MEMORANDUM

To: Lisa Wise Consulting

From: Jason Moody, Walter Kieser, and Ben Sigman

Subject: Economic Analysis for the Bellevue Corridor Community Plan; EPS #21139

Date: January 18, 2012

The Economics of Land Use

The City of Merced has retained a planning team led by Lisa Wise Consulting (LWC) to prepare the Bellevue Corridor Community Plan (BCCP). As a part of this team, Economic & Planning Systems, Inc. (EPS) is tasked with providing an assessment of real estate market conditions affecting development feasibility. This memorandum provides our assessment, including a general background on existing market conditions, future growth prospects, and supply and demand dynamics. Following consideration of this market assessment, EPS will work with the BCCP team to prepare recommendations concerning specific development opportunities and strategies for the Bellevue Corridor.

The Bellevue Corridor is located northeast of the City of Merced, roughly five miles from downtown Merced and Highway 99. As illustrated in **Figure 1**, the BCCP Area is located between G Street and the University of California, Merced (UC Merced) campus, within unincorporated Merced County. With the exception of the UC Merced campus, the Bellevue Corridor is presently characterized by rural residential and agricultural uses, though nearby areas within the City boundary exhibit suburban residential development patterns and some commercial uses. The Plan area is located within the City's Sphere of Influence and is considered for urban expansion by the City's General Plan.

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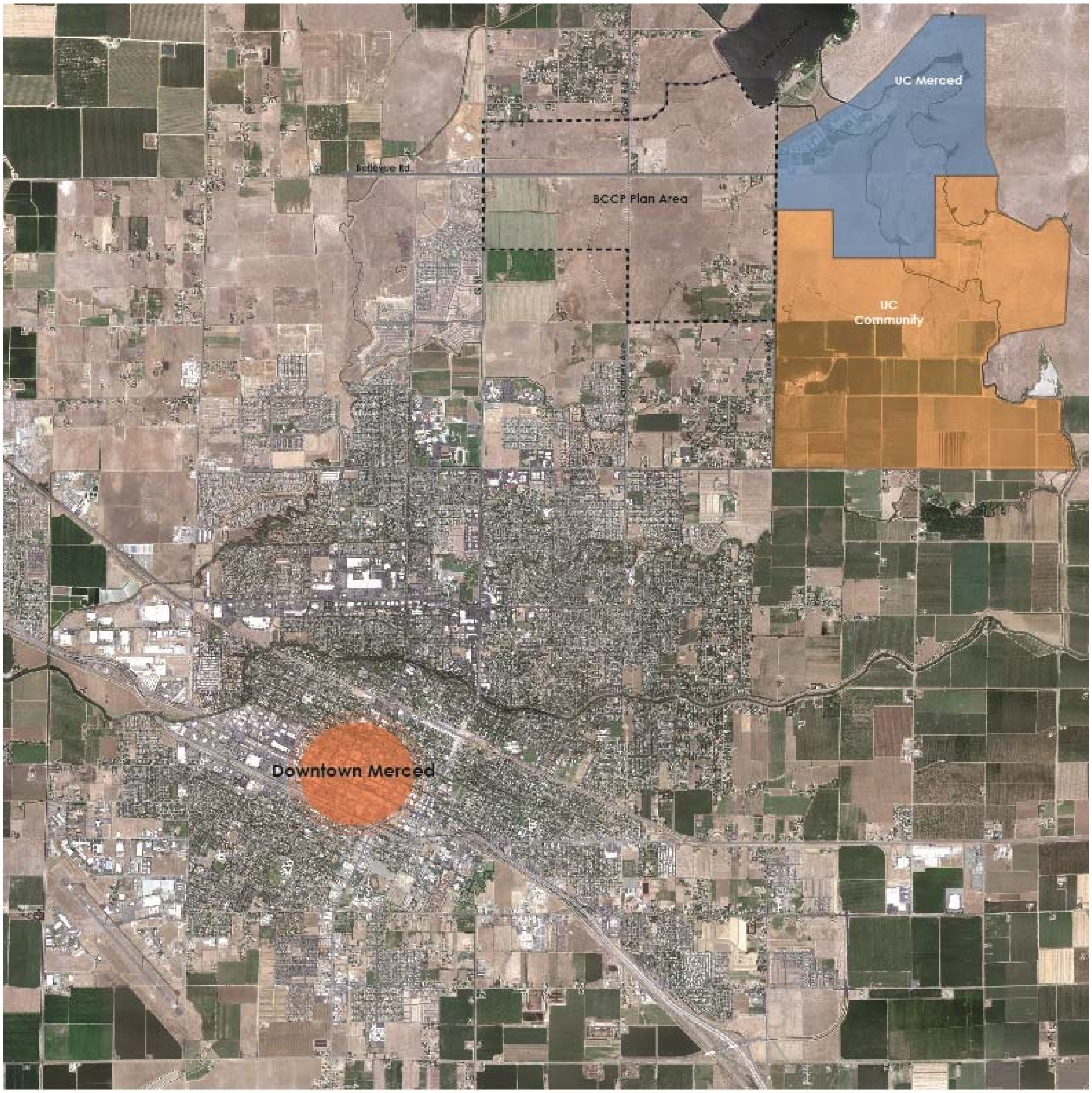
Figure 1: Map of BCCP Plan Area and Environs



Sources: LWC and City of Merced

Key Findings Concerning Economic Context

1. ***Consideration of an appropriate land use program for the Bellevue Corridor occurs within a regional market context characterized by continuing weak economic conditions, depressed housing prices, and stressed local government finances. While recent market activity suggests economic recovery, a return to healthy economic conditions is likely to be gradual.***

   The Great Recession continues to have a profound effect on real estate market conditions in the San Joaquin Valley, including Merced County and the City of Merced. The San Joaquin Valley remains one of the most severely affected regions in the United States in terms of foreclosures, "up-side down" properties, construction industry contraction, and unemployment. Merced County, in particular, has been hard hit. In 2010, for example, residential foreclosures as a share of total housing units was greater in Merced County than any other county in California, one of the hardest hit states in the nation.[1]

Weakness in the residential market remains a persistent and harmful drag on the Merced economy. Currently, home pricing remains below construction cost for most product types and homebuilders are unable to compete with existing re-sale properties available in the marketplace. Specifically, after City of Merced single-family residential prices peaked at more than $230 per square foot in 2005, values plummeted to roughly $60 per square foot in 2009, and have hovered in the $60 to $70 range since. Price recovery is likely to be slow, with substantial existing "latent supply" associated with bank-held properties, speculative ownership, and pending foreclosures coming to market in the future. While there was virtually no new residential construction in Merced in 2009 and 2010 (building permit activity dropped to nearly zero), permitting did pick up in 2011.

2. ***Recent statewide and regional growth forecasts indicate a wide range of potential future population growth scenarios for Merced County, suggesting a high level of uncertainty associated with the type and amount of new real estate development.***

   Demographic forecasts for Merced County vary widely by source, ranging from a high of 160,000 to a low of 45,000 new residents by 2030. While recent private forecasts indicate the county might grow by 45,000 between 2010 and 2030, the Merced County Association of Governments projection is for nearly 160,000 new residents over the same time period. Meanwhile, California's most recent Department of Finance forecast indicates that the population of Merced County will increase by about 100,000 between 2010 and 2030, consistent with recent projections prepared on behalf of the eight San Joaquin Valley regional planning organizations. Taken as a whole, these projections reveal that actual growth depends on a number of variables that are difficult to predict with a certainty at this time.

3. ***During the past several decades the City of Merced has entitled and planned for a substantial amount of new development within its Sphere of Influence; other nearby jurisdictions have also created significant development capacity.***

   In Merced, as is the case in most other San Joaquin Valley jurisdictions, planned development capacity greatly exceeds short- and, in many cases, long-range development forecasts. While the recently-adopted update of the City of Merced General Plan reduced previous development capacity, substantial development capacity remains available.[2] By way of example, a reasonable estimate of development capacity within and near the BCCP Area, even after recent reductions, suggests planned and approved projects to the northeast of the City could generate about 21,000 housing units and 7 million square feet of non-residential real estate.[3]

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[1] RAND California; DataQuick; US Census Bureau; and EPS.

[2] Merced Vision 2030 General Plan includes a combined SUDP/SOI that is slightly smaller than the 1997 SOI.

[3] City of Merced, January 2013

4. ***Merced's planned development capacity cannot be realized without substantial investments in infrastructure, including expanded utility capacity and major transportation system improvements, as well as environmental clearance.***

   In the context of relatively unconstrained land supply, development and absorption of particular areas or at specific sites will depend on availability of infrastructure, including utility capacity (e.g., sewer and water) and transportation improvements. Much of the entitled land both within and outside the City of Merced's Sphere of Influence does not have the level of infrastructure needed to accommodate planned of approved growth. In addition, development in many of the areas planned for expansion (or the infrastructure needed to serve these areas) still needs to obtain a variety of environmental clearances (e.g., CEQA/NEPA, ESA).

5. ***Fiscal and institutional factors will also influence the location and timing of new development and associated infrastructure.***

   Although the Bellevue Corridor is within the City's Sphere of Influence, the County's jurisdiction in the area limits the ability of the City to extend municipal services and infrastructure to new development. City annexation of the BCCP area will require approval by the Merced LAFCO, and likely the negotiation of a new property tax-sharing agreement with the County (without such an agreement the City will not receive property taxes from the area). Moreover, the persistence of depressed housing prices continues to make the development-based financing that historically provided funding for needed infrastructure much more constrained and challenging.

   Even regional-serving beneficial projects are proving difficult to fund, due in part to increasing conflict and tension between local jurisdictions as they compete for scarce fiscal resources. By way of example, the Atwater/Merced Expressway Project (AME) would transform Bellevue Road into a regional transportation route, creating a high-volume road that connects Highway 99 (at Buhach Rd), Castle Air Force Base, and UC Merced. However, the timing and funding for the AME project remain uncertain with more than $120 million still needed to cover the cost of the first two phases (I-99 to SR 59 at Bellevue).

6. ***While the City of Merced competes with other locations in Merced County and the broader San Joaquin Valley for jobs and associated commercial real estate development**, **it maintains a number of competitive advantages that make it well positioned to capture a disproportionate share of growth.***

   Various cities in the US 99 corridor, including Modesto and Turlock, as well as nearby Atwater and unincorporated areas such as Castle Air Force Base offer alternatives to Merced as locations for both business and housing. However, the City of Merced possesses a number of competitive attributes that will enable it to compete effectively for regional growth potential:

   - UC Merced, the only University of California Campus in the San Joaquin Valley;
   - Likely location of a future high-speed rail station and existing multi-modal public transit;
   - Stable, diverse community with attractive residential neighborhoods and appealing urban form (including a historic Downtown);
   - "Gateway" to Yosemite and other outdoor recreation areas; and
   - Convenient and successful retail shopping options (e.g., Merced Mall).

Key Findings Concerning the Bellevue Corridor

1. ***While the Bellevue Corridor is well positioned for growth, it is likely to face competition from other areas planned for development both within and outside the City Sphere of Influence.***

   The BCCP area location between developed portions of the City and the UC Merced Campus creates the opportunity to absorb UC Merced-related uses, without a “leap-frog” development pattern. The Plan area is large enough to accommodate a diversity of urban uses including a range of residential formats, retail uses, office, and institutional uses. In addition, a number of relatively large parcels are adequately sized for development without site assembly, a cost advantage over development areas with smaller sites. However, the existing development pattern that includes a number of rural residential developments may include some “hold out” property owners that constrain capacity and design of new development.

   While the Bellevue Corridor is a logical location for the City’s expansion, existing development capacity within the existing City limit, especially in North Merced (e.g., Bellevue Ranch), will have a substantial cost advantage over the Bellevue Corridor location until a substantial portion of that existing approved development capacity is absorbed. In addition, the Bellevue Corridor could compete directly with planned development in the University Community that lies immediately south of the UC Merced Campus.

2. ***UC Merced is anticipated to drive growth proximate to the campus, supporting levels of absorption and density that may not be achievable elsewhere in the County.***

   At build out, UC Merced anticipates having a student population of 25,000, faculty and staff population of 6,500, and other daily population of about 600.[4] Current schools include the School of Engineering, School of Natural Sciences, and School of Social Sciences, Humanities and Arts, while planned schools include a School of Management and School of Medicine. UC Merced is committed to research activities, having already established programs such as the Health Sciences Research Institute, Sierra Nevada Research Institute, UC Merced Energy Research Institute and University of California Advanced Solar Technologies Institute. Funding is in place for additional research institutes in a number of other specialized fields.

   UC Merced will be the primary economic driver of real estate development in the Bellevue Corridor. This strategic location is likely to support clustered and more dense development patterns, especially for sites that are easily accessible (i.e., within walking distance) from the UC campus. Over time improved roadway connections such as the Atwater/Merced Expressway Project (described above) and the Campus Parkway Project, a connection between the Bellevue Corridor and Highway 99 to the south, may also expedite development of the BCCP area.

   The time frame for UC-related development adjacent to the campus will be affected by the manner and pace in which UC programs grow. Currently, the State’s fiscal crisis is affecting UC Merced’s ability to proceed with its capital investment program for the campus, which may actually create opportunities for private sector actors to pursue real estate development that supports the campus expansion goals. The UC recently convened a ULI panel to

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[4] 2009 DEIS/DEIR

evaluate the impacts and feasibility of a more "distributed growth" model for the UC as a potential mechanism address funding shortfalls.

3. ***While both the planned University Community and the Bellevue Corridor will need to resolve a number of infrastructure and institutional issues before development can occur, Bellevue appears to have a competitive advantage in this regard.***

Though UC Merced is located in unincorporated Merced County and is not within the service area of the utilities provided by the City of Merced, the campus area is provided water and wastewater service by the City of Merced under a Pre-Annexation Agreement. Water is primarily supplied by a line constructed within the roadway alignment of Bellevue Road. A sanitary sewer line also runs along Bellevue and connects to the City of Merced's sewer system at an existing trunk line on G Street, near Merced College. Although the sewer pipeline under Bellevue Road is sized to serve the full development of the campus, upgrades to the existing trunk line on G Street would be required.[5] There is no existing infrastructure of this nature serving the UC Community Plan area.

While detailed infrastructure cost estimates would be required to quantify any advantage the BCCP has over the UC Community Plan area, the presence of existing sewer and water lines along Bellevue Road suggests that new development could be more readily accommodated within the BCCP area. The timing and ease of annexation to the City of Merced, and thus the provision of urban services, would also seem to favor Bellevue Corridor since its location represents a more logical extension of the existing City limits.

4. ***Depending on how a number of institutional and infrastructure issues are resolved, the Bellevue Corridor appears well positioned to capture a portion of the regional growth currently designated to occur on the University Community Plan area.***

The University Community Plan, located along the southern border of the UC Merced campus, calls for more than 800 acres of new residential, retail, office/R&D, and other urban land uses, as summarized in **Figure 2**.[6] The Plan was designed to capture economic activity generated by UC Merced (and students, faculty, and staff), based on its demand for goods and services in the regional economy. However, as noted above, the Community Plan must address a number of challenges before construction can commence, including the provision of adequate infrastructure and other public services. In many respects, the Bellevue Corridor is equally or better positioned to capture market demand generated by the UC, given the corridor's location, access to infrastructure, ownership patterns, and other factors. Ultimately, the timing and share of market demand absorbed by these two areas, or other competitive locations nearby, will depend on how a range of highly-uncertain economic and institutional factors unfold over time.

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[5] Ibid.

[6] Based on the land program described in the UC Merced and University Community Project EIS/EIR which has California Environmental Quality Act (CEQA) clearance.

Figure 2: Land Use Summary for the University Community (Northern Area)

Land Use	Town Center	Neighborhoods	Total
Single Family			
Units	1,418	3,356	4,774
Acres	45	330	375
Multi-Family			
Units	-	480	480
Acres	4	10	14
Mixed-Use			
Office (Sq. Ft.)	313,600	-	313,600
Retail (Sq. Ft.)	183,000	-	183,000
Housing (units)	540	-	540
Total Acres	15	-	15
Retail			
Sq. Ft.	130,700	78,400	209,100
Acres	8	6	14
Research & Development			
Sq. Ft.	2,308,300	-	2,308,300
Acres	71	-	71
Other[1]	66	273	339
Total Acres			**828**

(1) Includes schools, parks, shared parking, and public ROW.

5. ***While demand for research and development space is unknown, a high-level case study analysis reveals that planning for 2.5 to 5 million square feet of R&D/flex space around UC Merced would be aggressive, but also allow for upside potential.***

   The uncertainty surrounding UC Merced's future research programs and their potential for technology transfer and independent enterprise, coupled with the lack of an established real estate market for R&D space in Merced, make it difficult to establish a reliable estimate of long-run demand for research space. A review of market areas with a UC campus reveals that these areas support a range real estate market demand for R&D/flex space (see **Figure 3**). For example, Yolo County, near Sacramento and home to the UC Davis campus (established more than 50 years ago), supports about 500,000 square feet of R&D/Flex space. Meanwhile Orange County, where UC Irvine is located, supports roughly 18 million square feet of such space. Employment in scientific industries in Orange County is dramatically higher than in both Yolo and Merced Counties. Consideration of real estate market factors, employment characteristics, and UC programs suggest that Merced will attract demand for R&D space, but it is unlikely to exceed 5 million square feet.

Figure 3: Research and Development Case Study Findings

UC Host County	Nonfarm Employment	PSTS (% of Nonfarm)[1]	R&D/Flex Space (MSF)
Yolo (UC Davis)	113,000	6%	0.5
Merced	82,000	3%	***2.3*** [2]
Riverside	800,000	5%	2.7
Orange (UC Irvine)	1,876,000	9%	18

(1) Professional, Scientific, and Professional Services Sector

(2) Proposed development (see **Figure 2** above)

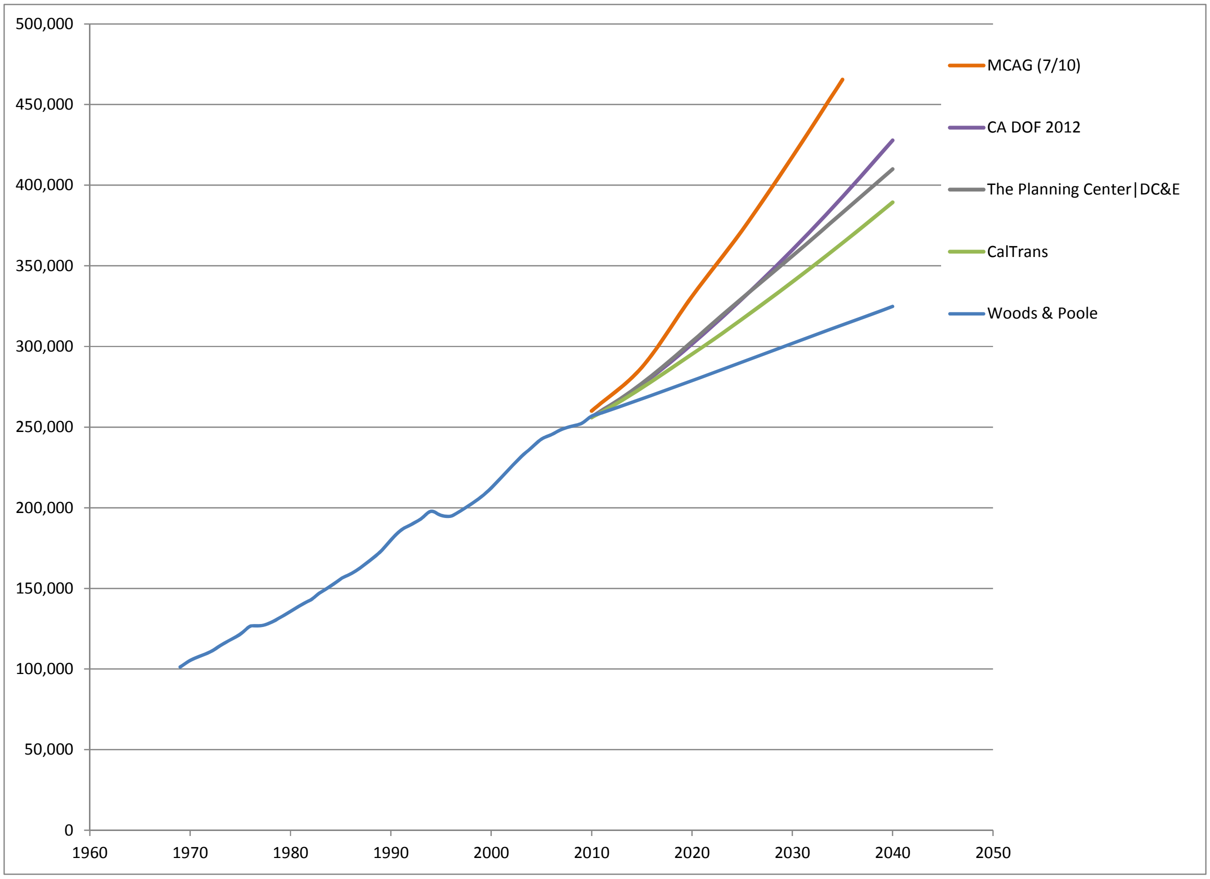
Sources: US Bureau of Economic Analysis; CoStar Group; and Economic & Planning Systems

Socio-Economic Trends

Regional socio-economic trends and projections indicate moderate levels of growth and real estate development will continue in Merced County over the next two decades. Recent studies of San Joaquin Valley demographics indicate that Merced County might grow by about 100,000 people by 2030.[7] More conservative forecasts indicate that the County will grow by only 45,000 people (Woods & Poole), while relatively aggressive projections the indicate the figure could be 160,000 (Merced County Association of Governments) over the same time horizon. These forecasts suggest that average annual population growth rates will likely range from 0.8 percent to 2.4 percent in Merced County.

[7] Demographic Forecast for the San Joaquin Valley, Planning Center|DC&E, 2012 and California Department of Finance 2012.

Figure 4: Total Population Forecasts for Merced County



Sources: Merced County Association of Governments (July 2010); State of California, Department of Finance (DOF); Woods & Poole Economics, Inc., 2012 State Profile; California Department of Transportation, Long-Term Socio-Economic Forecasts by County; San Joaquin Valley Demographic Forecasts 2010 to 2050, The Planning Center|DC&E, 2012; Economic & Planning Systems, Inc.

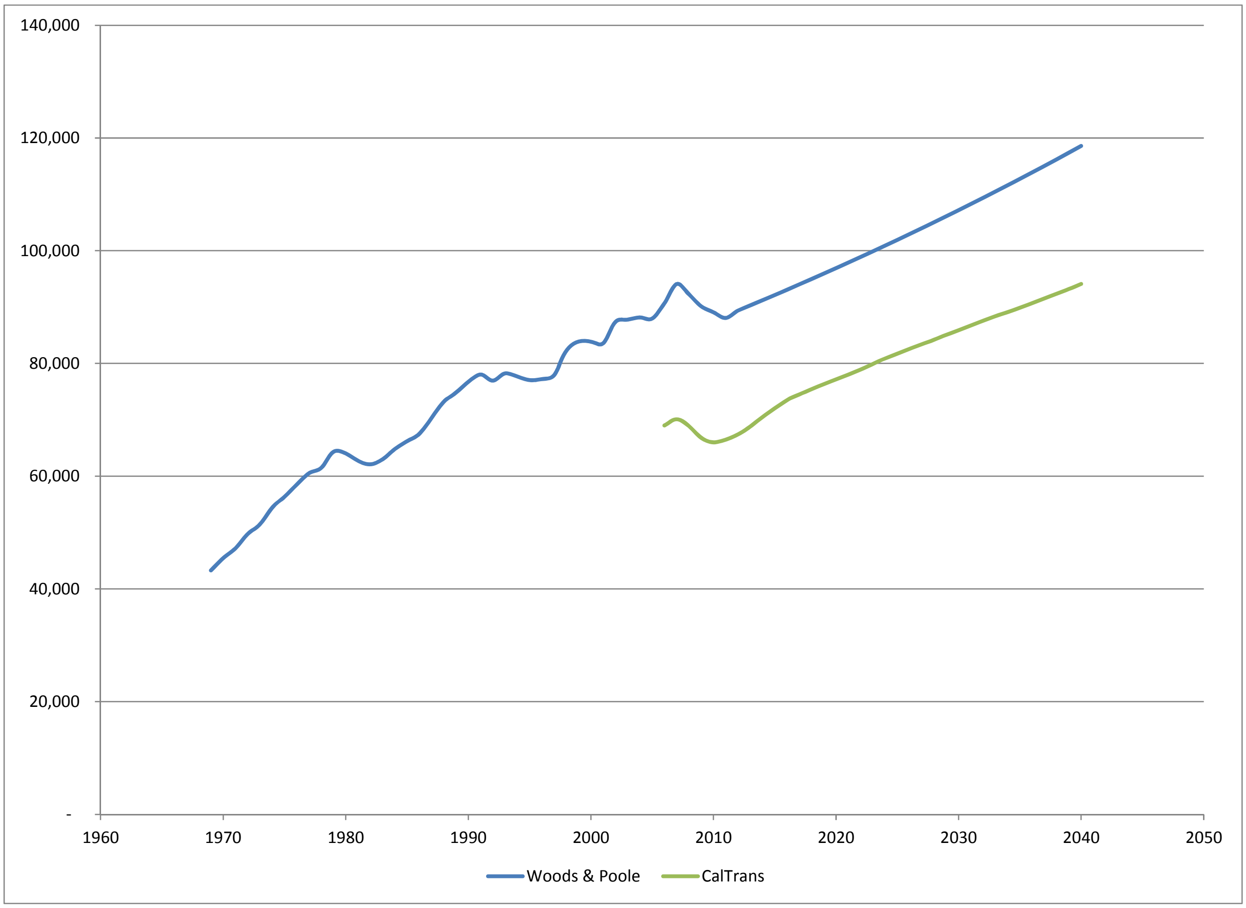
A recent study by The Concord Group (TCG) considers new housing demand under the population growth forecast prepared by The Planning Center|DC&E. In Merced County, TCG forecasts average annual demand for roughly 1,390 residential units per year (2010-50), one new residential unit for every 3.7 new persons over the next 40 years. Interestingly, TCG projects a significant increase in multifamily housing. The forecast indicates that about 46 percent of new units in the county will be in multifamily projects. This finding is in stark contrast to over 20 years of permit history data which indicate that less than 5 percent of Merced County's new housing units have been multifamily units. TCG's results are reflective of national data that indicate a preference for multifamily products among households with similar demographic characteristics to those households found in Merced County. In the City of Merced, TCG projects that 64 percent of housing demand will be for multifamily units, versus only 11 percent historically.

Employment projects support the notion of continued growth in Merced County, although it is unclear whether job growth will be sufficient to support the most aggressive population growth projections. A relatively conservative but well-accepted forecast of employment in Merced County from Woods & Poole indicates that average annual job growth will be approximately

0.9 percent, an increase of about 18,000 jobs over 20 years and 28,000 by 2040.[8] By comparison, the California Department of Transportation forecasts an employment growth rate of about 1.3 percent over the same period.

EPS calculations reveal that 18,000 new jobs over 20 years could support average annual net new demand for 100,000 square feet of office space each year in Merced County. There will also be demand for additional retail and industrial/flex commercial uses. Having captured nearly all County-wide office growth in recent years, the City of Merced is well-positioned to continue to attract new real estate development projects.[9]

Figure 5: Employment Forecasts for Merced County



Sources: Woods & Poole Economics, Inc., 2012 State Profile; California Department of Transportation, Long-Term Socio-Economic Forecasts by County; Economic & Planning Systems, Inc.

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[8] Ibid.

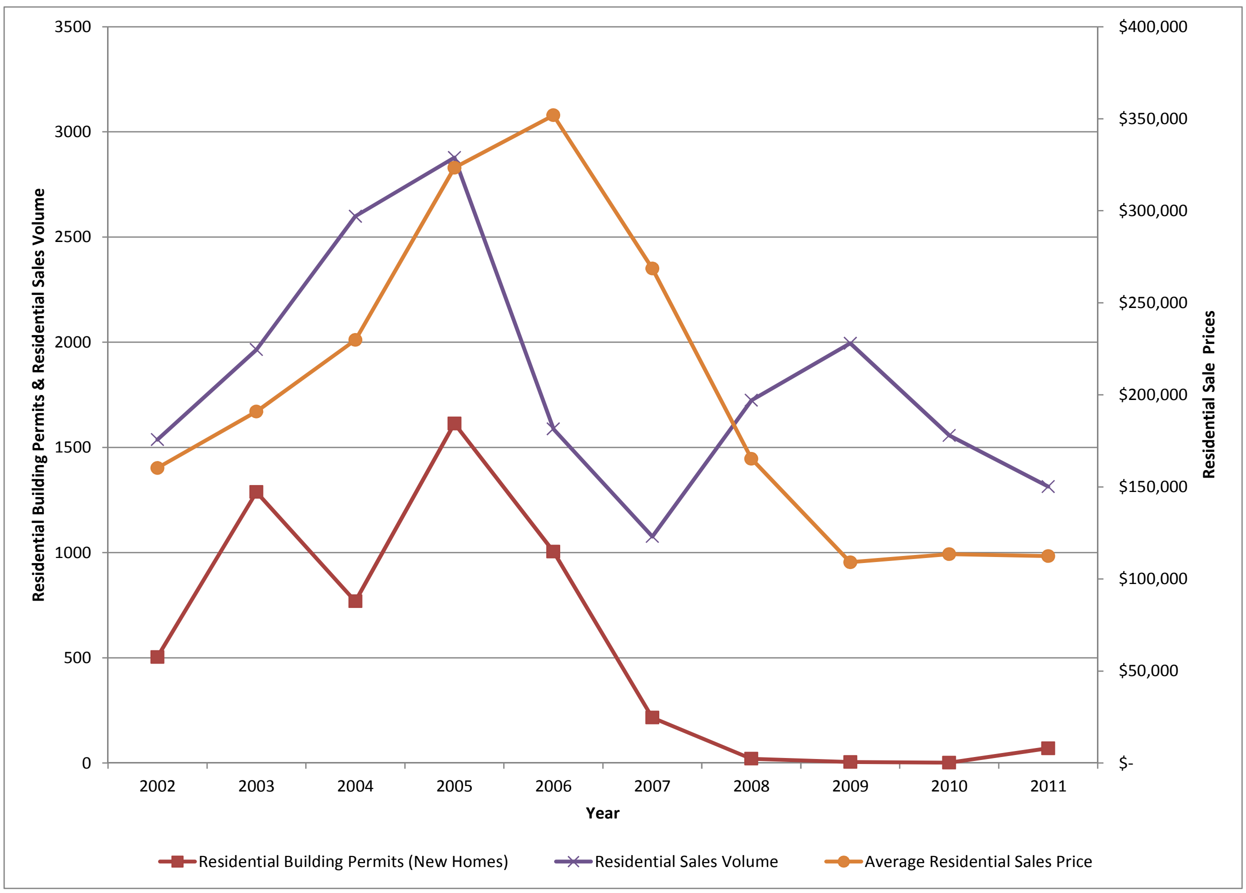
[9] While the forecasts are consistent in terms of projected absolute employment growth, the historical and future employment levels reported by Woods & Poole are systematically higher that those reported by the California Department of Transportation due to underlying data sources.

Real Estate Trends

Residential Market

Recent residential real estate market activity in the City of Merced has increased since hitting a cyclical low in 2007 and there are indications that over time conditions will return to a more normal market and construction activity. However, while prices have stabilized with an average home selling for about $110,000 over the past three years, values remain well below the peak price of $350,000 for an average home in 2006. Sales volumes plummeted with the market prices in 2007, but bounced back as investors entered the market in 2008 and 2009, though transaction volumes have fallen off since then, likely due to diminished market inventory. A substantial portion of market activity is attributable to investors seeking to reap gains as housing market improves. While City permitting of new homes dropped to nearly zero in 2009 and 2010, Merced issued 70 permits for new homes in 2011, a positive sign for housing developers in the City.

Figure 6: City of Merced Residential Permits, Sales, and Prices

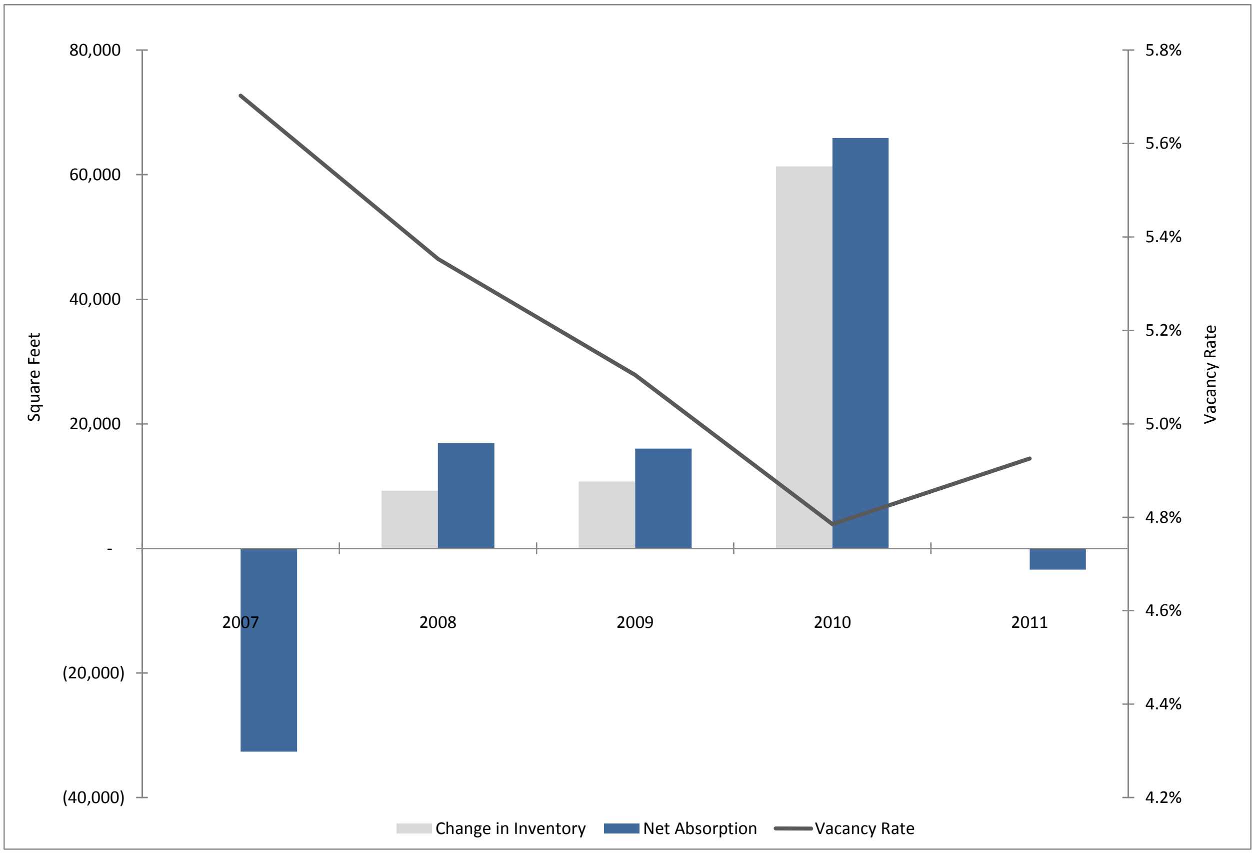


Source: RAND California and EPS

Office Market

Considering the dismal macroeconomic trends in the US during recent years, the City of Merced office market has performed well. Office vacancy has fallen since 2007 and remains below 5 percent, even with over 80,000 square feet of new space introduced in the market during that timeframe. Vacancy countywide is over 10 percent. Despite a relatively healthy market for office space in the City, with lease rates for new space in the range of $1.25 to $1.50 per square foot (per month), office development has been generally limited to single-story structures.

Figure 7: City of Merced Office Market Trends

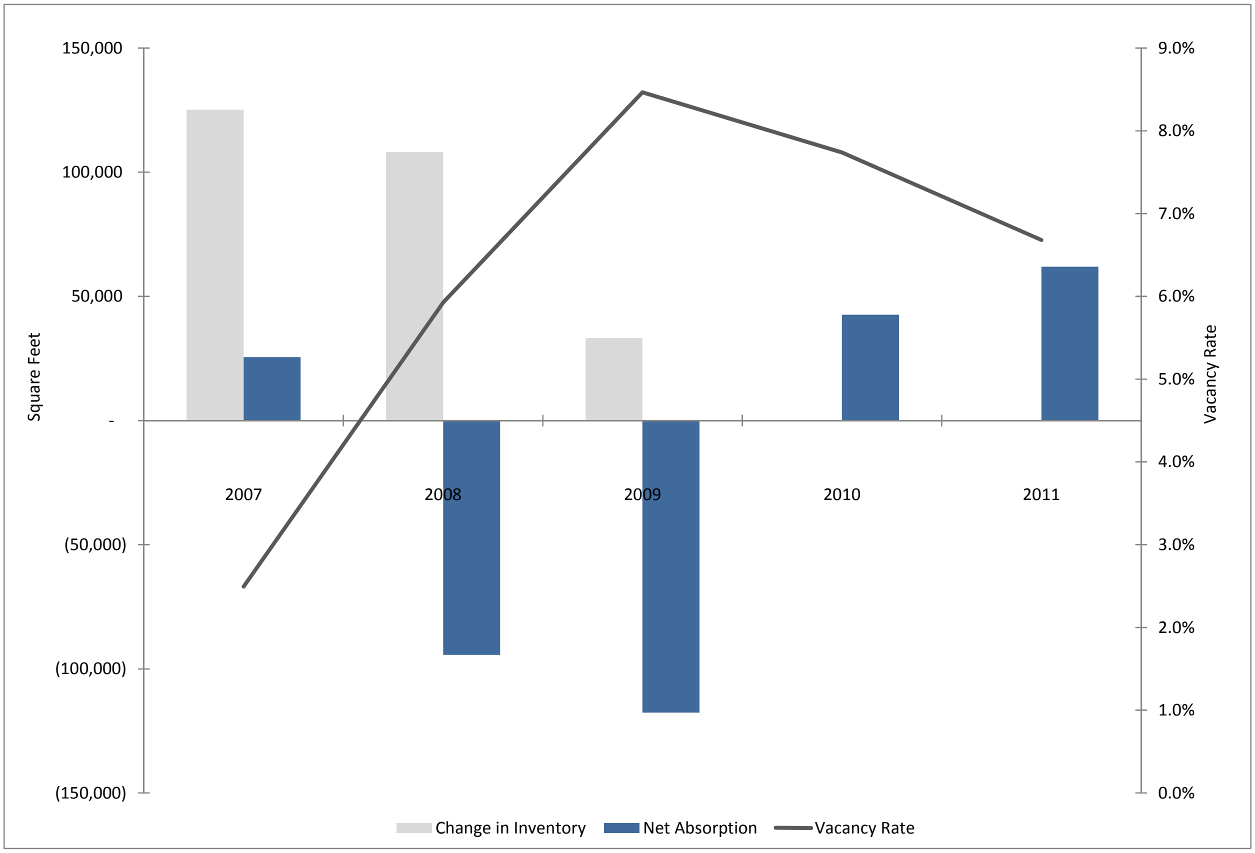


Sources: CoStar Group; Economic & Planning Systems, Inc.

Retail Market

Developers delivered over a quarter of million square feet of new retail development in the City of Merced between 2007 and 2009, about 30 percent of total deliveries in the County during that period. However, the development of this new retail space, in combination with negative net absorption, pushed the City's retail vacancy rate up dramatically. Retail vacancy peaked at about 8 percent in 2009 but fall to less than 7 percent in 2011, as retailers have filled unoccupied spaces. These are similar trends to those observed in the County overall. The available data indicate that positive net absorption of retail space may be partially attributable to more affordable leases, with average asking rates now as much as 50 percent less than their pre-recession peak.

Figure 8: City of Merced Retail Market Trends

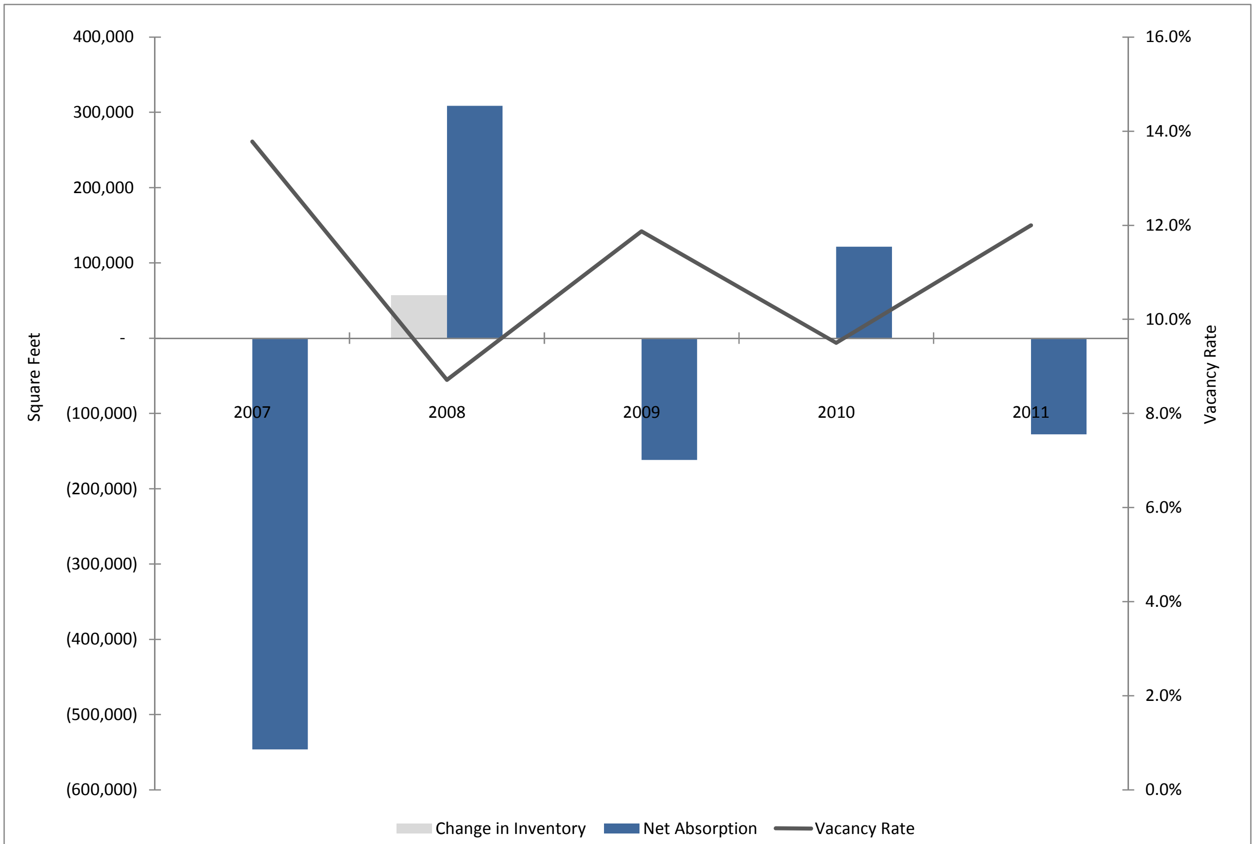


Sources: CoStar Group; Economic & Planning Systems, Inc.

Industrial Market

The market for industrial real estate in the City of Merced has been volatile in recent years, with dramatic swings in net absorption. Significant negative net absorption in 2007, combined with existing vacancy, left nearly 700,000 square feet of unoccupied industrial space in the City of Merced. However, 2008 and 2010 saw positive net absorption and industrial vacancy is lower today than in 2007. With built space available, there has been little new development of industrial real estate in recent years.

Figure 9: City of Merced Industrial Market Trends



Sources: CoStar Group; Economic & Planning Systems, Inc.

Land Market

Even with recent changes to the City's planned expansion areas, there is significant entitled land capacity within Merced's Sphere of Influence.[10] A recent EPS study determined that there is un-built development capacity for roughly 30,000 dwelling units and 12 million square feet of commercial space in sphere of influence areas located to the north and east of the current city boundary. Some undeveloped land is already entitled for new projects, with those approved projects enjoying a substantial cost advantage over creating new subdivision plans. Outside of the Merced Sphere of Influence, future competition is anticipated to come from nearby growth areas such as Atwater and Castle Air Force Base.

In addition, a significant amount of campus-related demand could be accommodated by land controlled by the UC and its partners. The UC Merced campus includes approximately 225 acres for student neighborhoods (accommodating 12,500 beds) and 75 acres for research and development uses. Further, University Community (northern area) located south of the UC Merced campus is envisioned to provide housing and services for 30,000 people. Even more

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[10] The Merced Vision 2030 General Plan, which was adopted by the City Council on January 3, 2012, revises the planned urban expansion area around Merced (now a combined Specific Urban Development Plan and Sphere of Influence) to be "slightly smaller than the 1997 Sphere of Influence".

development is planned for University Community South. While the Bellevue Corridor is well positioned to capture growth associated with the evolution of UC Merced, it likely will compete with the campus and campus village areas to accommodate growth associated with UC Merced.

Reflective of the availability of undeveloped land, there is a notable market for raw land in and around Merced. A review of available data reveals that over 5,000 acres has transacted in ZIP codes around the City of Merced (95303, 95340, 95341, 95348, and 95388) since 2002. Excluding identifiable property “flips” and land purchased for conservation, EPS estimates that about 2,000 acres was sold for development from 2002 through mid-2012. The available data reveal that six transactions accounted for more than half of the acreage sold. The buyers of these large parcels reported that the purchases were made as investments, to hold for future development, or for development of single family homes.