

APPENDIX F

**Socioeconomic Analysis for Proposed
Rule 9510 (Indirect Source Review) and
Rule 3180 (Administrative Fees for Air Impact
Assessment Applications)**

November 17, 2005

*SOCIOECONOMIC ANALYSIS
PROPOSED INDIRECT SOURCE RULE: DRAFT
RULES 9510 AND 3180*

4 November 2005

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FIGURE

1 San Joaquin Valley Unified Air Pollution Control District
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1. EXECUTIVE SUMMARY

The San Joaquin Valley Unified Air Pollution Control District (“District”) seeks to adopt New Rule 9510 and 3180 to meet certain United States Environmental Protection Agency (US EPA) mandates and timelines with regards to improved air quality in the region. This section of the report summarizes the findings of the socioeconomic analysis of Rules 9510 and 3180.

The analysis indicates that while the worst-case residential fee that a typical residential development would pay under Draft Rule 9510 and 3180 can increase the amount of household income required to finance the purchase of a new home, the estimated increase represents a small fraction of the original household income required to finance a new home in the event no air quality fees were in place. The affect of the fees on rents is similarly small.

The analysis also examines the question of housing affordability from the vantage point of low- and moderate-income households. The analysis demonstrates that, even before the imposition of an air quality fees, most low-income and households in the Central Valley are priced out of newly constructed multifamily unit market, the rents for which need to be at levels that account for price of land, development costs, developer fees, and an adequate level of profit, among other things. The analysis discusses how public subsidies can assist in enhancing the financial feasibility of a real estate project in which a certain portion of units are set-aside as below-market rental units.

The analysis also examines the impacts of proposed worst-case off-site emission reduction fees on commercial, industrial and institutional projects. While a typical non-residential development can absorb the 2006 and 2008 fees, projects will have to recover the cost of the fee over a period of time.

It is important to note that any fee identified in the report is the estimated maximum fee in the worst-case scenario for a typical development project, with the understanding that the

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actual fee will vary with the particulars of any project. Any fee in the report is presented for the purposes of analyzing potential impacts given costs associated with reducing quantifiable emissions resulting from what constitutes typical residential, commercial and industrial developments. It is also important to note that the developer may reduce fees by incorporating on-site emission reduction measures into the projects. There may or may not be costs associated with on-site measures. In any event, it is anticipated that the developer will choose the least costly option.

2. INTRODUCTION

This report describes the socioeconomic impacts of Rule 9510 (Indirect Source Review – ISR) and 3180 (Administrative Fees for Indirect Source Review). Following this introduction, the report summarizes the proposed amendments and describes the methodology for the socioeconomic analysis. In Section 5, the report describes the economic characteristics of sources affected by Rule 9510 and 3180. The sixth section analyzes the socioeconomic impacts of compliance costs on the regional economy.

The report is prepared pursuant to the provisions of AB2051 (Section 40728.5 of the California Health and Safety Code), which requires an assessment of socioeconomic impacts of proposed air quality rules. The findings in this report can assist District staff in understanding the socioeconomic impacts of Rules 9510 and 3180, and can assist staff in preparing a refined version of the rule. A final report will be presented at the Governing Board hearing by District staff in December 2005. Figure 1 is a map of the eight-county region that comprises the San Joaquin Valley Air Basin. As indicated in the map, Kern County is not completely in the District.

FIGURE 1
San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) Air Basin



3. DESCRIPTION OF NEW RULES 9510 & 3180

The San Joaquin Valley Air Basin (SJVAB) is classified as a nonattainment area for the state and federal health based ambient ozone and PM 10 standards by the California Air Resources Board (ARB) and the U.S. Environmental Protection Agency (EPA). The SJVAB is currently classified as serious nonattainment for the 24-hour and annual National Ambient Air Quality Standards (NAAQS) for particulate matter 10 microns in size and smaller (PM10), extreme nonattainment for the federal 1-hour ozone standard, serious nonattainment for the new federal 8-hour ozone standard, and severe nonattainment for the 1-hour state ozone standard.

The San Joaquin Valley Unified Air Pollution Control District's (District) adopted 2003 PM10 Plan projects attainment of NAAQS for PM10 at the earliest practicable date of December 31, 2010. The Indirect Source Rule¹ (ISR) is one of the commitments contained in the 2003 PM10 Plan to achieve these emissions reductions. The ISR commitment will be implemented through Rules 9510 and 3180. The purpose of Draft Rule 9510 is to reduce emissions of NOx and PM10 from new development projects. The purpose of Draft Rule 3180 is to recover the costs of administering Draft Rule 9510. Implementation of these draft rules is expected to reduce NOx and PM10 emissions by 5.4 and 5.8 tons per day respectively.

The District identified several examples of air pollution agencies in California that are currently reviewing land use projects for indirect source impacts and/or collecting mitigation fees in their districts. District staff reviewed programs being implemented by the Mendocino County and Shasta County Air Quality Management Districts and the Great Basin, Colusa County, and Placer County Air Pollution Control Districts. District staff also considered a number of

¹ Indirect Sources are land uses that attract or generate motor vehicle trips.

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program types including District permitting, city/county review, District review, and simple fee.

Despite significant air pollution reductions from both mobile and stationary sources, the District exceeds state and federal air quality standards for ozone and PM10. Although today's new cars pollute about 90 percent less than models produced 25 years ago (due to California's strict vehicle emissions standards), large increases in population and driving partially offset the benefits these cleaner-burning vehicles provide. The District's total population increased by 22 percent between 1990 and 2000; and, California's Department of Finance projects that the SJVAB's population will increase by 24 percent between 2000 and 2010. With increased population, there is an increase in emissions from area sources, such as consumer products, fuel combustion, landscape maintenance equipment, etc.

The total number of vehicle miles traveled (VMT) in the District has increased at a rate faster than population growth. The district witnessed a nine percent increase between 1999 and 2002, and is expecting a 27 percent increase from 2002 to 2010. Entrained and re-entrained paved road dust and corresponding PM10 emissions increase as VMT increases.

To reduce emissions of NOx and PM10, Draft Rule 9510 would apply to development projects that will seek to gain a discretionary approval for projects that, upon full build-out will include any one of the following: 50 residential units, 2,000 square feet of commercial space, 25,000 square feet of industrial space, 20,000 square feet of medical office space, 39,000 square feet of general office space, 9,000 square feet of educational space, 10,000 square feet of government space, 20,000 square feet of recreational space, or 9,000 square feet of unidentified space. Certain transportation projects, transit projects, reconstruction projects that result from a natural disaster, and development projects whose primary source of emissions are subject to District Rule 2201 or 2010 would be exempt from this Draft Rule. Also, development projects that have a mitigated baseline below two tons per year for each pollutant would be exempt from the emission reduction requirements of the rule.

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Draft Rule 9510 would require new development project applicants to submit an Air Impact Assessment application to the District prior to or at application for a project's final discretionary approval with a public agency. The application would include an assessment, project location and description, an on-site emission reduction checklist, a proposed Monitoring and Reporting Schedule (MRS), and a fee deferral agreement if necessary. The District would have 10 days to determine whether or not the application is complete. After deeming an application complete, the district would have 30 days to approve the application and notify the applicant of the fee amounts.

Draft Rule 9510 would require developers to reduce cumulative NOx emissions in excess of 50 percent of the project's first-year operational baseline emissions until the emissions reach 50 percent of the first-year baseline emissions (approximately 10 years). Developers would be required to reduce PM10 emissions equal to half of the first-year emissions after build-out for the same time period required for NOx reductions. Developers would also be required to reduce emissions from construction equipment NOx by 20%, and PM10 by 45% compared to the statewide fleet average. Emissions could be reduced through on-site emission reduction measures, by paying the District a fee to fund emission reduction projects off-site, or through a combination of the two.

To recover the costs of administering Draft Rule 9510, Draft Rule 3180 would include a non-refundable application filing fee to be paid when an application is submitted to the District. Once an application and application fee are received, District staff would log the total staff hours spent on the project. So that only the cost of the actual hours spent on the project is recovered, the cost of the hours spent on the project (hours multiplied by a weighted average labor rate) would be subtracted from the application fee. Draft Rule 3180 would also contain a fee, payable when the off-site emission reduction fees are collected, equal to four percent of the off-site fees to recover the cost of administering off-site emission reduction projects.

4. METHODOLOGY

The socioeconomic analysis involves the use of information provided directly by affected sources, as well as secondary data used to describe the industries affected by the proposed provisions of Rule 9510 and 3180. The approach is briefly described below.

This report relies heavily on the most current data available from a variety of sources. For commercial-industrial prices, this report relies on Dataquick, Loopnet.com and Realtor.com. For construction trends, this report relied on the Construction Industry Research Board. When estimating cost of construction, we used “Commercial Square Foot Building Costs: 2004”, by Deloitte Saylor Publication, as well as per square foot cost of construction estimates used by many cities when estimating the value of a project. For purposes of estimating profits, ADE relied on Dun and Bradstreet, as well as corporate reports of major home builders and developers of commercial-industrial space operating in California and the Central Valley.

With the above information, ADE was able to estimate profit ratios for sources affected by the draft rule. ADE calculated ratios of profit per dollar of revenue for affected industries. The result of the socioeconomic analysis shows what proportion of profits the compliance costs represent. Based on assumed thresholds of significance, ADE discusses in the report whether the affected sources are likely to pass on costs to consumers or to reduce jobs as a means of recouping the cost of rule compliance or as a result of reducing business operations. To the extent that such job losses appear likely, the indirect multiplier effects of the jobs losses are estimated using a regional IMPLAN input-output model.

When analyzing the socioeconomic impacts of proposed new rules and amendments, ADE works closely within the parameters of accepted methodologies discussed in a 1995 California Air Resources Board report called “Development of a Methodology to Assess the Economic Impact Required by SB513/AB969” (by Peter Berck, PhD, UC Berkeley

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Appendix F: Socioeconomic Analysis for Rules 9510 and 3180 November 17, 2005

Department of Agricultural and Resources Economics, Contract No. 93-314, August, 1995). The author of this report reviewed a methodology to assess the impact that California Environmental Protection Agency proposed regulations would have on the ability of California businesses to compete. The California Air Resources Board (ARB) has incorporated the methodologies described in this report in its own assessment of socioeconomic impacts of rules generated by ARB. One methodology relates to determining a level above or below which a rule and its associated costs is deemed to have significant impacts. When analyzing the degree to which its rules are significant or insignificant, ARB employs a threshold of significance that ADE follows. Berck reviewed the threshold in his analysis and wrote, "The Air Resources Board's (ARB) use of a 10 percent change in [Return on Equity] ROE (i.e. a change in ROE from 10 percent to a ROE of 9 percent) as a threshold for a finding of no significant, adverse impact on either competitiveness or jobs seems reasonable or even conservative."

5. IMPACT INDUSTRIES SUBJECT TO NEW RULES 9510 & 3180 (INDIRECT SOURCE RULE)

This section of the socioeconomic analysis describes demographic and economic trends in the San Joaquin Valley region. The first part of this section compares the San Joaquin Valley region against California as a whole, and provides a context for understanding demographic and economic changes that occurred within the San Joaquin Valley region between 1998 and 2003. Starting with subsection 5.2, the second part of this section narrows the focus of the socioeconomic analysis to industries affected by New Rules 9510 and 3180. The second part of this section describes the economic characteristics of potentially impacted industries that might be subject to Rules 9510 and 3180.

In this report, the San Joaquin Valley region is defined as Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare counties. Data for Kern County in Tables 1 and 2 are for all of Kern County, although Kern County is only partially in the San Joaquin Valley Air Basin. Starting with Table 3, data for Kern County are for the part of Kern County that is in the San Joaquin Valley Air Basin.

5.1 REGIONAL DEMOGRAPHIC AND ECONOMIC TRENDS

REGIONAL DEMOGRAPHIC TRENDS

The San Joaquin Valley region experienced tremendous population growth during the 1990s. Many came to this area because of affordable housing. As a result, population increased significantly. The eight-county region's population increased by 22 percent (or approximately 2.0 percent annually), from 2.9 million in 1993 to 3.6 million in 2003. While the State of California's population increased by 15 percent (or approximately 1 percent annually), all the counties in the region experienced faster rates of growth, and two counties grew at rates that were triple the State's growth rate, as Table 1 shows. While by many standards Madera County continues to be a small county— at 135,262 residents

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according to the Department of Finance—it still experienced a 35 percent growth in population during the last decade (or three percent annually). Kings County also grew by three percent per year. As demonstrated in the following section on regional economic trends, the demographic changes that occurred in the San Joaquin Valley region during the 1990s significantly influenced the economy of this eight-county region.

TABLE 1
Population Growth: San Joaquin Valley Region, 1993 - 2003

| | 1993 | 1998 | 2003 | Distribution, 2003 | Annual Per. Chng 93-98 | Annual Per. Chng 98-03 | Annual Per. Chng 93-03 |
|-------------|------------|------------|------------|-----------------------|---------------------------------|---------------------------------|---------------------------------|
| California | 31,303,452 | 32,670,019 | 36,144,267 | | 1% | 2% | 1% |
| SJV Region | 2,959,911 | 3,192,439 | 3,615,696 | 10% | 2% | 3% | 2% |
| Fresno | 722,608 | 781,936 | 862,642 | 24% | 2% | 2% | 2% |
| Kern | 593,087 | 637,227 | 724,883 | 20% | 1% | 3% | 2% |
| Kings | 109,648 | 120,957 | 141,434 | 4% | 2% | 3% | 3% |
| Madera | 100,297 | 114,137 | 135,262 | 4% | 3% | 3% | 3% |
| Merced | 191,883 | 203,181 | 232,141 | 6% | 1% | 3% | 2% |
| San Joaquin | 507,170 | 546,852 | 630,577 | 17% | 2% | 3% | 2% |
| Stanislaus | 400,417 | 428,272 | 491,929 | 14% | 1% | 3% | 2% |
| Tulare | 334,801 | 359,877 | 396,828 | 11% | 1% | 2% | 2% |

Source: Applied Development Economics, based on California Department of Finance

Housing construction in the San Joaquin Valley Air Basin has paralleled this increase in population. Low interest and the availability of land at prices lower than in coastal areas of California has fueled construction activity in the Central Valley. Tables 2 and 3 track building permits for single-family and multi-family homes. According to the California Construction Industry Research Board, home-builders typically take out building permits only when they are ready to construct housing. Thus, building permits is a good indicator of housing production. As Table 2 shows, the amount of single-family building permits increased by 14 percent annually between 1998 and 2003 in the Central Valley, easily surpassing the statewide annual rate of eight percent. Almost forty percent of all single family building permits was for projects in San Joaquin and Stanislaus County in 2003. As the tables below show, the amount of new construction for single-family homes greatly exceeds new

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construction for multi-family housing, for reasons related to market demand, availability of land, and historically low-interest rates, among other reasons.

TABLE 2
Single-Family Residential Building Permit Trends:
San Joaquin Valley, 1993-2003

| ----- SFU Building permits ----- | | | | | | | |
|----------------------------------|--------|--------|---------|-----------------------|------------------------------|------------------------------|------------------------------|
| | 1993 | 1998 | 2003 | Distribution, 2003 | Annual Per. Chng 93-98 | Annual Per. Chng 98-03 | Annual Per. Chng 93-03 |
| California | 69,901 | 94,298 | 138,762 | | 6% | 8% | 7% |
| SJV Region | 15,055 | 14,280 | 27,080 | 20% | -1% | 14% | 6% |
| Fresno | 3,743 | 2,742 | 4,479 | 17% | -6% | 10% | 2% |
| Kern | 3,082 | 3,025 | 5,529 | 20% | 0% | 13% | 6% |
| Kings | 530 | 526 | 835 | 3% | 0% | 10% | 5% |
| Madera | 694 | 473 | 1,144 | 4% | -7% | 19% | 5% |
| Merced | 1,087 | 960 | 2,489 | 9% | -2% | 21% | 9% |
| San Joaquin | 2,545 | 3,170 | 6,727 | 25% | 4% | 16% | 10% |
| Stanislaus | 1,835 | 1,997 | 3,884 | 14% | 2% | 14% | 8% |
| Tulare | 1,539 | 1,387 | 1,993 | 7% | -2% | 8% | 3% |

Source: Applied Development Economics, based on Construction Industry Research Board

TABLE 3
Multi-Family Residential Building Permit Trends: San Joaquin Valley, 1993-2003

| ----- MFU Building permits ----- | | | | | | | |
|----------------------------------|--------|--------|--------|-----------------------|------------------------------|------------------------------|------------------------------|
| | 1993 | 1998 | 2003 | Distribution, 2003 | Annual Per. Chng 93-98 | Annual Per. Chng 98-03 | Annual Per. Chng 93-03 |
| California | 14,755 | 31,409 | 56,920 | | 16% | 13% | 14% |
| SJV Region | 1,309 | 1,403 | 3,699 | 6% | 1% | 21% | 11% |
| Fresno | 404 | 292 | 1,520 | 41% | -6% | 39% | 14% |
| Kern | 314 | 428 | 583 | 16% | 6% | 6% | 6% |
| Kings | 13 | 231 | 143 | 4% | 78% | -9% | 27% |
| Madera | 105 | 160 | 90 | 2% | 9% | -11% | -2% |
| Merced | 20 | 72 | 457 | 12% | 29% | 45% | 37% |
| San Joaquin | 83 | 59 | 225 | 6% | -7% | 31% | 10% |
| Stanislaus | 148 | 93 | 284 | 8% | -9% | 25% | 7% |
| Tulare | 222 | 68 | 397 | 11% | -21% | 42% | 6% |

Source: Applied Development Economics, based on Construction Industry Research Board

While the value of single-family unit building permits in the Central Valley is lower by almost \$40,000 than the value of single family building permits for the state as a whole, it is worth noting that between 1998 and 2003 average values rose

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faster in the region as compared to the state (see Table 4). Using average construction cost figures adjusted for regional and historical variations, local officials estimate the value of single-family, multi-family and commercial and industrial building permits for reasons related to calculating fees and maintaining departmental budgets. The actual price of housing on the market is typically higher than the estimated value of the building permit, though changes in the value of building permits are a good indication as to the trajectory of change in the actual housing market.

TABLE 4
Average Value of Single-Family Unit Building Permit, San Joaquin Valley

| | ----- Average Value ----- | | | Annual Per. Chng 93-98 | Annual Per. Chng 98-03 | Annual Per. Chng 93-03 |
|-------------|---------------------------|-----------|-----------|------------------------------|------------------------------|------------------------------|
| | 1993 | 1998 | 2003 | | | |
| California | \$183,559 | \$218,055 | \$217,271 | 4% | 0% | 2% |
| SJV Region | \$130,879 | \$141,956 | \$170,604 | 2% | 4% | 3% |
| Fresno | \$135,736 | \$150,044 | \$183,122 | 2% | 4% | 3% |
| Kern | \$130,191 | \$130,167 | \$149,816 | 0% | 3% | 1% |
| Kings | \$141,740 | \$136,190 | \$119,485 | -1% | -3% | -2% |
| Madera | \$100,791 | \$102,214 | \$150,562 | 0% | 8% | 4% |
| Merced | \$135,439 | \$140,674 | \$153,139 | 1% | 2% | 1% |
| San Joaquin | \$143,809 | \$161,303 | \$197,209 | 2% | 4% | 3% |
| Stanislaus | \$119,981 | \$143,309 | \$176,566 | 4% | 4% | 4% |
| Tulare | \$118,658 | \$122,141 | \$153,456 | 1% | 5% | 3% |

Source: Applied Development Economics, based on Construction Industry Research Board

Table 5 below identifies the median price for for-sale owner-occupied housing in the Central Valley. The data comes from Dataquick. In the last two years, the median selling price of homes sold on the market has increased substantially. Dataquick's median housing price data cover transactions involving newly built homes, reselling of older homes, and condominiums and townhouses. At almost \$300,000 the median price of a home in Madera County is almost twice what it was in July 2003.

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TABLE 5
Median Home Sale Prices: San Joaquin Valley, 2003-2005 (\$2005)

| | July 2003 | July 2004 | July 2005 | 03-04 | 04-05 |
|--------------------|-----------|-----------|-----------|-------|-------|
| Fresno County | \$171,220 | \$220,955 | \$265,000 | 29% | 20% |
| Kern County | \$136,353 | \$176,041 | \$236,500 | 29% | 34% |
| Madera County | \$151,811 | \$242,638 | \$299,500 | 60% | 23% |
| Merced County | \$207,151 | \$242,638 | \$335,000 | 17% | 38% |
| San Joaquin County | \$247,295 | \$320,075 | \$403,000 | 29% | 26% |
| Stanislaus County | \$245,165 | \$278,775 | \$360,000 | 14% | 29% |
| Tulare County | \$131,494 | \$159,005 | \$215,500 | 21% | 36% |
| | \$184,356 | \$234,304 | \$302,071 | 27% | 29% |

Source: Applied Development Economics, based on Dataquick

REGIONAL ECONOMIC TRENDS

The influx of people moving into the region in search of homes that are more affordable than homes in the San Francisco Bay Area affects more than the housing market. The affect of more people in the San Joaquin Valley region can also be seen in the changing economic profile of the region.

Economic development practitioners and planners have traditionally divided economies into two broad industrial categories—the economic base and local support industries. Economic base industries are the drivers of local and regional economies in that these industries draw income into a local economy by selling products outside of the local economy, much like the export industries of a national economy. Accrued earnings then circulate throughout the local area in the form of wages and salaries, investments, purchases of fixed assets, and goods and services, generating more jobs and wealth.

The economic base is typically comprised of industries within the manufacturing, minerals-resource extraction, and agricultural sectors. There are also the “local support industries” such as retail or service sectors, the progress of which is a function of the economic base and demographic changes, and more so the latter than the former. As population increases in a given area, demand for services—such as realtors, teachers, and healthcare—increases, as does

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demand for basic retail items like groceries, gas for commuting, or clothing at the local apparel shops.

Agriculture is the economic base of the San Joaquin Valley region by virtue of the amount of goods this sector produces and exports throughout the nation and the globe. Fourteen percent of all workers in the region are employed by industries within agriculture, as Table 2 shows. However, in 1998 the proportion of workers in agriculture was 18 percent. In fact, over the five-year period between 1998 and 2003, employment in agriculture declined by three percent per year, or by 15 percent over five years.

Between 1998 and 2003, local support industries gained in prominence within the San Joaquin Valley region. Service-rendering industries employed the most workers as a proportion of total employment in the region. As Table 2 shows, excluding wholesale, retail and transportation, service-rendering industries comprise the largest employment sector in the region, at 647,100 or 53 percent of all jobs. With retail, transportation and wholesale, services accounts for slightly over 70 percent of all jobs. In 1998, service-rendering industries represented 50 percent of all jobs, and when including retail, wholesale and transportation in the mix, 67 percent.

Increases in employment in service-rendering industries are consistent with regional population growth. In the region, local support industries of construction, education and health, financial activities, and government increased annually by six percent, four percent, three percent and three percent respectively between 1998 and 2003.

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TABLE 6
Employment Profile Of The San Joaquin Valley Region 1998 – 2003

| MAJOR SECTORS | San Joaquin Valley Region Employment 1998 | San Joaquin Valley Region Employment 2003 | San Joaquin Valley Region Employment Distribution, 2003 | Annual Percent Change 1998 to 2003 | California Employment Distribution, 2003 | Annual Percent Change 1998 to 2003 |
|--------------------------------------|---|--|--|---|---|---|
| Agriculture | 204,200 | 174,900 | 14% | -3% | 3% | -2% |
| Resources, Mining and Construction | 57,400 | 78,100 | 6% | 6% | 5% | 5% |
| Manufacturing | 114,300 | 110,300 | 9% | -1% | 10% | -4% |
| Wholesale | 34,400 | 39,000 | 3% | 3% | 4% | 1% |
| Retail | 121,400 | 133,200 | 11% | 2% | 11% | 2% |
| Transportation/Warehousing/Utilities | 37,600 | 45,700 | 4% | 4% | 3% | -1% |
| Information | 15,000 | 14,200 | 1% | -1% | 3% | -0.5% |
| Financial Activities | 40,400 | 46,600 | 4% | 3% | 6% | 3% |
| Professional and Business Services | 88,000 | 95,100 | 8% | 2% | 14% | 1% |
| Educational and Health Services | 101,500 | 122,200 | 10% | 4% | 10% | 3% |
| Leisure, Hospitality and Other Srvcs | 112,500 | 116,400 | 9% | 1% | 13% | 2% |
| Government | 221,200 | 252,600 | 21% | 3% | 16% | 2% |
| Total Employment | 1,147,900 | 1,228,300 | 100% | 1% | 100% | 1% |

Source: Applied Development Economics, based on data from California Employment Development Department LMID

The emergence of local support industries in the San Joaquin Valley region mirrors and leads statewide trends, as Table 6 shows. In the region, construction, health-education, and government increased annually by six percent, four percent and three percent, whereas, statewide, these industries grew by five percent, three percent and two percent per year between 1998 and 2003. In short, while agriculture remains the leading edge of the economy, the San Joaquin Valley region's economy has become more diverse, with the growth occurring within population-driven local support industries rather than the export-focused economic base industries of manufacturing and agriculture.

5.2 DESCRIPTION OF AFFECTED INDUSTRIES

The analysis below examines trends of industries that will be likely affected by Draft Rules 9510 and 3180. According to the rule, developers of applicable development projects will have to pay a fee to reduce emissions related to the project that are not reduced on-site. The analysis below seeks to understand the possible impact of the fee on the economics of a development project, particularly with respect to project profitability and with respect to impacts on the final user,

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which, in the case of housing, is the homebuyer or renter. The report takes into consideration existing fees that are already in place, meaning that the analysis is on the incremental impact of the new fee on top of existing fees.

The following section reviews residential and commercial-industrial trends in certain number of cities in the eight-county region. The report focuses on 27 cities in the region. Table 7 below organizes the 27 cities into different typologies. The consultant obtained information regarding existing fees on residential and commercial development from many of these jurisdictions. In addition, the report references a report issued by State of California's Housing and Community Development Department, called "Pay to Play." This report also tracks residential development fees for many cities in the Central Valley.

TABLE 7
Select Central Valley Cities By Type

| Type | Cities |
|-----------------------------|---|
| Large Urban | Fresno, Bakersfield |
| Bay Area Commuter Shed | Stockton, Modesto, Manteca, Lodi, Tracy |
| Medium | Visalia, Clovis, Merced, Turlock, Hanford, Porterville, Tulare |
| Small/Med Bedroom Community | Ceres, Sanger, Atwater, Selma, Linden |
| Small Rural/Farming | Mendota, Wasco, Firebaugh, Avenal, Taft, Orange Cove, Oakhurst, Shafter |

Source: San Joaquin Valley Unified Air Pollution Control District

HOUSING TRENDS IN SELECT CITIES

Table 8 below identifies the population for the 27 cities that are the focus of this analysis. These cities consist of over 2 million residents, or 55 percent of all people in the eight-county San Joaquin Valley region. Between 1998 and 2003, population in these cities grew by three percent annually, which is consistent with annual population growth rates for the region as a whole (see Table 1).

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TABLE 8
Population Trends of Select Cities in the San Joaquin Valley Region, 1993-2003

| | City | County | ----- Population ----- | | | | |
|------------------------------|-------------|----------------|------------------------|------------------|------------------|-----------|-----------|
| | | | 1993 | 1998 | 2003 | 1993-1998 | 1998-2003 |
| Large Urban | Bakersfield | Kern | 192,351 | 220,771 | 268,914 | 3% | 4% |
| | Fresno | Fresno | 385,914 | 409,070 | 450,614 | 1% | 2% |
| | | | 578,265 | 629,841 | 719,528 | 2% | 3% |
| Bay Area Commuter Shed | Lodi | San Joaquin | 52,936 | 55,844 | 60,317 | 1% | 2% |
| | Manteca | San Joaquin | 42,833 | 47,256 | 57,485 | 2% | 4% |
| | Modesto | Stanislaus | 176,241 | 182,929 | 203,498 | 1% | 2% |
| | Stockton | San Joaquin | 222,992 | 241,777 | 262,553 | 2% | 2% |
| | Tracy | San Joaquin | 39,913 | 47,687 | 69,987 | 4% | 8% |
| | | 534,915 | 575,493 | 653,840 | 1% | 3% | |
| Medium | Clovis | Fresno | 57,036 | 67,291 | 76,545 | 3% | 3% |
| | Hanford | Kings | 33,892 | 39,012 | 44,833 | 3% | 3% |
| | Merced | Merced | 59,270 | 61,705 | 68,155 | 1% | 2% |
| | Porterville | Tulare | 32,310 | 36,286 | 42,181 | 2% | 3% |
| | Tulare | Tulare | 37,342 | 40,848 | 46,538 | 2% | 3% |
| | Turlock | Stanislaus | 46,481 | 50,958 | 62,256 | 2% | 4% |
| | Visalia | Tulare | 84,725 | 93,856 | 99,460 | 2% | 1% |
| | | 351,056 | 389,956 | 439,968 | 2% | 2% | |
| Small/Med Bedroom Community | Atwater | Merced | 22,528 | 22,944 | 26,216 | 0.4% | 3% |
| | Ceres | Stanislaus | 29,331 | 32,289 | 36,449 | 2% | 2% |
| | Linden | San Joaquin | 1,090 | 1,068 | 1,046 | -0.4% | -0.4% |
| | Mendota | Fresno | 7,287 | 7,521 | 8,203 | 1% | 2% |
| | Sanger | Fresno | 17,927 | 18,557 | 19,993 | 0.7% | 2% |
| | Selma | Fresno | 16,462 | 17,937 | 21,003 | 2% | 3% |
| | | 94,625 | 100,316 | 112,910 | 1% | 2% | |
| Small Rural/Farming | Avenal | Kings | 11,459 | 12,178 | 15,428 | 1% | 5% |
| | Firebaugh | Fresno | 5,031 | 5,565 | 6,201 | 2% | 2% |
| | Oakhurst | Madera | 2,570 | 2,519 | 2,833 | 0% | 2% |
| | Orange Cove | Fresno | 5,709 | 7,095 | 8,782 | 4% | 4% |
| | Shafter | Kern | 10,771 | 11,182 | 13,443 | 0.8% | 4% |
| | Taft | Kern | 6,508 | 7,375 | 9,027 | 3% | 4% |
| | Wasco | Kern | 17,212 | 20,083 | 22,400 | 3% | 2% |
| | | 59,260 | 65,996 | 78,114 | 2% | 3% | |
| San Joaquin Valley Air Basin | | | 1,618,121 | 1,761,601 | 2,004,360 | 2% | 3% |

Source: Applied Development Economics, based on California Department of Finance and US Census

Table 9 identifies the number of single-family dwelling unit building permits issued by the 27 cities. As the table shows, the cities issued 17,641 single-family building permits in 2003, which represents almost two-thirds of all single-family building permits issued in the eight-county region as a whole. Table 10 identifies the number of multi-family dwelling units issued by the 27 cities. The amount of these permits represents almost 80 percent of all multi-family building permits issued in the region as a whole in 2003. For these reasons, the cities are representative of the larger region.

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Appendix F: Socioeconomic Analysis for Rules 9510 and 3180

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TABLE 9 Single-Family Dwelling Units Building Construction Permits, San Joaquin Valley Region 2000-2003

| | 2000 | | 2001 | | 2002 | | 2003 | | 2000 - 2003 | |
|--------------------------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|--------------------------|-----------------------------|
| | Nos. of Permits | Avg. Value | Nos. of Permits | Avg. Value | Nos. of Permits | Avg. Value | Nos. of Permits | Avg. Value | Annual Change in Permits | Annual Change in Avg. Value |
| 01 Large Urban | 3,381 | \$132,038 | 4019 | \$132,089 | 4083 | \$137,988 | 5162 | \$152,257 | 15% | 5% |
| 02 Bay Area Commuter Shed | 6,223 | \$161,757 | 4699 | \$172,165 | 6084 | \$172,996 | 6208 | \$176,852 | -0.1% | 3% |
| 03 Medium | 2,705 | \$125,488 | 3585 | \$141,040 | 4178 | \$153,806 | 5218 | \$156,243 | 24% | 8% |
| 04 Small/Med Bedroom Community | 365 | \$105,702 | 542 | \$112,427 | 651 | \$118,285 | 801 | \$128,044 | 30% | 7% |
| 05 Small Rural/Farming | 190 | \$83,956 | 262 | \$87,732 | 314 | \$85,667 | 252 | \$98,046 | 10% | 5% |
| | 12,864 | \$143,580 | 13107 | \$147,205 | 15310 | \$154,305 | 17641 | \$160,217 | 11% | 4% |

TABLE 10 Multi-Family Dwelling Units Building Construction Permits, San Joaquin Valley Region 2000-2003

| | 2000 | | 2001 | | 2002 | | 2003 | | 2000 - 2003 | |
|--------------------------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|--------------------------|-----------------------------|
| | Nos. of Permits | Avg. Value | Nos. of Permits | Avg. Value | Nos. of Permits | Avg. Value | Nos. of Permits | Avg. Value | Annual Change in Permits | Annual Change in Avg. Value |
| 01 Large Urban | 177 | \$67,079 | 182 | \$73,639 | 454 | \$61,259 | 1150 | \$67,333 | 87% | 0% |
| 02 Bay Area Commuter Shed | 84 | \$56,183 | 368 | \$59,905 | 514 | \$65,380 | 275 | \$69,075 | 48.5% | 7% |
| 03 Medium | 206 | \$63,512 | 27 | \$64,680 | 155 | \$76,627 | 1119 | \$77,362 | 76% | 7% |
| 04 Small/Med Bedroom Community | 51 | \$48,135 | 7 | \$38,617 | 71 | 0 | 162 | \$22,627 | 47% | -22% |
| 05 Small Rural/Farming | 83 | \$40,584 | 135 | \$36,997 | 4 | \$48,978 | 194 | \$56,369 | 33% | 12% |
| | 601 | \$59,067 | 719 | \$59,052 | 1,198 | \$61,344 | 2900 | \$68,137 | 69% | 5% |

Source: Applied Development Economics, based on Construction Industry Research Board

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Table 11 identifies the average selling price of a new 3 to 4 bedroom home in the select cities. As expected, housing prices in the Bay Area Commuter Shed tend to be higher, in large part because of the close proximity to the San Francisco Bay Area housing market. Prices there are on average \$402,644 per 3-4 bedroom unit, versus almost \$250,000 for new units in Small/rural farming communities such as Avenal (Kings County) or Orange Cove (Fresno County).

**TABLE 11 Average Selling Price of New Single-Family and Multi-Family Housing
San Joaquin Valley Region 2005**

| | ----- Single-Family Units ----- | | | | ----- Multi-Family Units ----- | | |
|--------------------------------|---------------------------------|---------------------------|---------------------------|-------------------|--------------------------------|---------------------|-------------------|
| | Avg 3-4 BR SFU Values | Avg 3-4 BR SFU Size | Lot Size 3-4 BR SFU | Value Per SQFT | Average MFU Values | Average MFU Size | Value Per SQFT |
| 01 Large Urban | \$338,047 | 1,893 | 5,407 | \$179 | \$146,914 | 1,071 | \$137 |
| 02 Bay Area Commuter Shed | \$402,664 | 2,112 | 6,034 | \$191 | \$180,603 | 1,071 | \$169 |
| 03 Medium | \$296,428 | 1,779 | 5,083 | \$167 | \$137,357 | 1,071 | \$128 |
| 04 Small/Med Bedroom Community | \$314,030 | 1,883 | 5,379 | \$167 | \$136,062 | 1,071 | \$127 |
| 05 Small Rural/Farming | \$247,836 | 1,644 | 4,697 | \$151 | \$125,482 | 1,071 | \$117 |
| | \$323,966 | 1,862 | 5,320 | \$171 | \$145,283 | 1,071 | \$136 |

Source: Applied Development Economics, based on Realtor.com, Dataquick, and California Housing and Community Development, "Pay to Play"

Table 12 identifies existing fees on residential development in the 27 cities. As the table shows, fees amount to approximately five to six percent of values for single- and multi-family units. Data for fees comes from a variety of sources, including local jurisdictions and the California Department of Housing and Community Development (HCD), which issued a detailed report on residential developer fees of many cities throughout California. In using the HCD figures, this report adjusted the amount for general inflation and housing price inflation.

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TABLE 12 Existing Fees On A Per Unit Basis

| | Existing Fees On 3-4 BR SFU Unit | All Fees As Percent of Value | Existing Fees On MFU Unit | All Fees As Percent of Value |
|--------------------------------|-------------------------------------|------------------------------------|------------------------------|------------------------------------|
| 01 Large Urban | \$17,796 | 5% | \$6,149 | 4% |
| 02 Bay Area Commuter Shed | \$24,576 | 6% | \$8,093 | 4% |
| 03 Medium | \$19,266 | 6% | \$7,355 | 5% |
| 04 Small/Med Bedroom Community | \$21,162 | 7% | \$11,883 | 9% |
| 05 Small Rural/Farming | \$12,689 | 5% | \$5,969 | 5% |
| | \$18,552 | 6% | \$7,890 | 5% |

Source: Applied Development Economics, based on Realtor.com, Dataquick, and California Housing and Community Development, "Pay to Play"

Tables 13 and 14 compare existing fees against other development costs, including the price of land, to estimate profit and a profit rate. The profit rates calculated below are similar to what would be found in corporate reports of national homebuilders, particularly Centex Homes, Kaufman and Broad, Lennar, and Pulte Homes, whose combined average profit rate is approximately eight percent.²

TABLE 13 Home Prices, Construction Costs, Fees and Profit: Single Family Housing

| Community Types | Avg 3-4 BR SFU Values | Land Value Per 3-4 BR SFU Unit | All Fees Per 3-4 BR SFU Unit | Site Development Cost Per 3-4 BR Unit | Building Construction Costs Per 3-4 BR Unit | TOTAL COSTS | Profit per Unit | Profit as % Value |
|----------------------------------|-----------------------------|--|---------------------------------------|--|--|------------------|--------------------|----------------------|
| Large Urban | \$338,047 | \$77,124 | \$21,759 | \$40,233 | \$167,600 | \$306,716 | \$31,330 | 9% |
| Bay Area Commuter Shed | \$402,664 | \$93,015 | \$26,957 | \$46,410 | \$200,828 | \$367,210 | \$35,454 | 9% |
| Medium-Sized Cities | \$296,428 | \$50,069 | \$19,266 | \$37,346 | \$159,484 | \$266,165 | \$30,263 | 10% |
| Small\Medium Bedroom Communities | \$314,030 | \$74,468 | \$21,162 | \$34,570 | \$157,136 | \$287,336 | \$26,694 | 9% |
| Small Rural\Farming Communities | \$247,836 | \$47,847 | \$12,689 | \$28,825 | \$131,024 | \$220,386 | \$27,450 | 11% |
| | \$323,966 | \$68,505 | \$20,367 | \$38,373 | \$166,739 | \$293,983 | \$29,982 | 9% |

² www.sec.gov see Form 10-K

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TABLE 14 Home Prices, Construction Costs, Fees and Profit: Multi-Family Housing

| Community Types | Avg MFU Values | Land Value Per MFU Unit | All Fees Per MFU Unit | Site Development Cost Per MFU Unit | Building Construction Costs Per MFU Unit | TOTAL COSTS | Profit per Unit | Profit as % Value |
|----------------------------------|----------------|-------------------------|-----------------------|------------------------------------|--|------------------|-----------------|-------------------|
| Large Urban | \$146,914 | \$12,999 | \$6,149 | \$20,324 | \$81,295 | \$120,767 | \$26,147 | 18% |
| Bay Area Commuter Shed | \$180,603 | \$14,794 | \$8,093 | \$23,116 | \$92,464 | \$138,467 | \$42,136 | 23% |
| Medium-Sized Cities | \$137,357 | \$10,831 | \$7,355 | \$19,519 | \$80,260 | \$117,964 | \$19,393 | 14% |
| Small\Medium Bedroom Communities | \$136,062 | \$12,868 | \$11,883 | \$19,435 | \$80,926 | \$125,113 | \$10,949 | 8% |
| Small Rural\Farming Communities | \$125,482 | \$10,955 | \$5,969 | \$17,085 | \$77,658 | \$111,666 | \$13,815 | 11% |
| | \$145,283 | \$12,489 | \$7,890 | \$20,140 | \$83,179 | \$123,698 | \$21,585 | 15% |

Commercial-Industrial Trends

Table 15 below estimates the value, costs and profit associated with developing one acre of commercial, industrial and office development. Information for the table comes from a variety of sources, including Realtor.com and Loopnet.com for current price of new industrial and commercial projects in the Central Valley. When estimating cost of construction, we used “Commercial Square Foot Building Costs: 2004”, by Deloitte Saylor Publication, as well as per square foot cost of construction estimates used by many cities when estimating the value of a project. In determining the amount of fees on a commercial-industrial development, we asked building officials in five cities to calculate the amount of fees that would be generated by a 10,000 square feet light industrial development on a 2.5-acre parcel and by a 10,000 square feet retail project on a similarly-sized piece of land. We converted the fees into a per acre amount. The per acre values in the table below were calculated after having calculated the development costs, based on a profit of ten percent, and these values were checked against what we found on Loopnet.com and Realtor.com. The 10 percent profit is based on a review of Deloitte-Saylor’s “Commercial Square Foot Building Costs: 2004.” It is also based on a review of corporate reports of Catellus (industrial developer) and ProLogis (warehouse

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distribution developer). It should be noted that while data in the residential section above represents trends in 27 cities in the Central Valley, information in this section is for five cities that fit the different city types.

As Table 15 shows, existing fees on commercial and office developments are significantly higher than on industrial projects. This is so because of the traffic generated by retail and office is much higher than traffic generated by industrial users, which then requires a corresponding amount of reduction via fees.

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TABLE 15 Commercial-Industrial Trends: San Joaquin Valley Region, 2005

| | | Avg. Value Per Acre (Land and Building) | Unimproved Land Value Per Acre | Fees Per Acre | Site Development Cost Per Acre | Building Construction Costs Per Acre | TOTAL Costs per Acre | Est. Profit Per Acre | Profit As percent of Value |
|---------------------------------|------------|--|--------------------------------------|------------------|--------------------------------------|--|----------------------------|-------------------------|----------------------------------|
| Large Urban | Industrial | \$1,594,742 | \$157,518 | \$14,726 | \$60,768 | \$1,202,256 | \$1,435,268 | \$159,474 | 10% |
| | Commercial | \$1,910,201 | \$546,032 | \$35,306 | \$45,576 | \$1,092,267 | \$1,719,181 | \$191,020 | 10% |
| | Office | \$2,828,107 | \$546,032 | \$35,306 | \$45,576 | \$1,918,382 | \$2,545,296 | \$282,811 | 10% |
| Bay Area Commuter Shed | Industrial | \$1,679,815 | \$200,905 | \$47,904 | \$60,768 | \$1,202,256 | \$1,511,833 | \$167,981 | 10% |
| | Commercial | \$2,011,879 | \$522,536 | \$150,312 | \$45,576 | \$1,092,267 | \$1,810,692 | \$201,188 | 10% |
| | Office | \$2,929,785 | \$522,536 | \$150,312 | \$45,576 | \$1,918,382 | \$2,636,807 | \$292,979 | 10% |
| Medium-sized Cities | Industrial | \$1,546,952 | \$100,000 | \$29,233 | \$60,768 | \$1,202,256 | \$1,392,257 | \$154,695 | 10% |
| | Commercial | \$1,748,583 | \$303,178 | \$132,704 | \$45,576 | \$1,092,267 | \$1,573,724 | \$174,858 | 10% |
| | Office | \$2,666,489 | \$303,178 | \$132,704 | \$45,576 | \$1,918,382 | \$2,399,840 | \$266,649 | 10% |
| Small/Medium Bedroom Community | Industrial | \$1,631,301 | \$130,700 | \$74,447 | \$60,768 | \$1,202,256 | \$1,468,171 | \$163,130 | 10% |
| | Commercial | \$1,668,338 | \$280,576 | \$83,085 | \$45,576 | \$1,092,267 | \$1,501,504 | \$166,834 | 10% |
| | Office | \$2,586,244 | \$280,576 | \$83,085 | \$45,576 | \$1,918,382 | \$2,327,619 | \$258,624 | 10% |
| Small Rural\Farming Communities | Industrial | \$1,877,846 | \$350,642 | \$76,395 | \$60,768 | \$1,202,256 | \$1,690,061 | \$187,785 | 10% |
| | Commercial | \$1,653,475 | \$217,800 | \$136,292 | \$41,769 | \$1,092,267 | \$1,488,127 | \$165,347 | 10% |
| | Office | \$2,567,106 | \$217,800 | \$132,444 | \$41,769 | \$1,918,382 | \$2,310,395 | \$256,711 | 10% |

6. SOCIOECONOMIC IMPACTS

This section of the report compares the economic characteristics of affected industries against the possible Rule 9150 and 3180 air quality fees. The first part of this section discusses annual compliance cost. Section 6.2 discusses general business responses to compliance costs. Section 6.3 analyzes the socioeconomic impacts of Draft Rules 9510 and 3180.

6.1 NEW RULE 9510 AND 3180 FEE

Tables 16 through 18 identify the worst-case fees associated with New Rules 9510 and 3180. To reduce emissions of NO_x and PM₁₀, Draft Rule 9510 would apply to development projects that will seek to gain a final discretionary approval for projects that, upon full build-out will include any one of the following: 50 residential units, 2,000 square feet of commercial space, 25,000 square feet of industrial space, 20,000 square feet of medical office space, 39,000 square feet of general office space, 9,000 square feet of educational space, 10,000 square feet of government space, 20,000 square feet of recreational space, or 9,000 square feet of unidentified space. Certain transportation projects, transit projects, reconstruction projects that result from a natural disaster, and development projects whose primary source of emissions are subject to District Rule 2201 or 2010 would be exempt from this Draft Rule. Also, development projects that have a mitigated baseline below two tons per year for each pollutant would be exempt from the emission reduction requirements of the rule.

It is important to note that any fee identified below are the estimated maximum fee in the worst case scenario for a typical residential, commercial and or industrial development, with the understanding that the actual fee will vary with the particulars of any project. Any fee below is presented for the purposes of analyzing potential impacts given costs associated with reducing quantifiable emissions resulting from what constitutes typical applicable developments. The fee amounts

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identified include all off-site emission reduction fees and all administrative fees.

In the worst case, the fee that a typical residential development will pay is estimated at \$784 per unit starting in 2006, climb to \$1,268 the following year, and above \$1,772 in the years starting in 2008. The fee could be lower depending on the strategies that a developer employs to reduce emissions.

TABLE 16
Worst Case Estimate:
Fee That Corresponds
to A Typical Residential
Development

| Year | Per Unit |
|------|------------|
| 2006 | \$784.12 |
| 2007 | \$1,268.09 |
| 2008 | \$1,772 |

TABLE 17
Worst Case Estimate: Fee That Corresponds To The
Typical Industrial Development

| 2006 | | |
|------------------------------------|---------------|-------------------------|
| Use | Average Acres | Corresponding Fee Total |
| Heavy Industrial | 300.0 | \$357,394.75 |
| Light Industrial | 75.0 | \$240,508.75 |
| Warehouses | 25.0 | \$83,645.68 |
| Misc. Industrial (industrial park) | 39.0 | \$143,797.05 |
| 2008 | | |
| Heavy Industrial | 300.0 | \$747,626 |
| Light Industrial | 75.0 | \$518,237 |
| Warehouses | 25.0 | \$179,956 |
| Misc. Industrial | 39.0 | \$309,965 |

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TABLE 18
Worst Case Estimate: Fee That Corresponds To a Typical Commercial Development

| TYPE OF SHOPPING CENTERS | SIZE RANGE | TYPICAL SIZE (sq ft) | Corresponding Fee Total |
|---------------------------------|----------------------|-------------------------|----------------------------|
| 2006 | | | |
| convenience shopping center | up to 30,000 | 20,000 | \$24,524.94 |
| neighborhood shopping center | 30,000 to 100,000 | 50,000 | \$61,599.54 |
| community shopping center | 100,000 to 450,000 | 150,000 | \$184,647.45 |
| super community shopping center | 200,000 to 300,000 | 250,000 | \$403,546.91 |
| regional shopping center | 300,000 to 700,000 | 450,000 | \$626,791.07 |
| superregional shopping center | 500,000 to 2 million | 900,000 | \$1,253,582.15 |
| 2008 | | | |
| convenience shopping center | up to 30,000 | 20,000 | \$52,971.24 |
| neighborhood shopping center | 30,000 to 100,000 | 50,000 | \$131,689.99 |
| community shopping center | 100,000 to 450,000 | 150,000 | \$397,483.34 |
| super community shopping center | 200,000 to 300,000 | 250,000 | \$872,322.57 |
| regional shopping center | 300,000 to 700,000 | 450,000 | \$1,353,824.12 |
| superregional shopping center | 500,000 to 2 million | 900,000 | \$2,708,116.82 |

6.2 BUSINESS RESPONSES TO PROPOSED FEES

Industries impacted by the proposed new rule may respond in a variety of ways when faced with new regulatory costs. These responses may range from simply absorbing the costs and accepting a lower rate of return, to shutting down the affected business operation altogether and, where practical, shift from lower-value to higher-value product. Affected sources may also seek to renew efforts to increase productivity and reduce costs elsewhere in their operation in order to recoup the regulatory costs and maintain profit levels. Based on the discussion during a focus group meeting held in July, 2005, industries impacted by the new rules will in all likelihood seek to pass the costs on to homebuyers and renters in the case of residential fees, to the extent that the market allows.

6.3 IMPACTS ON AFFECTED INDUSTRIES

This section of the report analyzes revenues and profits of affected industries against anticipated costs associated with

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implementation of the draft rule. The analysis first examines impacts on builders of single-family homes. Then, it analyzes impacts on builders of multi-family units. In addition to impacts on homebuilders, the section analyzes how changes in price affect prospective homebuyers and renters. Finally, the section below examines impacts on non-residential developments, particularly commercial retail, industrial, and office projects.

Single-Family Dwelling Units

Tables 19 through 21 compare the fee that a typical residential development would pay in the year 2006, 2007 and 2008, or \$784, \$1,268 and \$1,772, against estimated profits. In calculating the impacts of the fee, we have included the additional \$400 administrative cost associated with Rule 3180. As Tables 19, 20 and 21 show, the fees do not significantly impact affected builders of single-family homes in a negative manner. The fee amounts to approximately three, four and six percent of estimated net profits, meaning that affected stakeholders would still garner between 94 and 97 percent of their original profit. Moreover, the impact is below the ten percent significance threshold employed in this analysis.

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TABLE 19 Impact Analysis of 2006 Air Quality Fee on Typical Single-Family Development: \$784 per unit

| Community Types | (1) Profit as % Value | (2) Air Quality Fee on New Res. Cons. @ \$.421/sqft | (3) Impact on Profit | (4) Impact Significance | (5) Modified Profit as Percent of Value | (6) Initial Home Value @ 5.85%, 30 yrs and 20% down | (7) Home Value @ 5.85%, 30 yrs and 20% down: With Air Fee | (8) Initial Home Value @ 6.85%, 30 yrs and 20% down | (9) Home Value @ 6.85%, 30 yrs and 20% down: With Air Fee | (10) Affect of Fee | (11) Change in 1% Interest Rate |
|----------------------------------|-----------------------------|---|----------------------------|-------------------------------|---|---|---|---|---|--------------------------|---|
| Large Urban | 11.5% | \$797 | -2.1% | <significant | 11.3% | \$93,624 | \$93,846 | \$101,737 | \$101,979 | \$223 | \$8,113 |
| Bay Area Commuter Shed | 10.8% | \$889 | -2.1% | <significant | 10.6% | \$111,520 | \$111,768 | \$121,184 | \$121,454 | \$248 | \$9,664 |
| Medium-Sized Cities | 8.3% | \$749 | -3.1% | <significant | 8.0% | \$82,097 | \$82,307 | \$89,212 | \$89,439 | \$209 | \$7,114 |
| Small\Medium Bedroom Communities | 8.5% | \$793 | -3.0% | <significant | 8.2% | \$86,972 | \$87,194 | \$94,509 | \$94,750 | \$221 | \$7,537 |
| Small Rural\Farming Communities | 10.6% | \$692 | -2.7% | <significant | 10.3% | \$68,639 | \$68,833 | \$74,587 | \$74,798 | \$193 | \$5,948 |
| All Select Cities Average | 9.3% | \$784 | -2.6% | <significant | 9.0% | \$89,724 | \$89,943 | \$97,499 | \$97,737 | \$219 | \$7,775 |

TABLE 20 Impact Analysis of 2007 Air Quality Fee on Typical Single-Family Development: \$1,268 per unit

| Community Types | (1) Profit as % Value | (2) Air Quality Fee on New Res. Cons. @ \$.681/sqft | (3) Profit as % Value | (4) Impact Significance | (5) Modified Profit as Percent of Value | (6) Initial Home Value @ 5.85%, 30 yrs and 20% down | (7) Home Value @ 5.85%, 30 yrs and 20% down: With Air Fee | (8) Initial Home Value @ 6.85%, 30 yrs and 20% down | (9) Home Value @ 6.85%, 30 yrs and 20% down: With Air Fee | (10) Affect of Fee | (11) Change in 1% Interest Rate |
|----------------------------------|-----------------------------|---|-----------------------------|-------------------------------|---|--|---|--|---|--------------------------|---|
| Large Urban | 11.5% | \$1,289 | -3.3% | <significant | 11.2% | \$93,624 | \$93,983 | \$101,737 | \$102,127 | \$359 | \$8,113 |
| Bay Area Commuter Shed | 10.8% | \$1,438 | -3.3% | <significant | 10.5% | \$111,520 | \$111,920 | \$121,184 | \$121,619 | \$400 | \$9,664 |
| Medium-Sized Cities | 8.3% | \$1,212 | -5.0% | <significant | 7.9% | \$82,097 | \$82,435 | \$89,212 | \$89,578 | \$337 | \$7,114 |
| Small\Medium Bedroom Communities | 8.5% | \$1,282 | -4.8% | <significant | 8.1% | \$86,972 | \$87,329 | \$94,509 | \$94,897 | \$357 | \$7,537 |
| Small Rural\Farming Communities | 10.6% | \$1,120 | -4.3% | <significant | 10.2% | \$68,639 | \$68,951 | \$74,587 | \$74,925 | \$312 | \$5,948 |
| All Select Cities Average | 9.3% | \$1,268 | -4.3% | <significant | 8.9% | \$89,724 | \$90,007 | \$97,499 | \$97,883 | \$353 | \$7,775 |

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TABLE 21 Impact Analysis of 2008 Air Quality Fee on Typical Single-Family Development: \$1,772 per unit

| (1) Community Types | (2) Profit as % Value | (3) Air Quality Fee on New Res. Cons. @ \$.952/sqft | (4) Profit as % Value | (5) Impact Significance | (6) Modified Profit as Percent of Value | (7) Home Value @ 5.85%, 30 yrs and 20% down | (8) Home Value @ 6.85%, 30 yrs and 20% down: With Air Fee | (9) Home Value @ 6.85%, 30 yrs and 20% down: With Air Fee | (10) Affect of Fee | (11) Affect of 1% Change in Interest Rate | |
|----------------------------------|-----------------------------|---|-----------------------------|-------------------------------|---|---|---|---|--------------------------|--|---------|
| Large Urban | 11.5% | 1,802 | -4.6 | <significant | 11.0% | \$93,624 | \$94,125 | \$101,737 | \$102,281 | \$501 | \$8,113 |
| Bay Area Commuter Shed | 10.8% | 2,011 | -4.6 | <significant | 10.3% | \$111,520 | \$112,079 | \$121,184 | \$121,791 | \$559 | \$9,664 |
| Medium-Sized Cities | 8.3% | 1,694 | -6.9 | <significant | 7.7% | \$82,097 | \$82,568 | \$89,212 | \$89,723 | \$471 | \$7,114 |
| Small\Medium Bedroom Communities | 8.5% | 1,792 | -6.7 | <significant | 7.9% | \$86,972 | \$87,471 | \$94,509 | \$95,050 | \$498 | \$7,537 |
| Small Rural\Farming Communities | 10.6% | 1,565 | -6.0 | <significant | 10.0% | \$68,639 | \$69,074 | \$74,587 | \$75,060 | \$435 | \$5,948 |
| All Select Cities Average | 9.3% | 1,773 | -5.9 | <significant | 8.7% | \$89,724 | \$90,217 | \$97,499 | \$98,035 | \$493 | \$7,775 |

TABLE 22 Median Home Sale Prices in Small to Medium Communities, 2003-2005

| | | July 2003 | July 2004 | July 2005 | 03-04 Change | 04-05 Change | 03-04 Per Chg | 04-05 Per Chg |
|--------------------------------|----------------------|-----------|-----------|-----------|--------------|--------------|---------------|---------------|
| Medium | Merced (Merced) | \$204,341 | \$226,741 | \$322,500 | \$22,400 | \$95,759 | 11% | 42% |
| | Tulare (Tulare) | \$125,379 | \$161,146 | \$204,000 | \$35,767 | \$42,854 | 29% | 27% |
| | Turlock (Stanislaus) | \$240,088 | \$284,330 | \$369,500 | \$44,242 | \$85,170 | 18% | 30% |
| | Visalia (Tulare) | \$154,723 | \$185,938 | \$270,000 | \$31,215 | \$84,062 | 20% | 45% |
| Small/Medium Bedroom Community | Atwater (Merced) | \$207,009 | \$232,422 | \$324,250 | \$25,413 | \$91,828 | 12% | 40% |
| | Mendota (Fresno) | | \$77,438 | \$120,000 | | \$42,563 | | 55% |
| | Sanger (Fresno) | \$161,659 | \$171,734 | \$276,500 | \$10,075 | \$104,766 | 6% | 61% |
| | Selma (Fresno) | \$123,245 | \$177,158 | \$249,250 | \$53,912 | \$72,092 | 44% | 41% |
| Small Rural/Farming | Oakhurst (Madera) | \$209,143 | \$273,742 | \$306,000 | \$64,599 | \$32,258 | 31% | 12% |
| | Taft (Kern) | \$82,697 | \$77,474 | \$110,000 | -\$5,223 | \$32,526 | -6% | 42% |
| | Wasco (Kern) | \$93,101 | \$103,299 | \$132,000 | \$10,198 | \$28,701 | 11% | 28% |
| | | \$160,139 | \$179,220 | \$244,000 | \$19,082 | \$64,780 | 12% | 36% |

Source: Applied Development Economics, based on Dataquick

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A close review of Tables 19 through 21 reveals that the fees under consideration could potentially impacts different community types in different ways. For Medium-sized communities, Small\medium bedroom communities, and Small rural\farming communities, the impact of the possible fee on profits is slightly higher than impact to home builders operating in the large urban and Bay Area Commuter Shed markets. This is so because prices of new homes are higher in the latter markets. To understand the influence of the \$784, 1,268 or \$1,772 fee on home prices in the Medium-sized cities, Small\medium bedroom communities, and Small rural\farming communities, it is worthwhile to compare the fees against recent changes in home prices in cities in these three community types.

Table 22 above includes recent data from Dataquick. Among other things, it shows that between July 2003 and July 2004 and July 2004 and July 2005, median prices of homes increased by \$19,000 and \$65,000 in specific cities in Medium-sized cities, Small\medium bedroom communities, and Small rural\farming communities. Table 22 includes all homes sold, not just newly constructed three-to-four bedroom homes. While the fee could raise home prices by \$784 to \$1,772, it is apparent that larger market forces are the primary culprit behind the increase in housing prices in these three community types. The fee associated with Draft Rules 9510 and 3180 would amount to, at most, three percent of recent change in housing prices in these three community types (or \$1,772 divided by \$65,000).

Tables 19 through 21 above also include an analysis on how the \$784, \$1,268 or \$1,772 fee would impact potential homebuyers. In other words, we assume that the homebuilder will pass this cost on to homebuyers to the fullest extent possible allowed by the market. As Table 11 above previously showed, the price of a new three-to-four bedroom home in the San Joaquin Valley region is approximately \$324,000. In large urban areas of Bakersfield and Fresno, the average price of a new three-to-four bedroom home is \$338,000, while in the Bay Area Commuter Shed, it is even higher at \$402,700. Housing is more affordable in rural communities such as Avenal, where the

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average price of a new home is \$247,800 (see Table 11 above).

In Column Six of Tables 19 through 21, we estimate the minimum household income required to qualify for conventional financing for new three-to-four bedroom homes in the different market types. We assume that the potential homebuyer is a first-time homebuyer, meaning that there are no proceeds from the sale of a previous home to put towards the purchase of the new home. We assume that the potential homebuyer will have a downpayment equal to 20 percent of the market value of the unit. We also factor in a 5.85 interest rate, monthly bills, homeowners insurance, and property taxes when calculating the minimum household income needed to qualify for a new three-to-four bedroom home in the San Joaquin Valley.

To qualify for financing for a \$324,000 home in the Central Valley, a prospective first-time home buying household would need to earn approximately \$89,724 annually. Columns Seven and Ten to the tables above show the extent to which the different fees raise the minimum qualifying household income. As a result of the \$784, \$1,268 and \$1,772 fees, minimum qualifying incomes for the region as a whole would rise, on average, by \$219, \$353, and \$493 respectively. The \$219 to \$493 amount is less than one percent of the original income needed to qualify for a new three-to-four bedroom home in the Central Valley.

For comparative purposes, Tables 19 through 21 include Columns Eight and Eleven, which show what would happen if interest rates rose from 5.85 percent to 6.85 percent. If this occurred, the minimum qualifying income would rise from \$89,724 to \$97,499, or by \$7,775. In other words, while the fees have the potential to increase the amount of income required to qualify for financing, larger market forces such as interest rates and market-driven price fluctuations play a significantly greater role in determining the income level needed to qualify for a new three-to-four bedroom home.

Multi-Family Dwelling Units

Tables 23 through 25 show the affects of the fees on construction of multi-family dwelling units. Small\medium

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bedroom communities and Small rural\ farming communities are affected negatively more so than the other communities, because the price of multi-family dwelling units elsewhere are higher than in these community types. Columns Six and Seven in each of the tables below estimate the minimum income required to purchase a multi-family unit such as a condominium or townhouse, and the extent to which the impact fee could raise this amount, in the event developers of multi-family units pass costs onto the consumers. The fee could raise the minimum income needed to qualify for financing for the purchase of a condominium or townhouse valued at \$145,300 (see Table 14 above), from \$40,237 to \$40,455 (\$784 fee), \$40,589 (\$1,268 fee) or at most \$40,696 (\$1,772 fee), which represent at most a one percent change. Tables 23 through 25 below show that the fee would only slightly affect rents, in the event units were rented out as opposed to sold.

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TABLE 23 Impact Analysis of 2006 Fee on Typical Multi-Family Housing Development: \$784 per unit

| Community Types | (1) Profit as % Value | (2) Air Quality Fee on New Res. Cons. @ .732/sqft | (3) Impact on Profit | (4) Impact Significance | (5) Modified Profit as Percent of Value | (6) Initial Condo- Townhouse Value @ 5.85%, 30 yrs and 20% down | (7) Condo- Townhouse Value @ 5.85%, 30 yrs and 20% down: With Air Fee | (8) Minimum Rent without Air Fee | (9) Minimum Rent with Air Fee | (10) Qualifying Rental Household without Air Fee | (11) Qualifying Rental Household with Air Fee |
|-----------------------------|--------------------------------|---|----------------------------|-------------------------------|---|--|--|--|--|---|--|
| Large Urban | 17.7% | \$788 | -3.0% | <significant | 17.3% | \$40,689 | \$40,907 | \$1,150 | \$1,157 | \$41,453 | \$41,675 |
| Bay Area Commuter Shed | 23.3% | \$788 | -1.9% | <significant | 22.9% | \$50,019 | \$50,237 | \$1,414 | \$1,420 | \$50,958 | \$51,180 |
| Medium | 14.1% | \$788 | -4.1% | <significant | 13.5% | \$38,042 | \$38,260 | \$1,076 | \$1,082 | \$38,756 | \$38,978 |
| Small/Med Bedroom Community | 8.0% | \$788 | -7.2% | <significant | 7.5% | \$37,683 | \$37,901 | \$1,065 | \$1,072 | \$38,391 | \$38,613 |
| Small Rural/Farming | 11.0% | \$788 | -5.7% | <significant | 10.4% | \$34,753 | \$34,971 | \$983 | \$989 | \$35,405 | \$35,628 |
| All Select Cities Average | 14.9% | \$788 | -3.6% | <significant | 14.3% | \$40,237 | \$40,455 | \$1,138 | \$1,144 | \$40,992 | \$41,215 |

TABLE 24 Impact Analysis of 2007 Fee on Typical Multi-Family Housing Development: \$1,268 per unit

| Community Types | (1) Profit as % Value | (2) Air Quality Fee on New Res. Cons. @ \$1.184/sqft | (3) Impact on Profit | (4) Impact Significance | (5) Modified Profit as Percent of Value | (6) Initial Condo- Townhouse Value @ 5.85%, 30 yrs and 20% down | (7) Condo- Townhouse Value @ 5.85%, 30 yrs and 20% down: With Air Fee | (8) Minimum Rent without Air Fee | (9) Minimum Rent with Air Fee | (10) Qualifying Rental Household without Air Fee | (11) Qualifying Rental Household with Air Fee |
|-----------------------------|--------------------------------|--|----------------------------|-------------------------------|---|---|--|--|--|---|--|
| Large Urban | 17.7% | \$1,268 | -4.9% | <significant | 16.9% | \$40,689 | \$41,041 | \$1,150 | \$1,160 | \$41,453 | \$41,812 |
| Bay Area Commuter Shed | 23.3% | \$1,268 | -3.0% | <significant | 22.6% | \$50,019 | \$50,371 | \$1,414 | \$1,424 | \$50,958 | \$51,317 |
| Medium | 14.1% | \$1,268 | -6.6% | <significant | 13.2% | \$38,042 | \$38,394 | \$1,076 | \$1,086 | \$38,756 | \$39,115 |
| Small/Med Bedroom Community | 8.0% | \$1,268 | -11.6% | significant | 7.1% | \$37,683 | \$38,035 | \$1,065 | \$1,075 | \$38,391 | \$38,749 |
| Small Rural/Farming | 11.0% | \$1,268 | -9.2% | <significant | 10.0% | \$34,753 | \$35,105 | \$983 | \$993 | \$35,405 | \$35,764 |
| All Select Cities Average | 14.9% | \$1,268 | -5.9% | <significant | 14.0% | \$40,237 | \$40,589 | \$1,138 | \$1,148 | \$40,992 | \$41,351 |

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TABLE 25 Impact Analysis of 2008 Fee on Typical Multi-Family Housing Development: \$1,772 per unit

| Community Types | (1) Profit as % Value | (2) Air Quality Fee on New Res. Cons. @ 1.655/sqft | (3) Impact on Profit | (4) Impact Significance | (5) Modified Profit as Percent of Value | (6) Initial Condo- Townhouse Value @ 5.85%, 30 yrs and 20% down | (7) Condo- Townhouse Value @ 5.*5%, 30 yrs and 20% down: With Air Fee | (8) Minimum Rent without Air Fee | (9) Minimum Rent with Air Fee | (10) Qualifying Rental Household without Air Fee | (11) Qualifying Rental Household with Air Fee |
|-----------------------------|--------------------------------|--|----------------------------|-------------------------------|---|---|--|--|--|---|---|
| Large Urban | 17.7% | \$1,657 | -6.3% | <significant | 16.7% | \$40,689 | \$41,148 | \$1,150 | \$1,150 | \$41,453 | \$41,920 |
| Bay Area Commuter Shed | 23.3% | \$1,657 | -3.9% | <significant | 22.4% | \$50,019 | \$50,478 | \$1,414 | \$1,427 | \$50,958 | \$51,426 |
| Medium | 14.1% | \$1,657 | -8.5% | <significant | 12.9% | \$38,042 | \$38,501 | \$1,076 | \$1,089 | \$38,756 | \$39,224 |
| Small/Med Bedroom Community | 8.0% | \$1,657 | -15.1% | significant | 6.8% | \$37,683 | \$38,142 | \$1,065 | \$1,078 | \$38,391 | \$38,858 |
| Small Rural/Farming | 11.0% | \$1,657 | -12.0% | significant | 9.7% | \$34,753 | \$35,212 | \$983 | \$996 | \$35,405 | \$35,873 |
| All Select Cities Average | 14.9% | \$1,657 | -7.7% | <significant | 13.7% | \$40,237 | \$40,696 | \$1,138 | \$1,151 | \$40,992 | \$41,460 |

Affordable Housing For Low-and Moderate Income Households

The discussion above focused on how fees would affect first-time homebuyers of single-family and multi-family units, as well as potential renters. In that context, housing affordability refers to the minimum income required to qualify for either a mortgage or the minimum income needed to pay a certain rent, with the understanding that the annual housing payment must not exceed one-third of annual household income. The federal agency called the Department of Housing and Urban Development (HUD) and private lenders use the one-third threshold as a way to gauge housing affordability. Anyone paying more than one-third of his or her income on housing is living in an unaffordable situation.

Affordable housing also refers to the extent to which low-income and moderate-income households can access housing at affordable rents. Every year, the federal government issues guidelines as to what constitutes low-income and moderate-income households, particularly for the purposes of qualifying households for federal housing programs such as Section 8 or the Low-Income Housing Tax Credit program. In turn, state and local agencies adopt these guidelines when carrying out their respective housing programs.

Table 26 below identifies the federal Housing and Urban Development's (HUD) 2005 income guideline for most of the Central Valley, and this guideline adjusts for number of people in a household. A single individual earning no more than \$27,500 is a low-income individual, while a single individual make \$27,502 would be a moderate-income person.

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TABLE 26 HUD Income Guidelines, 2005

| | Low Income | | Moderate | |
|-------------------|------------|----------|----------|----------|
| | Minimum | Maximum | Minimum | Maximum |
| 1 person | \$0 | \$27,500 | \$27,501 | \$41,250 |
| 2 persons | \$0 | \$31,400 | \$31,401 | \$47,100 |
| 3 persons | \$0 | \$35,350 | \$35,351 | \$53,025 |
| 4 persons | \$0 | \$39,300 | \$39,301 | \$58,950 |
| 5 persons | \$0 | \$42,400 | \$42,401 | \$63,600 |
| 6 persons | \$0 | \$45,550 | \$45,551 | \$68,325 |
| 7 persons | \$0 | \$48,700 | \$48,701 | \$73,050 |
| 8 or more persons | \$0 | \$51,850 | \$51,851 | \$77,775 |

Source: Applied Development Economics, based on Department of Housing and Urban Development

More importantly for the purposes of this analysis, a single person making no more than \$27,500 a year and who, at the same time, pays a rent that does not exceed one-third of her or his income lives in an affordable situation. Conversely, a single individual making no more than \$27,500 who is paying a rent that exceeds one-third of his or her income is living in an unaffordable situation. Table 27 below calculates the rents that would be affordable to low- and moderate-income households. For the most part, rents that low-income households should pay are substantially below the rents that typical new multi-family units constructed in the region should command, even before the imposition of the air fee. For example, 2-person low-income households should pay no more than \$785 on rent. As Tables 23 through 25 showed, rent for a newly constructed apartment unit should be \$1,138, which is unaffordable to 2-person low-income households by standards established by HUD. On the other hand, a two-person moderate-income household that paid the \$1,138 would be living in an affordable situation, since the maximum rent for purposes of calculating affordability is \$1,178. A one-person moderate-income household should pay no more than \$1,031 toward rent; thus the \$1,138 rent calculated in Table 23 through 25 would constitute unaffordable housing.

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TABLE 27 Affordable Monthly Rents

| | Affordable Rent: Low Income | | Affordable Rent: Moderate Income | |
|-------------------|--------------------------------|---------|-------------------------------------|---------|
| | Minimum | Maximum | Minimum | Maximum |
| 1 person | \$0 | \$688 | \$689 | \$1,031 |
| 2 persons | \$0 | \$785 | \$786 | \$1,178 |
| 3 persons | \$0 | \$884 | \$885 | \$1,326 |
| 4 persons | \$0 | \$983 | \$984 | \$1,474 |
| 5 persons | \$0 | \$1,060 | \$1,061 | \$1,590 |
| 6 persons | \$0 | \$1,139 | \$1,140 | \$1,708 |
| 7 persons | \$0 | \$1,218 | \$1,219 | \$1,826 |
| 8 or more persons | \$0 | \$1,296 | \$1,297 | \$1,944 |

Without public subsidies to either the renting households or to housing developers, most low-income households in the Central Valley are priced out of newly constructed multifamily units, the rents for which need to be at a level to take into account price of land, development costs, developer fees, and an adequate level of profit, among other things. For the region as a whole, the market rate rent for a typical multi-family unit is calculated at \$1,138, though rents are higher or lower depending on the community type, with Large Urban communities and the Bay Area Commuter Shed requiring higher rents (see Tables 23 through 25 Column Eight). Moderate-income households consisting of no more than three persons should be able to afford newly constructed multi-family units with monthly rents at or about \$1,138, although the same cannot be said for moderate-income households consisting of four or more persons, who will need higher-priced living quarter with additional rooms.

There are a number of housing programs and policies that can assist low- and moderate-income households to live in market rate housing. Federal housing programs such as Section 8 provide the difference between the amount³ that a low-income household can pay and the actual rent for an apartment in the private sector that is willing to accept Section 8. However, local governments receive only a limited number of Section 8 vouchers from the federal government,

³ The amount that a Section 8 tenant contributes toward rent on an out of pocket basis must not exceed one-third of the tenant's annual income.

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resulting in waiting lists consisting of many households waiting a relatively long time. Other public subsidies are aimed at encouraging the private sector to set-aside some, if not all, newly constructed housing as affordable to low- and moderate-income households. The federal Low-Income Housing Tax Credit (LIHTC) or, at the local level, the twenty percent housing redevelopment tax increment set-aside are just two revenue sources that can increase the feasibility of setting aside units at below market rents for low- and moderate-income households. Like the Section 8 program, there are some inherent limitations to the LIHTC and the tax increment set-aside programs. The financing via the federal LIHTC program is not readily available as it is accessed on a competitive basis. Not all cities have redevelopment agencies, and, of those with such agencies, it takes some time to generate the necessary amount of revenues (also known as tax increment) for a successful housing set-aside program.

Some cities have what are called “inclusionary housing” policies, meaning that in order to obtain approval for this or that housing project, the developer must guarantee that a certain portion (typically 15 percent) is reserved for low- and moderate-income households. Some cities sweeten their inclusionary policies with public financing, and some do not. It is argued that “inclusionary housing” policies without public subsidies result in overall higher rents or home prices, as developers required to set-aside housing at below-market levels for some units make up the difference by driving up the price of rest of the bulk of the units in a project.⁴

Non-Residential Development

Table 28 below analyzes the impacts of the Draft Rule 9510 and 3180 commercial and industrial fees on a per acre basis. In 2006, the fee on a typical retail and office development will amount to \$15,286 and \$7,914 per acre respectively. In the year 2008, fees on a per acre basis are expected to increase to \$33,008 (retail) and \$17,099 (office). As the table shows, in

⁴ Home Builders Association of Northern California - HBA News, (www.hbanc.org/news2000/JulAug2001/JulAug01feat2.html) / “The Inclusionary Housing Debate - Who Really Pays for Affordable ...” (www.realtor.org/sg3.nsf/Pages/housingdebatepays?OpenDocument)

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the year 2006 possible off-site emission reduction fees on new typically-sized commercial and office developments will not exceed the threshold of significance. The possible off-site fee amounts to an estimated 21 percent of profits in the year 2006. In 2008, the possible air off-site fees on new typically-sized commercial retail developments will exceed the threshold of significance by six to ten percent, depending on the community in which development occurs. The dollar amount in excess of the threshold in the year 2008 ranges from \$12,889 to \$16,324 per acre for commercial developments.

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TABLE 28 Impact Analysis of 2006 and 2008 Fee on Typical Commercial-Industrial Project

| | Avg. Value Per Acre | Est. Profit Per Acre | Profit as percent of Value | Est. Fees Per Acre | | Est. Fees As % of Profit | | Percent Above Significance Threshold | | Dollar Amount Above Significance Threshold | |
|--|------------------------|-------------------------|----------------------------------|--------------------|----------|--------------------------|------|--|----------|--|----------|
| | | | | 2006 | 2008 | 2006 | 2008 | 2006 | 2008 | 2006 | 2008 |
| Large Urban | | | | | | | | | | | |
| Industrial | \$1,594,742 | \$159,474 | 10% | \$1,880 | \$4,000 | 1% | 3% | < sig. | < sig. | | |
| Commercial | \$1,910,201 | \$191,020 | 10% | \$15,286 | \$33,008 | 8% | 17% | < sig. | 7% | | \$13,906 |
| Office | \$2,828,107 | \$282,811 | 10% | \$7,914 | \$17,099 | 3% | 6% | < sig. | < sig. | | |
| Bay Area Commuter Shed | | | | | | | | | | | |
| Industrial | \$1,679,815 | \$167,981 | 10% | \$1,880 | \$4,000 | 1% | 2% | < sig. | < sig. | | |
| Commercial | \$2,011,879 | \$201,188 | 10% | \$15,286 | \$33,008 | 8% | 16% | < sig. | 6% | | \$12,889 |
| Office | \$2,929,785 | \$292,979 | 10% | \$7,914 | \$17,099 | 3% | 6% | < sig. | < sig. | | |
| Medium-sized Cities | | | | | | | | | | | |
| Industrial | \$1,546,952 | \$154,695 | 10% | \$1,880 | \$4,000 | 1% | 3% | < sig. | < sig. | | |
| Commercial | \$1,748,583 | \$174,858 | 10% | \$15,286 | \$33,008 | 9% | 19% | < sig. | 9% | | \$15,522 |
| Office | \$2,666,489 | \$266,649 | 10% | \$7,914 | \$17,099 | 3% | 6% | < sig. | < sig. | | |
| Small/Medium Bedroom Community | | | | | | | | | | | |
| Industrial | \$1,631,301 | \$163,130 | 10% | \$1,880 | \$4,000 | 1% | 2% | < sig. | < sig. | | |
| Commercial | \$1,668,338 | \$166,834 | 10% | \$15,286 | \$33,008 | 9% | 20% | < sig. | 10% | | \$16,324 |
| Office | \$2,586,244 | \$258,624 | 10% | \$7,914 | \$17,099 | 3% | 7% | < sig. | < sig. | | |
| Small Rural\Farming Communities | | | | | | | | | | | |
| Industrial | \$1,877,846 | \$187,785 | 10% | \$1,880 | \$4,000 | 1% | 2% | not sig. | not sig. | | |
| Commercial | \$1,653,475 | \$165,347 | 10% | \$15,286 | \$33,008 | 9% | 20% | not sig. | 10% | | |
| Office | \$2,567,106 | \$256,711 | 10% | \$7,914 | \$17,099 | 3% | 7% | not sig. | not sig. | | |

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It is not clear how the development community will adjust to the additional costs. Rather than absorb the costs, the developer (or a subsequent owner of an affected project site) might seek to pass costs onto commercial tenants in the form of rent increases. Table 29 translates the amount of the total fee into a per square foot rent for significantly impacted commercial uses. While the 2006 fee does not significantly impact developers of commercial uses, the 2008 fee significantly impacts these developers to the tune of \$13,905. This amounts to almost one cent per square foot, which developers will pass onto future commercial tenant.

It is worth noting that the 2006 and 2008 fee, in effect, sets the bar slightly higher with respect to lease rates on all new commercial developments in the region. Comparable office developments that have been in place prior to the new fees could conceivably raise monthly rents by one cent. In addition, comparable retail sites in place prior to the new fees could conceivably raise rents by two cents in 2008.

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TABLE 29
2006 and 2008 Fee on Typical Commercial-Industrial Project: Affect of Fee on Monthly Rent

| | 2006 Dollar Amount Significance Threshold | Fee as a Percent of Profit | Amount Above Significance Threshold | 2006 Fee Per SqFt | 2006 Per Sqft Fee As Monthly Rent Increase Over Typical Amortization Period (15 years) | 2008 Dollar Amount Significance Threshold | Fee as a Percent of Profit | Amount Above Significance Threshold | 2008 Fee Per SqFt | 2008 Per Sqft Fee As Monthly Rent Increase Over Typical Amortization Period (15 years) |
|--|--|----------------------------------|---|----------------------|--|--|-------------------------------|---|----------------------|--|
| Large Urban | | | | | | | | | | |
| Industrial | < sig. | 1% | < sig. | | | < sig. | 3% | < sig. | | |
| Commercial | < sig. | 8% | < sig. | | | \$13,906 | 17% | 7% | \$1.28 | \$0.007 |
| Office | < sig. | 3% | < sig. | | | < sig. | 6% | < sig. | | |
| Bay Area Commuter Shed | | | | | | | | | | |
| Industrial | < sig. | 1% | < sig. | | | < sig. | 2% | < sig. | | |
| Commercial | < sig. | 8% | < sig. | | | \$12,889 | 16% | 6% | \$1.18 | \$0.007 |
| Office | < sig. | 3% | < sig. | | | < sig. | 6% | < sig. | | |
| Medium-sized Cities | | | | | | | | | | |
| Industrial | < sig. | 1% | < sig. | | | < sig. | 3% | < sig. | | |
| Commercial | < sig. | 9% | < sig. | | | \$15,522 | 19% | 9% | \$1.43 | \$0.008 |
| Office | < sig. | 3% | < sig. | | | < sig. | 6% | < sig. | | |
| Small/Medium Bedroom Community | | | | | | | | | | |
| Industrial | < sig. | 1% | < sig. | | | < sig. | 2% | < sig. | | |
| Commercial | < sig. | 9% | < sig. | | | \$16,324 | 20% | 10% | \$1.50 | \$0.008 |
| Office | < sig. | 3% | < sig. | | | < sig. | 7% | < sig. | | |
| Small Rural\Farming Communities | | | | | | | | | | |
| Industrial | < sig. | 1% | < sig. | | | < sig. | 2% | < sig. | | |
| Commercial | < sig. | 9% | < sig. | | | \$16,473 | 20% | 10% | \$1.51 | \$0.008 |
| Office | < sig. | 3% | < sig. | | | < sig. | 7% | < sig. | | |

6.4 IMPACT ON SMALL BUSINESSES

In addition to analyzing the various impacts of the Proposed Indirect Source Rule (Draft Rules 9510 and 3180) that are discussed above, state legislation requires that the socioeconomic analysis assess whether small businesses are disproportionately affected by air quality rules. This section discusses how fees that are assessed on developers of residential and commercial projects are typically passed onto the consumer. Because of the additional costs associated with the proposed off-site emission reduction fee, prospective buyers must either increase their respective household incomes or produce a downpayment that is larger than the typical 20 percent. Thus, prospective homebuyers may have to delay purchasing goods and services as a result of the need to raise additional downpayment, resulting in impacts to local stores, particularly small businesses. This section discusses potential small business impacts resulting from Draft Rule 9510 and 3180.

Off-Site Emission Reduction Fees, Minimum Household Income, and the Downpayment

As the analysis above demonstrated, the 2006, 2007 and 2008 off-site emission reduction fee under consideration could slightly raise the minimum qualifying incomes for obtaining a conventional loan by, on average, \$219, \$353, and \$493. In other words, to finance a new three to four bedroom home valued at \$323,966 in the region, a first-time homeowner would need an income of at least \$89,724.⁵ The 2006 fee could raise this minimum by a slight \$219, to \$90,217

What if a lender is inflexible and will not extend a loan to household that is \$219 to \$493 short of the minimum income needed to qualify for financing? In cases such as this, the prospective homeowner will have to produce a larger downpayment or pay a higher interest rate. The table below identifies the amount of additional downpayment above the

⁵ This minimum will change depending on the housing market, with households in Large Urban and Bay Area Commuter Shed communities needing more income than households in other part of the region.

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amount generated by the typical 20 percent downpayment rate.

As Table 30 shows, in the region in general, a household with at least \$89,724 in income can afford to purchase a newly constructed three to four bedroom unit priced at \$323,966 so long it has a downpayment in the amount of \$64,793, or 20 percent of the value of the home. In general, the 2006 through 2008 off-site emission reduction fees will require prospective homeowners to produce an additional \$970 to \$2,147 that will go towards the downpayment, in the event a lender is unwilling to exercise flexibility with respect to minimum income needed to qualify for a loan. The amount of additional downpayment differs between housing markets, with households in the Large Urban communities and the Bay Area Commuter Shed having to pay more.

Table 30 Potential Per Household Impact of Off-Site Emission Reduction Fees On Downpayment: Single Family Unit

| | Initial Qualifying Household Income Prior to Fee: SFU | Initial Downpayment | Additional Downpayment (2006 fee: \$784) | Additional Downpayment (2007 fee: \$1,268) | Additional Downpayment (2008 fee: \$1,772) |
|----------------------------------|---|---------------------|--|--|--|
| Large Urban | \$93,624 | \$67,609 | \$1,008 | \$1,616 | \$2,231 |
| Bay Area Commuter Shed | \$111,520 | \$80,533 | \$1,188 | \$1,906 | \$2,629 |
| Medium-Sized Cities | \$82,097 | \$59,286 | \$894 | \$1,434 | \$1,980 |
| Small\Medium Bedroom Communities | \$86,972 | \$62,806 | \$947 | \$1,519 | \$2,097 |
| Small Rural\Farming Communities | \$68,639 | \$49,567 | \$761 | \$1,221 | \$1,686 |
| All Select Cities Average | \$89,724 | \$64,793 | \$970 | \$1,556 | \$2,147 |

Table 31 is similar to Table 30, although it focuses on the additional amount of downpayment required of prospective buyers of townhouses and condominiums. In general, the 2006 through 2008 off-site emission reduction fees will require prospective homeowners to produce an additional downpayment ranging from \$932 to \$1,948.

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**Table 31 Potential Per Household Impact of Off-Site Emission Reduction Fees On
Downpayment: Multi-Family Unit**

| | Initial Qualifying Household Income Prior to Fee: MFU | Initial Downpayment | Additional Downpayment (2006 fee: \$784) | Additional Downpayment (2007 fee: \$1,268) | Additional Downpayment (2008 fee: \$1,772) |
|----------------------------------|--|------------------------|---|---|---|
| Large Urban | \$40,907 | \$29,383 | \$940 | \$1,529 | \$1,966 |
| Bay Area Commuter Shed | \$50,237 | \$36,121 | \$1,119 | \$1,818 | \$2,336 |
| Medium-Sized Cities | \$38,260 | \$27,471 | \$890 | \$1,447 | \$1,860 |
| Small\Medium Bedroom Communities | \$37,901 | \$27,212 | \$883 | \$1,435 | \$1,846 |
| Small Rural\Farming Communities | \$34,971 | \$25,096 | \$827 | \$1,344 | \$1,730 |
| All Select Cities Average | \$40,455 | \$29,057 | \$932 | \$1,515 | \$1,948 |

Prospective Homebuyers and Small Business Disproportionate Impact Analysis

Faced with the need to increase the amount of downpayment, a household will have to save by cutting back on expenditures, which could result in a decline in purchases of discretionary items from local retail and services establishments. Consumers may stop spending altogether, or shift their spending toward lower-priced goods and services. As we shall see, there is ample reason to believe that impacts associated with the decline in spending that corresponds to the 2006, 2007 and 2008 fees will be temporary. Before engaging in that discussion, below is a brief summary of what constitutes a small business for the purposes of analysis.

For purposes of qualifying small businesses for bid preferences on state contracts and other benefits, the State of California defines small businesses in the following manner⁶. To be eligible for small business certification, a business:

- Must be independently owned and operated;
- Cannot be dominant in its field of operation;
- Must have its principal office located in California

⁶ State of California. Department of General Services. "California Small Business Certification" (<http://www.pd.dgs.ca.gov/smbus/sbcert.htm>)

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- Must have its owners (or officers in the case of a corporation) domiciled in California; and
- Together with its affiliates, be either:
 - A business with 100 or fewer employees, and an average gross receipts of \$10 million or less over the previous tax years, or
 - A manufacturer with 100 or fewer employees

Data is available as to the number of retail and services establishments in the eight-county region, and with this data we can estimate sales by stores with 100 or fewer employees. Table 32 below provides an estimate on the number of retail, accommodations-food services, and arts-entertainment-recreation establishments in the region, including estimates on their respective sales. Data comes from the County Business Patterns and the US Economics Census.

TABLE 32
Number of Commercial Establishments That Sell Goods and Select Discretionary Services: San Joaquin Valley Air Basin, 2002

| | Total Establishments | Sales | Total Nos. Small Businesses | Sales By Small Businesses |
|-------------------------------------|----------------------|------------------|-----------------------------|---------------------------|
| Commercial | | | | |
| Retail* | 8,792 | \$21,790,159,759 | 8,601 | \$14,971,588,578 |
| Accommodations and Food Services | 627 | \$532,590,300 | 615 | \$365,953,623 |
| Arts, Entertainment and Recreations | 5,139 | \$3,048,315,000 | 5,108 | \$2,809,025,816 |
| Gasoline stations | 1,044 | \$2,909,895,000 | 1,044 | \$2,909,895,000 |
| | 15,602 | \$28,280,960,059 | 15,368 | \$21,056,463,017 |

* Apparel, groceries, home improvement, specialty retail, auto (except gas stations)

As Table 32 shows, in 2002 there were 15,602 stores that sold consumer goods and select number of discretionary services (such as entertainment venues and restaurants) and, of these, 15,368 employed less than 100 workers. These small stores generated approximately \$21.1 billion in sales. Based on a review of ten-year's worth of data from Dun and Bradstreet, we estimate that retail generates after tax net profits that amount to 2.2 percent of sales, while both accommodations-

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food services and arts-entertainment-recreations generate returns of 5.1 percent of sales. Combined, these industries generated an estimated \$548.6 million in net profits.

Table 33 estimates the aggregate amount of additional dollars that households will have to set aside as a result of the 2006, 2007 and 2008 off-site emission reduction fees. The additional downpayment per household is multiplied against the number of new single-family units that are built in the region. According to the California Department of Finance, the eight-county region grew by an average of 15,000 single-family units per year between 1995 and 2005. This amount is somewhat consistent with data in Table 2, which shows that between 1993 and 2003, homebuilders took out building permits to construct 15,000 and 27,000 single-family homes in those years, for an annual average of 18,800 single-family homes. In calculating the aggregate amount of additional dollars that all households will need to set aside because of the air quality fees, we adjusted for the fact that not all are first-time homebuyers.⁷

TABLE 33
Aggregate Amount of Dollars All Households Will Need to Set Aside As A Result of Off-Site Emission Reduction Fees

| | | Additional Downpayment (2006 fee) | Additional Downpayment (2007 fee) | Additional Downpayment (2008 fee) |
|------------------|--------------|---|---|---|
| | | \$970 | \$1,556 | \$2,147 |
| Scenario 1: Low | 15,000 units | \$5,820,000 | \$9,336,000 | \$12,882,000 |
| Scenario 2: Mid | 19,000 units | \$7,760,000 | \$12,448,000 | \$17,176,000 |
| Scenario 3: High | 30,000 units | \$11,640,000 | \$18,672,000 | \$25,764,000 |

If 15,000 newly constructed single-family units are sold in 2006, then the aggregate additional downpayment amount attributable to first-time homebuyers will equal \$5.8 million, as Table 33 shows. If the number of units goes as high as 30,000, then the additional downpayment will equal \$11.6 million. In the highest scenario in year 2008, the aggregate

⁷ Scenario 1 2006 fee = (15,000 x 40% rate of rentership) x \$970 = \$5,820,000

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amount of additional downpayment could equal \$25.8 million. Thus, local retail and services establishments, particularly small businesses, could lose anywhere between \$5.8 million to \$25.8 million.

Table 34 below compares the amounts in Table 33 against the estimated net profits of retail and services establishments that employ less than 100 workers. As the table shows, the aggregate amount of additional dollars that households will need to set aside as a result of the off-site emission reduction fee amounts to one to five percent of net profits of small retail and select services establishments. These impacts are below the ten percent threshold of significance employed in this and other socioeconomic analyses for the purposes of evaluating proposed air quality rules.⁸ It is worth noting that the analysis assumes that all of the dollars in Table 33 are spent at small business establishments, which, in reality, would not be the case. As a result, the table below overstates impacts on small businesses. Thus, the proposed rule does not disproportionately impact small businesses.

TABLE 34
Impact on Net Profits of Small Business Retail and Select Services Establishments

| | | Additional Downpayment (2006 fee) | Additional Downpayment (2007 fee) | Additional Downpayment (2008 fee) |
|------------------|--------------|---|---|---|
| | | \$970 | \$1,556 | \$2,147 |
| Scenario 1: Low | 15,000 units | 1% | 2% | 2% |
| Scenario 2: Mid | 19,000 units | 1% | 2% | 3% |
| Scenario 3: High | 30,000 units | 2% | 3% | 5% |

In all likelihood, the impacts identified in Table 34 are temporary. More than likely, the purchase of a new home will spur additional spending at retail and services establishments in excess of what is shown in Table 33. A

⁸ It should be noted that the report does not include a corresponding analysis for multi-family units because the impacts on net profits were significantly less than one percent, in large part because the number of newly constructed and sold new townhouses in the eight-county region is so low, ranging from 50 to 100 units per year.

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recent Pittsburgh Post-Gazette newspaper article on spending habits of new homeowners quotes the web-site of a marketing data company, which indicated that “New homeowners are golden opportunities for the enterprising businessman. These prospects are full of hope and ready to spend money.”⁹ Clickdata.com reports that many new homeowners purchase a new car within the first year at their new address.¹⁰

New homeowners are in a spending mood not simply because of the number of new credit cards and or other financing instruments that lenders eagerly extend to households that have demonstrated the financial wherewithal to purchase something as significant as a new home. For some, a new home represents a new phase in the life cycle of a household, including the addition of new family members such as children or a spouse. Others simply need bigger and better space. Inevitably, the new stage in the life cycle involves corresponding needs for goods and services from retail and service establishments, including small businesses.

Small Business Disproportionate Impact Analysis and Non-Residential Developments

The section directly above examined potential impacts on small businesses that sell retail items to consumers, particularly as the impacts relate to how households shift from funds from spending to saving. The section concludes that impacts will be temporary and more than compensated for when a household purchases a home. New Rule 9510 and 3180 could potentially impact small businesses in other ways as well. In particular, small business may not be able to absorb rent increases contemplated in Section 6.3 above.

This section evaluates the impacts of rent increases discussed in Section 6.3 on small businesses, particularly those that occupy commercial developments. As Section 6.3 demonstrated, new commercial development and are potentially significantly impacted by the proposed new rule.

⁹Caitlin Cleary, “New homeowners welcomes with onslaught of new mail” (Pittsburgh Post-Gazette), 10-15-05

¹⁰www.clickdata.com/consumer/newequity.asp

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For purposes of analysis, commercial development refers to retailers, restaurants, and entertainment and recreation venues.

The analysis below examines how all commercial small businesses are impacted, not just new ones. As Section 6.3 noted, comparable commercial developments that have been in place prior to the new fees could conceivably have their monthly rents raised by one cent per square foot starting in 2008.

If small businesses cannot pass costs onto consumers, and if they are unable to increase sales, then these businesses will have to absorb the additional rent, resulting in a decline in net profits. Lease rates for new and older but well-maintained commercial space is approximately \$1.50 per square foot in the San Joaquin Valley region. Scant data on arts and entertainment space suggest these areas go for \$1.25 per square foot a month.¹¹ Older buildings away from busy commercial corridors will in all likelihood command less than the \$1.50 that new buildings in busy areas command. Thus, in using the \$1.50 (retail and restaurants), \$1.10 (gas stations) and \$1.25 (arts and entertainment), we will overstate the cost in relation to net profits.

Table 35 shows that the 2008 fee will impact net profits of commercial small businesses by 1.5 percent. The bulk of impacts are borne by small businesses because these entities comprise almost 98 percent of commercial businesses and gas stations in the region.¹² However, the impacts are less than significant. Thus, small businesses are not disproportionately impacted by the rule.

¹¹ For the purposes of analysis, we assume that all commercial spaces pay these rents. Similar to the analysis directly above, commercial space refers to retail and select services such as restaurants and arts and entertainment venues. Select services exclude office space for industries such as accounting, medical, legal assistance, etc., because office uses are significantly impacted by the rule, as shows in Section 6.3.

¹² $15,368 \div 15,602 = 98\%$

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TABLE 35
Small Business Impact of Additional Rent Resulting From Proposed Air Quality Mitigation Fee

| | |
|--|-----------------------|
| Total Number of Retail and Select Services Establishments | 15,602 |
| Total Number of Small Business Retail and Select Services Establishments | 14,324 |
| Total Number of Small Business Retail and Select Services: Sales | \$18,146,568,017 |
| Total Number of Small Business Retail and Select Services: Net Profits | \$485,376,512 |
| Dollar Amount of One Cent Rent Increase (2008 fee: commercial) | \$7,230,586 |
| Impact of One Cent Rent Increase on Net Profit of commercial uses (2008 fee) | 1.5% |
| Impact of One Cent Rent Increase on Net Profit of commercial uses (2008 fee) | Less than significant |

APPENDIX A: ECONOMIC BENEFITS ASSOCIATED WITH DRAFT RULE 9510 AND 3180

The San Joaquin Valley Air Pollution Control District (SJVUAPCD) will use the Off-Site Emission Reduction Fees will be used to fund off-site emission reduction projects located within the San Joaquin Valley. Besides providing a health benefit to all Valley residents by reducing overall emissions in the air basin, the funding projects would benefit the Valley's economy. Potential projects for funding through this program are numerous and varied ranging from public works construction project such as road paving, procuring cleaner vehicles and equipment for businesses and local government agencies, to school bus upgrades. If all projects that go through the ISR program only reduce emissions through the off-site fee, the District may receive approximately \$11 million dollars in 2006 and approximately \$56 million in 2008 (allowing for fee deferrals) for use in the off-site emission reduction program. All of the money received as an off-site fee will be spent on projects within the region that make the air cleaner. The program would benefit the economy through three beneficial impacts:

LOCAL PURCHASES

Projects that require a purchase of equipment, materials, or services will result in money being re-circulated into the regional economy. The District cannot guarantee that the manufacturer or provider would be located within the Valley, but it can be expected that the majority will be Valley businesses that benefit. For example, road-paving projects would require asphalt and similar materials that would be provided by Valley businesses. A project that buys a cleaner engine would benefit the Valley engine dealer that sells the engine.

LOCAL PROJECTS

It has already been stated that the program would fund local projects. This means that the school, city, industry or private group that receives the funding for an emission reduction

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project would benefit economically from the program. For example, a school district may receive a new, cleaner school bus. A manufacturing facility may receive assistance in procuring a new, cleaner piece of equipment or pollution control device not required by District rules and regulations. A city or county would receive money that makes a road-paving project possible or enables their fleets to operate cleaner new vehicles.

JOB CREATION

The off-site funding program made possible by the ISR Program may also lead to short-term and perhaps long-term job creation. For a financially strapped company or public agency, the funding allows for the purchase and installation or construction of the item (be it a school bus or road project). The installation and construction aspects of the program may benefit the local economy through short-term job creation. Since the ISR program will provide ongoing funding as development occurs over time, it is expected to continue to provide this type of benefit while the rule is in effect. In addition, more efficient equipment may reduce costs and may allow for later expansion that can create long-term jobs.

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