2012
Inland Empire International Trade Forecast

CALIFORNIA STATE UNIVERSITY
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Inland Empire International Trade Forecasts

An Overview and Analysis of
Inland Empire Exports

By

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Institute for Economic and Environmental Studies

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Orange County/Inland Empire Small Business Development Center Network (SBDC)

Since 2003, the Orange County/Inland Empire Small Business Development Center Network has been providing small businesses with the information and tools they need to thrive and prosper. Comprised of a Lead Center, based at the Mihaylo College of Business and Economics at California State University, Fullerton, and three primary service centers, Orange County SBDC, Inland Empire SBDC and Tritech SBDC, the Orange County/Inland Empire SBDC Network is focused on empowering local businesses. We provide support for the economic growth and development of the Orange, Riverside and San Bernardino County economies by advancing job creation and retention and business expansion through expert consulting, effective training and access to resources.

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1. EXECUTIVE SUMMARY

Inland Empire merchandise exports totaled $5.4 billion in 2009 (latest available data), accounting for 5.7% of the region's economic output. Exports from the region grew on average by an astounding 17% per year from 2003-2008 as the region's economy expanded, contributing to the economic growth and overall employment levels. The global recession of 2008-2009 caused a worldwide collapse in international trade volumes, which had a direct adverse impact on the Inland Empire's economy. Exports in the region plunged precipitously, contracting by -14.2% in 2009. This decline had a profound negative effect on the region's growth and employment levels: manufacturing declined by 34,000 jobs during the crisis with an additional 30,000 jobs lost in trade, transportation and utilities. As the world economy emerged from the recession, trade volumes rebounded rapidly in 2010 spurred primarily by a robust cycle of global inventory restocking after a sharp drawdown during the recession. The IEES projects that Inland Empire exports grew by 17.9% in 2010 to over $6.3 billion, followed by an additional projected increase of 11.4% in 2011.

The trading partners for Inland Empire are concentrated into a few main areas with exports to NAFTA accounting for 34.7% of total export volumes, Asia for 27.1% and the European Union for 24.1%. Canada is the main destination with $1 billion of exports or 18.8% of region's total exports, followed by Mexico (15.9%) and the Netherlands (11.1%). China and Japan, the top two Asian export destinations for the region, combine for an additional 11.1% of total export volumes.

The profile of Inland Empire's exports is highly concentrated on manufactured equipments which combine for about 75% of total exports from the region. Computer and Electronic Product Manufacturing and Miscellaneous Manufacturing each had over $1 billion in exports in 2009. In fact, all top five export sectors from the region were in manufacturing with Computer and Electronic Product Manufacturing accounting for 19.8% of all exports, Miscellaneous Manufacturing for 19.5%, Transportation Equipment for 13.1%, Machinery Manufacturing for 7.7% and Chemical Manufacturing for 7.0%.

The outlook for Inland Empire's exports is for robust growth over the next three years, although the rate of increase is expected to moderate from its escalated pace of 2010. This reflects in part the

sluggish recovery in advanced economies which is further endangered by massive fiscal contractions in these countries over the next few years. While emerging economies should continue to grow, the pace is expected to be at a lower clip than in 2010 largely due to an engineered "soft-landing" by their governments to combat inflationary pressures, asset prices bubbles, and massive capital inflows. We project Inland Empire's exports to grow by an annual rate of over 11% over the next three years.

Longer term, the region has an immense potential to significantly expand its role in international trade. Recognizing this potential, local governments have taken a few important steps towards boosting the region's exports. Several Inland Empire agencies and organizations have actively sought to expand the role of local firms in international markets by providing training, education and support to help businesses identify and grow their global customer base. The region has signed bilateral agreements with other countries, hosted trade delegations and worked closely with foreign consulates and trade agencies to promote increased cooperation. At the national level, the National Export Initiative (NEI) put forth by the administration with the goal of doubling U.S. exports over the next five years should also boost exports from Inland Empire. Free trade agreements with Korea, Panama and Columbia -- which were approved by the U.S. Congress this past October -- are also expected to provide additional support for the region's role in international trade. Additionally, Inland Empire's exports should benefit further upon the successful completion of the Doha Round (the current trade-negotiation round of the World Trade Organization (WTO)) and the Trans-Pacific Strategic Economic Partnership Agreement (a free trade agreement that aims to integrate the economies of the Asia-Pacific region and the U.S.).

Executive Summary
Inland Empire Merchandise Exports
(millions of dollars)

Year	Export Volume	Growth Rate
2009	5,356	-14.2%
	Forecast	
2010	6,316	17.9%
2011	7,034	11.4%
2012	7,825	11.2%
2013	8,992	14.9%

Source: *IEES, California State University Fullerton and International Trade Administration*

2. INTRODUCTION

This unique report produced by the Institute for Economic and Environmental Studies (*IEES*) at California State University Fullerton in partnership with the Orange County/Inland Empire Small Business Development Center Network *(SBDC)*, provides extensive analysis and forecasts for the Inland Empire merchandise exports by dollar volumes, country, region, and sectors. There are a few challenges when forecasting exports at a regional or local level because much of the data are unavailable and need to be estimated. For example, while the International Trade Administration (ITA) provides detailed export data at the national and -- to a certain extent -- at the state level, information on exports is rather limited at the county or MSA level. Moreover, the most recent data are provided for very few years covering the period from 2005 through 2009. Data by sector is also limited and is provided only for the last three years -- from 2007 through 2009. Lastly, the data are updated with long lags, for example, data for the second half of 2010 will become available only late in 2011.

In order to remedy the existing data shortage, the *IEES* has estimated historical merchandise exports for Inland Empire from 1990-2004. These estimates are consistent with the new methodology adopted by the U.S. Census Bureau for tracking merchandise exports by origin of movements (see Appendix A2 and A3) and are derived from an econometric model that accounts for regional, state, national and international trends. Historical export estimates are important in understanding trends and breaks in the series, especially as they relate to the business cycles. The historical data are subsequently used to project exports over the next four years. Forecasts from 2010-2013 (data for 2010 will be released later in 2011) are based on statistical and econometric models using historical estimates for Inland Empire exports, regional export volumes, regional export shares, trend-growth rates, trade-weighted exchange rates, labor productivity in export-related industries, as well as U.S., foreign and local growth rates as measured by national and MSA real gross domestic products (RGDP).

3. WHY EXPORTS MATTER FOR THE U.S. AND INLAND EMPIRE

Exports have the potential to become an important driver of economic growth both nationally and regionally. While the U.S. is the world's third largest exporter (behind China and Germany), its global export shares have declined from a post-war high of 22% to 8.2% in 2009. Despite a three-decade shift which saw a decline in manufacturing employment in favor of a service-based economy, the U.S. continues to remain the largest manufacturing economy in the world (with China a close second), producing 21% of global manufactured products. Manufacturing activity makes up 11% of U.S. real GDP but it accounts for the lion's share -- a full 62% -- of total U.S. exports. The Southern California region is the main manufacturing base of the U.S. economy, with manufacturing activity in the area accounting for a total of 888,800 jobs in 2007.

International trade is also one of the important drivers of Inland Empire's economic growth. From 2001-2007, as the region's economy grew by an unprecedented 49% -- supported primarily by construction, transportation, warehousing, and manufacturing -- international trade volumes soared rising by more than double during this time. This is due to its proximity to major ports, well-connected transportation system, and vast areas of relatively inexpensive land used for warehousing, distribution, and manufacturing of traded goods. However, the main driver behind the region's expanded role in international trade has come primarily from imports, which account for roughly 82% of the region's two-way trade volumes. Inland Empire serves as a global warehousing and distribution center for imports from the country's main two ports with more than 700 million square feet of distribution and warehousing facilities. Most facilities are used by third party logistic providers or distributors involved in consolidating and storing imports before shipping them off to the rest of the country. In fact, more than 40% of total container imports for the nation enter the country through the ports of Los Angeles and Long Beach with 50% of these bound for the Southern California region.

While exports have also increased dramatically -- more than tripling over the past decade -- there is considerable more room for additional growth which will boost long run economic activity and employment for the region. The volume of exports from the Inland Empire reached a pre-recession peak

of $6.2 billion in 2008, and ranks third in Southern California after Los Angeles county ($40.3 billion) and Orange County with ($19.6 billion). Exports grew by an aggregate 167% from 2000-2008, reflecting increased activity in manufacturing, finance and retail sectors of the local economy. Despite this phenomenal growth, exports account for a small part of the region's GDP -- only 5.7%, far behind other California's Metro Statistical Areas (MSA). For example, exports account for a hefty 14.4% of the area's GDP in San Jose-Sunnyvale-Santa Clara MSA, 7.9% of GDP in San Diego-Carlsbad-San Marcos MSA and 7.2% of GDP in Los Angeles MSA. Overall, the region's exports make up 4.3% of total exports from California and 5.7% of total exports from the Los Angeles Custom District (LACD).

An increase in exports should provide a boost to both employment levels and real economic activity at the national and regional level. On the employment front, exports support 11.8 million jobs nationally, of which around 1.56 million are in California. In Southern California, the estimated employment base supported by international trade is around 500,000 (roughly 7.6% of nonfarm payroll jobs). In Inland Empire, exports alone are estimated to support over 86,000 jobs which make up around 7.5% of the total nonfarm employment in the two-county region. The vast majority of export-related jobs in the region are in manufacturing, which is particularly important for Southern California given its large manufacturing base and particularly so for the Inland Empire which has over 3,800 manufacturing companies that employ approximately 120,000 people. In fact, prior to the crisis, the trend for manufacturing employment has been positive in the Inland Empire: while Southern California's manufacturing employment shrunk by 241,400 (or -21.4%) from 1990-2007, it grew by 41,000 in the Inland Empire region. This suggests that the county is well positioned for a manufacturing-based export-led recovery.

An increase in exports would also improve the long-term income profile for workers in the Inland Empire. Export-related jobs offer higher pay to workers across all levels of education. Wages are around 11% higher for the same-level job at exporting firms compared to non-exporting ones, even after adjusting for firm size and capital intensity. Moreover, manufacturing jobs have fewer training barriers in early career stages compared to other sectors, which bodes well for the region's demographics where

around 47% of population has only high school or less education. This means that manufacturing firms engaged in export activity have the ability to offer higher paying jobs to the region's workforce, which in turn should support income growth in the area.

Exports should also increase the productivity and competitiveness of businesses in the region. Employment and output tend to be on average around 7% higher at exporting plants compared to non-exporting firms. Productivity is also much higher, with exporting firms being 30%-50% more productive than non-exporting firms. Exporting firms are also much more competitive since they are exposed to best international practices and need to constantly remain in the forefront of innovation and technological advancement. Trade also enhances economic growth by taking advantage and reinforcing economies of scale, which means that production efficiency is also improved. Lastly, the failure rate of exporting firms is distinctly smaller than of non-exporting firms (around one third), suggesting that trade tends to improve the overall health of businesses and their longevity.

Exports are particularly important for the national and regional economy after the Great Recession. Nationally, exports contributed positively to real GDP growth in 2010, providing a boost of 1.3%. More importantly, the other drivers of the economy -- consumption, government spending, and investments -- are simply not strong enough to contribute sufficiently to GDP growth (some will likely subtract from growth). Consumption spending, which accounts for around 70% of U.S. real GDP, is expected to inch forward as consumers continue to battle a stalled labor market, a gruesome multi-year deleveraging process, stagnant income, and a depressed housing market. Government spending is unlikely to support the recovery and absent any new deals, the fiscal sector is set to deliver the largest fiscal contraction in decades over the next two years. Business Investments have grown robustly, but are lagging substantially in the areas that matter the most for the Inland Empire economy -- residential and commercial construction.

Exports have the potential to lift the region out of its protracted sluggishness and may be able to reshape the Inland Empire economy over the next few decades. The Inland Empire suffered tremendous losses during the recession, shedding a phenomenal -34,000 jobs in a span of two years. As of 2010,

manufacturing employment for Inland Empire stands at the same level as in 1994 even though the population has grown by 1.2 million over the same period. The labor market is healing very slowly plagued by both cyclical and structural problems. The unemployment rate in the two county region reached 15% in 2010, and has decreased only slightly to 14.1% due to the extremely weak recovery which is particularly sluggish in the region given its large exposure to the housing crisis and associated collapse in construction and manufacturing activity.

Recognizing the important role of exports in the nation's economy, the National Export Initiative (NEI) aims at doubling U.S. exports over the 2010-2015 period. While doubling of exports is extremely rare having occurred only three times in the nation's history (last time in 1949), it is important to note than *any* increase in exports should prove beneficial for the U.S. economy. The Inland Empire region in particular, should strive to meet this goal, given its favorable infrastructure, large manufacturing base and the fact that it has done so in the past having more than doubled its exports from 2003-2008.

4. EXPORTS AND THE GLOBAL ECONOMY: OVERVIEW AND OUTLOOK FOR THE U.S. AND THE REGION

Export volumes are closely related to the overall health of the global economy and its outlook. The "Great Recession" caused a collapse in the world trade flows from late 2008 until the third quarter of 2009, which had a significant negative impact on export volumes for the U.S., Southern California and Inland Empire region. All told, U.S. merchandise exports collapsed by an unprecedented -17.9%, whereas exports from the Los Angeles Custom District dropped by an even larger -21.3%. The sharp decline in exports was deep and widespread with export volumes plunging for all countries, regions and industries.

Trade volumes improved sharply in 2010 as the world economy began to recover. The early improvement was largely due to the global inventory restocking as firms began to replenish their inventories and replace outdated capital after a sharp drawdown during the recession. While an improvement in trade volumes during 2010 was expected given the collapse of 2009, few had anticipated

the phenomenal rise that followed the early stages of the recovery. U.S. merchandise exports rose by 21% while those from the Los Angeles Custom District (LACD) jumped by 22.1%. As of 2010, the overall export levels for both the U.S. and LACD were just shy of their record-levels set in 2008.

The pace of the recovery, however, is highly uneven across regions. While the strength of the rebound is sluggish in advanced economies, developing nations picked up speed and expanded at rates near and their pre-crisis peaks. The recovery in the emerging markets was primarily driven by fiscal and monetary support, a global inventory restocking which boosted international trade volumes, and by increases in domestic demand. China's economy grew by an astounding 10.3% in 2010 supported by improved foreign and domestic demand, massive fiscal stimulus and strong investments in the real estate sector. India was the second best performer among the largest economies, posting a 9.7% growth rate which was largely boosted by a stellar performance of the manufacturing sector and strong domestic demand. Other Asian economies also grew at a brisk pace in 2010 with Taiwan's economy expanding by 9.3%, South Korea by 6.1%, and Indonesia by 4.5%. Latin American economies also expanded at robust rates with Brazil growing by 7.5% supported by higher commodity prices, strong domestic demand and expansions in manufacturing and industrial production. Other Latin American countries have also expanded at a fast clip over the previous year.

An entirely different picture emerges in the advanced economies which have trailed substantially behind emerging markets during this recovery cycle. By and large, the economic rebound in advanced economies has been sub-par, slow, and fragile, fraught with significant headwinds related to massive budget deficits, sovereign debt issues, and high unemployment levels. The German economy was the best performer in 2010, posting a 3.6% growth rate which was primarily supported by a surge in exports and capital investments. The U.K. and France grew by a lukewarm 1.5% with the U.K. government austerity measures raising further concerns about the sustainability of the recovery in the near-term.

After a relatively good performance in 2010, the outlook for the global economy downshifted significantly in 2011. There are a myriad of headwinds: from a slowing of China and Latin America due to an engineered "soft-landing" by their governments, to supply interruptions from Japan's earthquake and

tsunami, to oil shocks from developments in the Middle East. The Eurozone debt crisis has escalated further threatening the very existence of the European single market and the global economy due to the large risk exposure of the banking sector to at-risk sovereign debt. As of the end of the third quarter, Greece seems to be insolvent, Ireland and Portugal close to it, and Spain and Italy are precariously close to being illiquid. There is little doubt that the world economy is going through a dangerous new phase that could easily derail the fragile recovery.

In light of these developments, the outlook for global growth has downshifted significantly. While emerging economies should continue to grow, the pace is expected to be at a lower clip than in 2010. China's GDP growth rate, while still spectacular, has edged down to 9.5% in Q2 2011 from 9.7% in Q1 as the government grapples with inflationary pressures and potential asset price bubbles. Growth should also moderate in Latin America as the slowing of advanced economies and a lower level of remittances are likely to weigh on the economic activity of the region. Advanced economies are poised to fare much worse: given the weak recovery and pressures on public finances they are expected to grow by 1.4% this year and 1.7% in 2012. Europe is on the precipice of another recession, while Japan has already posted three back-to-back quarters of negative growth. Barring a full- blown crisis from Europe, the global economy is expected to grow over the forecast horizon by a more modest 4.2%, spurred primarily by emerging economies.

A slowing of the world economy means that exports would grow at a lower rate in 2011 and 2012 compared to 2010. U.S. merchandise exports grew only by 9.1% from January to July of this year. Exports in the second half are expected to grow at an even slower pace, reflecting the global slowdown. While the U.S. dollar has declined by 5% since the start of the year, this trend is expected to come to a halt over the next few months as market turmoil over the Eurozone debt crisis force investors into the relative safety of U.S. bonds. With a projected downshift in global economic activity and a stronger dollar, Inland Empire exports are forecasted to grow at a more moderate rate in 2011 and 2012 before reaccelerating again in 2013.

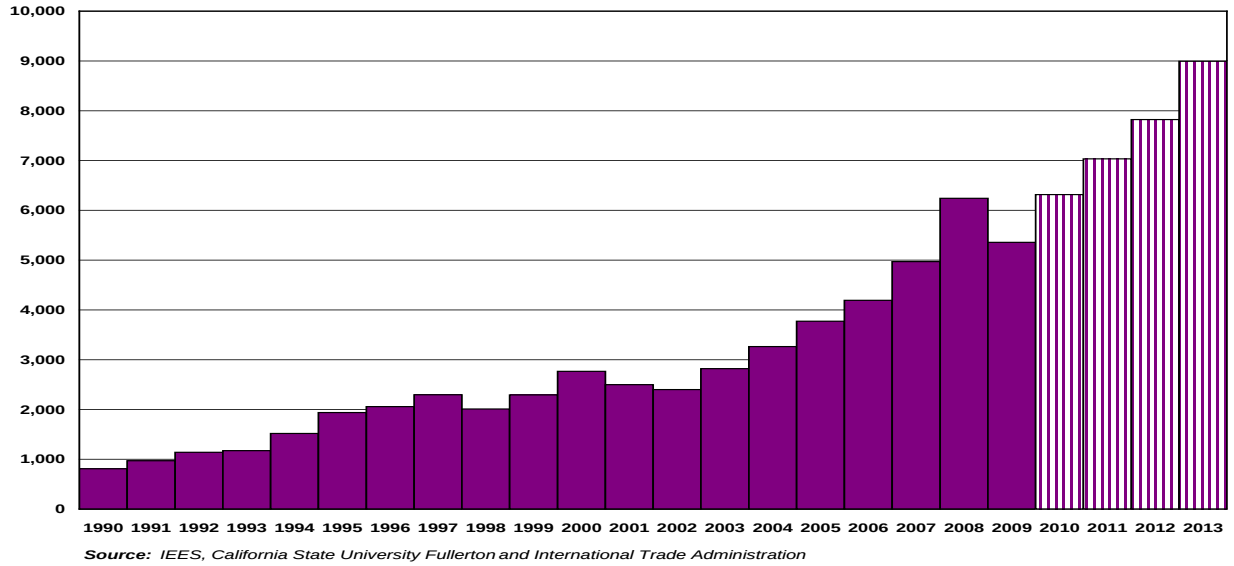
5. INLAND EMPIRE EXPORTS: DETAILED ANALYSIS AND FORECASTS

5.1 Inland Empire Total Export Volume

The Inland Empire ranks 25th in the nation based on its real GDP, is the largest Metropolitan Statistical Area (MSA) in the nation, and ranks as the 14th most populous in the U.S. If the Inland Empire were a separate country, it would be ranked 57th in the world based on the GDP volume, coming ahead of Vietnam which is ranked 58th. The region ranks in the top 10% of MSAs (40th out of 378 based on export volumes originated in the area. For California, it ranks fifth in exports behind Los Angeles-Long Beach-Santa Ana MSA (with $51.5 billion), San Jose-Sunnyvale-Santa Clara MSA (with $21.4 billion), San Francisco-Oakland-Fremont MSA (with $16 billion), and San Diego-Carlsbad-San Marcos MSA (with $13.4 billion). Given its sheer size, favorable location, infrastructure, and capital, the area has significant upside potential to become a major force in the ever-increasing globalized markets.

Inland Empire merchandise exports increased each year from 2003 to 2008 reflecting the strong regional economic growth and increased international demand for the region's products. The *IEES* historical and projected Inland Empire merchandise exports are in Figure 1 and Table 1. Historically, trends in regional exports have been broadly in line with international developments and domestic economic activity. For example, Inland Empire exports dropped by -14.2% in 2009 as global economic activity collapsed and trade volumes shrunk. Similarly, Inland Empire's exports also fell by -12.4% during the Asian financial crisis of 1997, following the sharp depreciation of currencies from major trading partners in the Asia Pacific region. Further declines also followed during the recession of the early 2000, with merchandise exports from the region falling by -9.7% in 2001 and an additional -4.0% in 2002. Interestingly, while export growth slowed down significantly during the recession of early 1990s, growth remained positive, most likely reflecting strong global demand from emerging economies and in particular from developing Asia.

Figure 1
Inland Empire Total Exports
(millions of dollars)



Source: *IEES, California State University Fullerton and International Trade Administration*

Despite these cycle declines, Inland Empire's exports have grown robustly over the past two decades. Total export volumes have risen by more than seven-fold during the period, from around $811 million in 1990 to $6.3 billion in 2010. Export growth was robust at a 12.9% average annual pace from 1990-1999 as the region's population and economy grew. However, this was short of the astounding 17.4% annual average rate that was recorded during the region's economic boom of 2003-2008. By 2008, Inland Empire exports had reached a record high of $6.2 billion, almost doubling the $3.2 billion recorded in 2004. Not surprisingly, manufacturing employment grew from 78,000 in 1990 to a record-high of 123,400 in 2006 which supported, in part, the spectacular rise in export volumes.

After a dramatic collapse in 2009, global trade volumes picked up robustly in 2010, exceeding even the most optimistic projections. The *IEES* estimates that Inland Empire merchandise exports grew by 17.9% in 2010, reflecting increased demand for the region's products around the world. We estimate that export volumes from Inland Empire reached $6.3 billion in 2010, surpassing their pre-recession levels and setting a new record-high. The global slowdown of 2011 is expected to moderate last year's growth with export volumes for the region growing at 11.4% for the current year. This trend is also

expected to continue in 2012, as advanced economies continue to struggle with high unemployment rates, financial instability, persistent fiscal deficits, and continued fiscal austerity. Emerging markets will also likely reduce to a certain extend their appetite for the region's exports as monetary and fiscal policy tightening slows down growth in an attempt to reign in persistent inflation, a drastic influx in capital flows, and potential asset price bubbles.

Over the next decade, the overall global expansion and the approval of free trade agreements with South Korea, Panama, and Columbia should support continued growth in Inland Empire's merchandise exports. In addition, accommodative monetary policy in the U.S. -- which is expected to last until at least mid-2013 -- should continue to place further downward pressure on the U.S. dollar, which bodes well for the region's exports.

Table 1
Inland Empire Total Exports
(millions of dollars)

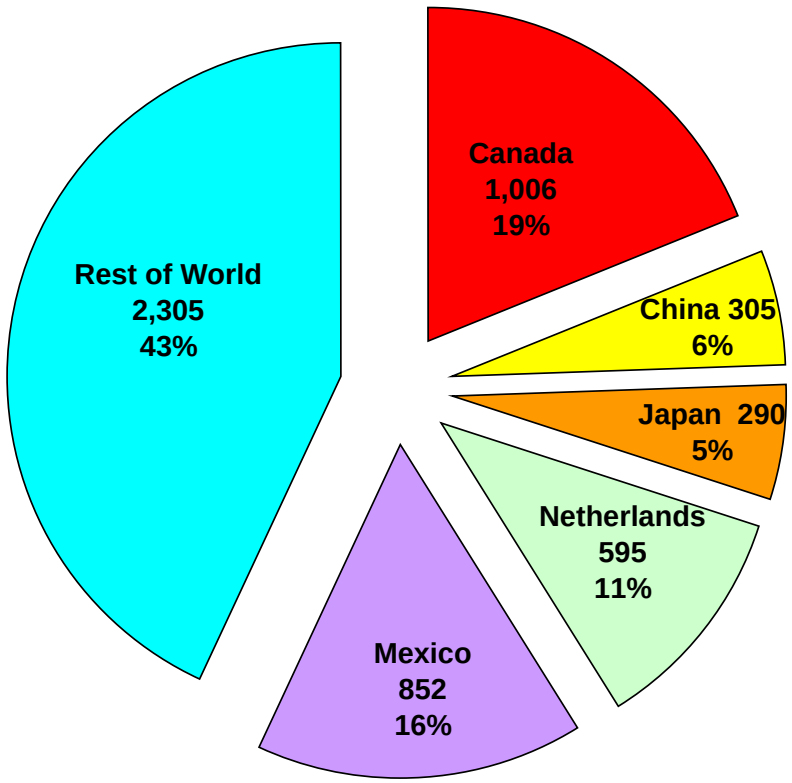
Year	Inland Empire Total Export Volume	Growth Rate
1990	811	
1991	970	19.6%
1992	1,141	17.6%
1993	1,175	3.0%
1994	1,518	29.2%
1995	1,938	27.7%
1996	2,057	6.1%
1997	2,295	11.6%
1998	2,010	-12.4%
1999	2,293	14.1%
2000	2,766	20.6%
2001	2,498	-9.7%
2002	2,399	-4.0%
2003	2,820	17.6%
2004	3,264	15.7%
2005	3,774	15.6%
2006	4,192	11.1%
2007	4,971	18.6%
2008	6,241	25.6%
2009	5,356	-14.2%
	Forecast	
2010	6,316	17.9%
2011	7,034	11.4%
2012	7,825	11.2%
2013	8,992	14.9%

Source: *IEES, California State University Fullerton and International Trade Administration*

5.2 Inland Empire Exports by Country

In 2009, 57% of Inland Empire's $5.4 billion of merchandise exports went to the region's top five trading partners: Canada, China, Japan, Netherlands and Mexico (Figure 2 and Table 2). Over a third (34.7%) of total exports went to the region's two largest trading partners: Canada (with over $1 billion) and Mexico (with $852 million). Exports to NAFTA countries have accounted for roughly one third of Inland Empire's exports over the last decade and these countries are expected to remain the major trading partners for the region in the future given their proximity and historical economic ties to the area.

Figure 2
Inland Empire Exports by Country
Year 2009, millions of dollars



Canada survived the recession much better than the vast majority of industrialized nations and grew by 3.1% in 2010, outperforming many developed economies. Canada is the main destination country for Inland Empire exports with total exports to the country amounting to over $1

billion in 2009. Exports to Canada are projected to increase to $1.7 billion by 2013, a 13.4% increase compared to the 2008 levels. However, after accounting for 24.1% of the Inland Empires exports back in 2008, Canada's share of Inland Empire's exports is projected to decrease to below 20% over the forecast horizon.

While the overall share of Inland Empire's exports to Canada declined significantly during the recession, dropping from 24.1% in 2008 to 18.8% in 2009, the share of exports to Mexico jumped appreciatively, rising from 9.6% in 2008 to 15.9% in 2009. This likely reflects the large peso depreciation against the dollar during the crisis which boosted exports to the region. The share of exports to Mexico is projected to remain high over the next three years, with over 14% of the exports from the region going to that country.

A major recent change in the composition Inland Empire trading is the significant rise in exports to the Netherlands. The Netherlands has become an increasingly important trading partner accounting for just under $600 million (11.1%) of Inland Empire exports in 2009. In 2005, exports to the Netherlands amounted to only $167 million -- or 4.4% of all exports from the region -- which means that they increased by 3.5 times in a span of just 4 years. Exports to the Netherlands are forecasted to grow over the forecast horizon rising by 13.6% in 2012 and 16.9% in 2013.

China and Japan are the two main Asian trading partners of the Inland Empire. Together, they combined for almost $600 million of exports in 2009 -- roughly 11% of total exports. Going forward, Japan's share of the Inland Empires exports is projected to decrease to below 5.5% from a five year historical average of 6.7% with exports to China remaining steady at around 6.2%. Export growth to these countries will continue to surge: exports to China are projected to grow by 84.8% during the four-year period from 2009-2013, whereas exports to Japan will grow by 64.9% over the same period. The jump in exports will reflect, in large part, currency adjustments as the U.S. dollar depreciates against the yen the Chinese yuan as political pressure mounts on a much-delayed appreciation of the Chinese currency.

Table 2
Inland Empire Exports by Country
(millions of dollars)

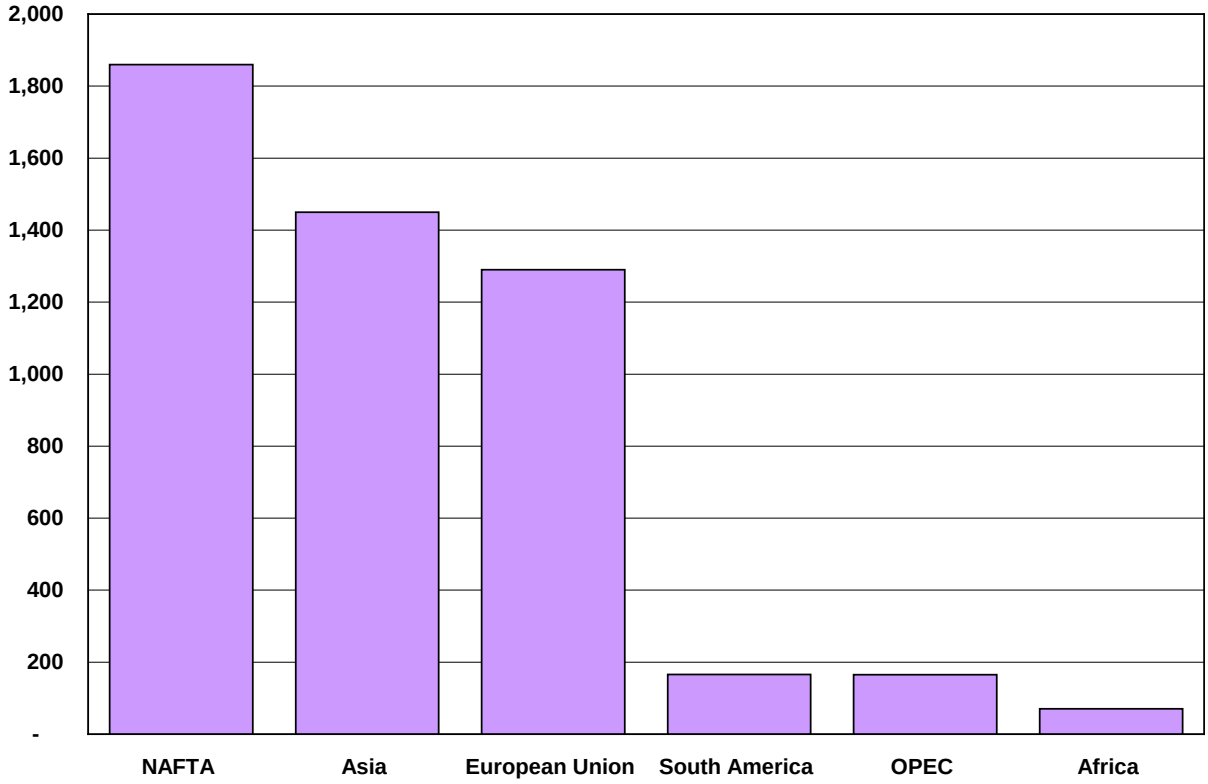
Year	Canada	China	Japan	Netherlands	Mexico	Rest of World	Total Exports
1999	644	70	279	128	394	821	2,337
2000	752	108	380	166	507	905	2,817
2001	648	148	351	114	491	790	2,542
2002	546	148	250	106	485	911	2,447
2003	613	188	261	111	443	1,320	2,936
2004	708	248	309	149	488	1,311	3,213
2005	809	298	327	167	500	1,673	3,774
2006	902	279	278	242	481	2,011	4,192
2007	1,132	321	313	307	501	2,397	4,971
2008	1,504	354	396	602	596	2,790	6,241
2009	1,007	306	290	595	853	2,306	5,356
				Forecast			
2010	1,184	393	333	771	940	2,694	6,316
2011	1,382	428	385	825	994	3,020	7,034
2012	1,488	483	419	938	1,151	3,346	7,825
2013	1,705	565	479	1,097	1,310	3,837	8,992

Source: *IEES, California State University Fullerton and International Trade Administration*

5.3 Inland Empire Exports by Region

The top three regions for Inland Empire exports in 2009 are NAFTA, Asia and the European Union which combine for 86% of all exports. In 2009, NAFTA generated $1.9 billion (34.7% of total volume) of Inland Empire merchandise exports (see Figure 3 and Table 3). Exports to Asia were second with $1.4 billion (27.1% of total volume), whereas the European Union accounted for $1.3 billion (24.1%). A smaller portion of Inland Empire merchandise exports was demanded by South America, OPEC and Africa, with the three regions combining for 7.5% of total export volumes.

Figure 3
Inland Empire Exports by Region
Year 2009, millions of dollars



Source: *IEES California State University Fullerton and International Trade Administration*

In 2009, at the height of the recession, export volumes from Inland Empire fell in all major regions. A large decline was recorded by the European Union with an astounding -18.1% drop compared to a year earlier and a decrease to Asia of -16.2%. The sharp decline in exports to Europe reflects weak fundamentals in Eurozone as well as a dollar appreciation against the euro at the height of the financial crisis as investors flocked to the relative safety of U.S. Treasuries. Exports to NAFTA fell by a smaller -11.4% reflecting both a milder recession in Canada and a significant depreciation of the Mexico peso against the dollar. Prior to the recession, from 2005-2008, exports to all three regions were expanding at a robust pace of over 13% per year.

The only two regions that recorded an increase in exports from the Inland Empire area during 2009

were Africa and OPEC -- with both regions having experienced a smaller downturn in 2009 compared to the rest of the world. The most significant decline of -30.4% was to South America following a prior reduction of -8.1% in 2008.

While the outlook for 2011 for Inland Empire exports is expected to be volatile across regions, export growth is projected to remain positive for all areas over the forecast horizon. Exports to the European Union are expected to increase at a lower clip in 2012 (by 9.7%) reflecting turmoil in the region with regards to its sovereign debt issues which should restrain the pace of economic activity in the region. Exports to NAFTA are expected to grow by 11.7% in 2012 and 14.5% in 2013 as the recovery continues to expand in the region. Exports to Asia are also expected to pick up robustly averaging an annual pace of 15.5% over the four year forecast horizon (2010-2013), though the pace of growth should downshift in 2011 and 2012 and reaccelerate again in 2013 in line with the business cycle outlook for the region. South American economies have grown rapidly during the recovery phase and exports to this region are expected to increase in 2012 and 2013.

Table 3
Inland Empire Exports by Region
(millions of dollars)

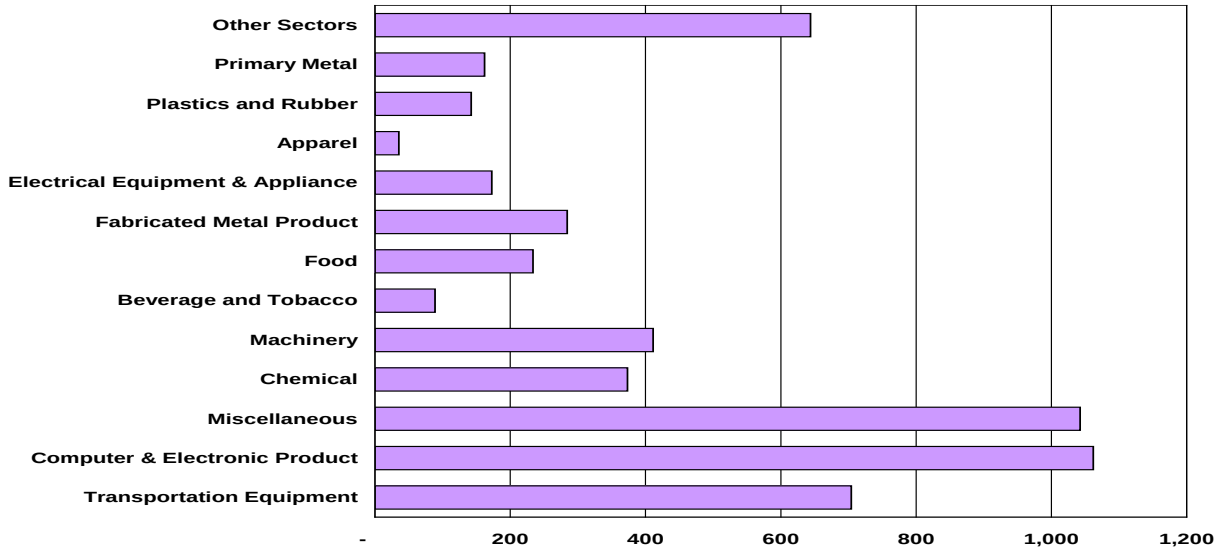
Year	Africa	Asia	European Union	NAFTA	OPEC	South America
1999	16	559	532	724	24	66
2000	15	802	674	960	23	66
2001	17	793	652	941	20	69
2002	18	717	572	919	21	53
2003	22	811	621	972	23	52
2004	30	1,063	759	1,158	34	79
2005	36	1,230	831	1,309	61	99
2006	44	1,248	1,079	1,382	84	153
2007	55	1,382	1,240	1,633	131	260
2008	58	1,731	1,575	2,100	152	239
2009	70	1,449	1,290	1,860	165	166
			Forecast			
2010	84	1,849	1,402	2,146	184	201
2011	89	1,980	1,665	2,399	198	235
2012	102	2,203	1,827	2,680	229	252
2013	117	2,562	2,077	3,068	260	292

Source: *IEES, California State University Fullerton and International Trade Administration*

5.4 Inland Empire Exports by Sector

Inland Empire exports are concentrated around a few manufacturing clusters. In particular, the three most important technology-related export sectors from the region are Computers & Electronic Products, Miscellaneous Manufacturing, and Transportation Equipment, combining for $2.8 billion or 52.4% of the Inland Empire exports in 2009 (see Figures 4 and Table 4). Leading the way in the share of Inland Empire exports are Computers & Electronic Products with 19.8% of total exports, followed by Miscellaneous Manufacturing (at 19.5% of total volumes) and Transportation Equipment (at 14.6% of total volumes). Other major industries for Inland Empire merchandise exports include chemical, machinery, fabricated metal product and food manufacturing.

Figure 4
Inland Empire Exports by Sector
Year 2009 Millions of Dollars



The global recession caused a decline in merchandise exports in most sectors in 2009 compared to the previous years. Inland merchandise exports declined dramatically in Transportation Equipment (-42.0%), Fabricated Metal Product (-21.2%), Electrical Equipment and Appliance (-23.4%) and Primary Metals (-40.4%) as global demand for these products collapsed during the recession. However, exports in some sectors experienced growth in 2009 particularly in Computer & Electronics, Beverage & Tobacco,

Food, and Apparel. Most notably, Food Manufacturing exports from the region surged by 20.3%, whereas Beverage & Tobacco exports jumped by 18.9%. The increase in high-tech products likely reflects the sharp rise in business investments early in the recovery cycle as firms replaced outdated capital. The higher demand for Food Manufacturing and Beverage & Tobacco products came largely from Asia as the region began to expand early in 2009 and consumer demand in developing Asia picked up more robustly than in other regions.

The strengthening of the global economy should stimulate demand across all sectors over the forecast horizon. In particular, Inland Empire exports for the three largest sectors are projected to increase in 2011 with Computers & Electronic Products and Miscellaneous Manufacturing each exceeding $1.3 billion and Transportation Equipments amounting to $1.1 billion. These three sectors are projected to account for over $3.7 (53% of the forecasted $7 billion total) of the 2011 Inland Empire exports. Exports from Chemical, Machinery, Fabricated Metals and Food Manufacturing are projected to account for a combined total of over $1.5 billion in 2011 and are expected to remain important sectors for the region's future growth.

Table 4
Inland Empire Exports by Sector
(millions of dollars)

Year	Transportation Equipment	Computer & Electronic Product	Miscellaneous	Chemical	Machinery	Beverage & Tobacco	Food
1998	247	304	330	107	190	28	66
1999	263	373	376	120	215	30	74
2000	287	472	427	144	290	34	84
2001	278	424	408	143	242	33	86
2002	266	399	420	151	232	34	85
2003	344	468	497	184	268	42	108
2004	438	564	559	207	326	50	115
2005	498	603	707	256	362	52	135
2006	608	786	687	273	426	60	158
2007	710	951	825	327	462	73	192
2008	1,215	1,042	1,052	375	470	75	194
2009	704	1,062	1,042	373	411	89	234
			Forecast				
2010	910	1,213	1,196	428	483	99	260
2011	1,058	1,329	1,340	470	537	107	286
2012	1,133	1,500	1,524	530	598	122	330
2013	1,316	1,717	1,766	606	687	139	381

Year	Fabricated Metal Product	Electrical Equipment & Appliance	Apparel	Plastics & Rubber Products	Primary Metal	Other Sectors	Total Export Volume
1998	100	70	11	43	84	429	2,010
1999	108	79	13	51	81	510	2,293
2000	124	101	15	63	99	626	2,766
2001	127	87	14	60	87	509	2,498
2002	124	85	15	60	84	443	2,399
2003	149	97	17	71	103	472	2,820
2004	169	111	18	80	115	509	3,264
2005	211	131	22	96	145	555	3,774
2006	232	143	25	107	153	533	4,192
2007	273	168	30	128	177	653	4,971
2008	361	226	33	153	272	774	6,241
2009	284	173	35	142	162	644	5,356
				Forecast			
2010	341	209	40	165	208	764	6,316
2011	383	238	44	183	245	814	7,034
2012	423	263	49	204	267	881	7,825
2013	487	305	57	234	313	984	8,992

Source: *IEES, California State University Fullerton and International Trade Administration*

6. CONCLUSION

This unique report provides detailed forecasts and analysis of merchandise exports for Inland Empire Metropolitan Statistical Area (MSA). Exports hold the potential to become an important source of growth for the region after the Great Recession given the slow recovery as well as the location and existing demographic trends of the two-county area. There was a spectacular increase in exports over the 2003-2008 period during which time Inland Empire total exports grew by a robust annual average rate of 17.4%, contributing significantly to the economic growth and employment trends in the county. In 2009 (the most recent available data), exports accounted for roughly 5.7% of the Inland Empire's regional output.

The Great Recession had a devastating impact on the Inland Empire economy given its large exposure to the housing crisis, construction decline and manufacturing collapse. The area's economy is intricately linked to the neighboring coastal counties (primarily Los Angeles and Orange County). While the recovery has been slow throughout the Southern California region, it has been exceptionally weak in the Inland Empire which has suffered from persistent high unemployment rates, continued issues related to the housing market, low income growth, and fiscal contractions from state and local governments. These issues are unlikely to be resolved in the short-term given that they are structural in nature and a long time is needed before a final resolution has been achieved.

Exports can become a driving force in the region's recovery which means that understanding the main trends and outlook for this central source of growth is important for both businesses and policymakers. However, official data for the region's exports are provided with long delays. The International Trade Administration will only provide limited updated data for 2010 towards the end of 2011. This report is unique in that it is the first and only available source that fills in this gap by providing detailed historical data and forecasts of total merchandise export for Inland Empire by (a) Country, (b) Region, and (c) Sector.

Using econometric models, our estimates show that Inland Empire exports increased by 17.9% -- to $6.3 billion in 2010. As the world economy continues to recover, albeit at a lower rate than in 2010,

Inland Empire exports are projected to increase again in 2011 by an additional 11.4%. Over 57% of Inland Empire's merchandise exports were to Canada, China, Japan, Netherlands and Mexico. NAFTA members account for roughly one third of Inland Empire's exports and they are expected to grow over the forecast horizon. More specifically, exports to Canada are projected to continue to exceed $1 billion over the forecast horizon, whereas exports to Mexico should increase to over $1 billion by 2012.

Manufacturing clusters dominate the type of exports from the Inland Empire. The three most important technology-related export sectors are Computers & Electronic Products, Miscellaneous Manufacturing, and Transportation Equipment, combining for $2.8 billion or 52.4% of the Inland Empire exports in 2009. Exports for the three largest sectors are projected to increase in 2011 with Computers & Electronic Products and Miscellaneous Manufacturing each exceeding $1.3 billion and Transportation Equipments amounting to $1.1 billion. Exports from Chemical, Machinery, Fabricated Metals and Food Manufacturing are projected to account for a combined total of over $1.5 billion in 2011 and are expected to remain important sectors for the region's future growth.

7. APPENDIX

A1. DATA SOURCES

"Annual Survey of Manufactures: Geographic Area Statistics," *U.S. Census Bureau*, http://www.census.gov/prod/www/abs/manu-asm-geo.

"California International Trade Register," *Database Publishing Company*, (1992), out-of-print.

"Current Establishment Survey," *Bureau of Labor Statistics, http://www.bls.gov*.

"Exchange Rates," Wharton Research Data Services database, http://wrds.wharton.upenn.edu, 2011.

"Exports from US Metropolitan Areas," *International Trade Administration*, http://www.trade.gov/mas/ian/Metro/index.html, 2011.

"Foreign Trade Statistics," *U.S. Census Bureau*, http://www.census.gov/foreign-trade.

"International Financial Statistics," International Monetary Fund, 1990-date, www.imfstatistics.org/imf/

"Labor Market Information," *State of California, Employment Development Department*, http://www.edd.ca.gov.

"Metro Business Patterns," *U.S. Census Bureau*, http://www.census.gov/econ/cbp/index.html.

"National Income and Products Account," *Bureau of Economic Analysis*, http://www.bea.gov.

"Regional Multipliers," *Bureau of Economic Analysis*, http://www.bea.gov, (1997).

"State and regional exports of merchandise," *International Trade Administration*, http://tse.export.gov, 2011.

"State export data series," *WISERtrade*, http://www.wisertrade.org, 2011.

"Statistical Abstract, Foreign Commerce & Aid," *U.S. Census Bureau*, http://www.census.gov/prod/www/abs/statab.htmlhttp://www.census.gov/foreign-trade.

"Trade Statistics" *International Trade Administration*, http://www.ita.doc.gov/, 2011.

"U.S. merchandise exports" *International Trade Administration*, http://tse.export.gov, 2011.

"U.S. District and Port Exports," *WISERtrade*, http://www.wisertrade.org, 2011.

"World Economic Outlook Database," *International Monetary Fund*, http://www.imf.org, 2011.

7. APPENDIX

A2. EXPORT DATA

The following is a summary of the export data sources. Parts of the summary are cited directly from the respective data source.

National Trade Data

TradeStats Express, International Trade Administration, U.S. Department of Commerce

The *International Trade Administration*, U.S. Department of Commerce, provides trade data for merchandise exports for the nation. This data are currently available annually (total for the year) from 1989 through 2010. Data are available for individual countries, trade/economic groups, and geographic regions by product type and industry. The data are available in the three product classification systems: North American Industry Classification System (NAICS) up to the four-digit level, Harmonized System (HS) at two- and four-digit levels, or Standard International Trade Classification (SITC) up to the three-digit level.

State Export Data

TradeStats Express, International Trade Administration, U.S. Department of Commerce

State export data are available in annually (total for the year) from 1999 through 2010. Data are available for individual countries, trade/economic groups, and geographic regions by product type and industry. The data are available by NAICS product classification (up to the three-digit level). The data captures origin-of-movement (OM) based on Origin State which differs from an earlier series based on Exporter Location (EL) (1993-2002). The OM series provides export statistics based on the state from which the merchandise starts its journey to the port of export. In contrast, the EL series was based on the zip code of the exporter and, unlike the OM series, it tended to capture company headquarters, wholesalers, brokers, and freight forwarders. Although OM data are not defined as the state of production origin, it is the closest

approximation to state of production for manufactured goods for which it may also capture the state of consolidation or the state of a broker or wholesaler.

U.S. Metropolitan Areas Export Data

International Trade Administration, U.S. Department of Commerce

The U.S. Metro Area Export data are available annually (total for the year) from 2005-2009 and are updated semi-annually. The top five export product profiles to a selected market are available for 2009 and are limited to only the top 5 countries for the top 50 metropolitan areas. In addition, as of the writing of this report, the data are updated with export volumes by country, region and industry for the first half of 2010. The export series for Metro Areas are computed by matching the five-digit zip codes entered on U.S. export declarations with the five-digit zip codes specified for each metropolitan area using concordance files from the Census Bureau's Geography Division and the U.S. Postal Service. The metropolitan export data series measures only the dollar value of merchandise exports (goods that can physically be transported across the border) and does not include exports of services. The metropolitan export data are only available in nominal U.S. dollars and are not adjusted for inflation or any other factors. Metropolitan areas referenced in the 2005 to 2009 data are based on the 2000 Census.

The export series for Metro Areas is based on the origin of movement by the zip code of the U.S. Principle Party of Interest (USPPI) of record. In 2004 the zip code of the USPPI, the party in the United States that receives the primary benefit (monetary or otherwise) from the shipment, was redefined to indicate the origin of movement of goods. Initially it did not necessarily represent the location of the USPPI. However, due to increased electronic reporting in the Automated Export System (AES), the validity of the reported ZIP Code has improved significantly since 2004. The USPPI of record is not necessarily the entity that produced the merchandise; hence, the series does not furnish complete and reliable data on the production origin of U.S. exports.

The existing Metro Area Export data differs from an earlier series produced by the U.S. International Trade Administration which were available from 1993-2002. The earlier series was based on the Exporter

Location (EL) Series collected by the Census Bureau from shipper's export declarations. With the introduction of the Automated Export System (AES) by the U.S. Customs Bureau and the Census Bureau, the accuracy of the Exporter Location Series became, according to the U.S. Census Bureau, highly suspect, and the series was discontinued. Measurement of exports by metropolitan area was not reported until the introduction of the zip-based Origin of Movement series in 2005. The Census Bureau states that the 2001 and 2005 export series cannot be compared because the 2001 data are based on Exporter Location Series and the 2005 data are based on the Origin of Movement (OM) series.

The OM zip-code series used to measure metropolitan exports differs from the OM data based on origin-state used for state exports. The OM series based on origin of state provides export statistics based on the state from which merchandise began its journey (as listed on the shipper's export declaration). The OM zip-code based series captures the origin of movement by the zip code of the U.S Principle Party of Interest. The collection of this new zip-based series makes it possible to determine exports by metropolitan area. The metropolitan series should only be compared to other sources that also use the Origin of Movement zip code based series and cannot be compared to other data sources that provide state exports (such as TradeStats and USA Trade Online) which publish their export data on an Origin of Movement state-basis.

Customs District Data

U.S. Census Bureau

Customs District and port data measure goods that leave out of a particular district or port (regardless of where the good originated in the United States). The metropolitan export data differs from the Custom District or port data. Since the metropolitan export data are based on the Origin of Movement series, this data attempts to track the export back to its origin of export, regardless of where the good actually leaves the country.

7. APPENDIX

A3. METHODOLOGY

Estimation of Exports for the Inland Empire

Total export volume for the Inland Empire are available from 2005 through 2009. Exports prior to year 2005 for the Inland Empire were extrapolated from regional, state, national and international trade trends as well as estimates from an econometric model. To estimate the historical data, regional, state, national and international merchandise exports volumes were used in conjunction with exchange rates, labor productivity in exporting industries, as well as U.S., foreign, and MSA growth measured by real gross domestic product.

In addition, the International Trade Administration provides export data for the Inland Empire MSA to the top 5 countries for the period from 2005-2009. The *IEES* has estimated the historical export volumes to main countries by using econometric and statistical methodology that takes into account foreign growth rates, trends in foreign demand for the region's products, labor share changes, and labor productivity growth rates. A similar technique is used to estimate historical exports by region and sector.

Forecasts from 2010-2013 (data for 2010 will be released later in 2011) are based on statistical and econometric models using historical estimates for Inland Empire exports, regional export volumes, regional export shares, trend-growth rates, trade-weighted exchange rates, labor productivity in export-related industries, as well as U.S., foreign and local growth rates as measured by national and MSA real gross domestic products (RGDP).

7. APPENDIX

A4. EXPORT REGIONS

Africa

Algeria, Angola, Benin, Botswana, British Indian Ocean Territories, Burkina, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo (Brazzaville), Congo (Kinshasa), Cote d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, French Southern and Antarctic Lands, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Morocco, Mozambique, Namibia, Niger, Nigeria, Reunion, Rwanda, St. Helena, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Western Sahara, Zambia, Zimbabwe.

Asia

Afghanistan, Bangladesh, Bhutan, Brunei, Burma, Cambodia, China, East Timor, Hong Kong, India, Indonesia, Japan, Laos, Macau, Malaysia, Maldives, Mongolia, Nepal, North Korea, Pakistan, Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, Vietnam.

European Union

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Federal Republic of Germany, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

North American Free Trade Agreement (NAFTA)

Canada, Mexico

Organization of the Petroleum Exporting Countries (OPEC)

Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, Venezuela.

South America

Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela

Source: *U.S. Census Bureau, Foreign Trade Statistics*

A5. INLAND EMPIRE EXPORTS

Table A1
Inland Empire Exports by Country: Growth Rate

Year	Canada	China	Japan	Netherlands	Mexico	Rest of World	Total Exports
2000	16.7%	53.7%	35.8%	29.4%	28.7%	10.2%	20.6%
2001	-13.9%	37.4%	-7.4%	-31.4%	-3.1%	-12.8%	-9.8%
2002	-15.7%	-0.1%	-28.8%	-6.9%	-1.1%	15.4%	-3.7%
2003	12.2%	26.9%	4.2%	5.1%	-8.7%	44.9%	20.0%
2004	15.5%	32.1%	18.6%	34.0%	10.2%	-0.7%	9.4%
2005	14.2%	20.0%	6.0%	11.8%	2.4%	27.6%	17.4%
2006	11.5%	-6.5%	-15.1%	45.4%	-3.9%	20.2%	11.1%
2007	25.6%	15.1%	12.7%	26.6%	4.3%	19.2%	18.6%
2008	32.8%	10.3%	26.5%	96.1%	19.0%	16.4%	25.6%
2009	-33.0%	-13.7%	-26.7%	-1.1%	43.0%	-17.3%	-14.2%
				Forecast			
2010	17.6%	28.7%	14.8%	29.6%	10.2%	16.9%	17.9%
2011	16.7%	8.8%	15.7%	7.0%	5.7%	12.1%	11.4%
2012	7.6%	12.8%	8.6%	13.6%	15.8%	10.8%	11.2%
2013	14.6%	16.9%	14.3%	16.9%	13.8%	14.7%	14.9%

Source: *IEES, California State University Fullerton and International Trade Administration*

Table A2
Inland Empire Exports by Country: Shares of Total Volumes

Year	Canada	China	Netherlands	South Korea	Mexico	Rest of World
1999	27.6%	3.0%	12.0%	5.5%	16.8%	35.1%
2000	26.7%	3.8%	13.5%	5.9%	18.0%	32.1%
2001	25.5%	5.8%	13.8%	4.5%	19.3%	31.1%
2002	22.3%	6.1%	10.2%	4.3%	19.8%	37.2%
2003	20.9%	6.4%	8.9%	3.8%	15.1%	45.0%
2004	22.0%	7.7%	9.6%	4.6%	15.2%	40.8%
2005	21.4%	7.9%	8.7%	4.4%	13.3%	44.3%
2006	21.5%	6.7%	6.6%	5.8%	11.5%	48.0%
2007	22.8%	6.5%	6.3%	6.2%	10.1%	48.2%
2008	24.1%	5.7%	6.3%	9.6%	9.6%	44.7%
2009	18.8%	5.7%	5.4%	11.1%	15.9%	43.0%
			Forecast			
2010	18.8%	6.2%	5.3%	12.2%	14.9%	42.7%
2011	19.6%	6.1%	5.5%	11.7%	14.1%	42.9%
2012	19.0%	6.2%	5.4%	12.0%	14.7%	42.8%
2013	19.0%	6.3%	5.3%	12.2%	14.6%	42.7%

Source: *IEES, California State University Fullerton and International Trade Administration*

Table A3
Inland Empire Exports by Region: Growth Rate

Year	Africa	Asia	European Union	NAFTA	OPEC	South America
2000	-8.2%	43.5%	26.8%	32.5%	-2.1%	-0.5%
2001	10.0%	-1.0%	-3.2%	-1.9%	-11.8%	3.8%
2002	9.7%	-9.6%	-12.3%	-2.4%	2.4%	-23.1%
2003	20.8%	13.1%	8.5%	5.8%	12.7%	-1.1%
2004	36.2%	31.1%	22.2%	19.2%	44.4%	50.8%
2005	20.9%	15.7%	9.6%	13.0%	81.2%	25.8%
2006	21.8%	1.5%	29.8%	5.6%	36.7%	54.9%
2007	24.2%	10.7%	14.9%	18.2%	55.8%	69.5%
2008	5.9%	25.2%	27.0%	28.6%	15.9%	-8.1%
2009	21.2%	-16.2%	-18.1%	-11.4%	9.0%	-30.4%
			Forecast			
2010	19.4%	27.5%	8.7%	15.4%	11.3%	20.9%
2011	6.2%	7.1%	18.8%	11.8%	7.8%	17.3%
2012	14.0%	11.3%	9.7%	11.7%	15.5%	7.1%
2013	14.9%	16.3%	13.7%	14.5%	13.5%	15.8%

Source: *IEES, California State University Fullerton and International Trade Administration*

Table A4
Inland Empire Exports by Sector: Growth Rate

Year	Transportation Equipment	Computer & Electronic Product	Miscellaneous	Chemical	Machinery	Beverage and Tobacco	Food
1999	6.4%	22.5%	13.7%	12.6%	13.3%	9.5%	12.6%
2000	9.0%	26.8%	13.7%	19.8%	34.7%	12.0%	13.2%
2001	-3.0%	-10.3%	-4.5%	-1.2%	-16.6%	-2.1%	2.4%
2002	-4.4%	-5.8%	3.0%	6.2%	-4.1%	3.0%	-1.2%
2003	29.3%	17.4%	18.3%	21.8%	15.4%	22.5%	27.3%
2004	27.3%	20.5%	12.5%	12.1%	21.8%	20.4%	6.5%
2005	13.7%	6.9%	26.3%	23.9%	11.1%	2.8%	17.3%
2006	22.1%	30.3%	-2.8%	6.7%	17.5%	16.9%	17.1%
2007	16.8%	21.0%	20.1%	19.8%	8.5%	21.1%	21.2%
2008	71.0%	9.6%	27.4%	14.5%	1.8%	2.0%	1.2%
2009	-42.0%	1.9%	-0.9%	-0.4%	-12.6%	18.9%	20.3%
			Forecast				
2010	29.2%	14.2%	14.8%	14.7%	17.5%	11.4%	11.2%
2011	16.2%	9.6%	12.1%	9.8%	11.2%	8.1%	10.2%
2012	7.0%	12.9%	13.7%	12.7%	11.4%	14.3%	15.4%
2013	16.2%	14.5%	15.8%	14.5%	14.9%	14.1%	15.4%

Year	Fabricated Metal Product	Electrical Equipment & Appliance	Apparel	Plastics & Rubber Products	Primary Metal	Other Sectors	Total port Volume
1999	7.1%	13.5%	13.0%	19.1%	-4.5%	19.0%	14.1%
2000	15.4%	26.5%	16.0%	23.2%	22.9%	22.9%	20.6%
2001	2.4%	-13.3%	-3.9%	-4.8%	-11.9%	-18.7%	-9.7%
2002	-2.5%	-2.7%	4.1%	0.5%	-3.1%	-13.0%	-4.0%
2003	20.1%	14.0%	13.6%	18.7%	21.6%	6.6%	17.6%
2004	13.7%	14.4%	8.7%	13.1%	12.3%	7.9%	15.7%
2005	24.9%	18.4%	18.9%	18.7%	26.1%	9.0%	15.6%
2006	9.6%	9.1%	15.1%	12.4%	5.1%	-4.0%	11.1%
2007	17.9%	17.7%	20.3%	19.2%	15.7%	22.6%	18.6%
2008	32.0%	34.2%	9.1%	19.8%	53.8%	18.5%	25.6%
2009	-21.2%	-23.4%	7.4%	-7.3%	-40.4%	-16.8%	-14.2%
			Forecast				
2010	20.0%	20.8%	13.2%	16.2%	28.3%	18.7%	17.9%
2011	12.3%	13.8%	9.0%	10.5%	18.1%	6.6%	11.4%
2012	10.4%	10.6%	13.4%	12.0%	8.6%	8.2%	11.2%
2013	15.2%	15.9%	14.3%	14.7%	17.3%	11.7%	14.9%

Source: *IEES, California State University Fullerton and International Trade Administration*

Table A5
Inland Empire Exports by Sector: Shares of Total Volume

Year	Transportation Equipment	Computer & Electronic Product	Miscellaneous	Chemical	Machinery	Beverage and Tobacco	Food
1998	12.3%	15.1%	16.4%	5.3%	9.5%	1.4%	3.3%
1999	11.5%	16.2%	16.4%	5.3%	9.4%	1.3%	3.2%
2000	10.4%	17.1%	15.4%	5.2%	10.5%	1.2%	3.0%
2001	11.1%	17.0%	16.3%	5.7%	9.7%	1.3%	3.4%
2002	11.1%	16.6%	17.5%	6.3%	9.7%	1.4%	3.5%
2003	12.2%	16.6%	17.6%	6.5%	9.5%	1.5%	3.8%
2004	13.4%	17.3%	17.1%	6.3%	10.0%	1.5%	3.5%
2005	13.2%	16.0%	18.7%	6.8%	9.6%	1.4%	3.6%
2006	14.5%	18.8%	16.4%	6.5%	10.2%	1.4%	3.8%
2007	14.3%	19.1%	16.6%	6.6%	9.3%	1.5%	3.9%
2008	19.5%	16.7%	16.8%	6.0%	7.5%	1.2%	3.1%
2009	13.1%	19.8%	19.5%	7.0%	7.7%	1.7%	4.4%
			Forecasts				
2010	14.4%	19.2%	18.9%	6.8%	7.7%	1.6%	4.1%
2011	15.0%	18.9%	19.1%	6.7%	7.6%	1.5%	4.1%
2012	14.5%	19.2%	19.5%	6.8%	7.6%	1.6%	4.2%
2013	14.6%	19.1%	19.6%	6.7%	7.6%	1.5%	4.2%

Year	Fabricated Metal Product	Electrical Equipment & Appliance	Apparel	Plastics & Rubber Products	Primary Metal	Other Sectors
1998	5.0%	3.5%	0.6%	2.1%	4.2%	21.3%
1999	4.7%	3.5%	0.6%	2.2%	3.5%	22.2%
2000	4.5%	3.6%	0.5%	2.3%	3.6%	22.6%
2001	5.1%	3.5%	0.6%	2.4%	3.5%	20.4%
2002	5.2%	3.5%	0.6%	2.5%	3.5%	18.5%
2003	5.3%	3.4%	0.6%	2.5%	3.6%	16.7%
2004	5.2%	3.4%	0.6%	2.5%	3.5%	15.6%
2005	5.6%	3.5%	0.6%	2.5%	3.9%	14.7%
2006	5.5%	3.4%	0.6%	2.6%	3.6%	12.7%
2007	5.5%	3.4%	0.6%	2.6%	3.6%	13.1%
2008	5.8%	3.6%	0.5%	2.5%	4.4%	12.4%
2009	5.3%	3.2%	0.7%	2.7%	3.0%	12.0%
			Forecasts			
2010	5.4%	3.3%	0.6%	2.6%	3.3%	12.1%
2011	5.4%	3.4%	0.6%	2.6%	3.5%	11.6%
2012	5.4%	3.4%	0.6%	2.6%	3.4%	11.3%
2013	5.4%	3.4%	0.6%	2.6%	3.5%	10.9%

Source: *IEES, California State University Fullerton and International Trade Administration*

Inland Empire International Trade Forecasts

An Overview and Analysis of Inland Empire Exports

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