Economic and Fiscal Impact Analysis of Proposed Industrial Land Conversion in Morgan Hill: Cochrane Road Site

Final Report

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by

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I. INTRODUCTION

This report assessed the economic and fiscal impacts of a proposed General Plan Amendment to develop a mixed-use residential and retail project on a site currently designated for industrial use at Cochrane Road and Butterfield Boulevard in Morgan Hill. This report provides an updated market analysis for employment uses in Morgan Hill, and builds on a September 2012 report analyzing the economic and fiscal impacts of two other General Plan Amendment proposals (Jarvis and Central sites). This study is focused on providing information on the fiscal impact of various development scenarios for the Cochrane Road site.

This report is organized into four chapters. Following this introduction, Chapter II summarizes the key findings and recommendations drawn from the analysis. Chapter III provides an updated description of Morgan Hill's economic position within Santa Clara County using new data as available, and provides an updated estimate of the potential supply and projected demand for employment space in Morgan Hill. Chapter IV presents the implications of the market and land supply analysis for the Cochrane Road site, and describes the results of the fiscal and employment impact analyses. Appendix A describes the methodology and assumptions underlying the fiscal and employment impact analysis. Appendix B provides a list of brokers, property owners, and City staff interviewed for this research.

II. SUMMARY OF FINDINGS AND RECOMMENDATIONS

This chapter summarizes the key findings and recommendations from the report. The analysis leading to these findings is described in more detail in the body of the report.

KEY FINDINGS

Morgan Hill has a significant and diverse employment base that has expanded rapidly over the past two decades, with strong prospects for continued growth.
From 1990 to 2010, Morgan Hill's job numbers rose from 10,000 to 17,500, representing average annual growth of 374 jobs per year. Currently, the employment base in the city is heavily concentrated in manufacturing and wholesale trade sectors, including many high technology firms in the electronic instrument, semiconductor, and electronic component manufacturing industries. From 2000 to 2009 Morgan Hill's manufacturing sector declined by only one percent, compared to 30 percent in Santa Clara County as a whole. In addition, wholesale trade employment grew by 40 percent during this period in the city, compared to a 9 percent decline in the county. In recent years, Morgan Hill has also experienced increases in other sectors like health, education, real estate, finance, and information, outpacing the county's growth rate in some of these industries. These trends indicate Morgan Hill's continued competitiveness in the wholesale trade and manufacturing sectors, and suggest that the city may become more competitive in health, education, and information over time.

Morgan Hill's commercial real estate market has historically attracted primarily industrial and R&D development.
The city has about 5.6 million square feet of built commercial space, more than 80 percent of which is industrial and research and development (R&D) space. Morgan Hill has been successful at attracting cost-sensitive industrial users like manufacturing and machining companies, as well as some R&D users. The industrial space is currently the most competitive of the commercial land uses, commanding rents nearly on par with the county, and vacancy rates only slightly higher than the region. Meanwhile, the market indicators for Morgan Hill's R&D market are currently weak, with an 18 percent vacancy rate and depressed rental rates. However, it is expected that over the long term, as the Silicon Valley economy rebounds and available industrial lands in San Jose become increasingly scarce, the Morgan Hill real estate market will strengthen.

There are two major existing concentrations of employment uses in Morgan Hill, each of which plays a slightly different role in the city's economy.
Strategic Economics has identified two major concentrations of employment uses in Morgan Hill: 1) the business parks around the Cochrane Road freeway exit and 2) the area between Dunne and Tenant Avenues. The Cochrane Road business parks are better positioned to attract new large-scale development, located at the northern-most freeway exit on Highway 101. Meanwhile, the Dunne and Tenant Avenue area is more suited to smaller industrial tenants.

Morgan Hill's current supply of lands designated for industrial, R&D, warehouse, and office uses exceeds long-term projected demand.
Given projected demand of between 44,700 and 114,000 square feet a year, the 294 acres of vacant industrial land within Morgan Hill's city limits, combined with the city's existing inventory of vacant built space, are sufficient to accommodate projected demand for approximately 40-95 years. [1]

If future employment growth is confined to the Cochrane Road area, there is potential to accommodate between 25 and 60 years of demand for employment space.
While the 294 acres of vacant industrial land located within the city as a whole is sufficient to accommodate projected demand for approximately 40-95 years, the 167 acres of vacant lands available in the Cochrane Road area (i.e., the area roughly bounded by Madrone Parkway to the north, Highway 101 to the east, Central Avenue to the south, and Monterey Road to the west) could accommodate 25-60 years of employment demand. These estimates assume that the city's existing inventory of vacant industrial and commercial buildings would be absorbed before new development occurs.

The Cochrane Road area is a more advantageous location for new employment.
As Morgan Hill's northernmost exit on Highway 101, the Cochrane Road area is generally a preferred location for economic development. Existing business parks near Cochrane Road have attracted most of the city's recent R&D/industrial development, and recent sale and leasing activity has been concentrated in this area. The Cochrane Road business parks are home to many of the city's largest employers. Reflecting the area's competitive advantages, rents and sale prices tend to be higher around Cochrane Road than in other parts of the city. In particular, the area east of Butterfield Boulevard is a Core Employment Area. This area is generally built out as a business park, housing some of the city's largest employers, and offering flexibility to provide single-tenant and multi-tenant spaces.

The GPA site is located in an area defined as a Potential Employment Growth Area. The area west of Butterfield Boulevard and north of Jarvis Drive is more eclectic than the Core Employment Area, and offers greater mix of uses -- including an existing restaurant and professional office building, an existing residential development, and a significant number of vacant properties, many of which are consolidated in ownership. This area could be a potential area of employment expansion in the future.

Preliminary analysis suggests that there may be pent-up demand for market-rate rental housing in Morgan Hill. The city's housing market was not the focus of this study. However, consistently low vacancy rates and rising rents in the existing multi-family stock suggest that Morgan Hill may lack sufficient market-rate, multi-family housing, particularly rental apartments.

All of the land uses considered in the analysis generate a net fiscal benefit to the city of Morgan Hill. Strategic Economics calculates that a retail land use would generate about $711,300 more in annual General Fund revenues than expenditures; a mixed-use multi-family residential and retail land use would

[1] The 2006 *Industrial Lands and Southeast Quadrant Market Study* projected that Morgan Hill had between 65 and 70 years of industrial land supply remaining within the city limits and sphere of influence. The 2006 estimate of years of supply is so much lower because the analysis relied on ABAG's 2005 employment projections, which forecast that the number of jobs in Morgan Hill would grow by 392 jobs a year between 2005 and 2030. This translated into demand for 144,000 square feet a year at current employment densities, or 130,516 at higher employment densities Since 2005, however, ABAG has significantly revised its projections for Morgan Hill's employment growth to 155 new jobs a year, reflecting both the drastic difference in economic conditions facing the nation and the region today, and the increasing emphasis on concentrating future growth in the core of the region. With 155 new jobs a year, annual demand for new employment space would total between 44,700 and 47,800 square feet, depending on the employment density. If employment growth rates were closer to the 1990-2010 growth rate of about 370 jobs a year, there would be demand for about 114,00 jobs a year (the high end estimate used in this analysis).

generate about $40,700 more in revenues than expenditures; and an industrial land use would result in $87,800 in net revenues.

While retail is the highest revenue-generating land use, the market for retail development in Morgan Hill is currently weak. The scenarios that include retail tend to provide the highest revenues because retail is assumed to generate significant sales tax for the city. However, the full retail scenario in particular assumes that there is sufficient demand in Morgan Hill to support large amounts of new retail development (nearly 200,000 square feet). Based on the retail market analysis performed for Morgan Hill's ongoing General Plan update, it appears that the site is unlikely to attract this amount of large-scale retail development in the short-term.

Projected fiscal impact is only one of many factors to consider in determining the most suitable use for the GPA site.
Other factors to consider include short- and long-term dynamics in Morgan Hill's industrial, commercial, and residential markets, projected supply of and demand for employment lands, the number and quality of jobs and housing units that could be accommodated in each scenario, and environmental and traffic impacts..

III. ECONOMIC CONTEXT & MARKET ANALYSIS

This chapter builds on the 2006 *Industrial Lands and Southeast Quadrant Market Study* to describe Morgan Hill's economic position within Santa Clara County, and provide an updated estimate of the long-term development potential for employment uses in Morgan Hill. The analysis provides a framework for considering the potential economic impact of converting the GPA site from an industrial to residential designation by 1) quantifying the overall balance between Morgan Hill's supply of employment lands on the one hand, and projected demand for employment space on the other and 2) assessing the relative strengths and weaknesses of the various employment concentrations within Morgan Hill.

The chapter begins with a summary of the demographic, housing, and employment trends in Morgan Hill, followed by a commercial real estate market analysis. The market analysis focuses on understanding the competitive advantages and disadvantages of particular subareas within the city. The chapter concludes by comparing the city's supply of industrial, R&D, warehouse, and office buildings and vacant land with projected long-term demand for employment space.

POPULATION & HOUSING CHARACTERISTICS

Morgan Hill has attracted significant population growth over the past two decades. The city's family-friendly environment and predominantly single-family housing stock draws a relatively affluent demographic, including many families and homeowners. This section reviews the demographic and housing trends that the city has experienced in recent years, based primarily on data from the 1990, 2000, and 2010 Decennial U.S. Census, the 2008-2010 American Community Survey,[2] and the California Department of Finance. Key findings are illustrated in charts and tables throughout the section; more detailed information on household characteristics is provided at the end of the section in Exhibits III-11 and III-12.

Morgan Hill's population has grown in the last two decades, expanding from fewer than 24,000 residents in 1990 to about 39,100 in 2012.
The fastest household growth took place between 1990 and 2000, when the population grew by an average for 4.0 percent a year (Exhibit III-1). Population growth slowed to 1.4 percent a year between 2000 and 2012, a rate that was still twice as fast as Santa Clara County's overall population growth rate during that period.

[2] The U.S. Census Bureau's American Community Survey (ACS), which replaced the decennial Census long form in the 2000's, collects data on household and population characteristics on an ongoing basis. The 2008-2010 survey estimates used in this report represent the results collected over that three-year period; 2008-10 is the most recent period for which this data on household income and housing stock characteristics are available for Morgan Hill.

Exhibit III-1. Population and Household Growth: Morgan Hill and Santa Clara County, 1990-2012

				Annual Average Change 1900-2000		Annual Average Change 2000-2012	
	1990	2000	2012	#	%	#	%
Morgan Hill							
Total Population	23,928	33,556	39,127	963	4.0%	464	1.4%
Population in Households	23,442	33,051	38,741	961	4.1%	474	1.4%
Total Households	7,858	10,846	13,129	299	3.8%	190	1.8%
Persons Per Household	2.98	3.05	2.95				
Santa Clara County							
Total Population	1,497,577	1,682,585	1,816,486	18,501	1.2%	11,158	0.7%
Population in Households	1,463,219	1,652,871	1,786,354	18,965	1.3%	11,124	0.7%
Total Households	522,040	565,863	636,748	4,382	0.8%	5,907	1.0%
Persons Per Household	2.80	2.92	2.81				

Sources: 1990 and 2000 U.S. Census; CA Department of Finance, 2012; Strategic Economics, 2012.

The city's population is on average more affluent than the county's, although the city's median income declined faster than the county's during the 2000's.

As shown in Exhibit III-2, Morgan Hill's median household income has remained well above Santa Clara County's since at least the 1990 Census, although the gap between the city and the county's median incomes decreased during the 2000's. Median incomes declined over the course of the 2000's by 14 percent in the city and 8 percent in the county, reflecting the recession and other national economic trends.

Exhibit III-2. Median Household Income, 1989-2009 (Inflation adjusted; in 2010 dollars)

				1989-1999		1999-2009	
	1989	1999	2009*	Change	% Change	Change	% Change
Morgan Hill	$89,224	$103,783	$89,236	$14,559	16%	-$14,547	-14%
Santa Clara County	$80,274	$94,130	$86,435	$13,856	17%	-$7,695	-8%

*2009 household median income is from the 2008-2010 American Community Survey, and represents an average taken over three years.

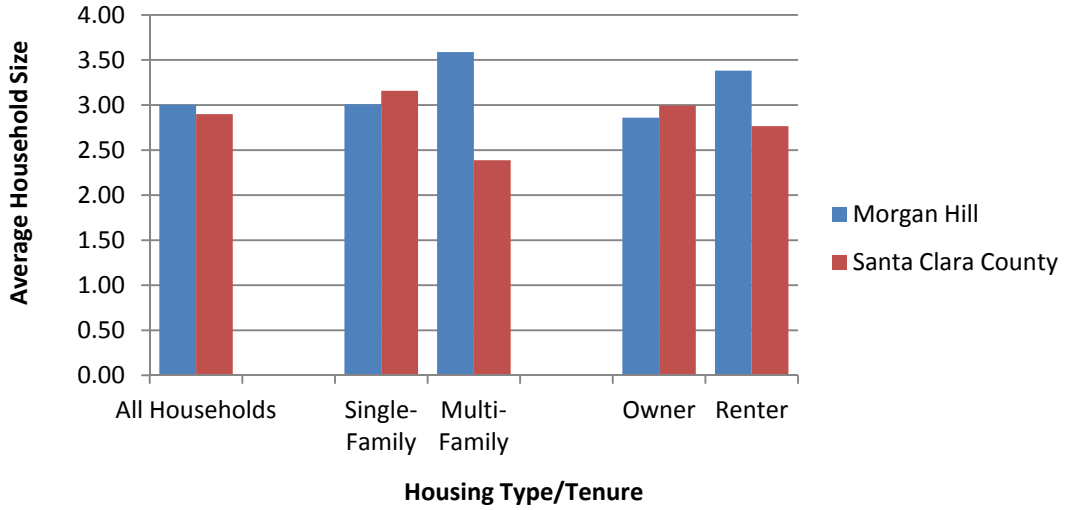
Sources: 2000 and 2010 U.S. Census; 2008-2010 American Community Survey; Strategic Economics, 2012.

On average, household sizes in Morgan Hill are relatively high compared to Santa Clara County, reflecting the city's high share of family households.

In 2012, the average household size in Morgan Hill was 2.95, compared to 2.81 in the county as a whole. Morgan Hill's renter households and household living in multi-family units are particularly large. While in Santa Clara County single-family and owner-occupied units tend to have larger household sizes than multi-family and renter-occupied units, in Morgan Hill this pattern is reversed (Exhibit III-3).

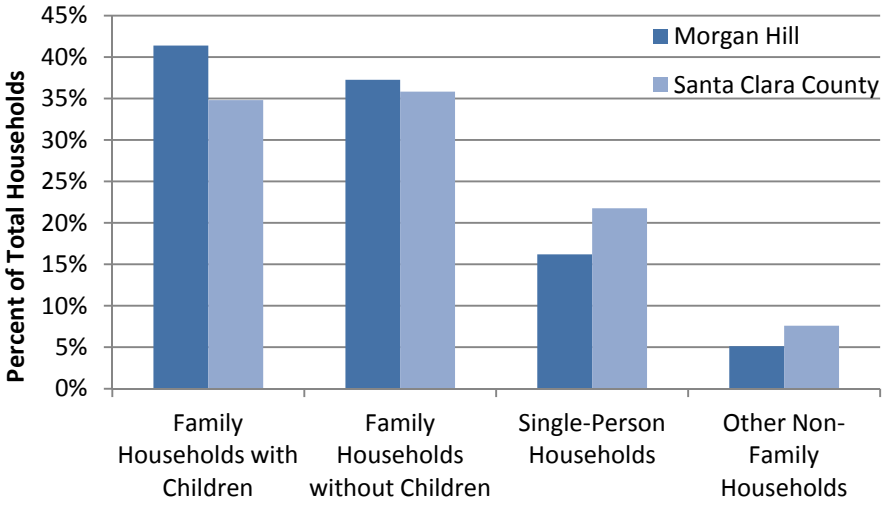
Morgan Hill's relatively large household sizes reflect the city's high share of families with children; as shown in Exhibit III-4, families with children comprised 41 percent of Morgan Hill's households in 2010, compared to 35 percent of the county's households. Morgan Hill also has a slightly higher share of families without children than the county, and a correspondingly lower percentage of single-person and other non-family (i.e., roommate) households.

Exhibit III-3. Average Household Size by Household Type and Tenure: Morgan Hill, 2010



Source: U.S. Census, 2008-2010 American Community Survey; Strategic Economics, 2012.

Exhibit III-4. Household Types: Morgan Hill and Santa Clara County, 2010

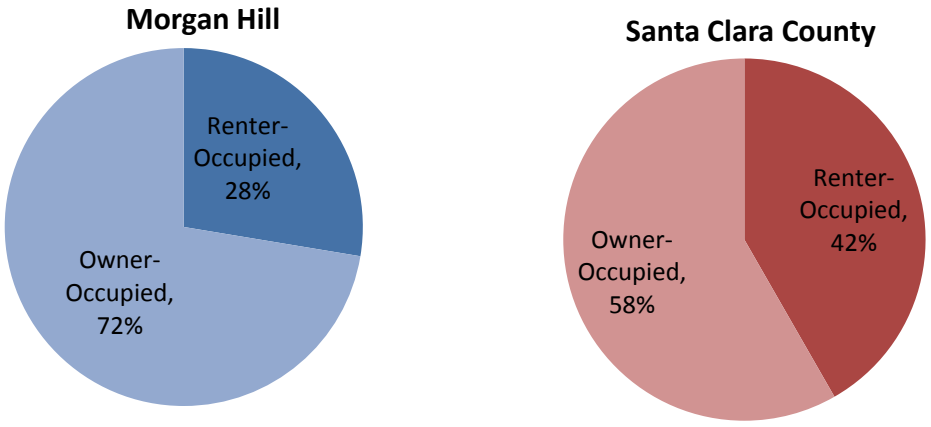


Sources: 2010 U.S. Census; Strategic Economics, 2012.

Morgan Hill's housing stock is predominantly composed of owner-occupied and single-family units. In 2010, 72 percent of Morgan Hill's housing units were owner-occupied, compared to 58 percent of Santa Clara County's housing units (Exhibit III-5). The percentage of the city's housing units occupied by owners v. renters did not change between 2000 and 2010, even as renter-occupied units as a share of Santa Clara County's total housing stock grew slightly, from 40 percent in 2000 to 42 percent in 2010 (see Exhibits III-11 and III-12, below).

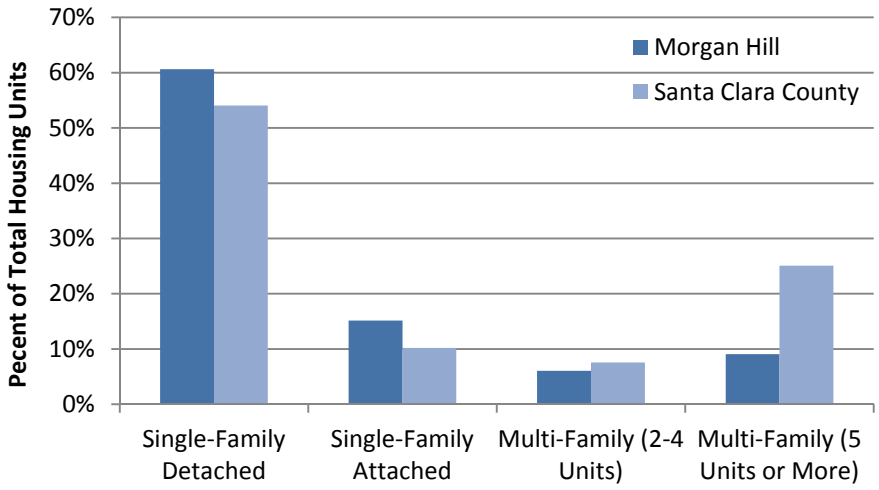
Morgan Hill also has a high share of single-family units, with single-family detached and attached houses together comprising 76 percent of the city's housing stock, compared to 64 percent of the county's (Exhibit III-6). There were fewer than 2,000 multi-family housing units in Morgan Hill in 2010, accounting for about 15 percent of the city's housing stock. As with renter-occupied units, the city's share of multi-family housing units has remained relatively constant since 2000.

Exhibit III-5. Household Tenure: Morgan Hill & Santa Clara County, 2010.



Sources: 2010 U.S. Census; Strategic Economics, 2012.

Exhibit III-6. Housing Stock Composition: Morgan Hill and Santa Clara County, 2008-2010



Sources: U.S. Census, 2008-2010 American Community Survey; Strategic Economics, 2012.

Between 2000 and 2011, Morgan Hill issued building permits for an average of 170 new housing units a year, of which 84 percent were for single-family units. [3]

Exhibit III-7 summarizes the number of building permits issued between 2000 and 2011 in Morgan Hill and Santa Clara County. On average over the course of the decade, Morgan Hill issued building permits for about 170 units a year. This new development reinforced the city's predominantly single-family residential character. Single-family units accounted for 84 percent of residential permits issued in the city between 2000 and 2011, compared to just 37 percent of all the permits issued in the county during that time.

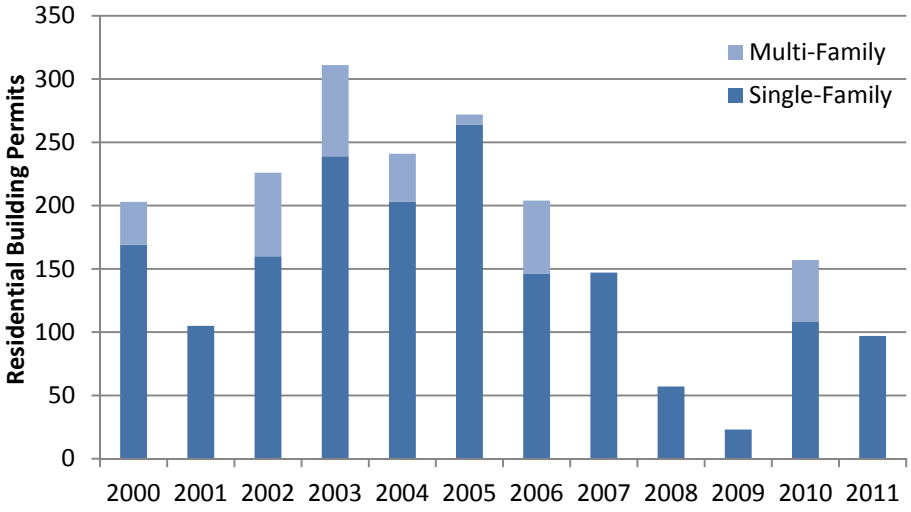
Exhibit III-7. Summary of Residential Building Permits Issued in Morgan Hill and Santa Clara County, 2000-2011

	Morgan Hill			Santa Clara County		
Building Type	**Total**	**Annual Average**	**% of Total**	**Total**	**Annual Average**	**% of Total**
Single-Family	1,718	143	84%	22,038	1,837	37%
Multi-Family	325	27	16%	37,596	3,133	63%
Total	2,043	170	100%	59,634	4,970	100%

Source: Construction Industry Research Board, 2012; Strategic Economics, 2012.

Exhibits III-8 and III-9 show how construction has fluctuated with the real estate market. Between 2002 and 2006, the city issued permits for more than 200 housing units a year. As in the rest of the county, however, housing construction fell off sharply between 2007 and 2009, with the city issuing permits for just 57 units in 2008 and 23 units in 2009. Construction began to pick up again in both the city and the county in 2010 and 2011.

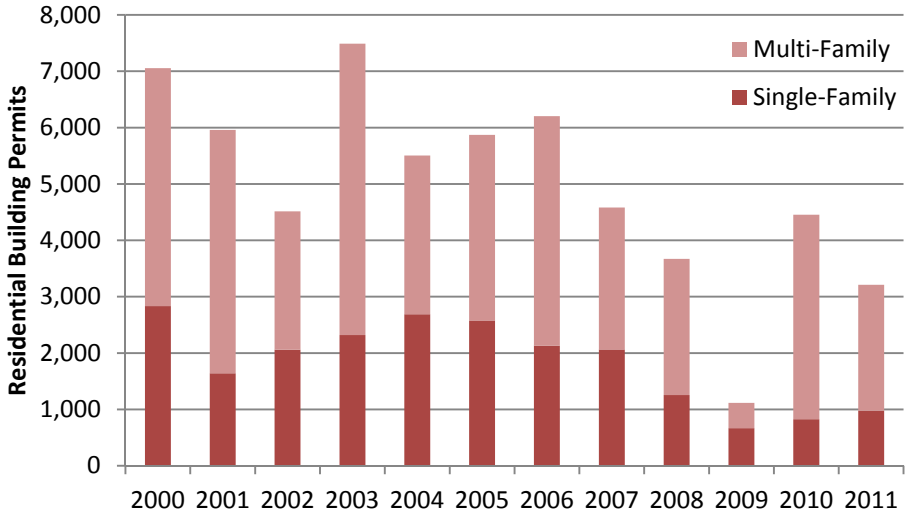
Exhibit III-8. Residential Development in Morgan Hill, 2000-2011



Sources: Construction Industry Research Board, 2012; Strategic Economics, 2012.

[3] The data shown in Exhibits III-7 through III-9 is consistent with Morgan Hill's 2007-2013 Housing Element, which included building permit data for 1996-2007 from the Construction Industry Research Board, the same source of the building permits data provided in the exhibits in this section. The California Department of Finance (DOF) estimates 1,426 net new single-family units and 87 net new multi-family residential units between 2000 and 2011 in Morgan Hill. This may indicate that developers did not build units for all of the building permits issued during this time period (shown in Exhibit III-7). However, DOF tracks *net new* housing units, not new development, so the DOF's lower numbers may also reflect demolition or replacement of existing units.

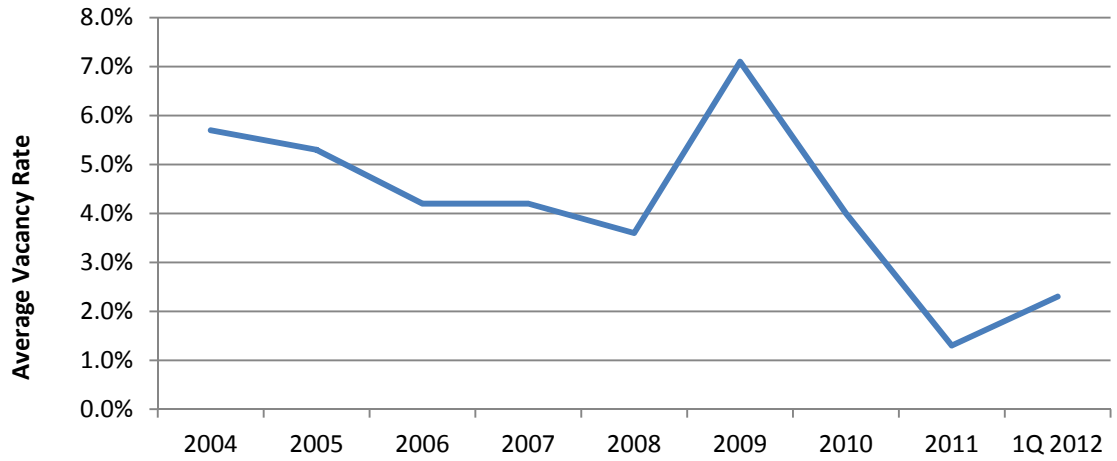
Exhibit III-9. Residential Development in Santa Clara County, 2000-2011



Sources: Construction Industry Research Board, 2012; Strategic Economics, 2012.

The city's apartment vacancy rate has fallen sharply in recent years and is lower than the county's. Exhibit III-10 shows the average vacancy rates between 2004 and the first quarter of 2012, for the three largest apartment buildings in Morgan Hill. After peaking at the height of the recession in 2009, vacancy rates fell sharply between 2009 and 2011. (A similar tightening of the rental market occurred across the region and much of the U.S. during this time period, as an increasing number of households turned to the rental market after losing their homes to foreclosure, or finding themselves unable to qualify for home loans.) While Morgan Hill's vacancy rate increased slightly to 2.3 percent at the beginning of 2012, it still remained below Santa Clara County's (3.6 percent in 1Q 2012). Meanwhile, average rents in Morgan Hill have also risen steadily, from $1,200 a month in 2004 to $1,666 in 1Q 2012.

Exhibit III-10. Average Apartment Vacancy Rate in Morgan Hill, 2004-2012



*Based on three projects with over 50 units: La Crosse Village (15945 Village Way, built in 1986), Monte Vista at Morgan Hill (16945 Del Monte Avenue, built in 1989), and Vineyard Court (15400 Vineyard Boulevard, built in 1999).
Source: RealFacts, June 2012.

Exhibit III-11. Detailed Household Characteristics: Morgan Hill, 2000-2010

	2000		2010		Change 2000-2010	
	#	% of Total	#	% of Total	#	%
Housing Units by Type*						
Single-Family Detached	6,905	62%	7,885	61%	980	14%
Single-Family Attached	1,521	14%	1,970	15%	449	30%
Multi-Family (2-4 Units)	630	6%	789	6%	159	25%
Multi-Family (5 Units or More)	1,127	10%	1,182	9%	55	5%
Other	908	8%	1,182	9%	274	30%
Total Housing Units	11,091	100%	13,008	100%	1,643	15%
Household Tenure						
Renter-Occupied Units	2,987	28%	3,416	28%	429	14%
Owner-Occupied Units	7,859	72%	8,955	72%	1,096	14%
Total Occupied Housing Units	10,846	100%	12,371	100%	1,525	14%
Household Type						
Family Households with Children	4,769	44%	5,103	41%	334	7%
Family Households without Children	3,859	36%	4,593	37%	734	19%
Single-Person Households	1,643	15%	1,998	16%	355	22%
Other Non-Family Households	575	5%	632	5%	57	10%
Total Households	10,846	100%	12,326	100%	1,480	14%

*2010 data on housing units by type are from the 2008-2010 American Community Survey.
Sources: 2000 and 2010 U.S. Census; 2008-2010 American Community Survey; Strategic Economics, 2012.

Exhibit III-12. Detailed Household Characteristics: Santa Clara County, 2000-2010

	2000		2010		Change 2000-2010	
	#	% of Total	#	% of Total	#	%
Housing Units by Type						
Single-Family Detached	323,923	56%	340,735	54%	16,812	5%
Single-Family Attached	52,736	9%	64,307	10%	11,571	22%
Multi-Family (2-4 Units)	46,371	8%	47,739	8%	1,368	3%
Multi-Family (5 Units or More)	136,628	24%	157,985	25%	21,357	16%
Other	19,671	3%	19,504	3%	-167	-1%
Total Housing Units	579,329	100%	630,270	100%	50,941	9%
Household Tenure						
Renter-Occupied Units	227,202	40%	249,553	42%	22,351	10%
Owner-Occupied Units	338,661	60%	348,767	58%	10,106	3%
Total Occupied Housing Units	565,863	100%	598,320	100%	32,457	6%
Household Type						
Family Households with Children	197,245	35%	210,364	35%	13,119	7%
Family Households without Children	198,316	35%	216,460	36%	18,144	9%
Single-Person Households	121,109	21%	131,506	22%	10,397	9%
Other Non-Family Households	49,193	9%	45,874	8%	-3,319	-7%
Total households	565,863	100%	604,204	100%	38,341	7%

*2010 data on housing units by type are from the 2008-2010 American Community Survey.
Sources: 2000 and 2010 U.S. Census; 2008-2010 American Community Survey; Strategic Economics, 2012.

EMPLOYMENT OVERVIEW

This section deals with the jobs that are located in Morgan Hill, including a brief discussion of the match between the jobs that are located in Morgan Hill and the city's resident labor force (i.e., workers who live in Morgan Hill, regardless of where they are employed). Because different sources of data on employment are based on different methodologies and have different strengths and weaknesses, the section relies on several different sources to paint a picture of Morgan Hill's employment base:

- **Job Counts:** For total jobs numbers in Morgan Hill and Santa Clara County, we use historic employment data provided to Strategic Economics by ABAG as part of the Plan Bay Area planning process. This data source has several advantages over other available sources: it appears to be the most comprehensive (i.e., it counts the most jobs in Morgan Hill, about 17,500 in 2010); includes data for 1990 as well as 2000 and 2010; and, since it is the basis for ABAG's 2012 employment projections, allows us to directly compare ABAG's projections for Morgan Hill with historic trends.
- **Industry Trends:** The U.S. Census Bureau collects data on employment by surveying companies every year on the number of workers they employ. The data are provided at the county and zip code level, and include more detailed information on industries (e.g. manufacturing, retail) than ABAG.[4] However, this source tends to undercount total employment; among other exclusions, the data does not capture self-employed individuals or most government employees. Therefore, we use the County & Zip Code Business Pattern data in this section to examine industry trends, but not for the total count of jobs. At the time this analysis was performed, the 2009 County & Zip Code Business Pattern data were the most recent available.
- **Top Employers:** The City of Morgan Hill provided data on the top employers in 2012 and 2002.
- **American Community Survey:** The U.S. Census Bureau's American Community Survey provided data on the city's resident labor force (i.e., worker who live in Morgan Hill, regardless of where they are employed). The 2008-2010 survey estimates used in this report represent the survey results collected over that three-year period.

Morgan Hill's employment base has grown rapidly over the past two decades, with the fastest growth occurring in the 1990's.
The number of jobs located in Morgan Hill grew from approximately 10,050 in 1990, to about 17,500 in 2010, an annual average increase of about 370 jobs a year (Exhibit V-13). The fastest growth occurred during the 1990s, when the city added approximately 390 jobs a year. This represents a much faster rate of growth than that experienced by the county as a whole. Overall, between 1990 and 2010, jobs in Morgan Hill increased by 3.7 percent a year while Santa Clara County jobs declined by 0.1 percent a year.

ABAG's most recent projections forecast that Morgan Hill's growth will slow to about 155 jobs a year, or 0.9 percent, between 2010 and 2040, while Santa Clara County will grow at a slightly faster rate (1.1 percent a year on average).[5] This represents a dramatic reduction from ABAG's previous projections for Morgan Hill; for example, in 2005, ABAG projected that the number of jobs in Morgan Hill would grow by 392 jobs a year through 2030 (this projection served as the basis for the 2006 *Industrial Lands and Southeast Quadrant Market Study*). The lower 2012 projection reflects the effects of the recession that began in 2008, which led ABAG to reduce projected employment growth for the entire Bay Area. In

[4] Morgan Hill has one zip code, 95037.

[5] Association of Bay Area Governments and Metropolitan Transportation Commission, "Preferred Land Use and Transportation Investment Strategy for Plan Bay Area" and "Jobs-Housing Connection Strategy," May 2012, http://www.onebayarea.org/plan_bay_area/.

addition, whereas ABAG's previous employment projections were based largely on capacity for growth as reflected in each city's General Plan, the most recent projections were performed as part of the region's Sustainable Communities Strategy and are intended to demonstrate an increased emphasis on concentrating growth in the center of the region.

Exhibit III-13. Employment in Morgan Hill and Santa Clara County, 1990-2010 and 2040 Projection

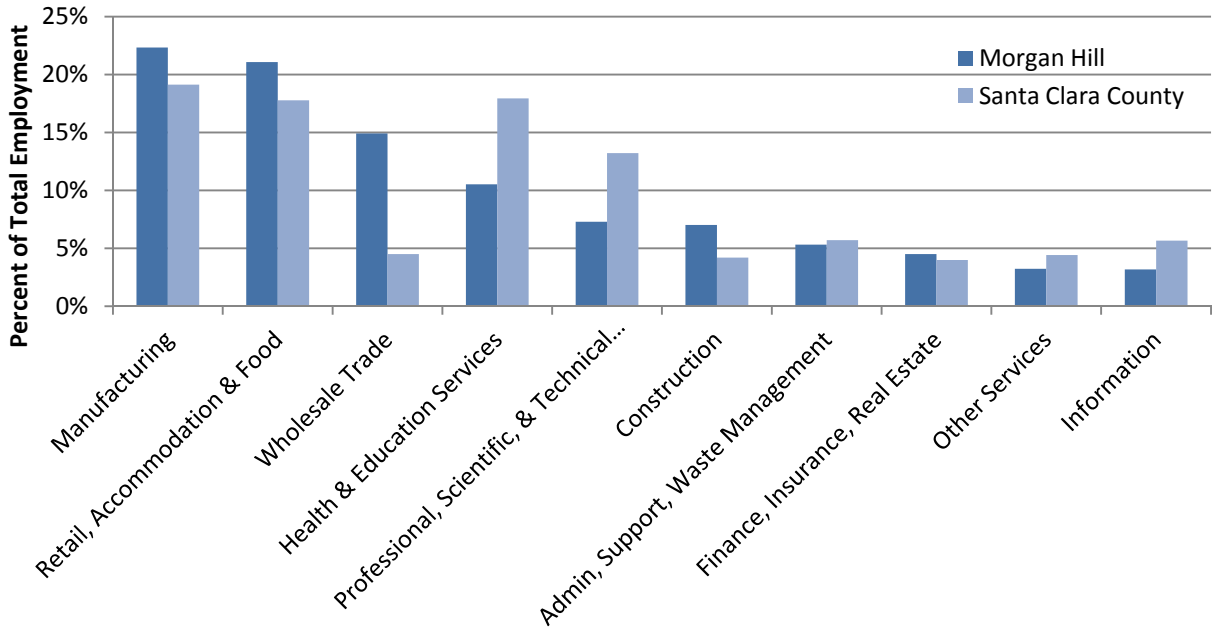
Time Period	Morgan Hill		Santa Clara County	
1990	10,050		950,320	
2000	13,965		1,044,139	
2010	17,523		926,264	
2040 (Projected)	22,183		1,229,756	
Time Period	**Annual Average Change in Jobs**	**Annual Average Percent Change**	**Annual Average Change in Jobs**	**Annual Average Percent Change**
1990-2000	392	3.9%	9,382	1.0%
2000-2010	356	2.5%	-11,787	-1.1%
1990-2010	374	3.7%	-1,203	-0.1%
2010-2040	155	0.9%	10,116	1.1%

Source: ABAG, May 2012.

Manufacturing, retail, accommodation, and food services, and wholesale trade account for the majority of Morgan Hill's employment.
As shown in Exhibit III-14, manufacturing accounted for 22 percent of jobs located in the city in 2009; retail, accommodation and food services accounted for about 21 percent, and wholesale trade accounted for nearly 15 percent. In comparison, the manufacturing and retail sectors accounted for a slightly smaller share of Santa Clara County's employment base (about 19 and 18 percent, respectively, in 2009), while wholesale trade made up fewer than 5 percent of the county's total jobs in 2009. Morgan Hill also had a higher share of jobs in construction (7 percent) compared to the county (4 percent).

Compared to the county, Morgan Hill has a relatively low share of jobs in health and education and professional, scientific, and technical services.
In 2009, health and educational services accounted for 10.5 percent of Morgan Hill's total employment, compared to 18 percent of Santa Clara County's employment. Professional, scientific, and technical services accounted for 7 percent of employment in the city and about 13 percent in the county. Morgan Hill also has relatively low employment in the information sector, which accounted for 3 percent of the city's jobs and 6 percent of the county's (Exhibit III-14).

Exhibit III-14. Private Employment by Major Sector: Morgan Hill and Santa Clara County, 2009



Sources: US Census County & Zip Code Business Patterns, 2009 (Morgan Hill employment); Quarterly Workforce Indicators, 2009 (County employment); Strategic Economics, 2012.

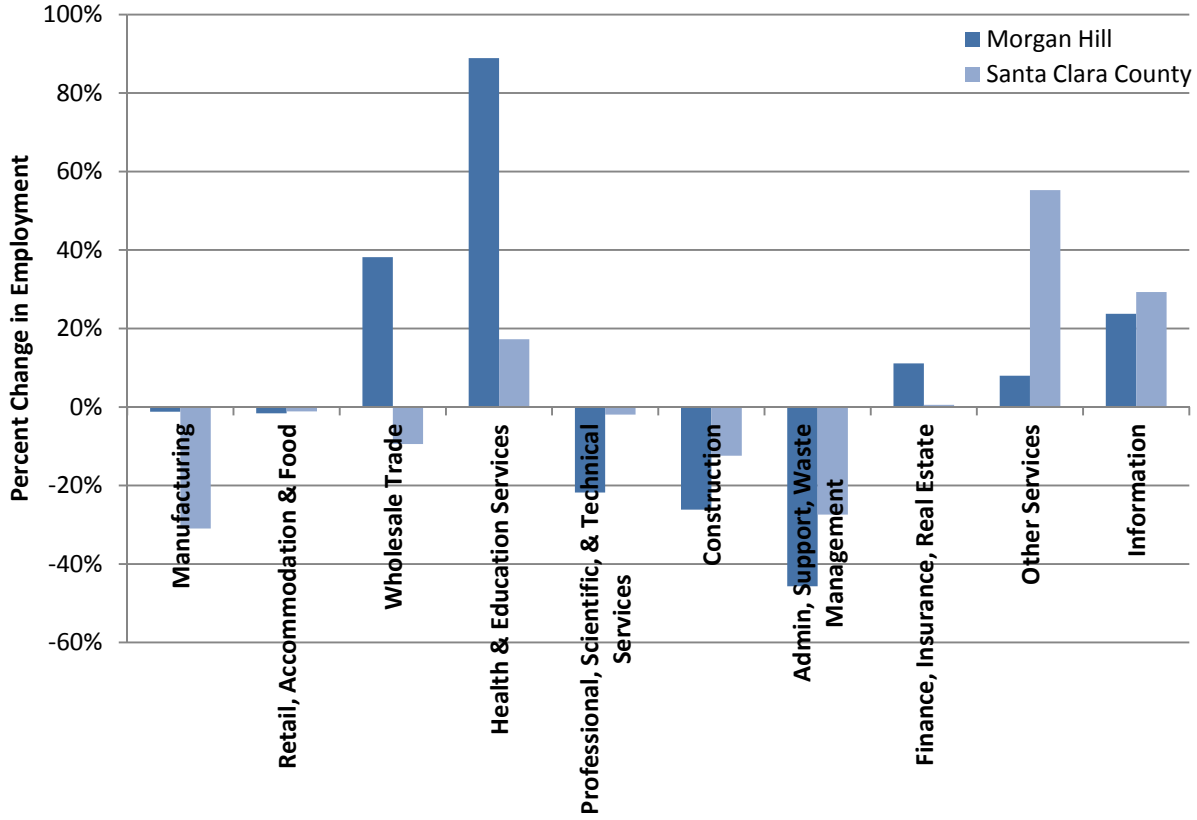
Between 2000 and 2009, Morgan Hill experienced rapid growth in health and education services and moderate growth in the finance, insurance, and real estate and information sectors, suggesting that the city's economy may be increasingly diversifying into these office-based sectors.

Exhibit III-15 shows the percent change in employment by sector between 2000 and 2009 for Morgan Hill and the county. The city experienced a significant increase in employment in health and educational services during this time, outpacing the county's growth rate in that sector. Morgan Hill's fire, insurance, and real estate sector also outpaced the county during this period, while the city's information employment continued to grow, albeit more slowly than in the county as a whole.

At the same time, Morgan Hill continued to add wholesale employment and remained competitive in manufacturing.

Morgan Hill also experienced a nearly 40 percent increase in wholesale trade employment between 2000 and 2009, compared to a 9 percent decrease in Santa Clara County as a whole. While both the city and county lost manufacturing jobs during this period, Morgan Hill's manufacturing employment declined just 1 percent, compared to a 30 percent loss in the county.

Exhibit III-15. Percent Change in Private Employment by Sector: Morgan Hill and Santa Clara County, 2000-2009



Sources: US Census County & Zip Code Business Patterns, 2000 & 2009 (Morgan Hill employment); Quarterly Workforce Indicators, 2000 & 2009 (County employment); Strategic Economics, 2012.

High-tech manufacturing industries, including electronic instrument and semiconductor and electronic component manufacturing, account for nearly half of employment in Morgan Hill's manufacturing center (Exhibit III-16).
Some of the city's top employers fall into these categories, including Anritsu, Flextronics International, and Infineon Technologies (Exhibit III-17).

Machine shops and threaded product manufacturing also play an important role in the Morgan Hill economy, accounting for 12 percent of the city's manufacturing employment base.
These firms tend to be smaller; most employ fewer than 50 people. While they are not necessarily high tech, machine shops and related firms may play an important role in the local and regional economy by providing parts to higher-tech manufacturers in Morgan Hill and Silicon Valley.[6] Morgan Hill also has a small wood product and office furniture cluster, which includes firms such as Mission Bell Manufacturing (another of the city's top employers, as shown in Exhibit III-17) and CalDoor, a manufacturer of cabinet doors.

[6] For a discussion of the role that different types of manufacturers play in the Silicon Valley economy, see City of San Jose, "Strengthening Manufacturing in San Jose," June 12, 2012, http://www.sanjoseca.gov/clerk/CommitteeAgenda/CED/20120625/CED20120625_d3.pdf.

Exhibit III-16. Top Manufacturing Categories in Morgan Hill, 2009 (by Estimated Employment)

NAICS Code	Description	Establishments	Est. Jobs	% of Total Manufacturing Jobs
3345	Electronic Instrument	9	1,010	28%
3344	Semiconductor and Electronic Component	6	650	18%
3327	Machine Shops and Threaded Product	14	430	12%
3219	Other Wood Product	2	380	10%
3372	Office Furniture and Fixtures	1	170	5%
3342	Communications Equipment	3	120	3%
	Total Manufacturing Employment	89	3,650	100%

Sources: US Census County & Zip Code Business Patterns, 2009; Strategic Economics, 2012.

In addition to electronic, semiconductor, and wood product manufacturers, Morgan Hill's top employers include a diverse array of other manufacturing companies and wholesalers, as well as companies in the retail, health, and education sectors.

As shown in Exhibit III-17, Morgan Hill's top employers include the school district, Anritsu, Specialized Bicycle Components, Paramit Corporation (a medical device manufacturer), and Fox Racing USA (a sports apparel manufacturer). Lusamerica Foods (a seafood wholesaler) and Young's Market Company (a wine and spirits distributor), are also high on the list of the city's employers. Beyond manufacturing and wholesale firms, most of the city's top employers are in sectors that provide services to Morgan Hill's population and workers, such as retail (e.g. Wal-Mart, Target, Safeway); tutoring and educational services (Extreme Learning); and health services and recreation (Covenant Care and 24 Hour Fitness).

Exhibit III-18 shows the city's top employers in 2002 for comparison. Hospira, the third largest employer in 2002, recently moved its manufacturing facilities from Morgan Hill to Costa Rica, vacating a 240,000 square foot space in the Morgan Hill Ranch Business Park. Anritsu and the school district, the city's two largest employers, both lost jobs over the course of the decade, as did The Thomas Kinkade Co, EDO Reconnaissance & Surveillance Systems Inc, Custom Chrome, and Sakata Seed America, Inc. – all of which are still located in Morgan Hill, but now have fewer than 100 employees.

Exhibit III-17. Morgan Hill's Top Employers (Firms with More than 100 Employees), 2013

Employer	Jobs	Description
Morgan Hill Unified School District	765	Public Sector
Anritsu Company	499	Testing and measurement devices
Specialized Bicycle Components	292	Bicycles, bike parts, and accessories
Flextronics International USA, Inc.	286	Electronics manufacturing services, supply chain services
Paramit Corporation	269	Medical device and instrument manufacturing
Fox Racing USA, Inc	243	Motocross apparel
Infineon Technologies, North America Corp.	228	Semiconductor manufacturing
Wal-Mart Supercenter #5766	179	Retail
Lusamerica Foods, Inc	170	Seafood
Extreme Learning	148	Tutoring and educational services
Mission Bell Mfg., Inc.	147	Custom woodwork
Target Store #T2252	144	Retail
Young's Market Company, LLC	134	Wine and spirits distribution
Covenant Care MH LLC, dba: Pacific Hills Manor	124	Skilled nursing care
Safeway Inc. #1455	123	Retail
Safeway Inc. #1891	110	Retail
Gryphon Financial Group, Inc.	104	Auditing services
24 Hour Fitness, Inc	101	Health club

Source: City of Morgan Hill, 2012; Strategic Economics, 2013.

Exhibit III-18. Morgan Hill's Top Employers (Firms with More than 100 Employees), FY 2002

Employer	Jobs	Description
Anritsu Company	997	Testing and measurement devices
Morgan Hill Unified School District	869	Public Sector
Hospira, Inc.	502	Injectable drugs and infusion technologies
The Thomas Kinkade Co.	370	Painting and prints
EDO Reconnaissance & Surveillance Systems Inc	336	Defense contractor
Paramit Corporation	244	Medical device and instrument manufacturing
Fox Racing USA, Inc	209	Motocross apparel
Custom Chrome	204	Aftermarket motorcycle parts and accessories
Safeway Inc. #1455	179	Retail
Sakata Seed America, Inc.	161	Flower, fruit, and vegetable seed research and production
Target Store T640	140	Retail
Mervyns #224	131	Retail
Specialized Bicycle Components	123	Bicycles, bike parts, and accessories
Northcoast Medical, Inc.	116	Rehabilitation devices
Alien Technology Corp	110	RFID devices
Towa Intercon Technology, Inc.	108	Semiconductor packaging
Zeta, A Division of Sierra Networks, Inc.	106	Networking

Source: City of Morgan Hill, 2012; Strategic Economics, 2012.

Jobs-Housing Match

Planners study the match between a city's jobs and its labor force in order to understand the opportunities available for residents to work near their homes. In this section, we examine several indicators of the match between Morgan Hill's housing and jobs, including the ratio of jobs to housing units, the ratio of jobs to employed residents, and the percent of the city's labor force that both lives and works in Morgan Hill.

Relative to Santa Clara County as a whole, Morgan Hill has comparable ratios of jobs to the labor force, employed residents, and housing units.

Exhibit III-19 shows how the number of jobs in Morgan Hill compares to the size of the resident labor force, the number of employed residents, and number of housing units. (The labor force includes both residents who are employed, and residents who are available and actively looking for employment.) In 2010, Morgan Hill had 0.90 jobs for every member of the labor force, 0.99 jobs for every employed resident, and 1.35 jobs for every housing unit – just slightly lower than Santa Clara County for each of these ratios. Given that Santa Clara County includes many of the Bay Area's top employment centers, this indicates that Morgan Hill has a relatively large jobs base for a city of its population size. As a point of comparison, Gilroy had roughly the same number of jobs as Morgan Hill in 2010 (17,600, according to ABAG), but a larger labor force (21,430, according to the 2008-10 ACS), resulting in a jobs/labor force ratio of 0.82.

Exhibit III-19. Ratio of Jobs to Labor Force, Employed Residents, & Housing Units: Morgan Hill and Santa Clara County, 2010

	Morgan Hill	Santa Clara County
Jobs	17,523	926,264
Resident Labor Force	19,456	936,381
Employed Residents	17,624	849,687
Housing Units	13,008	630,270
Jobs: Labor Force	0.90	0.99
Jobs: Employed Residents	0.99	1.09
Jobs: Housing Units	1.35	1.47

Source: U.S. Census, American Community Survey, 2008-10; ABAG, 2012; Strategic Economics, 2012.

Just over 5,500 workers both live and work in Morgan Hill, or about 31 percent of employed people who live in the city (Exhibit III-20).

This is several percentage points lower than the Santa Clara County average; in the county as a whole, 39 percent of employed workers live and work in the same city or Census Designated Place (e.g., people who both live and work in Gilroy, both live and work in San Jose, etc.). Morgan Hill's slightly lower share of residents who both live and work in the city likely reflects the fact that the city's proximity to the Silicon Valley allows it to attracts many people who work in nearby communities, but choose to make Morgan Hill their home due to affordability and/or quality of life factors.

Exhibit III-20. Employed Residents Who Live and Work in their Place of Residence: Morgan Hill and Santa Clara County, 2010

	Morgan Hill	Santa Clara County
Employed Residents	17,624	849,687
Workers Who Live and Work in Place of Residence*	5,506	332,471
as % of Employed Residents	31.2%	39.1%

*"Place of residence" includes incorporated cities (e.g., Morgan Hill) and unincorporated Census Designated Places (e.g., San Martin).

Source: U.S. Census, American Community Survey, 2008-10; ABAG, 2012; Strategic Economics, 2012.

INDUSTRIAL, R&D, OFFICE, & WAREHOUSE MARKET OVERVIEW

This section provides an overview of overview of industrial, research and development (R&D), office, and warehouse market conditions in the region and Morgan Hill as a whole, and then takes a more detailed look at the competitiveness of subareas within the city's industrial/commercial market.

Morgan Hill's Commercial Real Estate Market

Compared to the broader San Jose/Silicon Valley market, Morgan Hill's commercial real estate inventory is much more weighted towards industrial space.

Morgan Hill has approximately 5.6 million square feet of R&D, industrial, warehousing, and office built space.[7] As shown in Exhibit III-21, Colliers classifies 33 percent of the city's commercial square footage as industrial, compared to 18 percent of the region's inventory. R&D makes up a similar share of the inventory in both the city and region (48 percent in Morgan Hill, compared to 50 percent in Silicon Valley), but the city has a much lower share of office (12 percent, compared to 20 percent in Silicon Valley) and warehousing space (7 percent, compared to 12 percent).

The small amount of warehouse space shown in Exhibit III-21 may reflect Colliers' and other real estate firms' systems for classifying and tracking buildings, rather than actual uses. Given the large amount of wholesale employment in Morgan Hill, it seems likely that many wholesale companies occupy space – and potentially perform warehousing functions – in buildings that Colliers and other firms classify as industrial.

Understanding Industrial & Commercial Lease Terminology

Industrial and other commercial leases vary in how the landlord and tenants split costs and services associated with the property. In general, the more costs the landlord pays, the higher the rent. Some of the common terms include:

Triple Net (NNN): The tenant is responsible for a proportionate share of a building's property taxes, property insurance, and common area operating and utility expenses in addition to insurance, utility, cleaning and other costs associated with their own tenancy.

Industrial Gross (IG): The landlord pays for the building's property taxes and insurance; the tenant is responsible for a share of common area operating and utility expenses.

Full Service: The landlord pays for property taxes, insurance, and common area maintenance and utilities.

Source:
http://www.realtechre.com/terminology.htm

Morgan Hill's rents tend to be significantly lower than the regional average, and the city's vacancy rates tend to be several points higher (Exhibit III-21).

The San Jose/Silicon Valley market area's rents and vacancies are influenced by Palo Alto, Mountain View, Sunnyvale, and other Silicon Valley cities with particularly high rents and low vacancy rates. In most sectors, rents increased and vacancy rates declined between Q1 2012 and Q1 2013 in both Morgan Hill and San Jose/Silicon Valley. The few exceptions (a slight decline in Morgan Hill's industrial rents and an increase in office vacancies) may be due in part to a change in how Colliers tracks data.[8]

The city's industrial space is the most competitive segment of the market, while the existing supply of R&D and office may exceed current demand.

Morgan Hill's average office and R&D rents were about 60 percent of the regional average in 1Q 2013. The vacancy rates for office and R&D are also particularly high, at 17.9 percent and 27.7 percent,

[7] Source: Colliers International, 2012. Colliers tracks more commercial square feet in Morgan Hill than other available sources, so Colliers data are used throughout this report. However, Colliers does not include small buildings in its inventory; the firm tracks office buildings from 3,000 square feet, R&D from 5,000 square feet, industrial buildings from 7,500 square feet, and warehouse buildings from 10,000 square feet.

[8] Between Q1 2012 and Q1 2013, Colliers moved 160,000 square feet of commercial space from the office to the industrial category.

respectively, in 1Q 2013 (**Exhibit III-21**). Brokers interviewed for this report also suggested that the city's R&D market may be overbuilt relative to demand. In comparison, the city's average industrial rent ($0.65/square foot/month, full service) was approximately 85 percent of the region's average industrial rent – indicating that the city's industrial market is relatively competitive. Morgan Hill's industrial vacancy rate, at 7.4 percent in Q1 2013, is only slightly above the Silicon Valley average (6.7 percent).

Since Colliers only tracks five warehouse buildings in Morgan Hill, the zero percent vacancy rate reported for that product type may not fully reflect conditions in the warehouse market.

Exhibit III-21. R&D, Industrial, Warehouse, and Office Market Statistics: Morgan Hill and San Jose/Silicon Valley, 1st Quarter 2013

Product Type	Total Existing Inventory (1Q 2013) Buildings (a)	Sq. Ft.	% of Total Sq. Ft.	Vacancies Sq. Ft. 1Q 2013	Vacancy Rate 1Q 2013	Vacancy Rate 1Q 2012	Net Absorption (b) 1Q 2012 - 1Q 2013	Net Absorption (b) 2011	Average Rents (c) 1Q 2013 Monthly	Average Rents (c) 1Q 2013 Annual	% Change, 1Q 2012-1Q 2013
Morgan Hill											
R&D	62	2,688,925	48%	480,137	17.9%	19.2%	36,253	-201,246	$0.71	$8.52	3%
Industrial	76	1,882,576	33%	138,842	7.4%	13.7%	-17,990	-4,732	$0.65	$7.80	-4%
Warehouse	5	384,880	7%	0	0.0%	0.0%	0	0	N/A	N/A	N/A
Office	N/A	686,249	12%	189,905	27.7%	16.5%	56,781	50,520	$1.63 (d)	$19.56 (d)	12%
Total	N/A	5,642,630	100%	808,884	14.3%	15.7%	75,044	-155,458	N/A	N/A	N/A
Silicon Valley (e)											
R&D	2,618	157,065,264	50%	22,235,654	14.2%	14.4%	-810,657	1,464,451	$1.31	$15.72	13%
Industrial	2,690	56,184,331	18%	3,784,661	6.7%	10.0%	1,582,664	82,368	$0.76	$9.12	1%
Warehouse	350	38,406,211	12%	4,413,308	11.5%	10.4%	-697,381	-348,367	$0.54	$6.48	6%
Office	1,636	62,649,478	20%	10,358,098	16.5%	17.0%	1,230,750	2,058,284	$2.84	$34.08	9%
Total	7,294	314,305,284	100%	40,791,721	13.0%	13.6%	1,305,376	3,256,736	N/A	N/A	N/A

Source: Colliers International, 1st Quarter 2012 & 1st Quarter 2013.

(a) Colliers tracks office buildings from 3,000 square feet, R&D from 5,000 square feet, industrial buildings from 7,500 square feet, and warehouse buildings from 10,000 square feet.

(b) Net Absorption: The net change in occupied space during a given time period.

(c) Weighted average of full service asking rents, on a per square foot basis (includes all costs associated with occupying the premises)

(d) Includes Gilroy office market.

(e) Includes Campbell, Cupertino, Fremont, Gilroy, Los Altos, Los Gatos, Milpitas, Morgan Hill, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale submarkets.

Additional definitions:

Research and Development (R&D): One to three story structures with extensive glass, heavy office buildout and 3.5/1,000 parking ratio. Buildings may include high-end production facilities, laboratory space and grade level truck doors.

Warehouse/Distribution: Buildings with a minimum 20-foot clear height, dock-high truck loading and parking ratios of 2.0/1,000 or less.

Industrial/Light Industrial: Buildings with drive-in and/or dock-high truck capabilities, clear heights of less than 20 feet and parking ratios of 2.0/1,000 or less.

Vacancy rates may have continued to decline in the second quarter of 2013, but prices remain below replacement cost, indicating that new commercial development is unlikely to occur in the short term.

The market data shown in Exhibit III-21 goes through Q1 2013, and therefore does not account for some recent market activity. As shown in Exhibit III-22, 388,500 square feet of commercial real estate were sold in the second quarter of 2013. In addition to the sales activity shown below, at least 22,500 square feet of R&D /office space was leased during the second quarter of 2013.[9] However, some of this activity may have been offset by new vacancies opening up elsewhere in the city.

According to brokers, the sales prices in recent transactions ($50-$69 per square foot) are well below the cost of building a new commercial building. This indicates that new industrial, R&D, or office development is unlikely to be feasible in the near term because the sales price would not be sufficient to cover the developer's costs.[10]

Exhibit III-22. Sales Activity in Second Quarter 2013

Location	Building type	Sq. Ft.	Price/Sq. Ft.
685 Jarvis	R&D	50,000	$52
180 Cochrane Circle	Industrial	35,000	$57
755 Jarvis	Office/R&D	240,000	$50
15555 Concord Circle	Office/R&D	42,000	$56
Adams Court	Industrial	21,500	$69
Total		**388,500**	**$53 (a)**

(a) Weighted average price per square foot.
Source: Jeff Barnes, Colliers International, May 2013.

Morgan Hill's commercial real estate market is somewhat insulated from booms and busts to the north.

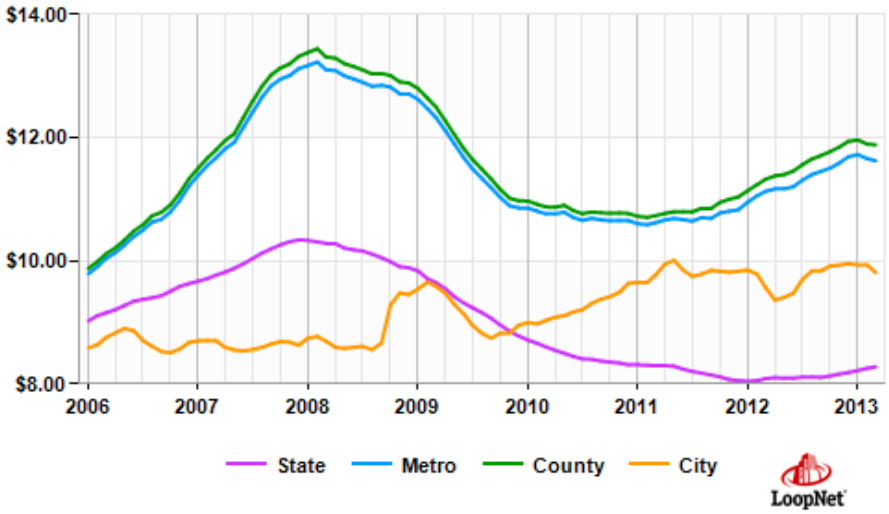
Exhibit III-23 shows how asking rents for industrial space in Morgan Hill have changed over the past seven years compared to the state, county, and the metropolitan statistical area (which includes San Benito as well as Santa Clara County).[11] While the county experienced a rapid rise in industrial rents between 2006 and 2008, asking rates in Morgan Hill remained relatively stable. The city experienced a sharp but short bump in prices in late 2008/early 2009, just as the regional market started to feel the effects of the national recession – although given the relatively small size of Morgan Hill's market, this temporary increase could reflect just a few, relatively large transactions. In 2010, the region's industrial rents bottomed out, and then started to increase slowly through 2011. Meanwhile, asking rents in Morgan Hill increased through 2010, before slowing in 2011. While LoopNet shows declining asking rates in early 2013, Colliers recorded that average transaction prices remained steady through the first quarter.

[9] Colliers International, "Lease Comparables Matrix," April 29, 2013; Cushman & Wakefield of Northern California, "Morgan Hill Lease Comparables Since 1-1-12," May 10, 2013.

[10] Communication with Jeff Barnes (Senior Vice President, Colliers International) and Keith Claxton (Senior Vice President, Cassidy Turley), May 2013.

[11] The rents reported by LoopNet, an online commercial real estate listing and research service (shown in Exhibit IV-2), are asking prices, while the rents reported by Colliers International (shown in Exhibit IV-1) are based on actual transactions. Given this difference, as well as other differences in the two companies' methodologies, the rents from the two sources do not match – although they are in the same order of magnitude (around $0.70 per square foot per month for Morgan Hill in early 2012).

Exhibit III-23. Asking Rents for Industrial Space (per Square Foot per Year): Morgan Hill, Santa Clara County, Metro Area, and State, 2006-March 2013



	March 2013 Asking Rents	
	Monthly	Annual
State	$0.69	$8.27
Metro*	$0.97	$11.62
County	$0.99	$11.88
Morgan Hill	$0.82	$9.81

*Includes Santa Clara and San Benito counties.

Construction of new, industrial and non-retail commercial space has been slow in recent years. Exhibit III-24 and III-25 show office and R&D construction trends from 2000 through the second quarter of 2013 for Santa Clara County and Morgan Hill/Gilroy, based on data from the commercial real estate firm Cassidy Turley. While Morgan Hill and Gilroy saw new R&D construction during and immediately after the dot.com boom of the early 2000's, the two cities have not experienced any significant new R&D or office development since 2005. Meanwhile, R&D and office development rebounded in Santa Clara County in 2007-2008, declined in 2009-11, and is appears to be recovering again in 2012 and 2013.

Industrial development followed the same trends. Morgan Hill received an average of five to ten applications a year for new industrial projects between 1995 and 2002, no new applications in 2003 and 2004, a handful between 2005 and 2007, and none since the recession that started in 2008.[12] This pattern was also present in the greater region. The commercial real estate firm Grubb & Ellis reports that very little construction of new industrial space occurred in the San Jose/Silicon Valley area during the 2002-2012 period.[13]

Exhibit III-26 shows the non-residential development projects that were under review or had recently been approved as of March 2012. Other than two small office projects that were recently approved, most of the planned and proposed development projects are retail or another use such as a conference center or religious facility. Given current vacancy rates particularly for R&D uses, Morgan Hill is unlikely to see significant new development until the excess inventory is absorbed and rents are restored to equilibrium.

According to brokers, businesses typically choose Morgan Hill either to take advantage of the relatively new, high-quality space available for prices that are significantly lower than in other parts of the county, or because owners or managers have ties to the community.
Prototypical examples include a sheet metal manufacturer that had outgrown its space in the City of Santa Clara and was drawn to a larger, newer, and lower-cost building in Morgan Hill that also offered a better

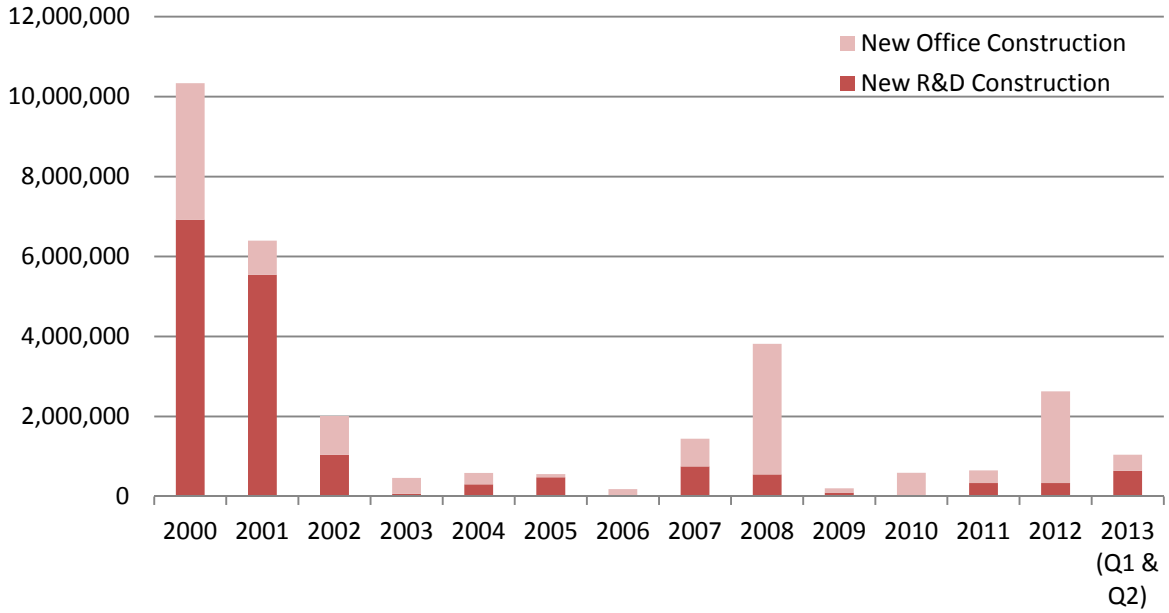
[12] Data provided by City of Morgan Hill Planning Division, July 2012.

[13] Grubb & Ellis, "Industrial Trends Report – Fourth Quarter 2011: Silicon Valley, CA," 2012, http://www.grubb-ellis.com/SitePages/GetFileFromDB.ashx?type=9&id=1274.

power supply; and a technology company started by a former Silicon Valley worker who already lived in Morgan Hill. Brokers note that the strongest demand is coming from machining and other manufacturing companies looking for space in the 15,000 to 20,000 square foot range; companies are particularly interested in spaces with high clear (i.e., ceiling) heights and good truck access.

However, as the Silicon Valley commercial real estate market evolves towards higher-intensity, multi-story, office and R&D uses, Morgan Hill's lower-cost, lower-density industrial buildings and land may become increasingly attractive for the region's manufacturers.
A recent study by the City of San Jose[14] found that in response to the growth of social media and other web-based companies, the trend in the San Jose/Silicon Valley real estate market is to build relatively high density, Class A office and R&D facilities in areas with good access to urban amenities. However, manufacturers – which play a key role in the Silicon Valley economy by enabling exports outside of the region, facilitating the development and introduction of new products, attracting skilled labor, and providing high-paying jobs – typically locate in older, one- to two-story buildings. New, multi-story buildings are ill-suited for many types of production, and manufacturing companies can rarely afford the higher rents associated with new office/R&D space. As traditional manufacturing centers in the heart of Silicon Valley, such as the North First Street Corridor in San Jose, intensify over time, manufacturers may be increasingly drawn to the lower-cost industrial land available in Morgan Hill.

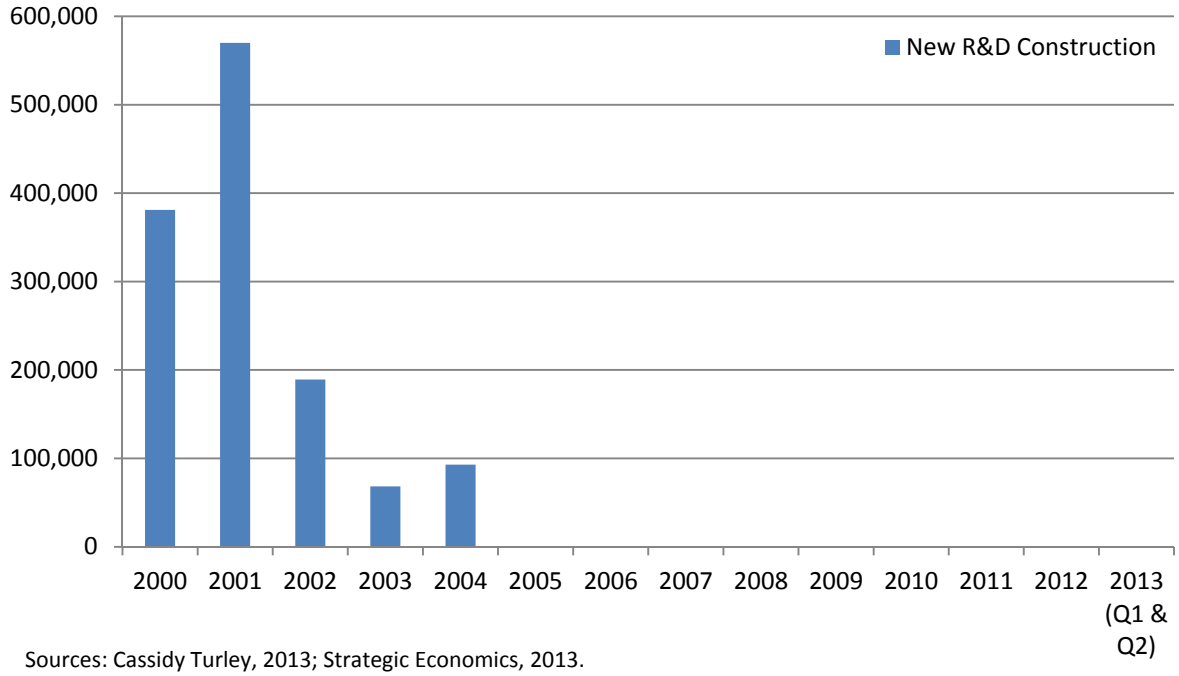
Exhibit III-24. New Office and R&D Construction: Santa Clara County, 2000-2nd Quarter 2013



Sources: Cassidy Turley, 2013; Strategic Economics, 2013.

[14] City of San Jose, "Strengthening Manufacturing in San Jose," June 12, 2012, http://www.sanjoseca.gov/clerk/CommitteeAgenda/CED/20120625/CED20120625_d3.pdf.

Exhibit III-25. New Office and R&D Construction: Morgan Hill and Gilroy, 2000-2nd Quarter 2012



Sources: Cassidy Turley, 2013; Strategic Economics, 2013.

Exhibit III-26. Planned and Proposed Non-Residential Development Projects, March 2012

Project Name	Location	Project Type	Total Square Feet	Square Feet Completed	Square Feet Approved	Status
Venture Professional Center	Digital Dr	Office (General Office Condos)	129,722	109,722	20,000	Approved
South Valley Orthopedics	265 Digital Dr	Office (Medical)	10,700	NA	NA	Approved
Cochrane Commons	Northeast quadrant of Hwy. 101 & Cochrane Rd.	Retail	657,250	263,588	22,470	Approved
Madrone Village	NW Corner of Cochrane and Madrone Pkwy	Retail	76,897	28,265	48,632	Approved
Monterey-Dynasty	Monterey Rd across from CDF Fire Station	Retail	268,888	0	0	Under Review
CVS	700 E. Dunne Ave	Retail	14,715	0	14,715	Under Construction
Monterey-Dincer	16770 Monterey Rd	Other Commercial	3,150	0	3,150	Approved
American Institute of Mathematics	14830 Foothill	Other Commercial (Conference Center)	167,512	0	167,512	Approved
California Sports Center	16955 Monterey Rd	Other Commercial (Recreation)	5,775	NA	NA	Under Review
Vista Del Toro	17620 Monterey Rd	Mixed Use	53,456	0	53,456	Approved
Beth-El Baptist Church	240 Vineyard Ct	Religious Facility	10,000	0	10,000	Approved
		Total:				
		Office	140,422	109,722	20,000	
		Retail	1,017,750	291,853	85,817	
		Other Commercial	176,437	0	170,662	
		Mixed Use	53,456	0	53,456	
		Religion	10,000	0	10,000	
		All	1,398,065	401,575	339,935	

Source: City of Morgan Hill, 2012; Strategic Economics, 2012.

MARKET DYNAMICS WITHIN MORGAN HILL

Existing Employment Concentrations

Exhibit III-27 shows where existing employment uses are concentrated within Morgan Hill, and the major employers and building types that characterize the different subareas. Generally speaking, there are two major concentrations of employment uses in the city: one to the north, clustered around the Cochrane Road freeway exit, and another to the south, between Dunne and Tenant Avenues. Exhibit III-28 shows recent lease transactions, organized by subarea. Note that many of these lease transactions were renewals, rather than absorption of formerly vacant space.

Cochrane Road Business Parks

The Cochrane Road area is generally defined as the area bounded by Madrone Parkway to the north, Highway 101 to the east, Central Avenue to the south, and Monterey Road to the west. As shown in Exhibit III-27, this area includes a number of different business parks, the largest of which are Madrone Business Park and Morgan Hill Ranch.

The Cochrane Road business parks are home to Morgan Hill's newest industrial and commercial facilities and most of the city's largest employers, which are concentrated in Morgan Hill Ranch and Madrone Business Park.

Morgan Hill Ranch and Madrone Business Park have some of the city's largest floor plates; many of the larger buildings were built-to-suit in the 1980's and 1990's for large tenants such as The Thomas Kinkade Company, Paramit, Wiltron (now Anritsu), and Abbott Laboratories (later Hospira). The majority of the city's largest employers are located in Madrone Business Park or Morgan Hill Ranch, including Anritsu, Fox Racing, Infineon, Young's Market, Paramit, and Flextronics. Sutter Business Park and Adams Court are even more recent; they were built on a speculative basis in the late 1990's and early 2000's and have smaller floorplates intended to serve a wider range of tenants.

According to local brokers, the Cochrane Road business parks – particularly Morgan Hill Ranch and Madrone Business Park – are typically the most attractive for new businesses considering moving to the city.

Cochrane Road is the first freeway exit in Morgan Hill that drivers encounter on their way south from San Jose, and the R&D and industrial buildings located in the area are some of the newest in the city.

Reflecting the area's competitive advantages, the Cochrane Road business parks have experienced more leasing and sales activity in 2012 and 2013.

The available data on recent transactions is too sparse to calculate average rental rates by subarea and building type. However, most of the lease transactions of employment space that occurred in Morgan Hill during 2012 and the first half of 2013 took place in the Cochrane Road area (Exhibit III-28). Similarly, with the exception of the sale on Concord Circle, all of the sales transactions shown above in Exhibit III-22 occurred in the Cochrane Road area. The amount of space involved in the transactions was also larger in the Cochrane Road area than in the Dunne and Tennant Area, reflecting the larger floorplates available around Cochrane Road. However, note that some of the lease transactions shown in Exhibit III-28 were renewals or tenant sale lease-backs, not absorption of previously vacant space.

Sutter Business Park and Adams Court business parks have significant long-term vacancies.

Sutter Business Park was built in the 1990's and was originally leased in its entirety by Cidco, Inc., a caller ID provider. Cidco left Morgan Hill in the early 2000's as the dot.com market was crashing, and the business park never fully recovered. Adams Court also entered the market in the early 2000's and reportedly never fully leased.

Digital Island and The Ranch are tenanted by a mix of manufacturing companies, medical/dental offices, and other resident-serving businesses.
Digital Island and The Ranch are located at the southwestern edge of the Cochrane Road concentration, and include many resident-serving businesses such as medical and dental offices, gyms, a credit union, and a tutoring service, as well as industrial uses such as sheet metal manufacturing and electronics distribution.

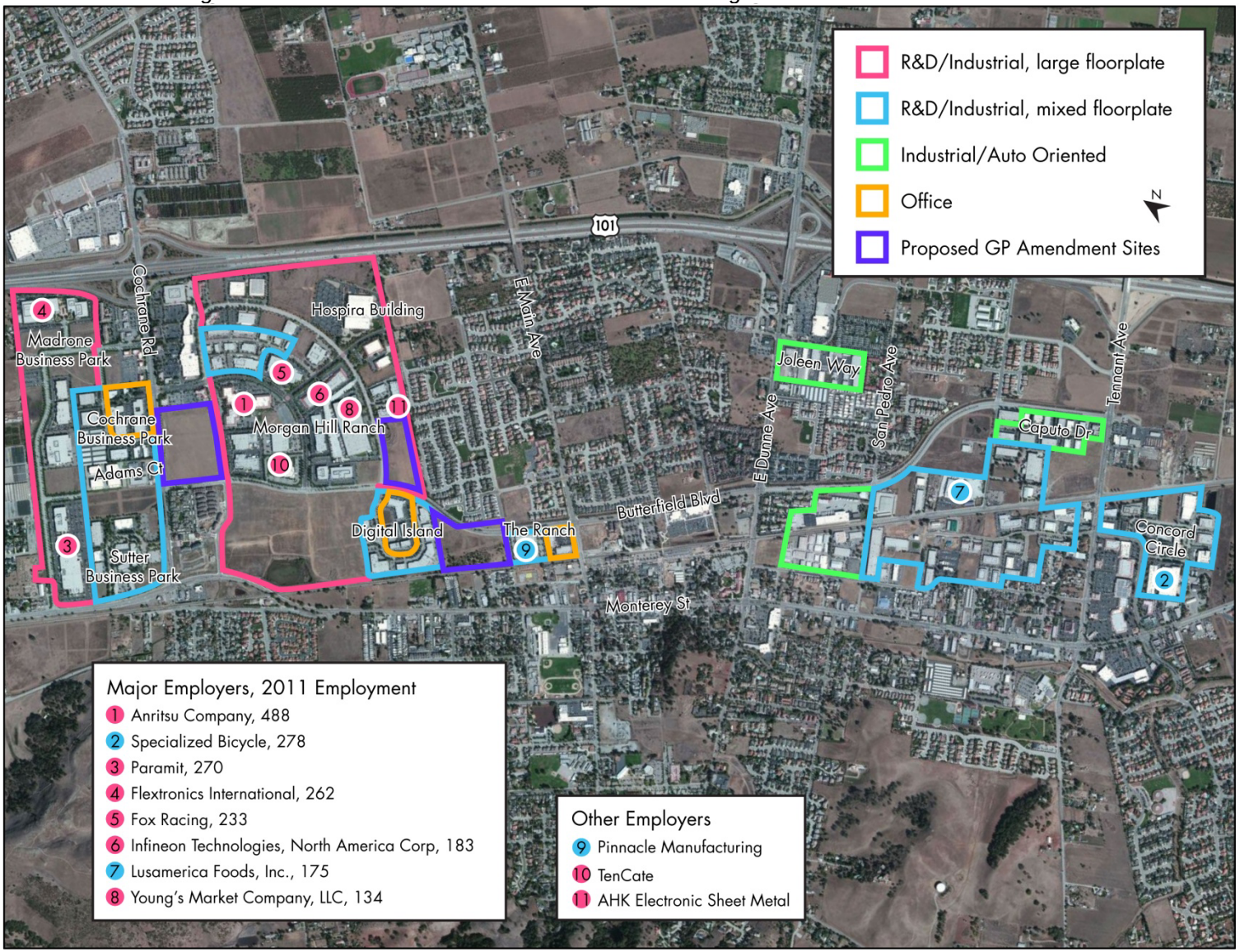
Dunne and Tennant Avenues

The employment areas located south of Dunne Avenue are characterized by a diverse mix of uses and building types, including many of the older, smaller industrial buildings in the city. However, some of the older buildings may serve an important function to the city's economy by providing relatively low-cost space for small manufacturers and other businesses.
Brokers report that potential tenants often think of the Dunne and Tennant Avenue freeway exits as significantly further from San Jose than Cochrane Road, and the industrial and commercial properties located in the southern part of the city are somewhat more removed from Highway 101 than the business parks to the north.

The city's southern employment areas can be divided into three general categories:

- **Light industrial/auto-oriented pockets** between Dunne and San Pedro Drive and around Joleen Way and Caputo Drive: These areas are home to a mix of light manufacturing, auto repair, and other auto-oriented uses, as well as a few office or other commercial uses. While these pockets include some of the older, smaller industrial buildings in the city, there are few properties from this area listed on the market, indicating a relatively high occupancy rate.
- **R&D/industrial concentration between Dunne and Tennant:** The small amount of heavy industrial space that has ever existed in Morgan Hill grew up around the railroad in this area. A few of these heavier uses are still in operation (for example, a road oil and paving company); several vacated sites are contaminated and are undergoing environmental remediation. For the most part, however, this area is now home to lighter manufacturing, wholesale/distribution, R&D, and office uses, including businesses as diverse as Lusamerica Foods, a seafood processing and distribution company; Mission Bell, a custom woodworking manufacturer; and Cyclonix, a graphic design/brand development firm.
- **R&D/industrial concentration south of Tennant:** The R&D/industrial area located south of Tennant Avenue is anchored by Specialized Bicycles, the city's third largest employer and one that has experienced significant expansion in recent years. According to brokers, the adjacent properties around Concord Circle are currently some of the more desirable in the city; these buildings meet the demand for 15,000-20,000 square foot industrial spaces that are currently popular with machining shops and other small manufacturers looking for space in Morgan Hill. Some parts of this area may be transitioning from industrial to other uses; for example, Vineyard Center, a small industrial park adjacent to the bicycle manufacturer, is attracting some employee- and resident-serving businesses including a health food distributor, a children's gym, and a knitting supply store.

Exhibit III-27. Existing Business Parks and Industrial Concentrations in Morgan Hill



Sources: Colliers International, "Gilroy-Morgan Hill Commercial Real Estate Map;" City of Morgan Hill, 2012; Strategic Economics, 2013.
Aerial image (c) 2010 Microsoft Corporation and its data suppliers

Exhibit III-28. Industrial, R&D, and Office Lease Transactions in Morgan Hill, 2012 through April 2013 (Including Lease Renewals)

Business Park / Area	Rent (per Sq.Ft./ Month)	Type of Space	Square Feet	Date Lease Signed	Tenant	Notes
Cochrane Road Area						
Morgan Hill Ranch	$0.49 NNN	R&D	54,545	10/1/2012	Fastener Svc. Corp.	Tenant sale lease-back.
Madrone Business Park	$0.53 NNN	Industrial	79,408	1/1/2013	Del Monaco Specialty Foods	
Adams Court	$1.10 NNN	R&D/Office	924	4/16/2013	Terrapin Systems, Inc.	
Adams Court	$0.75 NNN	Industrial	13,304	5/1/2012	US Micro Laser	
Adams Court	$0.50 NNN	Office	21,500	4/1/2013	Solar City Corporation	
Adams Court	$0.50 NNN	Industrial	25,000	3/1/2013	Solar City Corporation	3 months free
Sutter Business Park	$1.28 FS	Office (Class C)	4,500	4/1/2012	Zingenuity Inc	
Digital Island	$0.95 IG	R&D/Office	2,974	12/12/2012	Dr. Maury Harwood	Lease renewal
Dunne & Tennant Avenue Area						
Caputo Drive	$0.85 IG	R&D	3,200	2/1/2013	Minuteman Press of Morgan Hill	1 month free
Vineyard Center	$0.95 NNN	Industrial	5,040	1/1/2013	Carryingmate Industries, Inc.	1 month free
Vineyard Center	$0.76 IG	Industrial	4,320	3/19/2013	Agile Communications, LLC	Lease renewal

NNN: Triple Net

FS: Full Service

IG: Industrial Gross

Sources: Colliers International, "Lease Comparables Matrix," April 29, 2013; Cushman & Wakefield of Northern California, "Morgan Hill Lease Comparables Since 1-1-12," May 10, 2013; Strategic Economics, 2013.

Sources: Colliers International, "Gilroy-Morgan Hill Commercial Real Estate Map;" City of Morgan Hill, 2012; Strategic Economics, 2013.

OPPORTUNITIES FOR EMPLOYMENT GROWTH

Exhibit III-29 shows vacant (i.e., undeveloped) land designated as industrial in the Morgan Hill General Plan. This designation allows a variety of research and development, warehouse, manufacturing, service commercial and other uses, and captures the majority of opportunity sites for non-retail employment uses. The map is based on a survey of vacant industrial lands that the City of Morgan Hill conducted in 2008, updated to reflect more recent land use changes. Strategic Economics used parcel data from the Santa Clara County assessor's office to aggregate adjacent parcels with common owners.

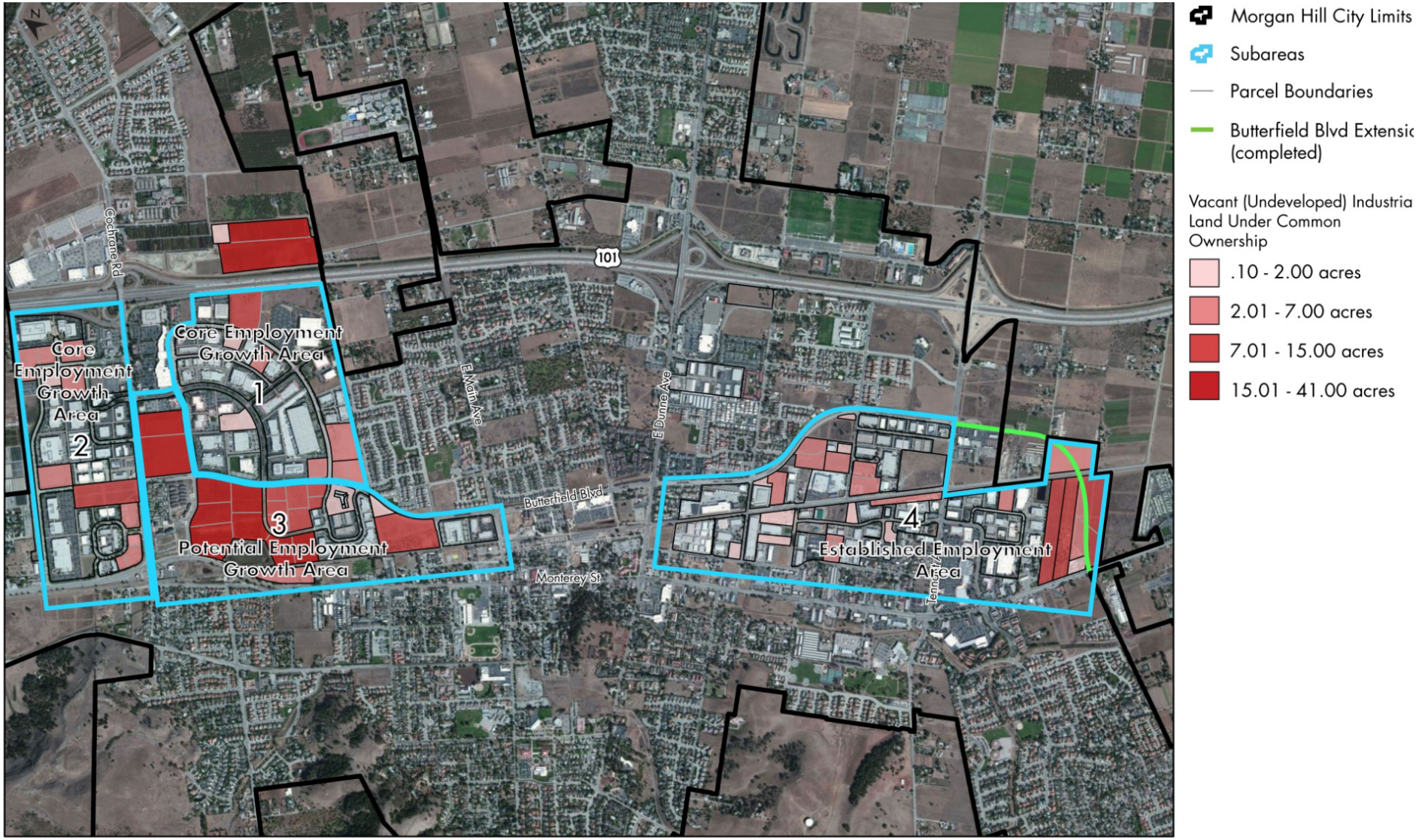
In total, Morgan Hill has about 294 acres of vacant industrial land within the city limits.
There are an additional 229 acres of vacant industrial land located outside the city limits in the Sphere of Influence; these are not shown in Exhibit III-29 because the Santa Clara County Local Agency Formation Commission (LAFCO) is unlikely to approve new annexations in the short- to medium-term.

However, different parts of the city are likely to experience different types of change as the city continues to attract new employment uses in the coming decades.
The current Morgan Hill General Plan has a single Industrial designation that does not distinguish between different parts of the city. Based on the existing development patterns described above and shown in Exhibit III-29, and the distribution of vacant land shown in Exhibit III-30, Strategic Economics identified some several preliminary subareas within Morgan Hill, each of which has different opportunities for attracting new commercial and industrial businesses and development:

- **Subareas 1 and 2: Core Employment Growth Areas, North and South of Cochrane Road.** As discussed above, these areas are home to most of Morgan Hill's largest employers, include most of the city's newest and largest industrial and commercial buildings, and are typically most attractive for businesses considering moving to Morgan Hill. Most of the vacant industrial parcels in this area are between 2 and 5 acres, and are scattered throughout the different business parks. At 11.8 acres total, the two adjacent parcels that compose the Jarvis Drive GPA site comprise the largest contiguous site in Subarea 2, followed by a 10 acre site located between Adams Court and Sutter Business Park.
- **Subarea 3: Potential Employment Growth Area, West of Butterfield.** This area includes some of the largest vacant properties under consolidated ownership, including multiple large, vacant properties on the west side of Butterfield. Given the competitive advantages of the Cochrane Road area, this area would be a natural location for a large business looking to move to Morgan Hill in the future, particularly as the remaining supply of vacant land in the Core Employment Growth Areas is developed over the long-term.
- **Subarea 4: Established Employment Area, South of Dunne Avenue.** This area plays an important role in Morgan Hill's economy by providing relatively low-cost space for small manufacturers and other businesses, but it has fewer opportunities for large-scale commercial or industrial development than the other subareas. Most of the vacant properties south of Dunne Avenue are less than 5 acres in size, which may be developed incrementally over time. There are a few larger vacant parcels located south of Tennant Avenue. The City is currently extending Butterfield Boulevard through this area, providing improved access to Highway 101 that may make these parcels more desirable for development in the long run, particularly given the momentum in adjacent Concord Circle and Specialized Bicycle. However, the land in this area has the disadvantage of being located off of Tennant Avenue, the southern-most freeway exist in Morgan Hill

Exhibit III-30 summarizes the total amount of vacant land and the average size of vacant properties for the four subareas.

Exhibit III-29. Vacant (Undeveloped) Industrial Land in Morgan Hill by Subarea*



*Parcels designated as industrial in the Morgan Hill General Plan. The industrial designation allows research, warehouse, manufacturing, & service commercial uses.
Additional notes: Individual parcels (demarcated with gray lines) are aggregated by property owner. For properties that include both existing buildings and significant vacant area that could be developed, the portion that is currently developed is not included in the calculation of vacant land area. Vacant parcels with significant contamination are not shown.
Sources: City of Morgan Hill, 2008; Strategic Economics, 2013. Aerial image (c) 2010 Microsoft Corporation and its data suppliers

Exhibit III-30. Summary of Vacant (Undeveloped) Industrial Land by Subarea*

Summary Area	Total Vacant Land (Acres)	Average Vacant Land Area Under Common Ownership (Acres)
1 - Core Employment Growth Area, South of Cochrane Rd.	30	4.3
2 - Core Employment Growth Area, North of Cochrane Rd.	38	4.8
3 - Potential Employment Growth Area, West of Butterfield Blvd.	99	14.1
4 - Established Employment Area, South of Dunne Ave.	97	4.2
Total City Limits*	294	6.2
Sphere of Influence (SOI)	229	7.0
Total City Limit & SOI	523	6.5

*Includes parcels east of Highway 101 that are within city limits but not included in the summary areas.
Source: Strategic Economics, 2013.

Additional analysis and visioning will be required to formalize Morgan Hill's employment growth areas and determine appropriate boundaries for these areas.
The subareas described above and shown in Exhibit III-29 are preliminary. In order to determine the amount and location of land that should be reserved for future employment growth, the city will need to weigh projected demand for employment space against projected demand for residential space. The following section looks at the employment side of this equation; further analysis will be required in order to understand the supply of land available in Morgan Hill to accommodate residential growth, and the market forces affecting residential demand.

EMPLOYMENT LANDS SUPPLY AND DEMAND ANALYSIS

Projecting Demand for Industrial Land

In order to understand how Morgan Hill's supply of industrial land might compare to future demand for employment uses, Strategic Economics used data from the Association of Bay Area Governments (ABAG) to project employment growth in Morgan Hill, and then converted the projected jobs into building square footage using assumptions about the space required for each employee and the type of built space (industrial, office, R&D, or warehouse) occupied by different industries. These demand projections are intended to represent a range of the possible future scenarios, rather than provide a single number of new jobs for which Morgan Hill should specifically plan.

Overall, Strategic Economics projects demand for between 44,700 and 114,000 square feet a year of industrial, warehousing, R&D, and office space, or a total of 805,000 to 2 million square feet by 2030.
The 44,700 to 114,000 square foot range represents the projected annual *average* demand over the coming decades; in any given year, demand could be more or less depending on national, regional, and local economic conditions.

Exhibit III-31 shows the employment demand scenarios on which this range is based. Scenarios 1 and 2 are based on ABAG's most recent employment projections, completed in May 2012.[15] As discussed above in Chapter II, ABAG's 2012 projections forecast that Morgan Hill's employment will grow by 155 new jobs a year over the thirty year period. This would represent a substantial reduction in the rate of employment growth in Morgan Hill over the past two decades, given that the city added an average of about 370 jobs a year between 1990 and 2010. The third scenario in Exhibit III-30 assumes that this historic rate of employment (370 jobs per year) would continue into the future.

In order to determine how many square feet of industrial, R&D, office, and warehouse space these new employees would require, Strategic Economics distributed the projected employment growth by sector and then by building type. These assumptions are shown in Exhibit III-32. Finally, Strategic Economics converted the employment numbers into demand for building space, using rules of thumb about the number of square feet required for each employee. Scenarios 2 and 3 are based on current employment densities: about 500 square feet per worker for industrial space, 800 square feet per worker for warehousing, 350 for R&D, and 300 for office. Scenario 1 assumes that the recent trend towards higher density office and R&D space would continue, with the amount of space allotted per worker falling to 300 square feet for R&D and 250 for office.[16]

[15] Association of Bay Area Governments and Metropolitan Transportation Commission, "Preferred Land Use and Transportation Investment Strategy for Plan Bay Area" and "Jobs-Housing Connection Strategy," May 2012, http://www.onebayarea.org/plan_bay_area/.

[16] Both the current and higher density assumptions match those used in the 2006 *Industrial Lands and Southeast Quadrant Market Study*, except that this analysis differentiates between lower-density warehousing space (800 square feet per worker) and higher-density industrial space (500 square feet per worker).

Exhibit III-31. Projected Employment Demand Scenarios

Demand Scenario	Industrial	Warehousing	R&D	Office	Total Industrial/ Warehousing/ R&D/Office	Retail/ Other Jobs	Total All Jobs
1. Low End Projection: ABAG Employment Projection (High Job Densities)							
Annual Average New Jobs	35	14	23	37	109	46	155
Square Feet per Employee	500	800	300	250			
Average Annual Building Demand (Sq. Ft.)	17,300	11,100	7,000	9,400	44,700		
Total Building Demand, 2012-2030 (Sq. Ft.)	311,000	199,000	126,000	168,000	805,000		
2. ABAG Employment Projection (Current Job Densities)							
Annual Average New Jobs	35	14	23	37	109	46	155
Square Feet per Employee	500	800	350	300			
Average Annual Building Demand (Sq. Ft.)	17,300	11,100	8,200	11,200	47,800		
Total Building Demand, 2012-2030 (Sq. Ft.)	311,000	199,000	147,000	202,000	860,000		
3. High End Projection: Historic Employment Growth Rate (Current Job Densities)							
Annual Average New Jobs	83	33	56	89	261	109	370
Square Feet per Employee	500	800	350	300			
Average Annual Building Demand (Sq. Ft.)	41,300	26,400	19,500	26,800	114,000		
Total Building Demand, 2012-2030 (Sq. Ft.)	743,000	475,000	351,000	482,000	2,052,000		

Source: ABAG, 2012; Strategic Economics, 2013.

Exhibit III-32. Employment Space Demand Projections: Industry and Building Type Assumptions

Sector	% of Total Workforce (a)	Job Distribution by Building Type				
		Industrial	Ware-house	R&D	Office	Other
Manufacturing, Wholesale, Construction (b)	45%	50%	20%	20%	10%	
Financial, Professional, Technical (c)	21%			30%	60%	10%
Health & Education Services	11%				70%	30%
Retail, Accommodation & Food Services	21%					100%
Other (d)	3%					100%
Total	100%					

(a) Based on Morgan Hill's employment by industry in 2009.

(b) Includes Manufacturing; Wholesale; Transportation & Warehousing; Construction

(c) Includes Professional, Scientific & Technical Services; Finance, Insurance, & Real Estate; Information; Management of Companies & Enterprises; Admin, Support, & Waste Management

(d) Includes Other Services and Natural Resources and Utilities

Source: Strategic Economics, 2013.

Comparing Supply and Demand

Strategic Economics converted Morgan Hill's supply of vacant industrial land into potential building square feet in order to compare projected demand for employment space with supply. Exhibit III-33 shows several different ways of thinking about the balance between supply and demand. The results are expressed as "years of supply," or the ratio of the total potential supply in each scenario to projected annual average demand for employment space (44,700 to 114,000 square feet, depending on future employment densities the pace of job growth).

- **The 294 acres of vacant industrial land located within the city, combined with the city's existing building inventory, is sufficient to accommodate projected demand for approximately 40-95 years.** In other words, the total potential supply of industrial, R&D, warehouse, and office space is 40-95 times greater than projected annual average demand for that space. This projection is shown in the first column of Exhibit III-33.
- **The Cochrane Road area (subareas 1, 2, and 3 in Exhibit III-29) could accommodate 25-60 years of employment demand.** This assumes that the city's existing inventory of vacancy industrial and commercial buildings would be absorbed before new development in the Cochrane Road area commences. This calculation is shown in the second column of Exhibit III-33.

Exhibit III-33. Potential Supply of Industrial, R&D, Office, and Warehouse Buildings Compared to Projected Demand

	Geography	
Assumptions	**City Limits**	**Cochrane Road Area (a)**
Potential Supply of Industrial, R&D, Office, and Warehouse Building Area in Morgan Hill		
Vacant Industrial Land		
Vacant Industrial Land (Acres)	294	167
Maximum Building Coverage	30%	30%
Maximum Building Area (Sq. Ft.) (b)	3,842,000	2,182,400
Existing Vacant Industrial, R&D, Office, and Warehouse Buildings		
Total Vacant Building Area (Sq. Ft.) (c)	808,900	808,900
75% of Building Area (Sq. Ft.)	606,700	606,700
Total Potential Building Area (Sq. Ft.)	4,448,700	2,789,000
Demand Compared to Supply		
Annual Average Demand (Sq. Ft.) (d)	44,700 - 114,000	44,700 - 114,000
Years of Supply	40 - 95	25-60

Columns may not add due to rounding. Scenarios assume that 75% of existing vacant building area would be absorbed before new construction occurs.

(a) Subareas 1, 2, and 3 on Exhibit III-27, above.
(b) Assumes maximum building coverage ratio of 30% and FAR of 1, based on current market conditions.

(c) 1Q 2013 (Colliers International).

(d) See Exhibit III-29, above
Sources: City of Morgan Hill, 2008; Colliers International, 2012; ABAG, 2012; Strategic Economics, 2013.

These supply scenarios rest on some common assumptions about city's future development: [17]

- **Lot coverage:** Aerial photographs of the city's newest business parks (e.g. Morgan Hill Ranch and Madrone Business Park) show that recent industrial and commercial development in the city has tended to be one-story high, with the total ground floor area covering no more than 30 percent of the available land area. The scenarios all assume that this land use pattern (30 percent coverage ratio, 1-story development) continues – for example, this implies in Scenario 1 that the 294 acres of vacant industrial land within the city limits could accommodate 3,842,000 square feet of industrial, R&D, office, and warehouse building area.
- **Absorption of existing inventory:** All of the scenarios further assume that 75 percent of the currently vacant buildings in Morgan Hill – about 606,700 square feet – will be absorbed before new development occurs, allowing for some ongoing vacancies caused by friction in the market and obsolescence of some of the existing building stock.

[17] These assumptions are similar to those used in the 2006 *Industrial Lands and Southeast Quadrant Market Study*, which assumed a floor-area ratio (FAR) of .35 and that 75 percent of vacant buildings would be absorbed before new construction began.

- **Total potential building area:** Includes both the maximum building area that could be developed on the vacant industrial land area considered in the scenario (subject to the lot coverage assumptions discussed above), and the 606,700 square feet of existing inventory that is expected to be absorbed into the market before new development occurs.

Comparison to the 2006 Industrial Lands Study

The 2006 *Industrial Lands and Southeast Quadrant Market Study* projected that Morgan Hill had between 65 and 70 years of industrial land supply remaining within the city's urban growth boundary. The urban growth boundary includes all of the vacant, industrial-designated land within the city limits and sphere of influence. In contrast, this analysis estimated 40-90 years of supply just within the city boundaries. There are some minor differences in methodology between this study and the 2006 study; for example the 2006 study used a floor area ratio (FAR) of 0.35 to calculate the potential building area that could be developed on vacant land, while this study effectively uses a more conservative FAR of 0.30. However, most of the difference can be explained by changing conditions affecting both the supply and – most importantly – the demand side of the equation:

- **Decreased Vacant Land and Building Area (Supply):** The 2006 study estimated that there were 556 acres of vacant industrial land within the urban growth boundary; this analysis found that there are 523 acres of vacant land today. Although it is difficult to directly compare the two studies' methodologies for calculating vacant land area, it appears that most of the difference is due to the re-designation of land from industrial to other uses, as little construction of new industrial space occurred between 2006 and 2012. Meanwhile, while the total amount of industrial, R&D, office, and warehouse space in Morgan Hill is about the same now as it was then (5.6 million square feet), the amount of vacant built space (808,900 square feet, or 14 percent of the inventory) is substantially lower than it was in 2006 (1.2 million square feet, or 22 percent).

  Largely due to these differences in vacant land and building area, the 2006 study estimated that Morgan Hill had 9.4-9.7 million square feet of potential supply within the urban growth boundary, while this analysis estimates that the city has about 7.4 million square feet in roughly the same geography. A lower supply number would tend to drive the "years of supply" estimate lower; however, in this case, it is outweighed by changes on the demand side of the equation.

- **Lower Projected Employment Growth (Demand):** The 2006 analysis relied on ABAG's 2005 employment projections, which forecast that the number of jobs in Morgan Hill would grow by 392 jobs a year between 2005 and 2030. This translated into demand for 144,000 square feet a year at current employment densities, or 130,516 at higher employment densities. Since 2005, however, ABAG has dramatically reduced its projections for Morgan Hill's employment growth to 155 new jobs a year, reflecting both the drastic difference in economic conditions facing the nation and the region today, and the increasing emphasis on concentrating growth in the center of the region. As shown in Exhibit III-29 above, 155 jobs translates into demand for 44,700 to 47,800 square feet year, depending on the employment density. Even assuming that employment growth returned to its historic 1990-2010 growth rate of about 370 jobs a year, there would only be demand for about 114,00 jobs a year (the high end estimate used in this analysis).

CONCLUSIONS

Morgan Hill has experienced strong population and employment growth over the past two decades. The city has proved particularly attractive to families with children. The housing stock is predominantly single-family and owner-occupied; this has been reinforced by recent residential development. However, given the persistently low rental vacancy rates and increasing rents, there is likely demand for rental apartment housing in the city.

While Morgan Hill is well-known for its family-friendly, residential character, the city has a significant employment base. The city's jobs/housing match is similar to the county-wide average. Given that Santa Clara County contains many of the Bay Area's largest employment centers, this shows that Morgan Hill has a relatively high number of jobs for a city of its population size. The city has a strong manufacturing and wholesale employment base, and the city's economy shows signs of diversifying, with recent increases in office-based sectors including health and education, finance, insurance, and real estate, and information. Continued population growth could also drive continued growth in health and education, finance, insurance, and real estate, since these industries often serve residents.

Based on the finding that projected demand for industrial, warehousing, R&D, and office space is expected to total between 44,700 and 114,000 square feet a year on average, the 294 acres of vacant industrial land within Morgan Hill's city limits, combined with the city's existing inventory of vacant built space, are sufficient to accommodate projected demand for approximately 40-95 years. Given the large existing inventory of vacant R&D space, the fact that the sales prices in recent transactions have below the cost of building a new commercial building, and the fact that Morgan Hill has experienced little new industrial and non-retail commercial development since the dot.com boom in the early 2000's, the city is unlikely to attract significant new development in the short-term. In the longer-term, however, as the market absorbs the existing vacant building space and rents rise, there is potential for new development, especially as market pressures in the Silicon Valley intensify. As employment growth occurs within Morgan Hill, the Cochrane Road business park area is likely to continue to be the most competitive for attracting new employers and, in the longer-term, new development. Assuming that the existing inventory of vacant space would be absorbed before new development begins, the Cochrane Road area could accommodate between 25 and 60 years of demand for employment space.

IV. FISCAL & ECONOMIC IMPACTS OF THE GENERAL PLAN AMENDMENT SITE

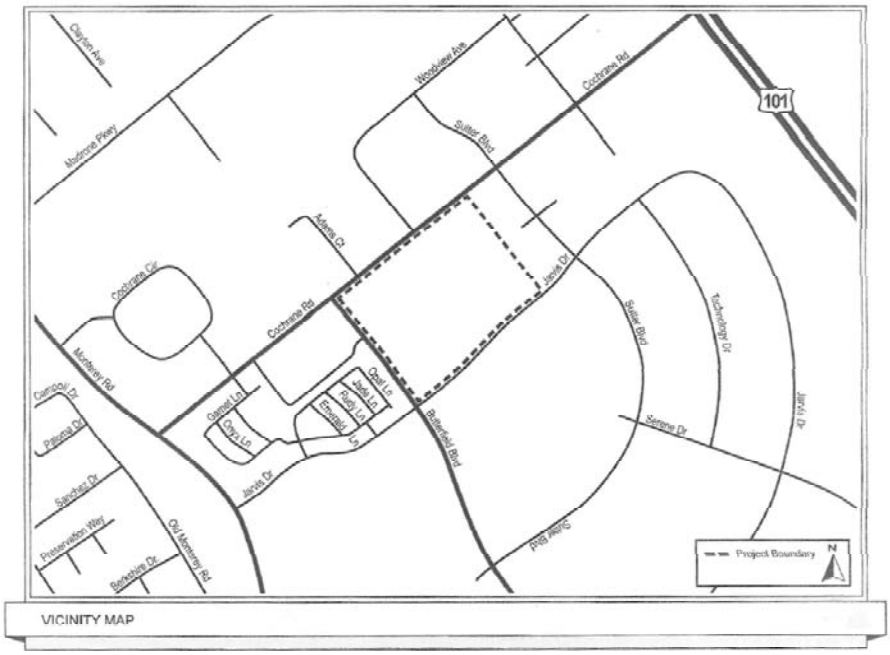
This chapter discusses the implications of the market analysis findings for the GPA site, and reviews the results of the fiscal and employment impact analysis conducted for the site.

Description of the GPA Site

This report evaluates the fiscal and economic impact of a proposed General Plan amendment at the southeast corner of Cochrane Road and Butterfield Boulevard (Exhibit IV-1). The 20-acre site is currently vacant and designated for industrial development in the Morgan Hill General Plan. The existing zoning is PUD (General Commercial or Limited Research and Development), which allows a wide variety of commercial uses. The Lewis Operating Corporation has submitted an application to change the designation to General Commercial along the entire Cochrane Road site frontage, encompassing about one-third of the site, and to Multi-Family Medium (14-21 dwelling units/acre) on the balance of the site. The applicant intends to create a horizontal mixed-use project with approximately 28,000 square feet of commercial space and up to 260 multi-family townhouse rental units with high-end amenities.[18]

The fiscal impact analysis studied three development scenarios, including a 100 percent industrial scenario (Scenario 1); a mixed-use, multi-family residential and retail scenario modeled after the applicant's proposal (Scenario 2); and a 100% retail scenario (Scenario 3). The three scenarios are summarized below in Exhibit IV-2 and discussed in greater detail below.

Exhibit IV-1. General Plan Amendment Site



Source: City of Morgan Hill Community Development Department, "General Plan Amendment GPA-12-02 and Zoning Amendment Application ZA-12-02: Cochrane Road – South Bay Development," Memorandum to Planning Commission, June 11, 2013.

[18] City of Morgan Hill Community Development Department, "General Plan Amendment GPA-12-02 and Zoning Amendment Application ZA-12-02: Cochrane Road – South Bay Development," Memorandum to Planning Commission, June 11, 2013.

Exhibit IV-2. Summary of Development Scenarios

	Cochrane Road Site
Gross Acreage	20.25
Scenario 1: Existing GP Designation - Industrial Use	
GP Designation	Industrial
Use	Industrial
Coverage (a)	30%
Industrial Square Feet	264,627
Scenario 2: Proposed GP Designation - Multi-Family Residential & Retail	
GP Designation	MF Med (14-21 du/ac) & General Commercial
Use	Townhouses & Retail
Total Housing Units	260
Market-Rate Rental Townhouses	234
Median Income Townhouses	26
Retail Square Feet	28,500
Scenario 3: Existing PUD Zoning Designation - Commercial Use	
GP Designation	Industrial
Use	Retail
Coverage (a)	30%
Retail Square Feet	264,627

(a) Assumes one-story development.
Sources: City of Morgan Hill, 2013; Strategic Economics, 2013.

IMPLICATIONS OF THE MARKET ANALYSIS FOR THE GPA SITE

At 20 acres, the GPA site accounts for about 12 percent of the vacant industrial land in the Cochrane Road business park area (Summary Areas 1-3 on Exhibit III-29 above), the city's most competitive employment concentration.
The Cochrane Road area has several competitive advantages including its position as the first freeway exit Morgan Hill that drivers encounter on their way south from San Jose. Most of the city's newest industrial, R&D, and office buildings are also located in this area.

The GPA site is located in an area that has the potential for future employment growth.
As identified above in Exhibit III-29, the GPA site is in a Potential Employment Growth Area. This area includes some of the largest vacant properties under consolidated ownership, including multiple large, vacant properties on the west side of Butterfield. Given the competitive advantages of the Cochrane Road area, this "Potential Employment Growth" area would be a natural location for a large business looking to move to Morgan Hill as the remaining supply of vacant land in the Core Employment Growth Areas is developed over the long-term.

The site is unlikely to attract new industrial, office, or R&D development in the short-term, although in the long-term, sites of this size could provide the flexibility to accommodate a wide range of potential employment uses.
Given the relatively small amount of new industrial, office, and R&D development that has occurred in Morgan Hill since the early 2000's, and the current trend in the San Jose/Silicon Valley real estate market towards building relatively high density, Class A office and R&D facilities in areas with good access to urban amenities, it seems unlikely that new industrial or commercial development will occur on the GPA

site in the short term. In the longer term, however, manufacturers may be drawn to the lower-cost industrial land available in Morgan Hill. As a relatively large lot (20 acres), the GPA site would provide the flexibility to accommodate a wide range of potential employment uses, particularly given its location at the edge of the city's most competitive employment concentration.

Based on the retail market analysis performed for Morgan Hill's ongoing General Plan update, the site is also unlikely to attract large-scale retail development in the short-term.
The "Economics White Paper" conducted for the General Plan update found that the Morgan Hill may have more retail than is currently supported by demand, and that the city's position between San Jose and Gilroy – both of which offer significant shopping opportunities – is a competitive disadvantage. In addition, Morgan Hill's residential population is perceived by retail developers and potential tenants as being too small to support significant new development, and growth in demand is limited by the RDCS process and population cap. These retail conditions are reflected in the fact that the Morgan Hill/Gilroy retail market area tends to have some of the lowest rents and highest vacancy rates in Santa Clara County.[19] Given these findings, it appears unlikely that the GPA site will attract large-scale, 100 percent retail development in the near future.

Taking an incremental approach to land use decisions will make it more difficult for the city to achieve its long-term vision for the Cochrane Road area, and to market the area as an employment growth district.
The city has not clearly defined the Cochrane Road area's boundaries or the community's vision and goals for the Cochrane Road area. While the previous chapter identified some preliminary subareas within the Cochrane Road area, the upcoming General Plan update process will provide an opportunity to conduct additional analysis and visioning, define boundaries and goals for the Cochrane Road employment area, and create a comprehensive framework for considering General Plan Amendment applications.

FISCAL AND EMPLOYMENT IMPACT ANALYSIS RESULTS

Based on findings from the previous chapter and interviews with the GPA applicants, Strategic Economics worked with city staff and the Initial Study consultant team to create three land use scenarios for the GPA site. For each of these land use scenarios, Strategic Economics then estimated the annual General Fund expenses and revenues that could be generated by the eventual build-out of the scenarios and estimated the number of jobs associated with each scenario. This section reviews the three development scenarios and the results of the fiscal and economic impact analysis.

Development Scenarios

Exhibit IV-3 summarizes the development scenarios that were evaluated. The first scenario is based on the existing Industrial General Plan designation for the site. Square feet of industrial built space were estimated using a 30 percent coverage ratio and assuming one-story development, based on existing development patterns in Morgan Hill. The industrial development is assumed to be multi-tenant manufacturing space, based on the finding in the previous chapter that small- to medium-sized manufacturers generate the greatest demand for employment space in Morgan Hill.

Scenario 2 is based on the General Plan amendment application, which proposes that 16 acres be re-designated as Multi-Family Medium (14-21 dwelling units per acre), and the remaining four be re-designated as General Commercial. Consistent with the Initial Study, this scenario assumes that the site would be developed with up to 260 rental townhouses and 28,500 square feet of new retail. Based on discussions with the applicants and proposed changes to the City's Residential Development Control

[19] BAE, "Economics White Paper," *Morgan Hill 2035 Existing Conditions White Papers*, May 2013.

System (RDCS) scoring standards, [20] 10 percent of the townhouses were assumed to be reserved for median income households.

The third scenario evaluates an alternative scenario with 100 percent, large format (i.e. big box) retail, consistent with the current Planning Unit Development (PUD) zoning designation. Consistent with existing shopping centers in Morgan Hill such as Cochrane Plaza, retail square footage was calculated based on a 30 percent coverage ratio and assuming one-story development.

Exhibit IV-3. Summary of Development Scenarios

	Cochrane Road Site
Gross Acreage	20.25
Scenario 1: Existing GP Designation - Industrial Use	
GP Designation	Industrial
Use	Industrial
Coverage (a)	30%
Industrial Square Feet	264,627
Scenario 2: Proposed GP Designation - Multi-Family Residential & Retail	
GP Designation	MF Med (14-21 du/ac) & General Commercial
Use	Townhouses & Retail
Total Housing Units	260
Market-Rate Rental Townhouses	234
Median Income Townhouses	26
Retail Square Feet	28,500
Scenario 3: Existing PUD Zoning Designation - Commercial Use	
GP Designation	Industrial
Use	Retail
Coverage (a)	30%
Retail Square Feet	264,627

(a) Assumes one-story development.
Sources: City of Morgan Hill, 2013; Strategic Economics, 2013.

Interpreting the Fiscal Impact Analysis

This fiscal impact analysis looked at ongoing impacts to the city's General Fund at build-out of the three development scenarios. As with all fiscal impact analyses, the assumptions drive the results. Strategic Economics created the assumptions described in this chapter based upon available data, city input, market analysis, and appropriate industry standards. However, unforeseeable deviations in actual future conditions can alter the fiscal impact outcomes. Because of these limitations, fiscal impact analysis is a tool best used to understand the major revenue and expense generators that would be associated with the three development scenarios, and to estimate the magnitude of likely net revenues or losses.

[20] The city has proposed changing the scoring for multi-family projects to award eight points to large multi-family projects (>150 units) for overall housing affordability if at least 10 percent of units are affordable to median income households. (See: City of Morgan Hill Community Development Department, "Zoning Amendment, ZA-13-04: City of Morgan Hill – Changes to the Residential Development Control System Standards & Criteria," Memorandum to Planning Commission, June 11, 2013.) At the direction of city staff, Strategic Economics assumed that Scenario 2 would be developed under this proposed scenario.

The analysis does not include programs that are funded independently of the General Fund. Therefore, the analysis does not consider impacts to the Community Development Agency, which is funded by planning, building, and engineering fees and other revenues sources that do not flow through the General Fund. In addition, fire service expenditures were excluded from the analysis because the city's contract with CalFire, the city's fire service provider beginning in January 2013, does not tie the city's costs to increases in the service population.[21] The analysis also does not consider impacts to the school district or other special districts that are funded separately and are not operated directly by the City of Morgan Hill. Finally, the fiscal impact analysis does not include estimates of impact fee revenues which are charged to mitigate effects of particular projects, or of capital expenses (e.g., construction of streets or parks) which might be associated with the future development of the GPA site.

Results

Exhibit IV-4 summarizes the results of the fiscal impact analysis for Scenario 1 (industrial development), Scenario 2 (mixed-use multi-family residential and retail development), and Scenario 3 (retail development). The methodology is described in detail in Appendix A. As shown in Exhibit IV-4, "net revenue" refers to the difference between annual General Fund revenues and expenditures. The "net revenue as a percent of total revenue" measure in the last line of Exhibit IV-4 compares the amount of projected net review to total revenues, and serves as a measure of the relative magnitude of revenues and expenditures. According to the industry standard, a development project is considered likely to have a neutral fiscal impact if net revenue is between +5 and -5 percent of total revenue.

The retail scenario is estimated to provide the greatest potential net revenue to the General Fund, followed by the industrial and mixed-use residential scenarios.

All of the potential scenarios have a net positive fiscal impact to the city's General Fund. Strategic Economics projects that Scenario 3 would generate approximately $711,000 more in annual General Fund revenues than expenditures ("net revenues"); Scenario 2 would generate $40,700 in net revenues; and Scenario 1 would generate $87,000 in net revenues. In all of the scenarios, net revenue is above 10 percent of total revenues, indicating that projected revenues significantly outweigh expenditures and the scenarios are all highly likely to have a positive fiscal impact.

The full retail scenario tends to provide the highest revenues because retail is assumed to generate significant sales tax for the city.

The analysis assumed that retail would generate $285 per square foot in taxable sales a year, based on calculations discussed below in Appendix A. However, as discussed above, there may not be sufficient market demand for large amounts of new retail in Morgan Hill in the short term, such as the large-scale, big box retail envisioned in Scenario 3. In addition to sales tax generated by the transactions that would occur in the new retail space, all three scenarios include estimates of sales generated by new workers and/or residents shopping in Morgan Hill. Scenario 1 also includes an estimate of business-to-business sales generated by the industrial use

After sales tax, property tax represents the largest revenue sources associated with each scenario.

Property tax revenues are based on the assessed value of the development in each scenario. Because residential and retail development have a higher market value than industrial development on a per square foot basis, Scenarios 2 and 3 generate higher property tax revenues than Scenario 1.

Police Department costs represent the largest expenditure in each scenario.

Consistent with the fact that the Police Department accounts for the largest share of Morgan Hill's General Fund expenditures, police services represent the largest expenditure in each scenario. Police

[21] Communication with Steve Rymer, Director, Morgan Hill Community Services Department, July 10, 2012.

Department expenditures are tied to the size of the service population in each scenario, as well as to the costs of providing police services to new retail (according to the Police Department, retail accounts for a disproportionate share of calls for service in Morgan Hill tied to vehicle and other thefts; see Appendix A for a discussion of how this was accounted for in the analysis).

Although the Recreation Division also accounts for a large percentage of all General Fund expenditures in Morgan Hill, the Recreation expenditures shown in Exhibit IV-4 are relatively low because the Recreation Division recovers most of its expenditures directly through member fees, rental fees, and other revenues.

A residential developer would likely provide capital improvements and other community benefits under the RDCS process, although these benefits are not reflected in the fiscal impact analysis.
For example, the developer may provide landscaped public service easements for utilities such as electricity and cable; traffic and other infrastructure improvements; and public plazas or other open space that are publicly accessible. These improvements are not accounted for in the fiscal impact analysis because the analysis only includes ongoing, General Fund operating costs and revenues, not upfront capital costs or improvements.

The GPA site could accommodate an estimated 530 jobs under Scenario 1, 60 jobs under Scenario 2, or 590 jobs under Scenario 3.
These estimates are based on assumptions about the intensity of industrial and residential development (discussed above), employment densities (500 square feet per manufacturing employee and 450 square feet per retail employee), and household sizes (3.1 persons per household, Morgan Hill's current average).

Projected fiscal impact is only one of many factors to consider in determining the most suitable use for the GPA site.
Other factors to consider include short- and long-term dynamics in Morgan Hill's industrial, commercial, and residential markets, projected supply of and demand for employment lands, the number and quality of jobs and housing units that could be accommodated in each scenario, and environmental and traffic impacts.

Exhibit IV-4. Estimated Annual General Fund Impacts at Full Build Out

	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
Industrial Sq. Ft.	264,627	0	0
Retail Sq. Ft.	0	28,500	264,627
Residential Units	0	260	0
Jobs	529	63	588
Revenue			
Property Tax	$25,000	$102,000	$75,000
Property Transfer Tax	$900	$3,600	$2,600
Sales Tax	$65,400	$162,700	$777,200
Vehicle License Fee	$11,100	$45,100	$33,200
Other Recurring Revenues	$9,300	$48,400	$10,400
Total Revenues	$111,700	$361,800	$898,400
Expenditures			
Police Cost	$12,300	$245,800	$174,300
Recreation	$300	$1,400	$300
Street Maint./Congest Mgmt.	$2,000	$10,600	$2,300
Environmental Programs	$500	$2,600	$500
Park Maintenance	$0	$15,300	$0
General Government	$8,700	$45,400	$9,700
Total Expenditures	$23,900	$321,100	$187,100
Net Revenue	$87,800	$40,700	$711,300
Net Revenue as % of Total Revenue	80%	10%	80%

Notes: Net revenue between +5 and -5% of total revenue is considered a neutral fiscal impact.

Fire service expenditures are not listed because Morgan Hill's fire contract is not tied to population increases; Community Development Agency expenditures are not listed because the agency is not funded by the General Fund.

Columns may not add due to rounding.

Source: Strategic Economics, 2013.

CONCLUSION

The fiscal impact analysis demonstrates that all of the potential land uses analyzed provide an ongoing benefit to the city's General Fund. The retail and mixed-use developments provide greater benefits than industrial uses at build-out. Strategic Economics estimates that 100 percent retail use (Scenario 3) would generate $711,300 in annual net revenues, compared to $40,700 annually from mixed-use residential/retail development (Scenario 2) and $87,800 a year from industrial (Scenario 1). The high net revenues associated with new retail development are largely due to increased sales tax revenues. However, the recently completed "Economic White Paper" performed as part of the city's General Plan update found that the demand for new retail in Morgan Hill is currently limited, and the development of a new shopping center on the GPA site as envisioned in Scenario 3 is unlikely in the short term. The GPA site is also unlikely to attract new industrial, office, or R&D development in the near future. However, the site is located in an area with the potential for future employment growth, and as a relatively large site it could provide the flexibility to accommodate a wide range of potential employment uses in the long-term.

APPENDIX A. FISCAL IMPACT METHODOLOGY

This appendix describes the methodology used to conduct the fiscal impact analysis of the GPA site.

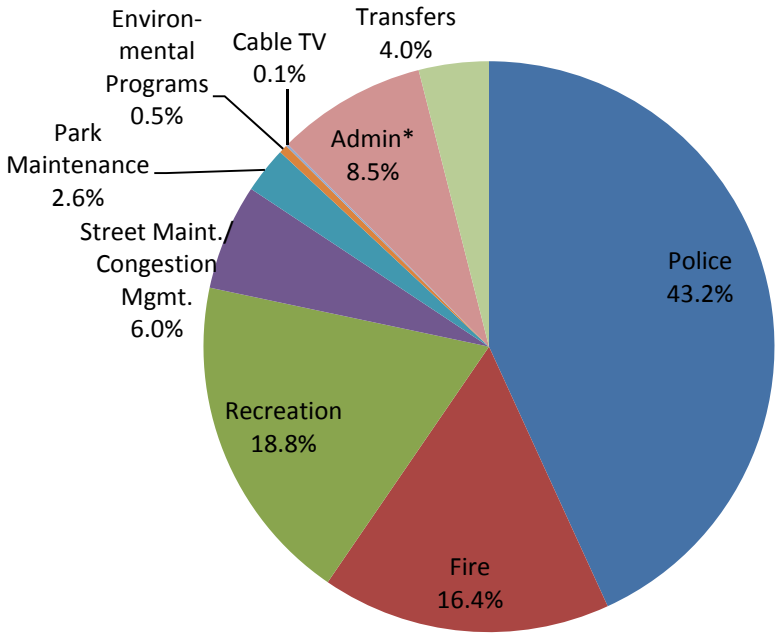
OVERVIEW OF MORGAN HILL'S GENERAL FUND REVENUES AND EXPENDITURES

In fiscal year (FY) 2013-14, Morgan Hill's total General Fund budget was expected to be about $31 million. Of the $31 million in General Fund revenues, the Council has discretion over how to spend $21 million, due to the fact that approximately $10 million in revenues is related to specific service and must be used to fund those services. Exhibits A-1 and A-2 show major General Fund expenditures and revenues as recommended in the FY 2013-14 budget. Like many California cities, Morgan Hill spends nearly two-thirds of its budget on public safety (police and fire). The city currently contracts with Cal Fire to provide emergency medical services, fire prevention, and fire suppression services.

The recreation, street maintenance and congestion management, park maintenance, environmental programs, and cable TV divisions all fall under the Community Services Department. The city spends a relatively high share of its budget on recreation programs, reflecting the value that the community places on these services and the investment that the city has made in recreational facilities. However, most of the General Fund expenditures on recreation are offset by fees for service (e.g., membership fees and facility rentals).

The Community Development Agency is not shown in Exhibit A-1 because the agency is not funded by the General Fund, but rather by the collection of planning, building, and engineering fees and other sources.

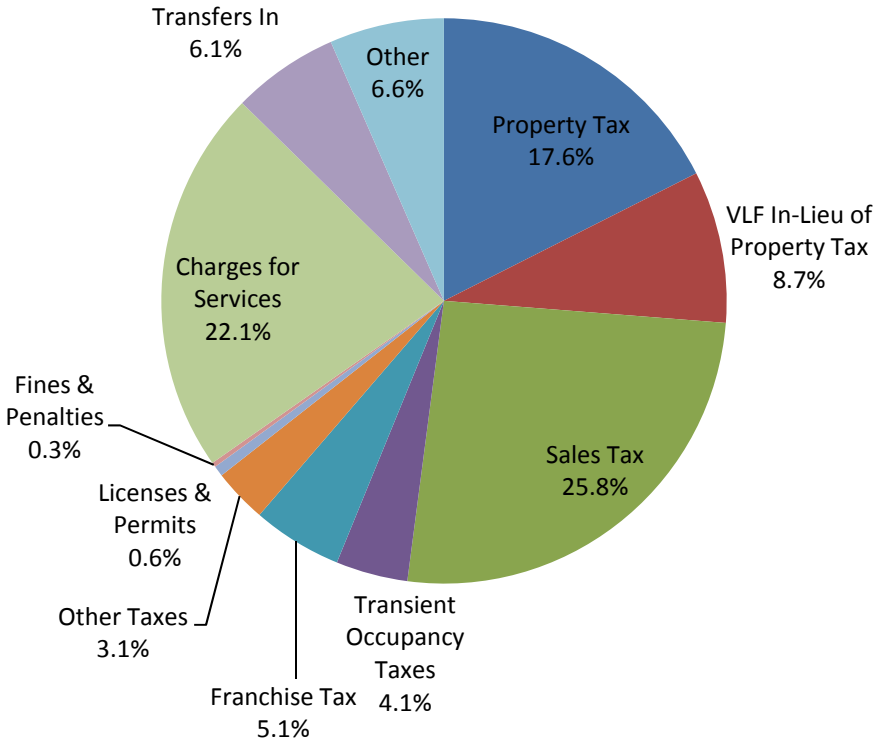
Exhibit A-1. FY 2013-14 General Fund Expenditures by Department/Division



*Includes City Council, City Manager, City Attorney, HR, and Finance.
Pie represents total General Fund expenditures, not just discretionary expenditures (shown on p. 65 of budget).
Source: City of Morgan Hill, "Fiscal Year 2013-14 Operating and CIP Budget (Recommended)," p. 67; Strategic Economics, 2013.

On the revenue side, charges for service, sales tax, property tax, and vehicle license fee (VLF) in-lieu of property tax[22] are the largest General Fund revenues.

Exhibit A-2. FY 2013-14 General Fund Revenues and Transfers In



Source: City of Morgan Hill, "Fiscal Year 2013-14 Operating and CIP Budget (Recommended)," p. 62; Strategic Economics, 2013.

USES AND LIMITATIONS OF FISCAL IMPACT ANALYSIS

Fiscal impact analysis measures the impact of potential development on the city's finances.
All types of development within a city will incur ongoing revenues and service costs. Additional residents and businesses create demand for city services (such as police) and facilities (such as parks), but also provide sales tax, property tax, fee income, and other revenues.

Fiscal impact analysis requires long-range projections of the future, and is therefore best used to understand which components of the development scenarios generate revenues and costs, and to compare the differing impacts among the alternatives.
Fiscal impact analysis uses the best available data to generate assumptions for projecting future revenues and expenses under the plan alternatives. These revenues and costs are derived from existing and historic conditions. However, completion of potential development may take several years, and circumstances may change significantly in that time. Therefore, the most effective use of fiscal impact analysis is to focus on which elements of the plan create significant revenues or costs, and the magnitude of difference among the fiscal outcomes associated with the three scenarios.

[22] Since 2004, the State of California has swapped city and county vehicle license fee revenues for additional property tax revenues.

ASSUMPTIONS AND METHODOLOGY

General Assumptions

Static analysis of full development build-out: The analysis is "static," as opposed to "dynamic." It analyzes the annual fiscal impacts upon completion of development envisioned under the plan, rather than providing year-by-year estimates during construction.

Ongoing General Fund impact: This analysis estimates potential impacts to the city's General Fund. Morgan Hill pays for many of its departmental activities through fees for service; in particular, the Community Development Agency is largely funded through the collection of planning, building, and engineering fees, and does not affect the General Fund except for occasional General Fund transfers to pay for special projects like the upcoming General Plan Update. This analysis assumes that Morgan Hill continues to provide the same share of services on a fee-for-service basis, rather than requiring additional General Fund dollars to make up for any shortfalls

2013 dollars: The analysis is derived from the recommended budget for fiscal year (FY) 2013-14, and all outputs are reported in 2013 dollars. The FY 2013-14 recommended budget was used rather than actual General Fund expenditures and revenues from the last completed fiscal year at the recommendation of the Finance Department, in order to reflect substantial changes to the city's budget that resulted from the State of California's decision to end redevelopment, which went into effect in February 2012.

Existing Service Population

To calculate certain costs and revenues on a per capita basis, an existing service population – or "daytime population" of residents and workers – must be established. The California Department of Finance estimates that Morgan Hill had a residential population of 40,079 as of January 1, 2013. ABAG reports that there were 17,500 workers in Morgan Hill in 2010, the most recent year for which data was available.

Employee Factor: Each worker is counted as producing 0.30 of the impacts of a resident for analytical purposes, since workers spend approximately one-third the time of a resident in the city, and are assumed to require fewer services in general (library, parks, etc.). This falls within industry-standard practices of counting employees as .25 to .5 of a resident for service needs.

Exhibit A-3 shows the existing service population, which totals 45,329.

Exhibit A-3. Current Morgan Hill Service Population

Current Service Population	
Residents	40,079
Employees	17,500
Employee Factor	0.30
Total Service Population	45,329

Source: California Department of Finance, 2013; ABAG, 2012; Strategic Economics, 2013.

Exhibit A-4. Key Land Use Assumptions

Land Use	Units/Sq.Ft. Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)	Value (per Unit / per sq. ft.)	Holding Period (years)	Vacancy	Occupancy
Non-Residential (Square Feet)							
Industrial	264,627	0	0	$90	15	10%	90%
Retail	0	28,500	264,627	$270	15	8.5%	92%
Residential (Units)							
Market-Rate Multi-Family (Rental)	0	234	0	$344,282	15	3%	97%
Median Income (Rental)	0	26	0	$340,528	15	3%	97%
Total	0	260	0				

Sources: Colliers International 2013; Terranomics, 2013; Lewis Operating Corp., 2013; Strategic Economics, 2013.

Key Land Use Assumptions

Exhibit A-4 shows the key land use assumptions used to create the model. These land use assumptions were derived as follows:

Number of industrial square feet and residential units: These are drawn from the development scenarios, as shown in Exhibit A-1, above.

Commercial building value:

- *Industrial building value:* The value of industrial space ($90/square foot) was estimated using the income capitalization approach. In this approach to property valuation, a building's anticipated operating expenses are removed from anticipated operating revenues to derive net operating income; this net operating income is then divided by a "capitalization rate," which is the ratio of net operating income to property sale value expected in the general real estate market. This calculation is shown in Exhibit A-5. Strategic Economics estimated rental, vacancy, expense, and capitalization rates based on interviews with Morgan Hill brokers and Morgan Hill/Silicon Valley market data reported by the commercial real estate firms Colliers International and Grubb & Ellis for 2012 and 2013. The monthly rent shown in Exhibit A-5 ($0.80 per square foot, full service) is higher than the current average price in Morgan Hill ($0.65 per square foot, full service); it is assumed that rents for new space would need to exceed current rents in order for development to be feasible.
- *Retail building value:* The income capitalization approach was also used to estimate the value of retail space. The rental rate used in the calculation, $2.25 per square foot per month (triple net) is based on the findings from the 2013 "Economics White Paper" performed for Morgan Hill's General Plan update, and on the asking rents for retail properties listed on LoopNet in July 2013. Strategic Economics estimated vacancy rates based on market data reported by Cassidy Turley in June 2013.

Exhibit A-5. Valuation of Industrial Space

Assumptions		
Monthly Rent (Full Service)	Per SF	$0.80
Vacancy	Percent	10.0%
Non-Reimbursable Expenses	Percent	25.0%
Capitalization Rate	Percent	7.0%
Estimated Value		
Gross Annual Industrial Income	Per SF	$9.60
Less Industrial Vacancy	Per SF	-$0.96
Less Non-Reimbursable Exp	Per SF	-$2.40
Net Operating Income	Per SF	$6.24
Capitalized Value	Per SF	$89.14

Sources: Colliers International, 2012; Grubb & Ellis, 2012; Strategic Economics, 2012.

Exhibit A-6. Valuation of Retail Space

Assumptions		
Monthly Rent (NNN)	Per SF	$2.25
Vacancy	Percent	10.0%
Non-Reimbursable Expenses	Percent	25.0%
Capitalization Rate	Percent	6.5%
Estimated Value		
Gross Annual Retail Income	Per SF	$27.00
Less Retail Vacancy	Per SF	-$2.70
Less Non-Reimbursable Exp	Per SF	-$6.75
Net Operating Income	Per SF	$17.55
Capitalized Value	Per SF	$270.00

Sources: Cassidy Turley, June 2013; Marcus & Millichap, 2Q 2013; BAE, 2013; Strategic Economics, 2013.

Residential building value: Residential values were derived from a variety of different sources:

- *Market-rate rental unit value*: The value of the market-rate rental units was derived using the income capitalization approach described above, assuming a $2,569 average monthly rent based on the unit mix and estimated rents provided by the applicants (Exhibit A-7).[23] The operating expenses and capitalization rate assumptions shown in Exhibit A-8 are based on industry standards. The vacancy rate (3 percent) is slightly lower than the industry standard of 5 percent because vacancy rates in Morgan Hill and Santa Clara County have been relatively low over the past several years.
- *Median income rental unit value:* The Morgan Hill Planning Commission is considering a change to the Residential Development Control System (RDCS) scoring process that would award 8 points to large multi-family residential rental projects (more than 150 units) if at least 10 percent of the units are affordable to median income households; this median income standard would replace the points awarded for providing below market rate units under the current RDCS standards.[24] At the instruction of city staff, Strategic Economics assumed that the mixed-use scenario would be developed under this new, proposed standard, with 10 percent of each unit type reserved for median income households. Exhibit A-7 shows the applicant's proposed unit mix, the market-rate rent as estimated by the applicant, and the median income rent as established by the U.S. Department of Housing and Urban Development and the state for each unit type. For some unit types, the median income rent is above the market-rate rent; in these cases, Strategic Economics assumed that the market-rate rent would apply to all units. Under these assumptions, the average rent for median income units is calculated as $2,541. This rent was used to calculate an average value for median income units using the income capitalization approach (Exhibit A-8).

[23] Note that the market-rate rents shown in Exhibit A-7 are above current average rents in Morgan Hill; for example, the average rent for a two-bedroom, 1,200 square foot townhouse in Morgan Hill in the fourth quarter of 2012 was $2,000 according to the data vendor RealFacts. However, the new units proposed for the site are expected to be larger than most existing units (1,300 to 2,100 square feet), and as new, luxury units may be expected to fetch a significant premium over the existing stock.

[24] City of Morgan Hill Community Development Department, "Zoning Amendment, ZA-13-04: City of Morgan Hill – Changes to the Residential Development control System Standards & Criteria," Memorandum to Planning Commission, June 11, 2013.

Exhibit A-7. Pricing Assumptions for Market-Rate and Median Income Rental Units

	Percent of Total Units	Average Market-Rate Rent	Median Income Rent	Assumed Median Income Rent
1 Bedrooms	11%	$1,950	$2,110	$1,950
2 Bedrooms	28%	$2,402	$2,374	$2,374
3 Bedrooms	28%	$2,586	$2,638	$2,586
4 Bedrooms	33%	$2,911	$2,849	$2,849
Weighted Average		**$2,569**		**$2,541**

Sources: Lewis Operating Corp., 2013; Santa Clara County Income and Rent Limits Based on State HCD Hold Harmless Limits, 2013; City of Morgan Hill, 2013; Strategic Economics, 2013.

Exhibit A-8. Valuation of Residential Units

Assumptions		Market Rate	Median Income
Monthly Rent	Per Unit	$2,569	$2,541
Stabilized Vacancy Rate	Percent	3%	3%
Operating Expenses	% Gross Rev	30%	30%
Capitalization Rate	Percent	6.0%	6.0%
Estimated Value			
Gross Annual Res. Income	Per Unit	$30,831	$30,495
Less Vacancy	Per Unit	-$925	-$915
Less Operating Expenses	Per Unit	-$9,249	-$9,149
Net Operating Income	Per Unit	$20,657	$20,432
Capitalized Value	Per Unit	$344,282	$340,528

Sources: Lewis Operating Corp., 2013; City of San Jose, "Santa Clara County Income and Rent Limits Based on State HCD Hold Harmless Limits," 2013; City of Morgan Hill, 2013; Strategic Economics, 2013.

Holding period: Exhibit A-4 shows the assumed "holding period," or the average amount of time a building is held before resale. For example, a seven-year holding period for single-family residential units indicates that 1/7th of homes will be sold (or "turn over") each year. This is used to calculate property transfer taxes, which are due upon sale of a property. Actual turnover rates were not available, so the analysis uses general assumptions based on industry standards and Strategic Economics' past experience. However, the Finance Department does not have reason to believe that holding periods in Morgan Hill would differ significantly from the industry standard.[25]

Vacancy Rates: Occupancy and vacancy rates are used to determine the actual revenue and costs generated by properties, assuming that buildings are not usually fully occupied. The analysis applies conservative long-term vacancy rates typically assumed by developers when performing pro forma analysis to determine feasibility of their projects (Exhibit A-4). The one exception is vacancy rates for multi-family rental, which are assumed to be 3 percent (lower than the industry standard) to reflect the relatively low vacancy rates in Morgan Hill and Santa Clara County's rental markets.

[25] Communication with Kevin Riper, Finance Director, June 28, 2013.

Jobs and Population Estimates

Many of the costs and revenues in the fiscal analysis were calculated based on the net increase in population and jobs resulting from build out of the three development scenarios. In order to derive population and job estimates from the housing unit and square footage estimates of the potential development scenarios, Strategic Economics applied the following assumptions:

Residential Household Size: 3.1 persons per household, the current average household size for Morgan Hill as reported by the California Department of Finance. This assumption is consistent with the household size assumption used in the Initial Study.

Square Feet per Worker: 500 square feet per employee for manufacturing space, consistent with the methodology used in Chapter IV to estimate demand for space generated by new industrial jobs. For retail space, the analysis assumes 450 square feet per employee.

The total assumed resident and employee population for each development scenario, based on the residential household sizes and employment densities described above, are shown in Exhibit A-9.

Exhibit A-9. Estimated New Service Population Associated with Development Scenarios

Land Use	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
Non-Residential			
Employees	529	63	588
Employee Factor	0.30		
Service Population	159	19	176
Residential			
Market-Rate Multi-Family (Rental)	0	725	0
Median Income (Rental)	0	81	0
Subtotal	0	806	0
Total Service Population	159	825	176

Source: Strategic Economics, 2013.

Note: Totals may not sum due to rounding.

Estimating Revenues

This section summarizes assumptions for property tax, property transfer tax, sales tax, property tax in-lieu of vehicle license fees, and other revenues.

Property & Property Transfer Tax

Assessed value: Exhibit A-10 shows the total estimated assessed value for each land use alternative, by land use type. These values were based on units and square feet included in the development scenarios, multiplied by the per-square-foot and per-unit assumptions described above. Since this is a static analysis, and the results are presented in 2013 dollars, no factor is included for the two percent annual increase in assessed value allowed under Proposition 13.

Exhibit A-10. Assessed Property Values of Development Scenarios, 2013 Dollars

Land Use	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
Non-Residential			
Industrial	$23,816,400	$0	$0
Retail	$0	$7,695,000	$71,449,000
Residential			
Market-Rate Multi-Family (Rental)	$0	$80,562,000	$0
Median Income (Rental)	$0	$8,853,700	$0

Source: Strategic Economics, 2013.

Property tax rate: Per California's Proposition 13, the base property tax rate in Morgan Hill is one percent of assessed property value. After the required shift of property tax revenue to state educational revenue augmentation funds (ERAF), Morgan Hill receives 10.5 percent of the base rate in the tax rate areas evaluated for this analysis.

Property transfer tax rate: As a General Law city, Morgan Hill receives 0.055 percent of the sales value of properties sold in the city.

Annual property tax revenue: Annual secured (land and improvements) property tax revenues are shown below in Exhibit A-11. These values were derived by multiplying assessed values shown in Exhibit A-10 by the city's net share of the one percent property tax rate.

Exhibit A-11. Annual Property Tax Revenues, 2013 Dollars

Land Use	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
Non-Residential			
Industrial	$25,000	$0	$0
Retail	$0	$8,100	$75,000
Subtotal	$25,000	$8,100	$75,000
Residential			
Market-Rate Multi-Family (Rental)	$0	$84,600	$0
BMR Rental	$0	$9,300	$0
Subtotal	$0	$93,900	$0
Total General Fund Revenue	**$25,000**	**$102,000**	**$75,000**

Columns may not add due to rounding.

Source: Strategic Economics, 2013.

Annual property transfer tax revenue: Annual property transfer tax revenue was calculated by multiplying the assessed value by the average turnover rate (to estimate the value of property sold annually), and then by the transfer tax rate.

Exhibit A-12. Annual Property Transfer Tax Revenue, 2013 Dollars

Land Use	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
Non-Residential			
Industrial	$900	$0	$0
Retail	$0	$300	$2,600
Subtotal	$900	$300	$2,600
Residential			
Market-Rate Multi-Family (Rental)	$0	$3,000	$0
Median Income (Rental)	$0	$300	$0
Subtotal	$0	$3,300	$0
Total General Fund Revenue	**$900**	**$3,600**	**$2,600**

Columns may not add due to rounding.

Source: Strategic Economics, 2013.

Property Tax In-Lieu of Vehicle License Fee (VLF)

Property tax in-lieu of VLF assumptions. Since 2004, the State of California has swapped city and county vehicle license fee revenues for additional property tax revenues. The property tax payment provided in-lieu of the VLF grows proportionally to a city's assessed value.[26] Exhibit A-13 shows the calculation of property tax in-lieu of VLF revenue per dollar of assessed value, based on Morgan Hill's total estimated assessed value in FY 2012-13 and the estimated in-lieu payment from the state for the same year.

Exhibit A-13. Property Tax In-Lieu of VLF Assumptions

Total Estimated Citywide Assessed Value (FY 2012-13)	$6,110,000,000
Citywide VLF Property Tax In-lieu Revenue (FY 2012-13)	$2,839,873
VLF Property Tax In-lieu Per $1 Assessed Value	$0.000465

Source: City of Morgan Hill Finance Department, 2012; City of Morgan Hill, "Fiscal Year 2012-13 Operating & CIP Budget;" Strategic Economics, 2013.

Annual vehicle license fee revenue. Annual property tax in-lieu of VLF revenue was calculated by multiplying the property tax in-lieu of VLF revenue per dollar of assessed value by the new assessed value for each development scenario (Exhibit A-14).

[26] Each city in California has also historically received an amount of vehicle license fee revenue from the state based on the number of residents in the City. However, the state legislature eliminated the per capita VLF payment effective July 1, 2011 in Senate Bill 89 of 2011. Although the League of California Cities has challenged this action in court, it is unlikely that cities will receive per capita VLF revenues in the future. Source: CaliforniaCityFinance.com, "City Vehicle License Fee Revenues," updated January 30, 2012, http://www.californiacityfinance.com/VLFupdate120130.pdf.

Exhibit A-14. Annual Property Tax In-Lieu of VLF Revenue, 2013 Dollars

Land Use	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
Non-Residential			
Industrial	$11,100	$0	$0
Retail	$0	$3,600	$33,200
Subtotal	$11,100	$3,600	$33,200
Residential			
Market-Rate Multi-Family (Rental)	$0	$37,400	$0
BMR Rental	$0	$4,100	$0
Subtotal	$0	$41,600	$0
Total General Fund Revenue	**$11,100**	**$45,100**	**$33,200**

Columns may not add due to rounding.

Sources: Strategic Economics, 2013.

Sales Tax

Taxable sales assumptions: Exhibit A-15 shows the taxable sales assumptions used to estimate sales tax revenues for the development scenarios. Note that many of the assumptions described below were generated using 2010 taxable sales data provided by the California Board of Equalization (BOE), and are likely to be conservative given that taxable sales in Morgan Hill have increased as the economy has recovered.[27]

- *Residential per capita sales:* The residents who would live in the new development would generate sales by shopping in Morgan Hill's stores. Strategic Economics assumed that residents would generate $9,800 taxable sales a year, based on Morgan Hill's per-capita taxable sales in 2010 as reported by the California Board of Equalization.
- *Employee per capita sales:* New employees working in the industrial space would generate sales tax revenues by shopping in Morgan Hill. The International Council of Shopping Centers[28] reports that office workers spend an average of $102 a week in close vicinity of their office buildings. Strategic Economics discounted this weekly expenditure by 25 percent in order to account for non-taxable sales (e.g., groceries) and the likelihood that industrial and retail workers would on average earn less than office workers, and then multiplied the weekly expenditures by 50 in order to estimate annual taxable sales per employee.
- *Retail taxable sales per square foot:* Strategic Economics estimated average taxable sales per square foot for retail by dividing Morgan Hill's total taxable retail sales in 2010 ($370 million) by the total estimated square footage of the city's major shopping centers (1.3 million),[29] resulting in an estimate of $285 per square foot. This estimate may be slightly high because the square footage figure does not include some of the city's smaller shops. However, $285 per square foot falls within the average ranges reported by national sources.[30]

[27] BAE, "Economics White Paper," *Morgan Hill 2035 Existing Conditions White Papers*, May 2013.

[28] ICSC, "Office-Worker Retail Spending in a Digital Age," 2012.

[29] BAE, "Economics White Paper," *Morgan Hill 2035 Existing Conditions White Papers*, May 2013.

[30] International Council of Shopping Centers and Urban Land Institute, *Dollars and Cents of Shopping Centers*, 2008.

- *Business-to-Business (industrial) taxable sales per square foot:* Industrial uses also generate sales and use taxes when firms sell products to other businesses. In order to estimate business-to-business taxable sales, Morgan Hill's total non-retail taxable sales in 2010 (about $96 million, as reported by the California Board of Equalization) were divided by the total number of industrial, R&D, warehouse, and office square feet in the city (about 5.6 million, as reported by Colliers International), resulting in an estimate of about $17 in taxable sales per square foot. This estimate may be high, given that Colliers only tracks commercial buildings above a certain size threshold.[31] On the other hand, manufacturing uses are likely to generate more business-to-business sales than office or R&D uses, so a relatively high per-square-foot estimate may be appropriate.

Exhibit A-15. Taxable Sales Assumptions

	Taxable Sales
Residents (Per Capita)	$9,800
Employees (Per Capita)	$3,825
Business-to-Business (Per Square Foot)	$17
Retail Sales (Per Square Foot)	$285

Sources: California Board of Equalization, 2010; U.S. Census, 2010; Colliers International, 2013; BAE, 2013; Strategic Economics, 2013.

Sales tax revenues: Morgan Hill receives approximately one percent of taxable sales made in the city. Sales tax revenues generated by residents and employees were calculated by multiplying the number of new residents and employees associated with each development scenario by the per-capita taxable sales assumptions, and then by one percent. Retail and business-to-business sales tax revenues were calculated by multiplying the square feet of retail industrial use, by the applicable taxable sales per-square foot assumption, and then by one percent. The results are shown in Exhibit A-16.

[31] Colliers tracks office buildings that are 3,000 square feet or larger, R&D buildings 5,000 square feet or larger, industrial buildings 7,500 square feet or larger, and warehouse buildings 10,000 square feet or larger. Source: Colliers International, "2011-2012 Silicon Valley Market Report & Forecast," January 2012.

Exhibit A-16. Annual Sales Tax Revenue, 2013 Dollars

	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
New Residents	0	806	0
New Employees	529	63	588
New Industrial Sq. Ft.	264,627	0	0
New Retail Sq. Ft.			
General Fund Revenues			
Residents	$0	$79,000	$0
Employees	$20,200	$2,400	$22,500
Business-to-Business	$45,200	$0	$0
Retail Sales	$0	$81,300	$754,700
Total General Fund Revenue	**$65,400**	**$162,700**	**$777,200**

Columns may not add due to rounding.

Sources: Strategic Economics, 2013.

Other Recurring Revenues

Calculating recurring revenue per capita: Working with the Finance Department, Strategic Economics determined which remaining General Fund revenues are variable (i.e., would increase on a per capita basis as new residents and employees are added). For the variable revenue sources, Strategic Economics applied a service population factor to each revenue category, representing the relative proportion of revenues attributable to new residents (1.0) and employees (0.30). These revenue categories include utility transient occupancy taxes, the public safety sales tax, franchise fees, licenses and permits, fines and penalties, intergovernmental revenues and transfers, rental and interest income, and charges for services.[32] Exhibit A-17 shows the per capita, variable revenue generated by residents and employees. Exhibit A-18 shows the results, based on multiplying the per capita resident and employee revenues by the number of new residents and employees associated with each development scenario.

[32] Some charges for services, transfers, and other recurring revenues are accounted for as offsetting program revenues for Community Services Agency and Police Department programs; see Exhibit B-20 and B-24 below.

Exhibit A-17. Other Recurring Revenues Assumptions

	Cost (FY 2013-14)	% Variable	Variable Revenues	Service Pop. Factors Res.	Service Pop. Factors Emp.	Revenue Per Capita Res.	Revenue Per Capita Emp.
Transient Occupancy Taxes	$1,266,670	100%	$1,128,652	1.00	0.30	$24.90	$7.47
Franchise (a)	$1,580,814	100%	$1,533,374	1.00	0.30	$33.83	$10.15
Public Safety Sales Tax	$312,317	100%	$222,705	1.00	0.30	$4.91	$1.47
Business License	$169,744	100%	$164,800	-	1.00	$0.00	$9.42
Other Permits	$17,793	100%	$23,275	1.00	0.30	$0.51	$0.15
Parking Enforcement	$5,620	0%	$0	1.00	0.30	$0.00	$0.00
City Code Enforcement	$75,000	100%	$122,000	1.00	0.30	$2.69	$0.81
Other Rev.-Other Agencies	$702,888	0%	$0	1.00	0.30	$0.00	$0.00
Gen Admin Overhd	$1,282,747	100%	$1,365,387	1.00	0.30	$30.12	$9.04
Other Charges For Services	$411,010	100%	$490,533	1.00	0.30	$10.82	$3.25
Interest Earnings	$39,510	0%	$0	1.00	0.30	$0.00	$0.00
Other Rentals	$144,542	0%	$0	1.00	0.30	$0.00	$0.00
Miscellaneous	$295,000	0%	$0	1.00	0.30	$0.00	$0.00
Fire Fees	$197,000	0%	$0	1.00	0.30	$0.00	$0.00
Transfer From Other Funds	$60,000	100%	$185,842	1.00	0.30	$4.10	$1.23
Total Per Capita Revenues						**$58.73**	**$17.62**

(a) Refuse,Cable,PG&E

Note: Does not include revenues analyzed in departmental case studies

Sources: City of Morgan Hill, "Fiscal Year 2013-14 Operating & CIP Budget (Recommended);" Strategic Economics, 2013.

Exhibit A-18. Annual Other Recurring Revenue, 2013 Dollars

	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
New Residents	0	806	0
New Employees	529	63	588
Increase in General Fund Revenue	**$9,300**	**$48,400**	**$10,400**

Source: Strategic Economics, 2013.

Estimating Expenditures

Strategic Economics worked with staff in Morgan Hill's Police, Community Services, and Finance departments to estimate the annual service impact of the growth envisioned under the different development scenarios. A "case study" approach was used to estimate expenses incurred by growth for the Police Department and Park Maintenance Division, since these activities would be directly affected by population growth and/or the provision of additional public infrastructure (i.e., parks). Growth of other expenses, which individually comprise relatively small shares of the General Fund and are more likely to increase incrementally with population growth, were estimated on a per capita basis. Notably, Morgan Hill's Community Development Agency, which includes planning, engineering, community and economic development, housing, building, and several other divisions, is not funded by the General Fund, and was therefore excluded from the analysis.

Fire Services

The cost of Morgan Hill's fire services contract is not tied to population growth.[33] Therefore, Strategic Economics assumed that the development scenarios would not result in additional costs associated with providing fire protection.

Police Department

Strategic Economics worked with the Police Department to estimate additional police expenses on the basis of maintaining funding per call for service, a common means of estimating additional police department expenses incurred as a result of service population increases.[34] This methodology is based on the following assumptions and calculations, shown in Exhibit A-19 through A-21:

Variable expense assumption. As shown in Exhibit A-19, Strategic Economics assumed after consultation with the Police and Finance Departments that all activities except those funded by grants are variable, meaning that they are likely to increase as calls for service increase.

Offsetting program revenues. Upon consultation with the Police and Finance Departments, Strategic Economics subtracted offsetting revenues that are likely to reoccur, including two grants and a transfer in from public safety, to arrive at the Police Department's net variable general fund expenditure in FY 2013-14 ($12,767,326).

Average cost per call assumption. Morgan Hill's FY 2013-14 recommended budget states that the Police Department received approximately 33,360 calls for service in FY 20112-13. Upon consultation with the Police Department, Strategic Economics divided 33,360 calls for service into the net variable general fund expenditure to calculate the cost of each call of service ($380).

Calls per capita assumption. Based on the FY 2012-13 calls for service and the current resident and employee populations, Strategic Economics estimated that the Police Department receives approximately 0.72 calls per resident and 0.06 calls per employee.

Calls per square foot of retail (retail case study). According to the Police Department, retail land uses tend to generate a disproportionate share of calls for service for theft and other crimes. In order to estimate calls for service per square foot of retail, the department conducted a case study of the Cochrane Plaza Shopping Center. The center accounted for just under 480 calls for service in FY 2012-13, or about 1.6 calls per thousand square foot (Exhibit A-20)

Calculation of new expenses. In order to calculate new Police Department expenses, Strategic Economics first estimated the annual calls for service that would be associated with each scenario, and then multiplied the number of calls for service times the cost per call. For residential and industrial land uses, calls for service were calculated by multiplying the number of new residents and industrial employees by the appropriate calls per capita ratio (Exhibit A-19). For the retail land uses, calls for service were calculated using the calls per thousand square feet of retail ratio shown in Exhibit A-20. Exhibit A-21, below, shows the estimated new expenses that result from each development scenario.

[33] Communications with Steve Rymer, Community Services Director (now City Manager), July 10, 2012; and Kevin Riper, Finance Director, June 28, 2013.

[34] Communications with David Swing, Chief of Police, July 10, 2012 and July 10, 2013.

Exhibit A-19. Police Department Expenditure Assumptions

Item	Cost (FY 2013-14 Recommended)	Percent Variable	Variable Cost
General Fund Expenditures			
PD Administration	$1,075,627	100%	$1,075,627
PD Field Operations	$6,965,197	100%	$6,965,197
PD Support Services	$1,551,462	100%	$1,551,462
PD Emergency Services	$153,065	100%	$153,065
PD Special Operations	$1,890,406	100%	$1,890,406
Domestic Violence Grant	$520,469	0%	$0
Animal Control	$0	100%	$0
Dispatch Services	$1,279,569	100%	$1,279,569
Subtotal Expenditures	$13,435,795		$12,915,326
Offsetting Program Revenues			
Driving Under the Influence Checkpoint (DUI)			$35,500
Homeland Security Grant			$12,500
Transfer from Public Safety			$100,000
Subtotal Offsetting Revenues			$148,000
Net Variable General Fund Expenditures			$12,767,326
Annual Estimated Calls for Service			33,362
Average Net General Fund Cost per Call			$383
Current Resident Population			40,079
Current Employee Population			17,500
Employee Factor			0.30
Total Service Population			45,329
Calls per Resident			0.74
Calls per Employee			0.06

Sources: City of Morgan Hill, "Fiscal Year 2013-14 Operating & CIP Budget (Recommended);" Strategic Economics, 2013.

Exhibit A-20. Police Department Retail Case Study

Case Study Shopping Center (Cochrane Plaza)	
Estimated Retail (Square Feet)	302,000
Calls for Service, 2012	479
Calls for Service per 1,000 Square Foot	1.6

Source: City of Morgan Hill Police Department, 2013; Strategic Economics, 2013.

Exhibit A-21. Calculation of Annual Police Service Costs, 2013 Dollars

	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
New Residents	0	806	0
New Industrial Employees	529	63	588
New Retail Square Feet	0	28,500	264,627
Increase in Calls for Service			
New Residents	0	593	0
New Industrial Employees	32	0	0
New Retail Square Feet	0	45	420
Total	32	642	455
Increase in Net General Fund Expenditures	**$12,300**	**$245,800**	**$174,300**

Source: Strategic Economics, 2013.

Park Maintenance

The Park Maintenance Division of Morgan Hill's Community Services Department is responsible for maintaining approximately 58 acres of maintained parks, including city parks, bicycle trails, and the Civic Center, as well as providing more basic maintenance (primarily weed abatement for fire prevention) of many more acres of city-owned open space. The assumptions used to calculate the park maintenance impacts are shown in Exhibit A-22.

Park maintenance cost per acre assumption. The FY 2013-14 budget projects a total cost per acre for park maintenance of $13,119.

Parks service ratio assumption. Morgan Hill's 58 acres of maintained parks serve a resident population of 40,079, at a ratio of 1.45 acres per 1,000 residents. Strategic Economics assumed that the new development would receive parks maintenance services at this same service ratio. [35] Residents are presumed to be the primary users of parks in Morgan Hill, so demand for parks is based on the city's resident population, rather than on the combined service population of both workers and residents.[36]

[35] The City of Morgan Hill Parks, Facilities, and Recreation Programming Master Plan specifies a citywide park standard of 5.0 acres per thousand residents, including both publicly owned and maintained parkland as well as open space and private, Home Owners Association (HOA)-owned parks (open space and HOA-owned parks are included in the service standard ratio calculation at a discounted rate). However, since the purpose of this analysis was to determine the impacts on the city's General Fund only, Strategic Economics used the current ratio of publicly maintained parks per 1,000 residents (1.48) to calculate park maintenance impacts. The ultimate development proposal for the General Plan amendment sites may be required to provide a different amount of parkland.

[36] This is consistent with the "City of Morgan Hill Development Impact Fee Study" conducted by Willdan Financial Services and published in March 2010.

Exhibit A-22. Park Maintenance Expenditure Assumptions

Item	
Park Maintenance Cost per Acre	$13,119
Current Maintained Park Acreage (a)	58
Current Resident Population	40,079
Current Parks Service Ratio (acres per 1000 residents)	1.45

(a) Does not include open space or HOA-owned and managed parks.

Analysis assumes that parks provided to serve new residents are maintained by the city.

Sources: City of Morgan Hill, "Fiscal Year 2013-14 Operating & CIP Budget;" Strategic Economics, 2013.

Calculation of new expenses. Exhibit A-23, below, shows the estimated new expenses that result from each development scenario, based on the number of new residents in each scenario and the park service ratio and cost per acre assumptions described above.

Exhibit A-23. Calculation of Annual Park Maintenance Costs, 2013 Dollars

	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
New Residents	0	806	0
New Parks Required (acres)	0	1.17	0
Increase in Net General Fund Expenditures	**$0**	**$15,300**	**$0**

Sources: Strategic Economics, 2013.

Other Community Services Department Services

In addition to park maintenance, the Community Services Department's functions include recreation programs, street and congestion management, environmental programs, and cable television customer service support. The assumptions used to calculate the new costs associated with these programs under the three development scenarios are shown below in Exhibit A-24.

Variable expense assumptions. Based on discussions with the Community Services and Finance Departments, all expenditures except the cable TV program were assumed to be variable, meaning that they are likely to increase as the service population increases. (The cable TV program is funded by payments from the franchised cable provider and the city's site licenses with cell phone companies, and increases in population or workers would not affect the amount that the city spends on this program.)[37]

Offsetting program revenues. The Community Services Department operates many of its programs, particularly its recreation programs, under a cost recovery model where costs are offset by user fees and other revenues. In order to reflect these offsets, program revenues, grants, and transfers were subtracted from the department's general fund expenditures to arrive at net General Fund expenditure estimates for each function. A detailed accounting of the offsetting revenues is provided at the end of this chapter in Exhibit A-28.

Per capita methodology. Based on conversations with the Community Services and Finance Departments, the net variable General Fund expenditures are assumed to increase on a per capita basis as

[37] Communications with Steve Rymer, Community Services Director (now City Manager, July 10, 2012; and Kevin Riper, Finance Director, June 28, 2013.

new residents and employees are added in the development scenarios. The "per capita" method determines the cost per additional resident or employee by dividing relevant total costs by the city's current service population, resulting in a cost per capita for each cost item. Employees are assumed to require 0.30 of the service expenditures as residents.

Exhibit A-24. Community Services Department Expenditure Assumptions (Excluding Park Maintenance)

	FY 2013-14 Recommended Budget			Cost Per Capita	
	General Fund Expenditures	Offsetting Revenues	Net General Fund Expenditure	Resident	Employee
Recreation	$5,838,638	$5,762,058	$76,580	$1.69	$0.51
Street Maint./Congest Mgmt.	$1,868,592	$1,284,255	$584,337	$12.89	$3.87
Environmental Programs	$151,160	$10,500	$140,660	$3.10	$0.93

Note: Cable TV is not shown because costs do not vary with service population increases.
Sources: City of Morgan Hill Finance Department, 2012; City of Morgan Hill, "Fiscal Year 2013-14 Operating & CIP Budget;" Strategic Economics, 2013.

Calculation of new expense. The net variable General Fund expenditures costs per capita are multiplied by the number of new residents and employees in each scenario to determine the total new costs incurred by the growing service population (Exhibit A-25).

Exhibit A-25. Calculation of Annual Community Services Department Costs (Excluding Park Maintenance), 2013 Dollars

	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
New Residents	0	806	0
New Employees	529	63	588
Increase in Net General Fund Expenditures			
Recreation	$300	$1,400	$300
Street Maint./Congest Mgmt.	$2,000	$10,600	$2,300
Environmental Programs	$500	$2,600	$500

Note: Cable TV is not shown because costs do not vary with service population increases.
Sources: Strategic Economics, 2013.

General Government Expenditures

General government functions, including City Council, City Attorney, City Manager, Human Resources, and Finance, are assumed to increase on a per capita basis as new residents and employees are added in the development scenarios. Strategic Economics assumed that City Council expenditures were not variable (the number of council members will not increase with new population), but that all other general government expenditures would increase as new population is added. As with the revenues calculated on a similar basis, Strategic Economics applied a service population factor to each expense category, representing the relative proportion of expenses attributable to new residents (1.0) and employees (0.30). Exhibit A-26 shows the per capita expenses generated by residents and employees. Exhibit A-27 summarizes new general government costs associated with each development scenario.

Exhibit A-26. General Government Expenditure Assumptions

	FY 2013-14	% Variable	Variable Cost	Expenditures Per Capita Resident	Expenditures Per Capita Employee
General Fund Expenditures					
City Council	$147,246	0%	$0	$0.00	$0.00
City Attorney	$541,354	100%	$541,354	$11.94	$3.58
City Manager	$302,151	100%	$302,151	$6.67	$2.00
Human Resources	$465,760	100%	$465,760	$10.28	$3.08
Finance	$1,185,760	100%	$1,185,760	$26.16	$7.85
Subtotal General Government:			$2,495,025	$55.04	$16.51
Total Per Capita Expenditures			**$2,495,025**	**$55.04**	**$16.51**

Note: Does not include costs analyzed in departmental case studies

Sources: City of Morgan Hill, "Fiscal Year 2013-14 Operating & CIP Budget;" Strategic Economics, 2013.

Exhibit A-27. Calculation of Annual General Government Costs, 2013 Dollars

	Scenario 1 (Industrial)	Scenario 2 (Mixed-Use)	Scenario 3 (Retail)
New Residents	0	806	0
New Employees	529	63	588
Increase in Net General Fund Expenditures	**$8,700**	**$45,400**	**$9,700**

Source: Strategic Economics, 2013.

Exhibit A-28. Detailed Community Services Department Expenditure Assumptions (Excluding Park Maintenance)

	FY 2013-14	% Variable	Variable Cost	Expenditures Per Capita Resident	Expenditures Per Capita Employee
Recreation					
General Fund Expenditures	$5,838,638	100%	$5,838,638	$128.81	$38.64
Offsetting Revenues					
RCSD Programs	$4,899,058	100%	$4,899,058	$108.08	$32.42
CCC/Gavilan Rent	$830,000	100%	$830,000	$18.31	$5.49
Transfer From RDA	$33,000	100%	$33,000	$0.73	$0.22
Total Offsetting Revenues	$5,762,058		$5,762,058	$127.12	$38.13
Net Variable General Fund Expenditures			$76,580	$1.69	$0.51
Street Maint./Congest Mgmt.					
General Fund Expenditures	$1,868,592	100%	$1,868,592	$41.22	$12.37
Offsetting Revenues					
Transfer From Street Maint.	$603,363	100%	$603,363	$13.31	$3.99
Transfer From Sewer/Water	$680,892	100%	$680,892	$15.02	$4.51
Total Offsetting Revenues	$1,284,255		$1,284,255	$28.33	$8.50
Net Variable General Fund Expenditures			$584,337	$12.89	$3.87
Environmental Programs					
General Fund Expenditures	$151,160	100%	$151,160	$3.33	$1.00
Offsetting Revenues					
Environmental Enhancement Mitigation Program	$0	100%	$0	$0.00	$0.00
Recycling (State of CA)	$10,500	100%	$10,500	$0.23	$0.07
Cloverleaf Grant (State of CA)	$0	100%	$0	$0.00	$0.00
Total Offsetting Revenues	$10,500		$10,500	$0.23	$0.07
Net Variable General Fund Expenditures			$140,660	$3.10	$0.93
Cable TV					
General Fund Expenditures	$37,825	0%	$0	$0.00	$0.00

Sources: City of Morgan Hill Finance Department, 2012; City of Morgan Hill, "Fiscal Year 2013-14 Operating & CIP Budget (Recommended);" Strategic Economics, 2013.

APPENDIX B. INTERVIEWEES

Strategic Economics interviewed the following real estate brokers, and property owners, and City staff for the purposes of this analysis and the original report (dated September 21, 2013).

Real Estate Brokers

- Jeff Barnes (Senior Vice President, Colliers International), May 2013
- Derik Benson (Senior Vice President, Cassidy Turley), May 2013
- Keith Claxton (Senior Vice President, Cassidy Turley), August 2012 and May 2013
- Mark Sanchez (Senior Vice President, Colliers International), June 2012
- Rudy Silverberg (Senior Director, Cushman & Wakefield), June 2012

Commercial Property Owners

- Rob Eaves (President, Venture Corporation), August 2012
- Myron Crawford (Berg & Berg), September 2012
- Brad Krouskup (President and CEO, Toeniskoetter Real Estate Investment and Management), August 2012

City Staff

- Kevin Riper (Finance Director), June 2012 and June 2013
- Jim Rowe (Contract Planner), July 2012
- Steve Rymer (Community Services Director; now City Manager), July 2012
- David Swing (Chief of Police), July 2012 and July 2013