.

Excluding UC Davis from the analysis illustrates employment changes and relevant accompanying statistics from the 1990 – 2008 timeframe, as shown in Table 3.

**Table 3: Davis Employment Profile (excluding UC Davis)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Knowledge-Based</td>
<td>800</td>
<td>2,300</td>
<td>1,500</td>
<td>12.6%</td>
<td>28.4%</td>
</tr>
<tr>
<td>&lt;Target Knowledge-Based&gt;</td>
<td>&lt;453&gt;</td>
<td>&lt;1,427&gt;</td>
<td>&lt;974&gt;</td>
<td>&lt;7.8%&gt;</td>
<td>&lt;18.5%&gt;</td>
</tr>
<tr>
<td>&lt;Rest of Professional, Scientific &amp; Technical Services&gt;</td>
<td>&lt;347&gt;</td>
<td>&lt;873&gt;</td>
<td>&lt;526&gt;</td>
<td>&lt;4.8%&gt;</td>
<td>&lt;10.0%&gt;</td>
</tr>
<tr>
<td>Agriculture &amp; Natural Resources</td>
<td>402</td>
<td>367</td>
<td>-35</td>
<td>2.0%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Construction</td>
<td>471</td>
<td>397</td>
<td>-74</td>
<td>2.2%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Rest of Manufacturing</td>
<td>1,742</td>
<td>555</td>
<td>-1,187</td>
<td>3.0%</td>
<td>-22.5%</td>
</tr>
<tr>
<td>Wholesale, Transportation, Utilities</td>
<td>325</td>
<td>961</td>
<td>636</td>
<td>5.3%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Retail, Leisure, Hospitality</td>
<td>4,031</td>
<td>6,109</td>
<td>2,078</td>
<td>33.5%</td>
<td>39.4%</td>
</tr>
<tr>
<td>Business &amp; Financial Services</td>
<td>1,919</td>
<td>2,515</td>
<td>596</td>
<td>13.8%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Education &amp; Health</td>
<td>2,832</td>
<td>3,849</td>
<td>1,017</td>
<td>21.1%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Government &amp; Unclassified</td>
<td>452</td>
<td>1,196</td>
<td>744</td>
<td>6.6%</td>
<td>14.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12,974</td>
<td>18,249</td>
<td>5,275</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Annual Growth (jobs)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>278</td>
</tr>
</tbody>
</table>

Davis has experienced steady employment growth during the 1990 – 2008 timeframe. Since 1990, 5,275 new jobs (278 annually) have been created with increases in all sectors except those related to natural resources, construction and manufacturing. The largest increases occurred in the Combined Knowledge-Based; and Retail, Leisure, and Hospitality sectors with increases of 1,500 and 2,078 jobs, respectively. Of particular note, nearly 28% of employment growth has occurred in the Combined Knowledge-Based sector with over 18% of growth attributable to the more specialized Target Knowledge-Based sector. Knowledge-based business represents 12.6% of total Davis employment excluding UC Davis and 7.7% including UC Davis.

Analyzing historical employment changes over the five most recent years of available data reveals important trends regarding shifts in employment growth and where Davis may expect future growth to occur. Table 4 illustrates employment changes from 2003 to 2008.

---

Table 4: Davis Employment Change (2003 – 2008)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Knowledge-Based</td>
<td>1,586</td>
<td>2,300</td>
<td>714</td>
<td>44.5%</td>
</tr>
<tr>
<td>&lt;Target Knowledge-Based&gt;</td>
<td>&lt;959&gt;</td>
<td>&lt;1,427&gt;</td>
<td>&lt;468&gt;</td>
<td>&lt;29.2%&gt;</td>
</tr>
<tr>
<td>&lt;Rest of Professional, Scientific &amp; Technical Services&gt;</td>
<td>&lt;627&gt;</td>
<td>&lt;873&gt;</td>
<td>&lt;246&gt;</td>
<td>&lt;15.3%&gt;</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fish &amp; Hunting and Mining</td>
<td>373</td>
<td>367</td>
<td>-6</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Construction</td>
<td>350</td>
<td>397</td>
<td>47</td>
<td>2.9%</td>
</tr>
<tr>
<td>Rest of Manufacturing</td>
<td>559</td>
<td>555</td>
<td>-4</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Wholesale, Transp., Utilities</td>
<td>746</td>
<td>961</td>
<td>215</td>
<td>13.4%</td>
</tr>
<tr>
<td>Retail, Leisure, Hospitality</td>
<td>6,133</td>
<td>6,109</td>
<td>-24</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Business &amp; Financial Services</td>
<td>2,441</td>
<td>2,515</td>
<td>74</td>
<td>4.6%</td>
</tr>
<tr>
<td>Education &amp; Health</td>
<td>3,416</td>
<td>3,849</td>
<td>433</td>
<td>27.0%</td>
</tr>
<tr>
<td>Government &amp; Unclassified</td>
<td>1,041</td>
<td>1,196</td>
<td>155</td>
<td>9.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16,645</strong></td>
<td><strong>18,249</strong></td>
<td><strong>1,604</strong></td>
<td><strong>100.0%</strong></td>
</tr>
<tr>
<td><strong>Annual Growth (jobs)</strong></td>
<td><strong>321</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Davis’ 2003-2008 average employment growth rate (321 jobs/year) exceeds the 1990 – 2008 growth rate (267 jobs/year). Additionally, a significant shift occurred with knowledge-based employment growth representing a much higher growth rate than other sectors. Of the 1,604 jobs created, 714 were generated in the Combined Knowledge-Based sector. This suggests a rapidly growing knowledge-based sector in Davis that will continue to flourish if supportive conditions continue or improve. Figure 1 illustrates knowledge-based industry’s increase as a percentage of total employment during the 1990 – 2008 timeframe.

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Positive Role of UC Davis

As a large public sector institution and employer, UC Davis plays an enormous role in the local and regional economy\(^\text{18}\). This subsection focuses on UC Davis activities likely to translate into business creation wealth created in the local private sector.

Commercialization of intellectual property created by the University of California system is an important revenue source for each university. The ESG Study concluded UC Davis has an historically low rate of technology commercialization relative to other UC campuses\(^\text{19}\). However, UC Davis has made considerable strides in increasing research funding, paying current dividends and likely to change the trajectory of technology commercialization and subsequent new startups. UC Davis was recently ranked tenth internationally as a top university startup community by YouNoodle, a Bay Area-based firm specializing in researching startup companies\(^\text{20}\). Several noteworthy activities and recent actions justify placing UC Davis’ historical performance into a future context.

\(^{18}\) Refer to UC Davis Economic Impact Report: [http://www.news.ucdavis.edu/special_reports/economic_impact/]
\(^{19}\) ESG Study, Pg 46
• UC Davis research revenue has doubled over the past ten years, ranking 16th nationally among all private and public universities for research & development expenditures\textsuperscript{21}.

• The Center for Entrepreneurship has graduated 377 total participants, held eleven Entrepreneurship Academies and helped launch or support over 24 new companies since 2005.

• The annual Big Bang! and Little Bang! business plan competitions have been successful with several startup companies emerging from the competition.

• Since 1980, a number of technology spinoff/start-up companies have been established by UC Davis personnel, 48 of which are still in existence.

UC Davis is making substantial strides in technology commercialization and entrepreneurship which will increase the number of technology spinoff companies. As evidence of the importance of technology transfer to UC Davis, a blue-ribbon committee has recently been established to recommend specific ways and means by which the university can improve its support of technology transfer and commercialization\textsuperscript{22}. Technology spinoffs located in Davis help create a critical mass of companies that attract other technology companies to Davis, creating a multiplier effect that can benefit the Davis economy. Staying attuned to these developments and ensuring Davis creates a business climate conducive to helping spinoff companies establish themselves and remain in Davis is important to achieving community economic development goals.

**DAVIS BUSINESS CLIMATE**

Knowledge-based, and particularly innovation industries are dynamic and grow or decline rapidly independent of modeling projections. Outreach interviews with “key informants” with substantial knowledge in respective fields provided insight into which industries are poised for growth and Davis’ prospects for accommodating them.

City staff conducted thirty-nine interviews for this study. Interviewees fell into one of the following main categories: Innovation/knowledge-based companies, business and entrepreneurial organizations, economic consultants, academics, and property owners/developers/commercial real estate brokers, and UC Davis administration management. Additionally, seven interviews/surveys of UC Davis spinoffs who did not located in Davis were conducted to assess potential weaknesses in Davis’ business climate\textsuperscript{23}. Table 5 summarizes the composition of interviewees.

\textsuperscript{23} Refer to Chapter 4 of the BPLS Technical Report for more detail
Table 5: Outreach Interviews

<table>
<thead>
<tr>
<th>Interview Categories</th>
<th># of Interviews</th>
<th>Total Interview Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation/Knowledge-Based Companies</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>Business &amp; Entrepreneurial Organizations</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Economic Consultants</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Academics</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Property Owners/Developers/Commercial Real Estate Brokers</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>UC Davis Administration Management</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>67</strong></td>
</tr>
</tbody>
</table>

The overriding conclusion from the interviews was key informants were enthusiastic regarding Davis’ ability to create, grow, and attract innovation companies and knowledge-based business growth. While specific points varied, key insights were gained as to necessary conditions to accommodate business growth. Primary themes are listed in order of frequency raised:

1. Davis’ economic niche is in biosciences, clean technology, high technology, and other knowledge-based industries.
2. Davis’ close proximity to UC Davis is an enormous asset for future business growth opportunity.
3. Davis needs a business park or could benefit from additional business park land.
4. Davis quality of life is an asset for business growth prospects.
5. Housing costs are an issue for staff below senior management level.
6. Davis has untapped potential for knowledge-based business growth.
7. Land availability and ownership of existing land affects demand for business growth.
8. Perceptions of Davis as business-friendly vary
9. Davis should incentivize business
10. Laboratory/wet lab space is needed in Davis
11. Small/Medium sized spec space available when companies need it is critical to retaining existing companies and attracting new companies
12. Davis workforce is highly skilled
13. Davis lease costs are an issue

Equally important to accommodating future business growth is ensuring Davis represents a favorable business climate. At each interview’s conclusion, interviewees were asked what Davis should do immediately to encourage business growth. Interviewees provided insightful thoughts on what Davis can do immediately to improve the business climate and promote business growth, particularly in knowledge-based industries. While specific recommendations varied, consistent themes emerged allowing comments to be grouped. Interviewees made the following recommendations, in order of frequency raised:

1. Improve/streamline entitlements and permit processes

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24 See Chapter 4 of the BPLS Technical Report for more detail on interviews.
2. Establish housing objectives consistent with business growth
3. Partner/coordinate with UC Davis focusing on results
4. Address infrastructure needs
5. Business retention & outreach are critical
6. Improve/advertise a business-friendly image
7. Encourage entrepreneurialism
8. Take action to achieve tangible results such as creating additional wet lab space or establishing a local incubator.
9. Reevaluate/redefine economic development goals to ensure it works for businesses Davis wants to attract
10. Reduce City fees
11. Address housing costs

Quantitative and qualitative analysis of the local economy confirms Davis represents a dynamic business and regulatory environment. Table 6 summarizes the key strengths, weaknesses, opportunities, and threats (SWOTs) for Davis to address regarding a preferred economic future.

Table 6: SWOT Analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Davis has untapped potential for business growth, particularly knowledge-based industries such as biotechnology, clean technology, and high technology industries</td>
<td>• Davis is not perceived as “business friendly”, particularly with respect to land entitlements process. These are perceived to be unpredictable and time consuming – a deterrent to future business growth</td>
</tr>
<tr>
<td>• Proximity to UC Davis is an asset</td>
<td>• Housing costs have been raised as an issue</td>
</tr>
<tr>
<td>• Davis quality of life is a business attraction asset</td>
<td>• Davis is deficient in readily available wet lab space of all sizes</td>
</tr>
<tr>
<td>• Davis can be business-friendly: zoning compliant commercial development applications are processed rapidly</td>
<td>• The remaining land supply is inadequate</td>
</tr>
<tr>
<td>• Davis has an excellent, highly skilled workforce</td>
<td>• Ownership of existing land presents little opportunity for purchase. Idle, vacant land affects ability to facilitate business growth</td>
</tr>
<tr>
<td>• Davis’ intellectual climate is an asset</td>
<td>• Davis lease costs are an issue for start-up companies and other cost-sensitive users</td>
</tr>
<tr>
<td></td>
<td>• Davis has a shortage of experienced business/executive managers</td>
</tr>
</tbody>
</table>
Opportunities

- Davis can benefit from additional business park land
- Davis should actively market itself for business attraction purposes and advertise its successes.
- Demand for knowledge-based employment may be greater than econometric employment projections suggest

Threats

- Innovation companies are going to Sacramento region competitors
- Neighboring communities are poised to welcome businesses that may prefer to be in Davis
- Neighboring communities advertise proximity to UC Davis as business attraction strengths

BUSINESS GROWTH PROJECTIONS AND ECONOMIC IMPACT ANALYSIS

Long-term decisions influencing Davis’ economic future are informed by assumptions of future business growth. Because employment growth is a business success indicator (particularly in knowledge-based industry), employment change becomes a primary indicator by which economic development is measured.

This study explored five employment growth projection methodologies for the 2010 – 2035 timeframe. While projection results vary, they can be used to frame Davis’ economic future. Due to this study’s emphasis on private sector business growth, all methodologies exclude UC Davis employment growth.

Employment figures for all methodologies are grouped into two major categories. The first category is Office & Industrial, which is most typically associated with business park-type development. The second category, Other Commercial, includes all other employment growth. Employment is then converted to building square footage using industry-appropriate employment densities. Building square footage is converted to acreage using .26 and .35 floor-area ratio (FAR) assumptions:

- .26 floor area ratio (FAR): Represents the ten-year historical development intensity for business park-type uses in Davis and typically reflects single-story development.
- .35 floor area ratio (FAR): Represents a realistic higher development intensity to maximize remaining available land and typically represents two-story development.

Business growth would provide community-wide economic benefits. The Center for Strategic Economic Research (CSER) conducted an economic impact analysis for two

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25 Floor-area ratio represents the proportion of building size to property size. For example a 1,000 square foot building on a 1,000 square foot parcel with have an FAR of 1.0. Assumptions defined in greater detail in Chapter 6 of the BPLS Technical Report.
employment growth projections as well as an economic impact analysis of a hypothetical 100 acre (66 net acres) business park, expanding upon the ESG Study efforts.

**Business Growth Projections**

Econometric employment modeling (i.e. one reflecting statistical relationships) is considered the most statistically valid of the five employment projection scenarios presented in this study. Two econometric employment projections maintaining local sector-level relationships with the Sacramento-Solano region were conducted by the Center for Strategic Economic Research (CSER).26

1. **“Business As Usual” Employment Growth and Land Needs**

   This scenario assumes similar employment trends and relationships between the local and regional economies will continue through 2035.

2. **“Higher Targeted Growth” Employment Growth and Land Needs**

   This scenario accounts for different patterns in the Combined Knowledge-Based employment sector. Specifically, this scenario assumes that for this sector Davis will capture a greater share of regional growth than the “Business as Usual” scenario (based on the demonstrated ability of these local sectors to capture regional growth).

3. **SACOG Employment Projections and Land Needs**

   As a component of the Blueprint Project, the Sacramento Area Council of Governments (SACOG) conducted employment projections for the Sacramento Region for the 2005 – 2035 timeframe. SACOG employed *land constrained* econometric employment modeling for Davis which assumed no expansion of the Davis city boundary.

4. **Historical Employment Growth and Land Needs**

   The Historical Growth employment scenario represents a linear projection applying past rates of historical employment growth from 1990 – 2008 to the 2010 – 2035 timeframe. While this approach has less statistical validity than the econometric model used in the “Business as Usual” and “Higher Targeted Growth” scenarios, it offers insight into future growth potential if historical employment growth is applied as a baseline assumption. This is similar to the approach used in the ESG Study.

5. **Land Absorption-Based Employment Growth and Land Needs**

   This scenario applies a demonstrated 10-year (1999 – 2008) historical land demand analysis using the following assumptions:

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- 8.6 acres/year based on absorption of vacant land with Business Park, Office, and Industrial land use designations
- .26 FAR development intensity
- Employment projections are calculated assuming 333 square feet per employee, similar to projections in the ESG Study\(^{27}\).

Because this scenario was based upon development of land with Business Park, Office, and Industrial land use designations, it reflects only potential employment growth within those land use categories, not all employment growth across all industry sectors and land use designations and so does not allow for a direct comparison to the other projections.

Table 7 summarizes projected employment growth and associated land needs including by building type/major use under the five methodologies\(^ {28}\):

**Table 7: Employment Growth Projections and Built Space/Land Needs\(^ {29}\)**

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Building Type/Major Use</th>
<th>Employment Change (2010 - 2035)</th>
<th>Square Footage</th>
<th>Acres (.26 F.A.R)</th>
<th>Acres (.35 F.A.R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business as Usual (Alternative Future #1)</td>
<td>Office &amp; Industrial</td>
<td>1,811</td>
<td>775,433</td>
<td>66.5</td>
<td>50.9</td>
</tr>
<tr>
<td></td>
<td>Other Commercial</td>
<td>1,854</td>
<td>556,522</td>
<td>49.1</td>
<td>36.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3,665</td>
<td>1,331,955</td>
<td>117.6</td>
<td>87.4</td>
</tr>
<tr>
<td>Higher Targeted Growth (Alternative Future #2)</td>
<td>Office &amp; Industrial</td>
<td>3,198</td>
<td>1,248,911</td>
<td>110.3</td>
<td>81.9</td>
</tr>
<tr>
<td></td>
<td>Other Commercial</td>
<td>1,859</td>
<td>557,914</td>
<td>49.3</td>
<td>36.6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,057</td>
<td>1,806,825</td>
<td>159.5</td>
<td>118.5</td>
</tr>
<tr>
<td>SACOG Employment Projections</td>
<td>Office &amp; Industrial</td>
<td>3,146</td>
<td>1,278,068</td>
<td>112.8</td>
<td>83.8</td>
</tr>
<tr>
<td></td>
<td>Other Commercial</td>
<td>1,964</td>
<td>508,845</td>
<td>44.9</td>
<td>33.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,110</td>
<td>1,786,913</td>
<td>157.8</td>
<td>117.2</td>
</tr>
<tr>
<td>Historical Employment Growth</td>
<td>Office &amp; Industrial</td>
<td>3,385</td>
<td>1,050,166</td>
<td>92.7</td>
<td>68.9</td>
</tr>
<tr>
<td></td>
<td>Other Commercial</td>
<td>4,165</td>
<td>1,285,658</td>
<td>113.5</td>
<td>84.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8,550</td>
<td>2,335,824</td>
<td>206.2</td>
<td>153.2</td>
</tr>
<tr>
<td>Land Absorption-Based</td>
<td>Bus.Park, Office, Industrial</td>
<td>7,312</td>
<td>2,435,004</td>
<td>215.0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Economic Impact Analysis**

Future business/employment growth will be accompanied by local economic benefits. The Center for Strategic Economic Research conducted an economic impact analysis of the two econometric employment projections (“Business as Usual”, “Higher Targeted Growth”) as well as a hypothetical 100 acre (66 net acres) business park.

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\(^{27}\) City of Davis, Community Development Department. 10-year 8.6 acre annual historical development rate applied to the 2010 – 2035 timeframe.

\(^{28}\) See Chapter 5 of the BPLS Technical Report for projections by employment sector.

\(^{29}\) See Chapter 6 of the BPLS Technical Report for more built space and land needs assumptions detail.
Economic Impacts of Employment Projections

With continued business growth, various economic outcomes will be realized in the City of Davis economy. In addition to an increase in jobs, the local economy could see corresponding gains in output (market value of goods produced and services provided) and employee compensation (value of wages and benefits) as well as a boost in state and local tax generation. If Davis were to experience the “Business as Usual” scenario employment growth through 2035 (nearly 3,700 jobs), the economy would see a corresponding gain of about $406 million of output, $183 million of employee compensation, and $14 million of revenue from state and local taxes. With a greater level of employment growth concentrated in the high value knowledge-based sectors, “Higher Targeted Growth” scenario presents notably larger economic outcomes (associated with the net gain of nearly 5,100 jobs) at approximately $586 million of output, $252 million of compensation, and $19 million of state and local taxes.

Economic Impact of Business Park Scenario

The ESG study explored the viability of a business park at the ConAgra property and concluded a business park viable if the site is entitled to permit a wide range of uses. Buildout was projected at 16 years. The site was considered infeasible if restricted to high technology uses only due to a projected 39 year buildout. Using the ESG study as a foundation, CSER expanded this analysis to understand in greater detail the economic impact of a new 100-acre business park (66 net acres) within the existing city limits. Conceivably, this could represent the ConAgra property but the analysis conclusions are not location-dependent. For the purposes of this study, the business park economic impact analysis scenario excluded certain employment sectors considered less compatible with a dedicated business park such as Agriculture; Construction; Education & Health; and Wholesale, Transportation & Utilities. Remaining employment sectors were applied to the scenario, proportional to their current representation in the Davis economy. It is important to note that this analysis is conducted independent of “Business as Usual” and “Higher Targeted Growth” employment projections. Table 8 illustrates employment distribution for this analysis:

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31 ESG Study, Pg 65.
32 ESG Study, Pg 71.
Table 8: New Business Park Employment Assumptions

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total Employment</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Knowledge-Based</td>
<td>1,360</td>
<td>52.6%</td>
</tr>
</tbody>
</table>
| <Targeted Knowledge-Based>                 | <844>            | <32.6%>
| <Rest of Professional, Scientific, &       | <516>            | <20.0%>
| Technical Services>                        |                  |        |
| Manufacturing                              | 328              | 12.7%  |
| Retail, Leisure, Hospitality               | 258              | 10.0%  |
| Business & Financial Services              | 251              | 9.7%   |
| Government & Unclassified                  | 388              | 15.0%  |
| Total                                      | 2,586            | 100%   |

A new business park containing about 2,600 jobs in selected sectors (many of which are high value) could directly generate economic outcomes equaling nearly $445 million of output, $138 million of employee compensation, and $19 million of state and local tax revenue.

Table 9 illustrates economic outcomes associated with the projected employment growth in each of the “Business as Usual” and “Higher Targeted Growth” employment scenarios as well as a new dedicated business park.

Table 9: Economic Impact Analysis Results

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Business as Usual</th>
<th>Higher Targeted Growth</th>
<th>New Business Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs</td>
<td>3,665</td>
<td>5,057</td>
<td>2,586</td>
</tr>
<tr>
<td>Output</td>
<td>~$406,000,000</td>
<td>~$586,000,000</td>
<td>~$445,000,000</td>
</tr>
<tr>
<td>Employee Compensation</td>
<td>~$183,000,000</td>
<td>~$252,000,000</td>
<td>~$138,000,000</td>
</tr>
<tr>
<td>State &amp; Local Tax Generation</td>
<td>~$14,000,000</td>
<td>~$19,000,000</td>
<td>~$19,000,000</td>
</tr>
<tr>
<td>Approximate City Share</td>
<td>&lt;~$1,300,000&gt;</td>
<td>&lt;~$1,700,000&gt;</td>
<td>&lt;~$2,300,000&gt;</td>
</tr>
<tr>
<td>Land Demand Range (acres)</td>
<td>87.4 - 117.6</td>
<td>118.5 - 159.5</td>
<td>100 (66 net)</td>
</tr>
</tbody>
</table>

The potential impact from a “New Business Park” scenario illustrates economic benefits from a dedicated business park are greater than for the “Business as Usual” scenario. However, it should be noted that all employment projection scenarios assume employment on the ConAgra property, so the “New Business Park” analysis and employment projection scenarios are not mutually exclusive. However, from a local revenue generation standpoint, the “New Business Park” analysis suggests Davis may be better served focusing economic development efforts toward a new business park and/or related industries over the type of employment growth assumed in the “Business

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33 “Approximate City Share” is a rough analysis conducted by the City of Davis Finance Department to reflect the approximate amount of tax revenue for the City.
as Usual” and “Higher Targeted Growth” scenarios – if market conditions permit - given
the greater projected per capita return on investment.

**Alternative Economic Futures**

Previous sections of this study provided a range of employment projections (both
econometric and alternative), the economic impacts of two econometric projections, and
a sense of Davis’ business growth strengths and weaknesses. “Three Alternative Futures” are presented for community consideration, representing plausible economic futures. Two are based on the econometric employment projections (Alternative Future #1: “Business as Usual”, Alternative Future #2: “Higher Targeted Growth A third alternative, “Goal-Based Economic Development”, has two variations. Alternative #3 represents a goal-based future focused on increasing knowledge-based employment as
a percentage of Davis’ total employment from the current 12.6% to 17.5%.

**Alternative Future #1: “Business as Usual” Scenario**

In this scenario, Davis grows in accordance with “Business as Usual” employment
projections. This would reflect a loss of employment in the Combined Knowledge-
Based sector accompanied by large employment increases in Retail, Leisure, & Hospitality; Education & Health; and Government sectors. Table 10 summarizes employment change in the Combined Knowledge-Based sector with total employment growth projections under this alternative future.

**Table 10: Alternative Future #1 Employment Growth**

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Employment Category</th>
<th>Employment Change (2010 - 2035)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Future #1</td>
<td>Combined Knowledge-Based</td>
<td>-525</td>
</tr>
<tr>
<td>Business as Usual</td>
<td>Other</td>
<td>4,190</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3,665</td>
</tr>
</tbody>
</table>

**Alternative Future #2: “Higher Targeted” Growth Scenario**

In this scenario, Davis grows in accordance with “Higher Targeted Growth” employment projections. This would reflect increases in the Combined Knowledge-Based sector accompanied by the same employment increases in Retail, Leisure, & Hospitality; Education & Health; and Government sectors as in Alternative Future #1. Table 11 summarizes employment change in the Combined Knowledge-Based sector with total employment growth projections under this alternative future.

**Table 11: Alternative Future #2 Employment Growth**

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Employment Category</th>
<th>Employment Change (2010 - 2035)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Future #2</td>
<td>Combined Knowledge-Based</td>
<td>857</td>
</tr>
<tr>
<td>Higher Targeted Growth</td>
<td>Other</td>
<td>4,201</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,057</td>
</tr>
</tbody>
</table>
**Alternative Future #3: Goal-Based Economic Development**

In this scenario, using the “Higher Targeted Growth” scenario as the baseline, Davis pursues business growth to increase employment diversification in the Davis economy by increasing the Combined Knowledge-Based sector’s percentage of total employment approximately five percent from 12.6% to 17.5% by 2035. This Alternative Future would require proactive, strategic actions to support knowledge-based industry. Two approaches can be taken within this scenario.

In Alternative Future #3-A, all projected employment growth from the “Higher Targeted Growth” Scenario is assumed to occur in addition to Combined Knowledge-Based sector employment growth necessary to reach 17.5% of total 2035 employment. Alternative Future #3-A results in 6,175 new jobs, of which 1,975 occur in the Combined Knowledge-Based sector as evidenced in Table 12.

**Table 12: Alternative Future #3-A Employment Growth**

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Employment Category</th>
<th>Employment Change (2010 - 2035)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Future #3-A: Increased</td>
<td>Combined Knowledge-Based</td>
<td>1,975</td>
</tr>
<tr>
<td>Knowledge-Based Employment +</td>
<td>Other</td>
<td>4,201</td>
</tr>
<tr>
<td>Projected employment Growth in Other</td>
<td>Total</td>
<td>6,175</td>
</tr>
<tr>
<td>Sectors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Alternative Future #3-B, Combined Knowledge-Based sector employment growth is assumed to replace employment in Retail, Leisure, & Hospitality; Education & Health; and Government & Unclassified sectors. Table 10 illustrates projected Combined Knowledge-Based sector employment change. Alternative Future #3-B retains the 5,059 jobs projected in the econometric “Higher Targeted Growth” scenario but replaces employment growth in Retail, Leisure, & Hospitality; Education & Health; and Government & Unclassified sectors with Combined Knowledge-Based employment growth to achieve the 17.5% goal. This scenario results in approximately 1,779 Combined Knowledge-Based jobs, as evidenced in Table 13.

**Table 13: Alternative Future #3-B Employment Growth**

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Employment Category</th>
<th>Employment Change (2010 - 2035)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Future #3-B: Combined</td>
<td>Combined Knowledge-Based</td>
<td>1,779</td>
</tr>
<tr>
<td>Knowledge-Based Employment Substitution</td>
<td>Other</td>
<td>3,280</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5,059</td>
</tr>
</tbody>
</table>

34 For scenario #3-B, a shift of approximately 235 Combined Knowledge-Based jobs = 1% shift in percentage of total employment
Table 14 shows employment growth by building type/major use with accompanying built space and land needs required to achieve Alternative Futures #1 through #3-B. Table 14: Employment, Built Space, and Land Needs by Building Type/Major Use for Alternative Futures #1 - #3-B

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Building Type/Major Use</th>
<th>Employment Change (2010 - 2035)</th>
<th>Square Footage</th>
<th>Acres (.26 F.A.R)</th>
<th>Acres (.35 F.A.R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business as Usual</td>
<td>Office &amp; Ind.</td>
<td>1,811</td>
<td>775,433</td>
<td>68.5</td>
<td>50.9</td>
</tr>
<tr>
<td>(Alternative Future #1)</td>
<td>Other Comm.</td>
<td>1,854</td>
<td>556,522</td>
<td>49.1</td>
<td>36.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3,665</td>
<td>1,331,955</td>
<td>117.6</td>
<td>87.4</td>
</tr>
<tr>
<td>Higher Targeted Growth</td>
<td>Office &amp; Ind.</td>
<td>3,198</td>
<td>1,248,911</td>
<td>110.3</td>
<td>81.9</td>
</tr>
<tr>
<td>(Alternative Future #2)</td>
<td>Other Comm.</td>
<td>1,859</td>
<td>557,914</td>
<td>49.3</td>
<td>36.6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,057</td>
<td>1,806,825</td>
<td>159.5</td>
<td>118.5</td>
</tr>
<tr>
<td>Goal-Based Economic Development:</td>
<td>Office &amp; Ind.</td>
<td>4,316</td>
<td>1,658,166</td>
<td>146.4</td>
<td>108.8</td>
</tr>
<tr>
<td>(Alternative Future #3-A)</td>
<td>Other Comm.</td>
<td>1,859</td>
<td>557,914</td>
<td>49.3</td>
<td>36.6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6,175</td>
<td>2,216,080</td>
<td>195.7</td>
<td>145.4</td>
</tr>
<tr>
<td>Goal-Based Economic Development:</td>
<td>Office &amp; Ind.</td>
<td>3,814</td>
<td>1,448,850</td>
<td>127.9</td>
<td>95.0</td>
</tr>
<tr>
<td>(Alternative Future #3-B)</td>
<td>Other Comm.</td>
<td>1,245</td>
<td>381,327</td>
<td>33.7</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,059</td>
<td>1,830,177</td>
<td>161.6</td>
<td>120.0</td>
</tr>
</tbody>
</table>

Alternative Futures #1 through #3-B result in a need for between 117.6 and 195.7 acres. Office and Industrial uses, those most consistent with business park-type development represent the vast majority of future built space needs for all scenarios, ranging from 68.5 to 127.9 acres.

Despite the current economy, Davis’ long term economic future appears favorable. The extent to which the community acts to support business growth will dictate the magnitude of community benefit received. This section presented several employment projection methodologies, demonstrated the economic benefits of two employment projections and a hypothetical business park, and presented three Alternative Futures for community consideration.

EXISTING VACANT LAND INVENTORY AND LAND ADEQUACY

While employment projections provide some insight into the volume of employment growth Davis might expect given historical trends, a critical information gap exists if land capacity is unknown. An important factor in accommodating future business growth is the amount of land and/or built space available to accommodate new or expanding businesses. At the most basic level, additional built space and/or land is necessary to accommodate business growth.

This section addresses the adequacy of Davis’ existing vacant commercial land supply with employment growth and land demand projections. It places an emphasis on remaining land for office/flex and industrial buildings – building types most typically associated with business park-type uses. However, because employment projections

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35 See Chapter 5 of the Technical Report for more details
were conducted for Davis’ entire economy, land and built space information is provided accordingly.

Given this study’s focus and due to an absence of vacant land downtown and uncertainty in quantifying 25-year redevelopment assumptions for the downtown, for the purposes of this study all new development related to economic growth is assumed to occur on vacant land throughout the city, outside the downtown. However, it is reasonable to assume some downtown redevelopment will occur 2010 and 2035, increasing the supply of office and retail space for business growth. Addendum 2 of the Technical Report explores in more detail the potential role of downtown as a future employment center.

**Factors Affecting Remaining Vacant Land**

Undeveloped vacant land is important for accommodating future business growth. Business creation, attraction, and growth are dependent on available physical space to operate, including vacant land available for building construction. No accepted standard exists regarding how much land inventory a community should have available to support business growth, either in total acreage or percentage of land available. Davis’ current General Plan was to guide land use development through January, 2010. Thus, the 25-year timeframe used for this study is appropriate for assessing the Davis land supply in support of a future General Plan update. Figure 2 illustrates Davis existing land inventory contrasted with existing commercial development.

While measuring total available land is important, equally important is how well available land accommodates *business growth*. To address this issue, the following attributes of vacant parcels were also considered:

- Site Size Category (small, medium, large, very large)
- Development capacity (square footage)
- Employment capacity (# of employees)
- Site quality (Class A, B, C, or D)
Figure 2: Vacant Commercial Land

Source: City of Davis Geographic Information System
Davis’ available land supply is greatly influenced by the criteria used for including sites in the inventory. Due to this study’s focus on land suitable for knowledge-based business growth, two of the more important variables, site size and site quality, are disaggregated for Office/Flex & Industrial sites to provide greater insight into Davis’ available land supply. “Other Commercial” sites, typically represent sites zoned for service commercial, retail, or other general commercial uses. Due to their nearly universal small size (<3.5 acres), they are presented in aggregate. Table 32 illustrates Davis’ land supply by size.

### Table 15: Vacant Commercial Land

<table>
<thead>
<tr>
<th>Remaining Office/Flex &amp; Industrial Sites</th>
<th># of Sites</th>
<th>Total net acres (where applicable)</th>
<th>Development Potential (square feet)</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>@ .26 F.A.R</td>
<td>@ .35 F.A.R</td>
<td></td>
</tr>
<tr>
<td># of Small Sites</td>
<td>17</td>
<td>29.7</td>
<td>336,710</td>
<td>1,011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>@ .26 F.A.R</td>
<td>453,264</td>
<td>1,361</td>
</tr>
<tr>
<td># of Medium Sites</td>
<td>9</td>
<td>62.7</td>
<td>709,549</td>
<td>2,131</td>
</tr>
<tr>
<td></td>
<td></td>
<td>@ .35 F.A.R (333 sft/empl.)</td>
<td>955,162</td>
<td>2,868</td>
</tr>
<tr>
<td># of Large Sites</td>
<td>2</td>
<td>44.1</td>
<td>504,378</td>
<td>1,515</td>
</tr>
<tr>
<td></td>
<td></td>
<td>@ .35 F.A.R (333 sft/empl.)</td>
<td>566,125</td>
<td>1,700</td>
</tr>
<tr>
<td># of Very Large Sites</td>
<td>1</td>
<td>66.0</td>
<td>747,490</td>
<td>2,245</td>
</tr>
<tr>
<td></td>
<td></td>
<td>@ .35 F.A.R (333 sft/empl.)</td>
<td>1,006,236</td>
<td>3,022</td>
</tr>
<tr>
<td>Total Office/Flex &amp; Industrial</td>
<td>29</td>
<td>202.4</td>
<td>2,298,127</td>
<td>6,901</td>
</tr>
<tr>
<td></td>
<td></td>
<td>@ .35 F.A.R (333 sft/empl.)</td>
<td>2,980,786</td>
<td>8,951</td>
</tr>
<tr>
<td>Other Commercial Sites</td>
<td>15</td>
<td>25.5</td>
<td>313,185</td>
<td>940</td>
</tr>
<tr>
<td></td>
<td></td>
<td>@ .35 F.A.R (333 sft/empl.)</td>
<td>401,865</td>
<td>1,207</td>
</tr>
<tr>
<td>Total Inventory</td>
<td>44</td>
<td>227.9</td>
<td>2,611,312</td>
<td>7,841</td>
</tr>
<tr>
<td></td>
<td></td>
<td>@ .35 F.A.R (333 sft/empl.)</td>
<td>3,382,651</td>
<td>10,158</td>
</tr>
</tbody>
</table>

A total of 44 vacant sites (227.9 acres) within the Davis city boundary are suitable for business growth. Twenty-nine of these are suitable for Office/Flex & Industrial development. However, 17 of the 29 Office/Flex & Industrial sites are less than four acres, leaving 12 vacant sites for medium or larger users (>135 employees). Davis has one very large site (ConAgra, 66 net acres) suitable as a “dedicated business park”.

Site quality plays a significant role in the ability for the available land supply to facilitate future business growth. High quality sites are necessary for business attraction purposes and to competitively position Davis against neighboring and regional communities. Table 16 illustrates the extent to which site quality affects land availability. This table ranks the sites according to criteria associated with most desirable sites (e.g. size, configuration, proximity to freeway, etc.). Class A sites are the most desirable with Class D sites presenting size, configuration and/or location limitations. Of the 44 vacant sites available, less than half (16 sites) are ranked as Class A or Class B sites (note: two “Business Park Opportunity Sites” - PG & E and Department of Forestry Site - are not included in this inventory).

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36 Refer to Chapter 6 of the BPLS Technical Report for more detail.
Table 16: Vacant Commercial Land by Evaluation Class

<table>
<thead>
<tr>
<th>Remaining Office/Flex &amp; Industrial Sites</th>
<th># of sites</th>
<th>Total net acres (where applicable)</th>
<th>Development Potential (square feet) @ .26 F.A.R</th>
<th>Development Potential (square feet) @ .35 F.A.R</th>
<th>Employees @ .26 F.A.R (333 sf/empl.)</th>
<th>Employees @ .35 F.A.R (333 sf/empl.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class A Sites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small (&lt;4 acres)</td>
<td>1</td>
<td>1.6</td>
<td>17,894</td>
<td>24,089</td>
<td>54</td>
<td>72</td>
</tr>
<tr>
<td>Medium (4.1-15 acres)</td>
<td>5</td>
<td>36.3</td>
<td>411,459</td>
<td>553,887</td>
<td>1,236</td>
<td>1,663</td>
</tr>
<tr>
<td>Large (15.1-50 acres)</td>
<td>1</td>
<td>28.3</td>
<td>326,000</td>
<td>326,000</td>
<td>979</td>
<td>979</td>
</tr>
<tr>
<td>Very Large (&gt;50 acres)</td>
<td>1</td>
<td>66.0</td>
<td>747,490</td>
<td>1,006,236</td>
<td>2,245</td>
<td>3,022</td>
</tr>
<tr>
<td><strong>Class A Total</strong></td>
<td>8</td>
<td>132.2</td>
<td>1,502,843</td>
<td>1,910,212</td>
<td>4,513</td>
<td>5,736</td>
</tr>
<tr>
<td><strong>Class B Sites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>6</td>
<td>10.8</td>
<td>122,430</td>
<td>164,809</td>
<td>368</td>
<td>495</td>
</tr>
<tr>
<td>Medium</td>
<td>1</td>
<td>6.7</td>
<td>75,428</td>
<td>101,538</td>
<td>227</td>
<td>305</td>
</tr>
<tr>
<td>Large</td>
<td>1</td>
<td>15.8</td>
<td>178,378</td>
<td>240,125</td>
<td>536</td>
<td>721</td>
</tr>
<tr>
<td>Very Large</td>
<td>0</td>
<td>0.0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Class B Total</strong></td>
<td>8</td>
<td>33.2</td>
<td>376,236</td>
<td>506,472</td>
<td>1,130</td>
<td>1,521</td>
</tr>
<tr>
<td><strong>Class C Sites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>8</td>
<td>15.3</td>
<td>172,942</td>
<td>232,806</td>
<td>519</td>
<td>699</td>
</tr>
<tr>
<td>Medium</td>
<td>3</td>
<td>19.7</td>
<td>222,661</td>
<td>299,736</td>
<td>669</td>
<td>900</td>
</tr>
<tr>
<td>Large</td>
<td>0</td>
<td>0.0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Very Large</td>
<td>0</td>
<td>0.0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Class C Total</strong></td>
<td>11</td>
<td>34.9</td>
<td>395,603</td>
<td>532,543</td>
<td>1,188</td>
<td>1,599</td>
</tr>
<tr>
<td><strong>Class D Sites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>2</td>
<td>2.1</td>
<td>23,444</td>
<td>31,559</td>
<td>70</td>
<td>95</td>
</tr>
<tr>
<td>Medium</td>
<td>0</td>
<td>0.0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Large</td>
<td>0</td>
<td>0.0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Very Large</td>
<td>0</td>
<td>0.0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Class D Total</strong></td>
<td>2</td>
<td>2.1</td>
<td>23,444</td>
<td>31,559</td>
<td>70</td>
<td>95</td>
</tr>
<tr>
<td><strong>Total Office/Flex &amp; Industrial</strong></td>
<td>29</td>
<td>202.4</td>
<td>2,298,127</td>
<td>2,980,786</td>
<td>6,901</td>
<td>8,951</td>
</tr>
<tr>
<td><strong>Other Commercial Sites</strong></td>
<td>15</td>
<td>25.5</td>
<td>313,185</td>
<td>401,865</td>
<td>940</td>
<td>1,207</td>
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<tr>
<td><strong>Total Inventory</strong></td>
<td>44</td>
<td>227.9</td>
<td>2,611,312</td>
<td>3,382,651</td>
<td>7,841</td>
<td>10,158</td>
</tr>
</tbody>
</table>

Land Adequacy

The employment growth projections displayed a distribution of employment growth across all sectors. However, employment growth distribution does not match the distribution of Davis’ remaining vacant land supply. That is, there is no correlation between the type of employment growth projected with the zoning of the remaining vacant land supply. For the purposes of determining total land adequacy, this study assigns total employment growth to total remaining vacant land irrespective of zoning of remaining vacant land. Figure 3 illustrates the
extent to which Davis’ land supply can support future business growth based on
the above assumption\(^{37}\).

**Figure 3: Davis Land Supply Adequacy, 2010 – 2035 (All Employment Projections)\(^{38}\)**

Figure 3 suggests Davis’ total vacant land supply is theoretically sufficient
under alternate growth scenarios if the ConAgra property is retained for business
growth purposes. If the ConAgra property is rezoned either entirely or primarily
for other uses, Davis’ ability to accommodate business growth is significantly
compromised. Additionally, if Housing Element Conflict Sites\(^{39}\) are developed for
residential uses, land supply is further reduced\(^{40}\). Davis should carefully balance
community priorities and plan for both business growth and other community
needs (e.g. housing). A role of this study is to help identify tradeoffs resulting
from land use decisions in advance rather than when development applications
are in process.

\(^{37}\) At .26 FAR development intensity

\(^{38}\) Goal-Based Economic Development (Alternative Futures #3-A & #3-B) scenarios do not reflect
employment projections but rather represent economic development objectives accompanied
by necessary land needs.

\(^{39}\) Nonresidential sites considered suitable for residential uses in Housing Element Update
process.

\(^{40}\) See discussion below.
Additional Land Supply Factors

Important and often unquantifiable or speculative factors also affect land supply adequacy. These include total available land, site quality, site sizes, practical development potential of specific sites due to size and configuration, demand for business growth, land ownership, available land marketed for sale, and policy/process factors. Additionally, several external factors not accountable in a basic demand/supply analysis have potential to affect the land supply.

Land Supply Factors Potentially Increasing Inventory

Economic Recession and UC Davis Migration of Some Activities to Campus and the Effect on Vacant Space Equilibrium

The current economic recession has affected many communities, Davis included. Businesses and companies are downsizing, and demand for office and flex space is down overall in Davis. Due to the economic recession's severity and duration, vacancy rates were assessed to analyze whether the Davis office/flex, industrial, retail, and general commercial space markets were in equilibrium: the market state at which tenants and landlords have equal negotiating leverage. This term is defined as the market state at which tenants and landlords have equal negotiating leverage, generally 10% for office and industrial buildings and 6% - 7% for retail buildings. Under this assumption, the combined vacancy rate for all vacant space at equilibrium should be 8.9%. This study analyzed current vacancy rates, the effect of the UC Davis migration of some activities currently occurring in Davis private leased space, and subsequent excess square footage that must be reabsorbed by new business growth.

On balance, despite the economic recession and UC Davis' migration trend toward campus, the Davis commercial real estate market has performed fairly well. Table 17 illustrates current Davis vacancy rates across primary building types.

Table 17: Davis Vacancy Rates

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Vacancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office/Flex</td>
<td>8.6%</td>
</tr>
<tr>
<td>Industrial</td>
<td>0%</td>
</tr>
<tr>
<td>Retail</td>
<td>5.0%</td>
</tr>
<tr>
<td>General Commercial</td>
<td>11.4%</td>
</tr>
<tr>
<td>Total</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

41 Loopnet: 2/10/10; Davis Enterprise Classified Ads: 2/10/10, 2/11/10, 2/12/10, 2/14/10; Craigslist: 2/10/10, 2/14/10.
Though local vacancy rates have likely increased due to the recession, a market correction may be bringing the real estate market closer to equilibrium where lease rates are likely to increase only at the rate of inflation. Additionally, it may suggest that in a healthy economy where vacancy rates may drop below equilibrium, Davis’ built space is undersupplied. Because the Davis commercial vacancy rate exists on balance, below equilibrium, this study concludes a built space surplus does not exist.

**Status of UC Davis Research Park**

UC Davis administration has confirmed the business park south of I-80 is no longer being pursued due to an absence of private development partners able to finance and construct the project and necessary infrastructure and access improvements. Thus, the project is not assumed to have an impact on Davis as a land supply factor.

**Downtown Potential as Future Employment Center**

Given downtown’s role as Davis’ commercial and cultural center it is reasonable to assume additional office and retail development will occur downtown within the 2010 – 2035 timeframe. The 2000 General Plan Environmental Impact Report (EIR) assumed over 480,000 square feet of net new commercial development downtown, much of which is yet to materialize. However, because this study focuses on available land supply and given downtown’s absence of vacant sites and current processes affecting downtown redevelopment, quantifying downtown’s commercial development capacity is highly speculative. Therefore, for the purposes of this study, all new commercial development is assumed to occur on currently vacant land outside downtown. However, Addendum 2 of the BPLS Technical Report explores in more detail the potential role of downtown as a future employment center. Interviews for this study confirmed many small businesses desired the amenities provided by a downtown location if suitable lease space was available.

**Land Supply Factors Potentially Reducing Inventory**

**Housing Element Update Potential Conflict Sites**

Eight sites totaling 101.2 acres\(^{44}\) in the final Housing Element list are zoned for Office/Flex & Industrial uses. These present potential land availability conflicts for both types of uses. If conflict sites are developed for housing, they are effectively removed from the inventory for business growth or business park-type uses and vice versa. Figure 4 identifies these sites.

\(^{44}\) Includes ConAgra property
Figure 4: Housing Element Update Potential Conflict Sites
Land Supply Factors Potentially Affecting Business Growth

Remaining Available Land for Sale and Land Market Dynamics:

An important component to business growth is not only the vacant land theoretically available for growth, but also land actively marketed for sale so build-to-suit development can quickly materialize when business attraction prospects approach the City or current property owners. The state of Davis’ land supply is accurately reflected by the amount of land actively marketed for sale. If land supply is adequate, sites in a variety of sizes and locations will be available for purchase or lease. If land is undersupplied, very few opportunities are available for ownership transfer and/or build-to-suit development to facilitate business growth. This results in many business prospects approaching owners of properties not marketed for sale, increasing the property’s perceived value. This influences the owner to retain the property. Thus, existing property owners to a certain extent may influence the rate at which future business growth can occur in Davis. Table 18 illustrates properties formally on the market in contrast with total available land.

Table 18: Remaining Available Land Marketed for Purchase

<table>
<thead>
<tr>
<th>Site Category</th>
<th># of Sites</th>
<th>Total Acres</th>
<th>Total Inventory</th>
<th>% Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office/Flex &amp; Industrial</td>
<td>4</td>
<td>8.8</td>
<td>202.4</td>
<td>4.3%</td>
</tr>
<tr>
<td>Other Commercial Sites</td>
<td>1</td>
<td>2.8</td>
<td>25.5</td>
<td>11.0%</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>11.6</td>
<td>227.9</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

No accepted “equilibrium” standard exists quantifying the amount or percentage of land that should be actively marketed for sale within a community. Of Davis’ 44 total vacant commercial sites, five sites totaling 11.6 acres are actively marketed for sale. This suggests a very limited market for business attraction prospects seeking ownership and build-to-suit opportunities. Qualitative evidence supporting this conclusion is supported by City staff experience and explored in greater detail in Chapter 4 of the Technical Report. The absence of larger size sites readily available for purchase has limited business attraction success in Davis.

Factors Affecting Site Delivery

Facilitating future business growth, particularly in knowledge-based industries, requires maintaining a steady supply of high quality building sites in a variety of sizes and ownership opportunities. Lack of action to maintain a sufficient space inventory will result in missed opportunities and loss of businesses, employment growth, and other economic benefits to other communities. Unquantifiable factors affect Davis’ land supply today with a business community consensus that a significant contrast exists between the available land supply and land deliverable
for business growth. That is, a deficiency of suitable sites for sale to develop exists now.

Future business growth will depend on the ability to develop existing vacant land. While most existing available sites included in this study are compatible with their assumed uses, not all sites are developable with a smooth regulatory process. This issue particularly applies to larger sites requiring an environmental impact report (EIR); conditional use permits; opportunity sites requiring general plan amendments/rezones; and lastly, external sites for annexation, if the City chooses to pursue that route.

A streamlined, predictable development application process was voiced as the single most important action the city could take to facilitate business growth. Historically, Davis has relied upon Planned Development zoning to tailor specific uses to their respective parcel(s). Entitlements processes requiring General Plan amendments, rezoning, or conditional use permits are often lengthy and unpredictable for developers whose projects facilitate business growth. A corollary to drawbacks associated with Planned Development zoning is the absence of a standard Business Park or Office zone. Standardized business park zoning ensures process predictability and reduces project completion time. These two issues complement ESG Study conclusions regarding the ConAgra property that entitlements with highly restrictive, discretionary, and unclear regulatory controls will limit capture/absorption of business park market opportunities and will negatively impact business growth. This applies universally to the Davis market.

**POTENTIAL IMPACTS OF FUTURE BUSINESS GROWTH**

Future business growth may raise questions regarding infrastructure capacity, community impacts, and demand for residential growth. This study analyzed these subjects at a cursory level and has drawn preliminary conclusions, relying upon conclusions drawn from the 2000 General Plan Update and macro-level analysis conducted by the Public Works Department as primary information sources.

First, the 2000 General Plan assumed buildout of all commercially zoned parcels by 2010. Some of that commercial growth did not occur, which represents the remaining vacant land supply presented in this study. The City has evaluated the water supply, wastewater treatment system, and circulation impacts and concludes the existing infrastructure has the capacity to accommodate the range of business growth projections presented in this study\(^{46}\).

Second, potential exists for future business growth to be accompanied by demand for additional housing. This study analyzed the range of business growth projections and quantified potential housing demand resulting in a demand for

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\(^{46}\) See Addendum 1 of the BPLS Technical Report for more detail.
between approximately 2,257 – and 4,956 housing units, depending on employment growth scenario assumed\(^{47}\). Davis’ one percent residential growth guideline permits approximately 300 units per year resulting in approximately 7,500 units over the 2010 – 2035 timeframe, if constructed. While this study does not resolve whether additional housing *should* be accommodated, future business growth *could* theoretically be accommodated within the context of existing residential growth policies.

**CONCLUSIONS AND NEXT STEPS**

The current economic recession is a challenging environment in which to discuss business growth. Businesses are struggling, unemployment rates are at record highs, and economic recovery seems distant for many businesses and the community as well. However, economic recovery will occur and Davis can capitalize on competitive strengths, changing the trajectory of the local economy particularly in industries widely recognized as driving the future economy. Davis’ advantages relative to neighboring communities can be leveraged to strengthen its competitive position, particularly in high-paying knowledge-based industries that neighboring and regional communities highly prize, such as biotechnology and clean technology. Supporting this objective, this study focused on primary topics related to assuring business opportunity for a 25-year timeframe. In summary, key topics addressed include:

- Current economic development policies supporting business growth, particularly knowledge-based industry
- Economic value of business growth, with an emphasis on knowledge-based industry
- The nature of Davis economy from both current and historical perspectives
- Davis business community perception of the local business climate, prospects for future growth, and necessary conditions to facilitate it
- Employment growth projections
- Economic Impact analysis of two employment growth projections as well as a hypothetical 100 acre (66 net acres) business park.

Davis existing land supply and the extent to which it can accommodate future business growth

The study’s purpose evolved from considering the tradeoffs of a specific land use decision regarding the ConAgra property to one focusing on priorities for Davis’ economic future. The evolution included a shift from a focus on historical land absorption and tradeoffs surrounding a specific land use decision for the ConAgra property analysis to a more thorough analysis of the economic value,

\(^{47}\) Ibid.
conditions necessary to facilitate, business growth projections, and land supply. Thus, this study emphasizes Davis’ economic future as much as it does land use and supply. With the BPLS set in this context, the following five conclusions can be drawn:

1. Davis economic development policies support knowledge-based business growth
2. Knowledge-based business provides substantial economic value
3. Davis is poised for additional growth in knowledge-based industries
4. Davis’ land supply to accommodate future business growth is limited
5. Davis needs to proactively facilitate future knowledge-based business growth to achieve desired goals

Davis is in a position to chart a desired economic growth path. Thus, the timing is appropriate for Davis to consider preparing for a desired economic future. Econometric employment growth projections reveal substantial employment growth using conservative assumptions. However, questions for community consideration include:

- How much and what type of business growth should the community pursue?
- How much and what type of land is necessary to support desired business growth?
- What actions should the City take to support and encourage desired business growth?
- What actions should be taken to maximize the benefits from the current land supply?

Community priorities in response to these questions necessarily lead to questions regarding Davis’ available land supply including:

- How should the ConAgra site develop?
- How should Housing Element Conflict Sites develop?
- If the PG&E site is redeveloped, how should it be developed?

Tension exists between Davis’ quantified available land inventory and deliverability of land to facilitate business growth. If Davis desires to continue expanding the business sector, it is likely at some point within the 2010-2035 timeframe annexing additional land contiguous to the City boundary will need exploration. Retaining the ConAgra property and preparing it for business park development would extend the time necessary before external sites need consideration. Figure 10 illustrates potential external sites considered appropriate for business park locations. External business sites have not been analyzed for
development potential, suitability, compatibility, potential impacts, or property owner interest.

Figure 5: Potential External Business Park Locations

When community priorities for existing vacant land are established, it may then be appropriate to explore the subject of whether Davis should pursue additional commercial land to support business growth. Figure 11 illustrates a framework for near and long-term land decision making to guide the community through important issues regarding Davis' economic future.
Figure 6: Framework for Business Park, Office, and Industrial Land Decision Making

**Maximize Use of Existing Inventory:**
1. Preserve existing Business Park, Office, and Industrial land by discouraging conversion to uses such as housing, institutional, and commercial recreation.
2. Amend Business Park, Office, and Industrial zoned districts to increase consistency, certainty, and allow for streamlined processing.
3. Encourage higher intensity development on existing vacant commercial sites.
4. Work with existing vacant commercial property owners to collectively market vacant properties.

**Confirm Long-Term Land Inventory**
1. How should the Con Agra site develop?
2. How should Housing Element Conflict Sites develop?
3. If the PG &E site is redeveloped, how should it be developed?

**Should Davis Pursue Additional Business Park Land to Support Business Growth?**

**Assumption: Con Agra Site is Preserved for Business Growth:**
1. Facilitate construction of infrastructure at Con Agra property
2. Facilitate construction and occupancy of business park at ConAgra property.

**Assumption: Con Agra Site is NOT Preserved for Business Growth:**
1. Explore appropriate substitute business park sites for Con Agra property contiguous to City boundary.
2. Confirm preferred location for business park.
4. Facilitate construction and occupancy of business park.
Private sector business growth is an important factor of local economic health and prosperity. This study analyzed several components of the Davis economy and identified opportunities as well as constraints to future business growth. The community and decision-makers will find this study a useful resource to guide future economic development initiatives and land use decisions. Readers are encouraged to explore the Business Park Land Strategy Technical Report for greater depth, detail, and context surrounding the key issues addressed in this study.