Inland Empire Prosperity . . .

Educational Challenges With It!

John Husing, Ph.D.
Economics & Politics, Inc.
Chief Economist, IEEP
After Losing 8.71 Million Jobs …

U.S. Jobs Long Slow Growth - **Not Over-Heating**

Exhibit 3 - Job Creation or Destruction
U.S., 1998-2015, Seasonally Adjusted (000)

March 2010-July 2015
Job Gain: +12,416,000 or +42.5% versus 8,710,000 Lost in Recession

Source: U.S. Bureau of Labor Statistics
Petroleum Prices

Helps Families In Modest Income Areas

Exhibit 10.-West Texas Intermediate Crude Oil Prices Monthly Average, 2000-2015

Source: U.S. Energy Information Agency
Value of the Dollar: Helps Imports & Hurts Exports

Exhibit 11: Value of Dollar vs. Major Currencies, 2000-Present

Was $4,000, Now $3,237, Save $763

Source: U.S. Federal Reserve Board
Consumer Confidence, 2009-2015

Needed To Help Homes Sales

Exhibit 10: U.S. Consumer Confidence Present Outlook, January 2009-Present

Source: Conference Board
California Wage & Salary Employment: A Record Level

California Total Jobs, 1983-2015ytd

Source: CA Employment Development Department
ytd = January to May 2015
California Job Gains/Losses

2008-2010
-1,066,400

2011-2015
+1,942,491

Great Recession
+879,733
82.7% Up

Recovery

California Job Gains & Losses, 1984-2015

Source: CA Employment Development Department
Note: 2015 Based On 5-Months Data
Very Rapid Job Growth: 3 Straight Years!

2011-2016p
Gained Back 250,502 vs. 142,933 Lost
107,576 More Jobs Will Have Been Created!

Exhibit 33-Wage & Salary Job Change
Inland Empire, Annual Average, 1984-2016p

Sources: CA Employment Development Department, Economics & Politics, Inc.
Inland Empire Growth was the 2nd Largest Absolute Job Gain in California in 2014!

Job Growth, Major California Metro Areas, California, 2013-2014

Los Angeles: 96,500
Inland Empire: 53,100
San Francisco-San Mateo: 45,200
Santa Clara Metro Area: 43,600
Orange County: 36,300
San Diego: 30,400
Alameda: 27,433
Contra Costa: 27,433
Sacramento: 23,900
Fresno: 10,150
Kern: 7,500
San Joaquin: 5,900

Source: Revised Data, CA Employment Development Department
IE Unemployment Rate: Closing In on the National Level

Exhibit 6.-Unadjusted Unemployment History
U.S. & Inland Empire, 2001-2015

The Over-riding Issue: Poverty

Share of Total Population Living in Poverty, California, By Region, 2013

Central Valley: 35.4% (All People), 35.4% (Under 18)
Los Angeles: 27.3% (All People), 27.3% (Under 18)
Inland Empire: 18.2% (All People), 18.2% (Under 18)
Rest of CA: 20.6% (All People), 20.6% (Under 18)
So. Coastal: 19.1% (All People), 19.1% (Under 18)
Expanded Bay Area: 16.5% (All People), 16.5% (Under 18)

Source: American Community Survey, 2013
Gold Mine Theory

Secondary Tier

Primary Tier

Kelly Space & Technology, Inc.

$10,000

TEN THOUSAND DOLLARS
Educational Challenge For Adults & Their Children

Time To Stop Talking & Do Something About This!

Educational Attainment: High School or Less Adults, 25 & Over, by Region, 2013

- Central Valley: 51.9%
- San Bernardino: 47.1%
- Riverside: 45.7%
- Los Angeles: 43.5%
- Rest of CA: 36.1%
- So. Coastal: 34.5%
- Expanded Bay Area: 31.3%

Source: American Community Survey, 2013
Adult Workforce Training Strategy

- Must Be An Educational Priority or Poverty Increases
- Business Must Convene Key Players
- Bi-County Education Leaders Must Come Together
- Single Cohesive Strategies Designed
- Single Proposals To:
  - Legislature
  - Non-Profits
- Competitiveness Between Inland Entities Discouraged
- Business Provide Backbone Support & Drive Process
- Business Coordinate Endorsements
- If Community Colleges Can’t Respond, Look To Private Sector Schools
Key Strategic Elements

A. Industry Defined Jobs
B. Industry Define Training Standards, Certifications, Speed of Training
C. Business Assist Schools
   1. School Visitations
   2. Company Tours
   3. Job Shadowing
   4. Internships
   5. Externships
D. AB 86
   • Adult Schools
   • ROP
   • K-12 Technical Education
E. STEM
F. Soft Skills
IEEP: Irvine Grant-Launch Initiative to move workers to Middle Class jobs

- Business Decide High Levels of Poverty Not In Their Interest
- IEEP Created Strategy
  - Secure Housing
  - Wrap Around Support Services (*income, child care, transport*)
  - Training In Business Defined Sectors
    - Skills
    - Certifications
    - Speed of Training
  - Business Agree To Prioritize Interviews For Jobs
- $300,000 Irvine Planning Grant … Likely $1.5 million Implementation Grant
- Agreement By Every County Agency
- Issue: Agencies Frustrated … **Who Will Provide The Training?**
Education Sector: Innovation & Working Together

Chaffey College: Only Presidential grant in CA for manufacturing training
Public & Private Education Growing As Budgets Heal

K-12 Median Pay $41,557
High Ed Median Pay $60,465
Health Care
Health Care Jobs: Continuous Growth

2013-2014 Growth of 4,000 Jobs

<table>
<thead>
<tr>
<th>Physicians</th>
<th>Other Ambulatory Care</th>
<th>Hospitals</th>
<th>Residential Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,200</td>
<td>1,500</td>
<td>0</td>
<td>1,300</td>
</tr>
</tbody>
</table>

2011-2015 12% of Job Growth

Median Pay $57,443
Training Issue

Soft Skills

Athletic Trainers & Exercise Physiologists
Cardiovascular Technologists and Technicians
Dental Assistants
Dental Hygienists
Diagnostic Medical Sonographers
EMTs
Massage Therapists
Medical Laboratory Techs
Medical Records & Health Information Techs
Medical Transcriptionists
MRI Techs
Nuclear Medicine Techs
Nursing (RN, LVN, Nurses Aids)
Opticians
Paramedics
Pharmacy Techs
Phlebotomists
Physical Therapists
Physician’s Assistants
Radiological Techs
Respiratory Techs
Logistics Flow of Goods
Port Container Volumes
Strong Even With January Labor Slowdown

Exhibit 22.-Import & Export Container Volume, 2000-2015e
Ports of Los Angeles & Long Beach (mil. teus)

2015 = Based upon experienced Year to Date, May
Source: Port Import Export Reporting Service (PIERS), collected from Vessel, LA-LB for 2011-2015
E-Commerce Growth Rates Year Over Year by Quarter

U.S. E-Commerce Growth Rates Quarter over Same Quarter Prior Year, 2001-2014

Source: Bureau of the Census
A. Needs

• Truck Drivers
• Diesel & CNG/LNG Mechanics
• Technological Changes To Work Environment  
  o Robotic Equipment 
  o Information Technology 
  o Environmental Systems 
• Soft Skills
Industrial Construction

Exhibit 24: Industrial Space Under Construction
Southern California Market, June 2015

Inland Empire: 19,820,384 sq ft (82.2%)

Los Angeles: 2,504,958 sq ft (10.4%)
Orange County: 1,166,482 sq ft (4.8%)
San Diego: 519,081 sq ft (2.2%)
Ventura County: 92,740 sq ft (0.4%)

Sources: CB Richard Ellis

Four Qtrs. IE Net Absorption: 17.4 million Sq. Ft.
Net Industrial Space Absorption

Exhibit 14 - Industrial Space Net Absorption Riverside Metropolitan Area, 1991-Present (moving 4-quarter total)

Source: Grubb & Ellis to 2011, CB Richard Ellis 2012-2015

17.4 million
Industrial Vacancy Rate

Exhibit 23 - Industrial Space Vacancy Rate Inland Empire, 1991-Present

Source: Grubb & Ellis to 2011, CB Richard Ellis 2012-2015
Logistics Incredibly Important To Inland Empire’s Economic Health

Remember: Every Gold Mine Job Also Funds Another Secondary Tier Job

Exhibit 7 - Inland Empire Growing & Declining Sectors
Annual Average 2011-2015 ytd

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
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<td>Logistics</td>
<td>25,308</td>
<td>25,548</td>
<td>24,950</td>
<td>24,427</td>
<td>23,353</td>
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<td>Eating &amp; Drinking</td>
<td>22,353</td>
<td>22,041</td>
<td>21,641</td>
<td>21,427</td>
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<td>Health Care</td>
<td>19,660</td>
<td>19,450</td>
<td>19,250</td>
<td>19,040</td>
<td>18,820</td>
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<td>Construction</td>
<td>13,745</td>
<td>13,545</td>
<td>13,350</td>
<td>13,150</td>
<td>12,950</td>
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<td>Social Assistance</td>
<td>10,817</td>
<td>10,641</td>
<td>10,450</td>
<td>10,250</td>
<td>10,040</td>
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<tr>
<td>Retail Trade</td>
<td>9,445</td>
<td>9,250</td>
<td>9,050</td>
<td>8,850</td>
<td>8,640</td>
</tr>
<tr>
<td>Admin. Support</td>
<td>9,087</td>
<td>8,850</td>
<td>8,640</td>
<td>8,450</td>
<td>8,240</td>
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<tr>
<td>Mgmt &amp; Professio</td>
<td>7,620</td>
<td>7,450</td>
<td>7,250</td>
<td>7,050</td>
<td>6,840</td>
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<tr>
<td>K-12 Education</td>
<td>7,215</td>
<td>7,050</td>
<td>6,850</td>
<td>6,650</td>
<td>6,440</td>
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<td>Employment Agency</td>
<td>5,975</td>
<td>5,750</td>
<td>5,550</td>
<td>5,350</td>
<td>5,140</td>
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<td>Manufacturing</td>
<td>3,445</td>
<td>3,250</td>
<td>3,050</td>
<td>2,850</td>
<td>2,640</td>
</tr>
<tr>
<td>Other Services</td>
<td>3,243</td>
<td>3,050</td>
<td>2,850</td>
<td>2,650</td>
<td>2,440</td>
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<tr>
<td>Financial Activities</td>
<td>1,545</td>
<td>1,350</td>
<td>1,150</td>
<td>950</td>
<td>740</td>
</tr>
<tr>
<td>Amusement</td>
<td>1,393</td>
<td>1,200</td>
<td>1,000</td>
<td>800</td>
<td>600</td>
</tr>
<tr>
<td>Higher Education</td>
<td>1,215</td>
<td>1,050</td>
<td>850</td>
<td>650</td>
<td>450</td>
</tr>
<tr>
<td>Accommodation</td>
<td>(290)</td>
<td>(260)</td>
<td>(230)</td>
<td>(200)</td>
<td>(170)</td>
</tr>
<tr>
<td>Mining</td>
<td>(987)</td>
<td>(950)</td>
<td>(920)</td>
<td>(890)</td>
<td>(860)</td>
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<tr>
<td>Utilities</td>
<td>(4,482)</td>
<td>(4,250)</td>
<td>(4,050)</td>
<td>(3,850)</td>
<td>(3,640)</td>
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<tr>
<td>Agriculture</td>
<td>(4,780)</td>
<td>(4,550)</td>
<td>(4,350)</td>
<td>(4,150)</td>
<td>(3,940)</td>
</tr>
<tr>
<td>Publish, telecomm</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal &amp; State</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Government</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

2015 is January thru May
PM 2.5: Diesel Pollution

Riverside-Rubidoux: PM 2.5 Days Above National 24 Hour Standard

-95.6%

Source: South Coast Air Quality Management District
Manufacturing: Should Be A Major Growth Source
California Manufacturing Job Growth Just 4.0% of U.S. Growth

Exhibit 6.-Manufacturing Job Trends, Seasonally Adjusted
U.S. & California, January 2010 - June 2015

Sources: U.S. Bureau of Labor Statistics, CA Employment Development Department
### Exhibit 63: Industrial Electrical Rates, Cents per KWh
Western States Competitive With California, November 2014

<table>
<thead>
<tr>
<th>State</th>
<th>Rates</th>
<th>CA Disadvantage</th>
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<tbody>
<tr>
<td>California</td>
<td>$7.88</td>
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<tr>
<td>North Dakota</td>
<td>$7.35</td>
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<tr>
<td>Kansas</td>
<td>$6.88</td>
<td>$6.25</td>
</tr>
<tr>
<td>Nebraska</td>
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<tr>
<td>South Dakota</td>
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<tr>
<td>Colorado</td>
<td>$6.75</td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td>$6.66</td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td>$6.15</td>
<td>81.9%</td>
</tr>
<tr>
<td>Oregon</td>
<td>$6.07</td>
<td>94.0%</td>
</tr>
<tr>
<td>Texas</td>
<td>$6.07</td>
<td>96.5%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>$6.07</td>
<td>96.2%</td>
</tr>
<tr>
<td>Arizona</td>
<td>$5.76</td>
<td>88.8%</td>
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<tr>
<td>Arkansas</td>
<td>$5.73</td>
<td>110.2%</td>
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<tr>
<td>Utah</td>
<td>$5.68</td>
<td></td>
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<tr>
<td>Idaho</td>
<td>$5.54</td>
<td>118.5%</td>
</tr>
<tr>
<td>Missouri</td>
<td>$5.46</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>$5.21</td>
<td>129.0%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>$5.07</td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>$4.77</td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td>$4.62</td>
<td>135.3%</td>
</tr>
<tr>
<td>Nevada</td>
<td>$4.40</td>
<td>150.1%</td>
</tr>
<tr>
<td>Washington</td>
<td>$4.40</td>
<td>158.2%</td>
</tr>
</tbody>
</table>

Sources: U.S. Energy Information Agency
Inland Empire Manufacturing Jobs

2011-2015
4% of Job Growth

Median Pay $49,138
A. Issue is Baby Boomer Retirees
   • Industry Specified Skills, Occupations, Certifications
   • Industry Define Speed of Training
   • Types of Skills
     o Mechanics
     o Machinists
     o Welders
     o Electrical Technicians
     o Software Techs
   • Soft Skills
Construction: Finally Coming Back
Notices of Default At Low Levels (878 in June 2015)

Negative Equity Has Dropped 4th Qtr 2009-1st Qtr 2015 54.9% to 13.9%

Exhibit 20.-Notices of Default Inland Empire, 2007-2015

Source: Foreclosureradar.com
Long Term Competitive Price Advantage Still Exists

Exhibit 12: Home Price Advantage, Inland Empire & Southern California Markets
Median Priced New & Existing Home, 2nd Quarter 2015

- Inland Empire: Median All Home Price $296,000
- San Diego: Median All Home Price $512,000, Inland Empire Advantage $216,000
- Los Angeles: Median All Home Price $517,000, Inland Empire Advantage $221,000
- Orange: Median All Home Price $698,000, Inland Empire Advantage $402,000

Source: Dataquick
Affordability to Median Income Household

I. Empire: 47%-53%
LA: 31%-69%
Orange: 22%-78%
Home Sales Volume
Finally Some Upward Motion

Exhibit 16. All Homes Sales, Inland Empire Seasonally Adjusted, by quarter, 1988-2015

Source: Dataskip
Construction Jobs: Finally Growing

Median Pay $51,923
Training Issue

- Issue is Loss of Workforce
- Need People To Be Able To Develop Trade Skills To Industry Standards
- Soft Skills
High-End & Office Based Jobs

Film & Commercials

Engineering

Legal & Accounting

Police & Fire

Health Care

Science & Information
Higher End Homes Draw Well Educated Workers

UPLAND
$484,914

EASTVALE
$468,269

CORONA
$429,667

Loma Linda
$357,037

Claremont
$568,700

TEMECULA
$344,095

$427,095

$465,778

$459,000
Migration of Educated Workers

Exhibit 29. Population with BA or High Degree Persons 25 & Over, Inland Empire, 2000-2013

- 2000: 312,257
- 2013: 543,022
- Change: 230,765
- Percent Change: 73.9%

Source: U.S. Census Bureau
Still relatively low share of BA or higher.
Diverse Challenge

Ethnicity of Population Inland Empire, 2013

- Asian & Pacific: 285,452 (6.5%)
- African American: 308,487 (7.0%)
- White: 1,521,153 (34.7%)
- Other: 123,682 (2.8%)
- Hispanic: 2,142,104 (48.9%)

Source: 2013 American Community Survey
Professionals, Mgmt., Utilities, Information, Mining Slowly Coming Back

Median Pay $55,308

Exhibit 7 - Inland Empire Growing & Declining Sectors
Annual Average 2011-2015 ytd

2015 is January thru May
Office Space Net Absorption

Exhibit 16: Office Net Space Absorption Moving 4-quarters, Inland Empire, 1991-Present

Source: Grubb & Ellis to 2011, CB Richard Ellis 2012-2015
Office Vacancy Rate

Exhibit 25.-Office Vacancy Rate
Inland Empire, 1991–Present

Source: Grubb & Ellis to 2011, CB Richard Ellis 2012-2015

15.8%
Governor’s Innovation Award:

Cal State Grant 1 of 5 Top Ranked of 57 Applications by Staff

University of California, Riverside
Loma Linda University Health Systems
San Bernardino County Superintendent of Schools
Riverside County Superintendent of Schools
Coachella Valley, Palm Springs, and Desert Sands School Districts
Crafton Hills College; San Bernardino Valley College
Riverside Community College District; Riverside Community College
AVID
Inland Empire Economic Partnership
Coachella Valley Economic Partnership
Inland Valley Development Agency
Kelly Space and Technology
San Antonio Community Hospital; Redlands Community Hospital
Bank of America
Union Pacific Railroad
Imperial Irrigation District
California Steel Industries
Cardenas Market
County of San Bernardino
Assembly Member Brown; Mayor Montanez, Corona
Strategic Elements: Academic Success

- College Completion
- A-G Requirements
- STEM
- Cultural Divide
- K-12, Community College & University Articulation
- Parental Understanding of College Environment
Financial Sectors, Slow Comeback

Median Pay $48,010

Exhibit 7.- Inland Empire Growing & Declining Sectors
Annual Average 2011-2015 ytd

2011-2015
2% of Job Growth

Training Issue

• Issue:
  o No One Offers Middle Management Training
  o Industry Specified Skills & Occupations
  o Industry Defined Acceptable Credentials
  o Industry Define Speed of Training

• Types of Skills
  o Escrow
  o Title
  o Teller Managers
  o Loan Officers
  o Real Estate Agents & Finance
Gold Mine Theory

Secondary Tier

Primary Tier

[Images and illustrations related to the Gold Mine Theory, including a construction site, a nugget of gold, and a banknote.]
Low Paying Job Growth
Retail, Consumer & Bus. Services, Hotel, Eat & Drink
Amusement, Agriculture, Employment Agency

Exhibit 7.-Inland Empire Growing & Declining Sectors
Annual Average 2011-2015 ytd

- Logistics: 43,803
- Eating & Drinking: 25,308
- Health Care: 22,353
- Construction: 19,660
- Social Assistance: 21,427
- Retail Trade: 15,308
- Admin. Support: 10,817
- Mgmt & Professio: 9,445
- K-12 Education: 9,087
- Employment Agcy: 7,215
- Manufacturing: 7,620
- Other Services: 3,445
- Financial Activities: 3,243
- Amusement: 1,545
- Higher Education: 1,393
- Accommodation: 215
- Mining: 215
- Utilities: 215
- Agriculture: 215
- Publish, telecomm: 987
- Federal & State: 2,952
- Local Government: 4,482

2011-2015 45% of Job Growth

Median Pay $28,475

2015 is January thru May
Training: Middle Management

• Issue:
  o No One Offers Middle Management Training
  o Industry Specified Skills & Occupations
  o Industry Defined Acceptable Credentials
  o Industry Define Speed of Training

• Types of Skills Train To Sector Requirements
  o Retail Mid-Managers
  o Restaurant & Fast Food Managers
  o Hotel Department Managers
  o Executive Assistants
Federal, State, Local Government Still Not Recovered

Exhibit 7.-Inland Empire Growing & Declining Sectors Annual Average 2011-2015 ytd

Logistics: 43,803
Eating & Drinking: 25,308
Health Care: 22,353
Construction: 21,427
Social Assistance: 19,660
Retail Trade: 13,745
Admin. Support: 10,817
Mgmt & Professional Service: 9,445
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Employment Agency: 7,620
Manufacturing: 7,215
Other Services: 5,975
Financial Activities: 3,445
Amusement: 3,243
Higher Education: 1,545
Accommodation: 1,393
Minning: 1215
Utilities: (290)
Agriculture: (987)
Publish, telecomm: (2,952)
Federal & State Local Government: (4,482)

2011-2015 -5% of Job Growth

Median Pay $57,529

2015 is January thru May
With Shared Governance, Faculty Senate Plays A Huge Role In Community College Priorities.

If Chaffey Is Typical, Campus Political Players Come From Areas Like Social Science & Humanities … Not Technical Training.

This Is An Issue If There Is Not A Leadership Understanding Of The Importance Of Technical & Contract Training To Providing Upward Mobility For Marginally Educated Workers To The Middle Class.

It Will Be A Fatal Flaw In Any Strategy To Increase The Quality Of Life In The Inland Empire.