

Date: May 5, 2015
To: Edith Ramirez, City of Morgan Hill
From: Sujata Srivastava, Strategic Economics
Subject: Morgan Hill Industrial Land Study Update (#1212b)

Introduction

This memorandum report is an update of the calculation of available industrial land and buildings to accommodate future employment growth in Morgan Hill, building on the 2013 “Economic and Fiscal Impact Analysis of Industrial Land Conversion” report. Since the completion of the 2013 report, the City’s available supply of industrial land and buildings has changed, due to three major factors:

- 1) General Plan Amendments were approved, are pending, or incorporated into the General Plan Update that resulted or may result in the conversion of properties from industrial to residential uses.
- 2) A significant amount of the available vacant industrial, R&D, and office space has been absorbed since 2013.
- 3) The General Plan Update currently underway will re-designate some parcels that were formerly zoned for “industrial” uses to “flex” uses, which would allow them to be developed as retail commercial sites.

This study provides a revised calculation of the potential supply of industrial space, with new estimates of land supply and available buildings. The calculation of the projected demand for employment space has not changed since 2013. Strategic Economics compared projected demand for employment space with supply. 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.

Summary of Findings

Existing Industrial Areas

The industrial employment lands in Morgan Hill are located in four major subareas. Subarea 1 is the Morgan Hill Ranch Business Park, located south of Cochrane Road and east of Butterfield Boulevard. This area houses the city’s largest employers and is considered a core employment area. Subarea 2 is located north of Cochrane Road, bounded by Highway 101 to the east and Monterey Road on the west, and is also considered a core employment area. Subarea 3 is located in the Morgan Hill Ranch Business Park west of Butterfield Boulevard, housing the largest available vacant industrial sites. It also contains the South Bay parcel on Cochrane Road. Subarea 3 is considered a future employment area. Subarea 4 is the industrial district south of Dunne. This area contains heavier industrial users and is defined as an established industrial area.

The Cochrane Road area (Subareas 1, 2, and 3 in Figure 1) continues to be the strongest location for future industrial, R&D, and office uses. Home to most of Morgan Hill's largest employers, Subareas 1 and 2 include most of the city's newest and largest industrial and commercial buildings, and are most attractive for businesses considering moving to Morgan Hill. Subarea 3 includes some of the largest vacant properties under consolidated ownership, including multiple large, vacant properties on the west side of Butterfield Boulevard. Given the competitive advantages of the Cochrane Road area, this subarea 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 Subareas 1 and 2 are developed over time.

The area south of Dunne Avenue (Subarea 4 in Figure 1) plays an important role in Morgan Hill's economy by providing relatively low-cost space for small manufacturers and other businesses. This area is well established for smaller industrial uses, and offers fewer opportunities for large-scale commercial or industrial development when compared to the Cochrane Road industrial subareas.

Demand for Employment Space in Morgan Hill

Morgan Hill has a significant and growing employment base. 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, 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. Employment forecasts range from 155 to 370 new jobs per year in Morgan Hill.

The commercial real estate market in Morgan Hill is strong, particularly for industrial and R&D uses. The total amount of vacant space has declined by half since 2013. According to Colliers International, the vacancy rate for industrial and R&D uses is under three percent (see Figure 2). The office market remains soft in Morgan Hill, with a vacancy rate of 18 percent vacancy rate. However, the overall commercial real estate market for all the above land uses is much stronger today than in 2013, with a combined vacancy rate of four percent. All land uses experienced positive absorption during 2014.

Existing industrial tenants in Morgan Hill are actively seeking space for expansion. Existing employers in Morgan Hill have plans to lease more industrial space in the next two years (approximately 100,000 square feet), and speculative industrial projects have been proposed that would add new space to the market for new and existing users.

Supply of Industrial Land

The supply projections were calculated under four scenarios, and are shown in Figure 3, 4, 5, and 6:

- Scenario 1 summarizes the previous 2013 study (Figure 3).
- Scenario 2 summarizes existing land supply using updated 2015 data (Figure 4).
- Scenario 3 shows the industrial land supply with the proposed General Plan Update, which would re-designate some industrial land for flexible commercial uses (Figure 5).
- Scenario 4 shows the supply with both the General Plan Update and the approval of General Plan Amendments to convert industrial lands to other uses (Figure 6).

Today, the total number of acres of vacant industrial land located within the city is lower than the supply in 2013, sufficient to accommodate projected demand for approximately 30-77 years. In other words, the total potential supply of industrial, R&D, warehouse, and office space is enough to satisfy between 30 and 77 years of commercial demand, depending on the pace of job growth (Figure 4).

Within the Cochrane Road subareas, the 2015 land supply can accommodate growth for 16 to 41 years, a slight decrease from 2013. 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 (Figure 4).

The proposed General Plan Update would reduce the total supply of land for employment uses to 25 to 64 years in Morgan Hill. In the Cochrane Road area, the land use changes envisioned in the General Plan Update would reduce the total inventory to 15 to 39 years of supply (Figure 5).

The combined General Plan Update and the General Plan Amendments seeking conversion of industrial properties further reduces supply citywide to 19 to 48 years. In the Cochrane Road area, the industrial land supply would meet commercial demand for between 13 and 33 years (Figure 6).

Development Potential

If rental rates continue to rise as expected, the potential for larger scale development of industrial, R&D, and office space is likely to become feasible in the short term. According to local brokers and developers, the overall rental rates on industrial and R&D properties are currently about 20 percent lower than what is required to make speculative new construction feasible. However, if rental rates in the Silicon Valley continue to climb, it is reasonable to expect that rental rates in Morgan Hill will increase enough to attract new construction. It is possible that the city would receive more development proposals for non-retail commercial space within the next 2-3 years, if job growth in the region continues to be strong.

Assumptions

The following presents the key assumptions used in the analysis.

- **Employment Growth:** 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. The low end of the range is based on Association of Bay Area Government's 2012 projections, which 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. The high end of the range is based on the historic rate of employment in Morgan Hill between 1990 to 2010, when the City added 370 jobs per year.
- **Demand for New Industrial, R&D, and Office space:** 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. Strategic Economics then converted the employment numbers into demand for building space, using rules of thumb about the number of square feet required for each



employee (500 square feet per worker for industrial space, 800 square feet per worker for warehousing, 300 to 350 square feet for R&D, and 250 to 300 square feet for office).

- **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 analysis assumes that this land use pattern (30 percent coverage ratio, 1-story development) is maintained.
- **Absorption of Existing Vacant Space:** All of the scenarios further assume that 75 percent of the currently vacant buildings in Morgan Hill – about 321,000 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.
- **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 321,000 square feet of existing inventory that is expected to be absorbed into the market before new development occurs.

Figure 1. Vacant Industrial Land by Subarea, Morgan Hill, 2015

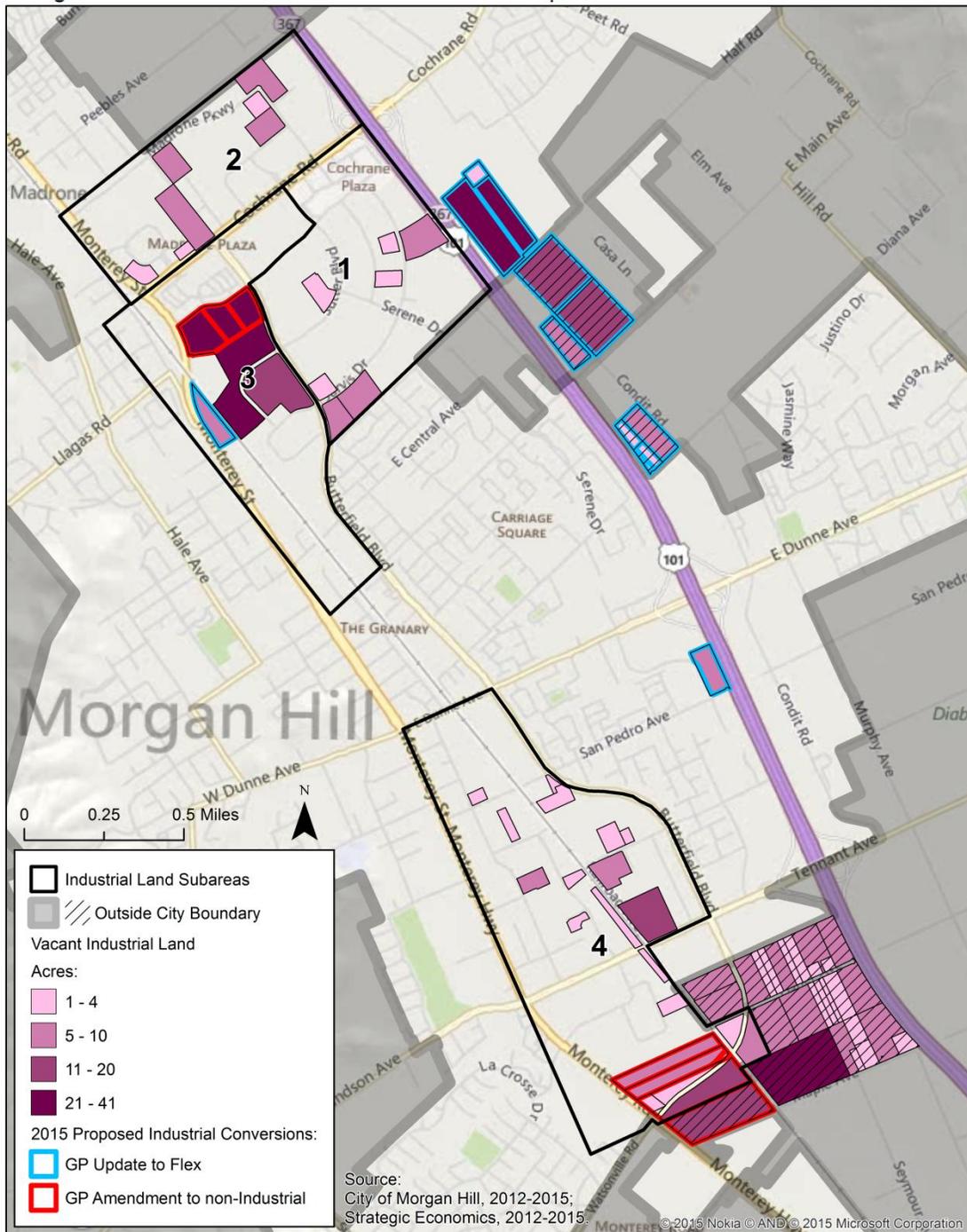




Figure 2. R&D, Industrial, Warehouse, and Office Market Statistics: Morgan Hill, 1st Quarter 2015.

Product Type	Total Existing Inventory (1Q 2015)				Vacancy (b)		Net Absorption (c)	
	Number of	Total	% of Total	Monthly	Vacant	Vacancy	Calendar Year	
	Buildings (a)	Sq. Ft.	Sq. Ft.	Rents	1Q 2015	1Q 2015	1Q 2015	2014
R&D	66	2,768,135	44%	\$0.95	81,670	2.95%	-22,302	66,146
Industrial	75	2,235,847	36%	\$0.95	56,841	2.54%	17,220	22,251
Warehouse	6	482,538	8%	\$0.49	n/a	n/a	0	28,680
Office	43	752,452	12%	\$1.81	134,739	17.91%	900	47,506
Total	190	6,238,972	100%	\$1.02	273,250	4.38%	-4,182	164,583

(a) Colliers tracks office buildings from 3,500 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) Vacancy rate includes vacant direct and sublease space. Because there are only 6 warehouse buildings tracked by Colliers in Morgan Hill, there is not sufficient data to calculate the vacancy rate.

(c) Net Absorption is the net change in occupied space.

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

Sources: Colliers International, 4th Quarter 2014 & 1st Quarter 2015.

Figure 3. Supply Projections for Scenario 1: Previous 2013 Study

Supply Projection	1. Previous 2013 Study						
	City Limits	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Cochrane Road (e)	City and SOI
Vacant Industrial Land (a)							
In Acres	284	38	30	89	97	167	523
In Square Feet	12,371,040	1,655,280	1,306,800	3,876,840	4,225,320	7,274,520	22,781,880
Maximum Building Coverage	30%	30%	30%	30%	30%	30%	30%
Maximum Building Area (Acres)	85.20	11.40	9.00	26.70	29.10	50.10	156.90
Maximum Building Area (Sq. Ft.) (b)	3,711,312	496,584	392,040	1,163,052	1,267,596	2,182,400	6,834,600
Existing Vacant Industrial, R&D, Office							
Total Vacant Building Area (Sq. Ft.) (c)	808,900	808,900	808,900	808,900	808,900	808,900	808,900
75% of Building Area (Sq. Ft.) (d)	606,700	606,700	606,700	606,700	606,700	606,675	606,675
Total Potential Supply (Sq. Ft.)	4,318,012	1,103,284	998,740	1,769,752	1,874,296	2,789,075	7,441,275
Demand Compared to Supply							
Annual Average Demand (in Sq. Ft.)				44,700 - 114,000			
Years of Supply	40 - 95	10 - 25	10 - 20	20 - 40	20 - 40	25 - 60	65 - 170

Notes:

Columns may not add due to rounding.

(a) Based on City's inventory of zoned industrial parcels in current General Plan, and combined industrial and flex parcels in updated General Plan.

(b) Assumption of 30% site coverage area.

(c) Available space in Industrial, R&D, Office, and Warehouse buildings, Colliers International, 1Q2015.

(d) Assumes that 75 percent of the vacant space would be leased before new construction could occur.

(e) Includes Subareas 1, 2, and 3.

Sources: City of Morgan Hill, 2015; Colliers International, 2015; ABAG, 2012; "Economic and Fiscal Impact Analysis of Industrial Land Conversion," 2013; Strategic Economics, 2015.

Figure 4. Supply Projections for Scenario 2: Existing Conditions, 2015

Supply Projection	2. Existing Conditions 2015						
	City Limits	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Cochrane Road (e)	City and SOI
Vacant Industrial Land (a)							
In Acres	247	29	32	63	87	124	464
Maximum Building Area (Sq. Ft.) (b)	3,230,410	378,972	418,176	823,284	1,139,530	1,620,432	6,058,455
Existing Vacant Industrial, R&D, Office							
Total Vacant Building Area (Sq. Ft.) (c)	273,250	273,250	273,250	273,250	273,250	273,250	273,250
75% of Building Area (Sq. Ft.) (d)	204,938	204,938	204,938	204,938	204,938	204,938	204,938
Total Potential Supply (Sq. Ft.)	3,435,347	583,910	623,114	1,028,222	1,344,467	1,825,370	6,263,393
Demand Compared to Supply							
Annual Average Demand (in Sq. Ft.)				44,700 - 114,000			
Years of Supply	30 - 77	5 - 13	5 - 14	9 - 23	12 - 30	16 - 41	55 - 140

Notes:

Columns may not add due to rounding.

(a) Based on City's inventory of zoned industrial parcels in current General Plan, and combined industrial and flex parcels in updated General Plan.

(b) Assumption of 30% site coverage area.

(c) Available space in Industrial, R&D, Office, and Warehouse buildings, Colliers International, 1Q2015.

(d) Assumes that 75 percent of the vacant space would be leased before new construction could occur.

(e) Includes Subareas 1, 2, and 3.

Sources: City of Morgan Hill, 2015; Colliers International, 2015; ABAG, 2012; "Economic and Fiscal Impact Analysis of Industrial Land Conversion," 2013; Strategic Economics, 2015.

Figure 5. Supply Projections for Scenario 3: General Plan Update

Supply Projection	3. Proposed GP Update						
	City Limits	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Cochrane Road (e)	City and SOI
Vacant Industrial Land (a)							
In Acres	204	29	32	56	87	117	362
Maximum Building Area (Sq. Ft.) (b)	2,668,486	378,972	418,176	731,808	1,139,530	1,528,956	4,725,519
Existing Vacant Industrial, R&D, Office							
Total Vacant Building Area (Sq. Ft.) (c)	273,250	273,250	273,250	273,250	273,250	273,250	273,250
75% of Building Area (Sq. Ft.) (d)	204,938	204,938	204,938	204,938	204,938	204,938	204,938
Total Potential Supply (Sq. Ft.)	2,873,423	583,910	623,114	936,746	1,344,467	1,733,894	4,930,457
Demand Compared to Supply							
Annual Average Demand (in Sq. Ft.)				44,700 - 114,000			
Years of Supply	25 - 64	5 - 13	5 - 14	8 - 21	12 - 30	15 - 39	43 - 110

Notes:

Columns may not add due to rounding.

(a) Based on City's inventory of zoned industrial parcels in current General Plan, and combined industrial and flex parcels in updated General Plan.

(b) Assumption of 30% site coverage area.

(c) Available space in Industrial, R&D, Office, and Warehouse buildings, Colliers International, 1Q2015.

(d) Assumes that 75 percent of the vacant space would be leased before new construction could occur.

(e) Includes Subareas 1, 2, and 3.

Sources: City of Morgan Hill, 2015; Colliers International, 2015; ABAG, 2012; "Economic and Fiscal Impact Analysis of Industrial Land Conversion," 2013; Strategic Economics, 2015.

Figure 6. Supply Projections for Scenario 4: General Plan Update and GP Amendments

4. Proposed GP Update and GP Amendments							
Supply Projection	City Limits	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Cochrane Road (e)	City and SOI
Vacant Industrial Land (a)							
In Acres	149	29	32	36	52	97	286
Maximum Building Area (Sq. Ft.) (b)	1,947,132	378,972	418,176	470,448	679,536	1,267,596	3,742,806
Existing Vacant Industrial, R&D, Office							
Total Vacant Building Area (Sq. Ft.) (c)	273,250	273,250	273,250	273,250	273,250	273,250	273,250
75% of Building Area (Sq. Ft.) (d)	204,938	204,938	204,938	204,938	204,938	204,938	204,938
Total Potential Supply (Sq. Ft.)	2,152,070	583,910	623,114	675,386	884,474	1,472,534	3,947,743
Demand Compared to Supply							
Annual Average Demand (in Sq. Ft.)	44,700 - 114,000						
Years of Supply	19 - 48	5 - 13	5 - 14	6 - 15	8 - 20	13 - 33	35 - 88

Notes:

Columns may not add due to rounding.

(a) Based on City's inventory of zoned industrial parcels in current General Plan, and combined industrial and flex parcels in updated General Plan.

(b) Assumption of 30% site coverage area.

(c) Available space in Industrial, R&D, Office, and Warehouse buildings, Colliers International, 1Q2015.

(d) Assumes that 75 percent of the vacant space would be leased before new construction could occur.

(e) Includes Subareas 1, 2, and 3.

Sources: City of Morgan Hill, 2015; Colliers International, 2015; ABAG, 2012; "Economic and Fiscal Impact Analysis of Industrial Land Conversion," 2013; Strategic Economics, 2015.