Sequoia National Forest
Know Your Social and Economic Situation Workshop

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Visalia, California

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Headwaters Economics

www.headwaterseconomics.org

Mission: Improve community development and land management decisions in the West.
Identify Issues and conduct research

Interpret complex economic and ecological concepts

Distribute to people who can make a difference

Bring people together to implement solutions
The Economy of the West:

- Recent changes
- Drivers of change
- Winners and losers
- Protected lands
- Adapting to change

How has the regional economy changed?

Goods Production
Services
Non-Labor income
The West: Personal Income

- One out of every two new dollars in personal income
- One out of every three new dollars in personal income

Source: BEA REIS

- The rest of the economy: 98%
- Mining (incl. energy development): 0.52%
- Agriculture (incl. ranching): 0.74%
- Wood products (incl. paper products): 0.72%

Source: BEA REIS
Rural West: Personal Income

one out of every two new dollars in personal income

one out of every three new dollars in personal income


The rest of the economy 92%

Wood products (incl. paper products) 1.8%

Agriculture (incl. ranching) 2%

Mining (incl. energy development) 3.8%

8%

Source: BEA REIS
What are the drivers of change?

- Changing nature of goods production
- International Competition
- Aging population
- Emphasis on services / information
Global Assembly Line

Percent of Population 65 and Over

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>4%</td>
</tr>
<tr>
<td>1950</td>
<td>8.1%</td>
</tr>
<tr>
<td>2000</td>
<td>13%</td>
</tr>
<tr>
<td>2050 (projected)</td>
<td>21.8%</td>
</tr>
</tbody>
</table>

By 1983 more Americans over 65 than the number of teenagers (no longer a nation of youths)

What’s next? One third of Americans were born between 1946 and 1964 – the BABY BOOMERS

Source: Ken Dychtwald “Age Wave”
<table>
<thead>
<tr>
<th>Industry</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>$14 billion</td>
</tr>
<tr>
<td>Mining, Oil, &amp; Gas</td>
<td>$10 billion</td>
</tr>
<tr>
<td>Lumber, wood, paper (est.)</td>
<td>$14 billion</td>
</tr>
<tr>
<td><strong>Examples of “services”</strong></td>
<td>$38 billion</td>
</tr>
<tr>
<td>Consumer Services</td>
<td>$86 billion</td>
</tr>
<tr>
<td>Health Services</td>
<td>$94 billion</td>
</tr>
<tr>
<td>Producer Services</td>
<td>$362 billion</td>
</tr>
</tbody>
</table>

Source: BEA REIS
What are “producer services?”

Relatively high-wage “knowledge-based industries” …

Finance, insurance, real estate, business services, engineering, management services, etc.
## Wages and Employment in the West, 2003

(Private Sector Only)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>% of Total</th>
<th>Average Annual Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, all industries</td>
<td>22,942,965</td>
<td>100%</td>
<td>38,612</td>
</tr>
<tr>
<td>Goods Producing</td>
<td>4,920,886</td>
<td>21%</td>
<td>43,552</td>
</tr>
<tr>
<td>Natural Resources and Mining</td>
<td>692,714</td>
<td>3%</td>
<td>26,002</td>
</tr>
<tr>
<td>Construction</td>
<td>1,625,303</td>
<td>7%</td>
<td>39,507</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2,602,869</td>
<td>11%</td>
<td>50,749</td>
</tr>
<tr>
<td>Service-Providing</td>
<td>18,022,080</td>
<td>79%</td>
<td>37,262</td>
</tr>
<tr>
<td>Trade, Transportation, and Utilities</td>
<td>5,128,818</td>
<td>22%</td>
<td>34,291</td>
</tr>
<tr>
<td>Information</td>
<td>812,313</td>
<td>4%</td>
<td>70,052</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>1,838,252</td>
<td>7%</td>
<td>54,999</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>3,613,832</td>
<td>16%</td>
<td>45,948</td>
</tr>
<tr>
<td>Education and Health Services</td>
<td>2,822,678</td>
<td>12%</td>
<td>36,455</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>2,891,992</td>
<td>13%</td>
<td>18,487</td>
</tr>
<tr>
<td>Other Services</td>
<td>1,058,758</td>
<td>5%</td>
<td>22,894</td>
</tr>
<tr>
<td>Unclassified</td>
<td>55,439</td>
<td>0.2%</td>
<td>36,398</td>
</tr>
</tbody>
</table>

Source: BLS QCEW

### Who wins and who loses?

- **Connection to markets**
- **Education**
- **Resource dependent**
From 1990 to 2003, real wages in the counties where over 50 percent of the jobs require a college degree grew by 26 percent, compared to 7 percent growth for those counties where less than 50 percent of the jobs required a college degree.

Income growth and above average dependence on:

- Producer Services (engineering, finance, etc.) 296%
- Consumer
- Retail 205%
- Wholesale 185%
- Government 134%
- Distributive 134%
- Social 113%
- Transformative (mining, logging, manufacturing, etc.) 99%

Counties more than average dependent on “producer services” grow the fastest ...

... more dependent on “transformative” grow the slowest

Source: Prosperity in the 21st Century West. Rasker et al.
Average Wages per Job in the West

The West
Resource Dependent Counties (>20% of Jobs)

Less than 5% of the counties in the West (20 out of 411 counties) have more than 20% of their job base in either timber, mining or energy development (including oil, gas and coal).

Source: BEA REIS

Importance of protected lands?

- Types of land uses
- Correlations with prosperity
- Metro to rural continuum
Other Federal
BLM
Forest Service
Public Lands
National Park Service
US Fish & Wildlife Service
Other Federal

“Protected”
National Parks (NPS)
National Conservation Areas (BLM)
National Monuments (NPS, FS, BLM)
Wilderness (NPS, FWS, FS, BLM)
National Rec. Areas (NPS, FS, BLM)
National Wild and Scenic Rivers (NPS)
National Wildlife Refuges (FWS)
Waterfowl Production Areas (FWS)
Wildlife Management Areas (FWS)

“Unprotected”
... next to protected lands

“Unprotected”
... NOT next to protected lands
Land Classes

- "Protected"
- "Unprotected" ... next to protected lands
- "Unprotected" ... NOT next to protected lands

Land Classes

- Unprotected, next to protected lands
- All public lands
- All protected lands
- Unprotected, NOT next to protected lands

Correlations (95% confidence level)

Personal Income Growth 1990-2000

Source: Prosperity in the 21st Century West. Rasker et al.
Correlations with Personal Income Growth 1990-2000

Correlations (95% confidence level)

-0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8

Percent born in state

Mining, oil, gas, timber, etc.
Economic specialization
Ski resort
Arts, entertainment, food
Unprotected next to protected lands
Mountains
All public lands
All protected lands
Unprotected NOT next to protected lands
Driving distance to city
Producer Services
(engineering, architecture, etc.)
Education
Airport

Can all benefit equally from protected lands?

No evidence that it hurts

Source: Prosperity in the 21st Century West. Rasker et al.
Can all benefit equally from protected lands?

**METRO**
Maybe.
Difficult to measure.

**RURAL CONNECTED**
Yes. Especially if have:

- Education
- Access to markets
- High-wage services
- Diverse economy, etc.
Can all benefit equally from protected lands?

**RURAL ISOLATED**
Strongly correlated, but not enough.

Need:
* Education
* Access to markets
* Newcomers
* Producer Services
* Diversification

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- **Adapting to change?**

  The West's competitive advantage
  Changing role of public lands
  Using the best information
WHAT DOES THE FUTURE HOLD?

Comparative advantage: cheaper

The competitive edge: high-wage, high-skill jobs, educated workforce, recreation, environmental amenities, retirees

Resource industries: value-added and stewardship

Changing nature of production – mobile people and business

High wage occupations attracted to high quality of life

Retirement and investment income – also mobile, looking for affordability, health care, quality of life

“Are you just pissing and moaning, or can you verify what you’re saying with data?”
Economic Profile System (EPS)

www.headwaterseconomics.org

Personal Income by Major Sector: Fresno, Kern, and Tulare Counties

Source: BEA REIS
Major Sectors Related to Public Lands: Fresno, Kern, and Tulare Counties

Employment %, 2006

- All Other Jobs: 94%
- Timber Related: 1%
- Travel & Tourism: 4%
- Mining: 1%

Source: CBP

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