

# ***Leadership at All Levels***

*Tri-Valley TEC  
December 1, 2011*

***Contra Costa Economic Partnership  
STEM Workforce Initiative***



***Partnership for Prosperity***

# ***CCEP STEM Workforce Initiative***

- *a coalition of industry (business, government and labor) and education leaders dedicated to creating and retaining quality jobs for Contra Costa County.*
- *nonprofit economic development corporation manages the STEM Workforce Initiative and, through The Initiative...*
  - *Serves as an intermediary in Contra Costa County/East Bay region.*



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# *Overarching Goal:*

*To secure a **workforce pipeline** into high-wage, high-skill, high-demand “gold collar” careers in the regional economy.*

*To create a **seamless system** of **purposeful** transition for students from high school to post-secondary education & training (without remediation) that lead to those “gold collar” jobs.*



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# **California & East Bay's Shifting Economy**

*“The workplace does not demand generic college graduates. Simply getting a college degree, regardless of major, will not be all that helpful. Students should focus their energies on acquiring the specific skills and kinds of knowledge demanded by occupations that are both growing and paying well.”*

**Workforce 2020: Work & Workers in the 21<sup>st</sup> Century**  
Hudson Institute



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# *Changing Workforce*

*"California industries face critical skills shortages and some recent studies warn that soon more of the state's employers may be unable to find workers with the skills they need to remain competitive."*

**California EDGE Campaign**



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# ***Global Economy***

*"The best jobs created in the Innovation Age will be filled by Americans (and workers in other advanced countries) to the extent that workers possess the skills required to compete for them and carry them out. If jobs go unfilled in the U.S., they will quickly migrate elsewhere in the global economy."*

**Workforce 2020**



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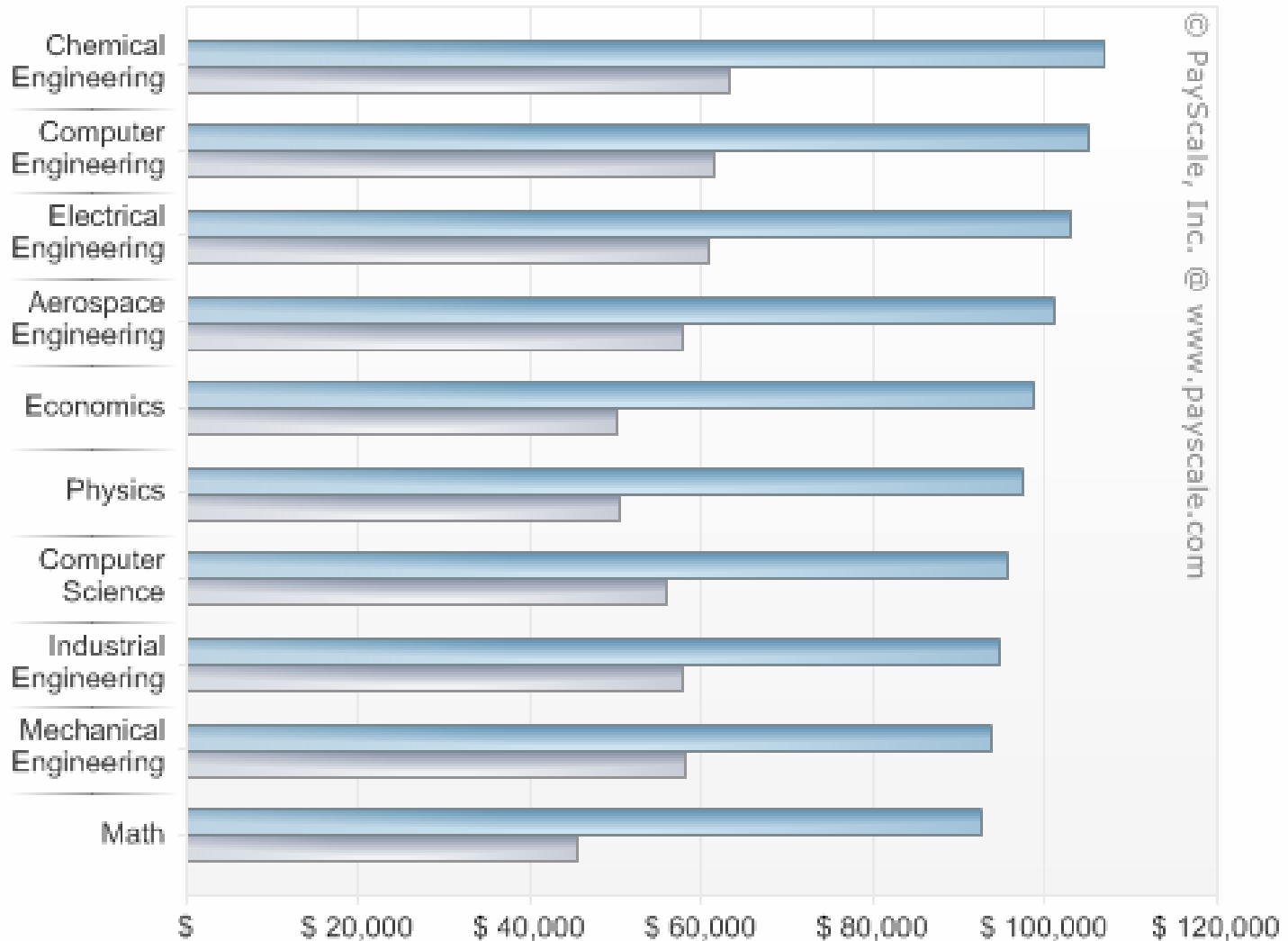
*“The skills of the workforce will increasingly be the defining characteristic that determines the extent to which our economy can develop and exploit new technologies and compete in the global marketplace.”*

**The 21st Century at Work:  
Forces Shaping the Future Workforce and Workplace**



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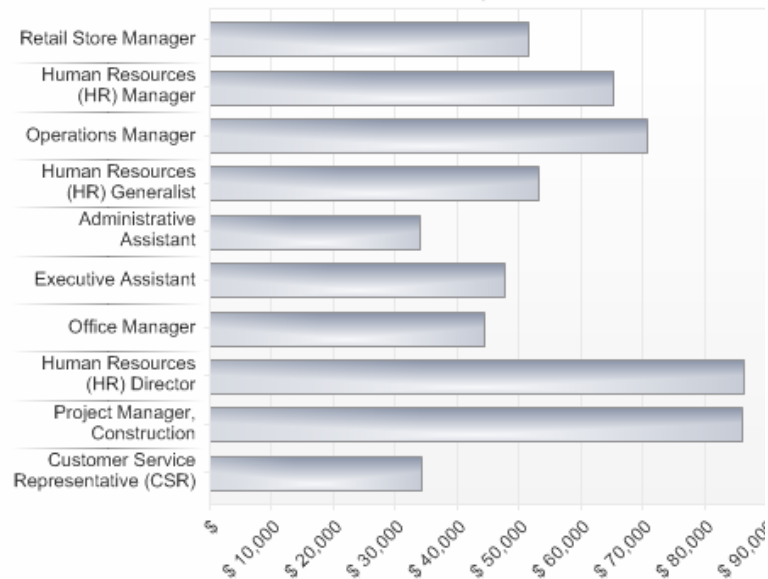
## Top 10 College Majors That Lead to High Salaries





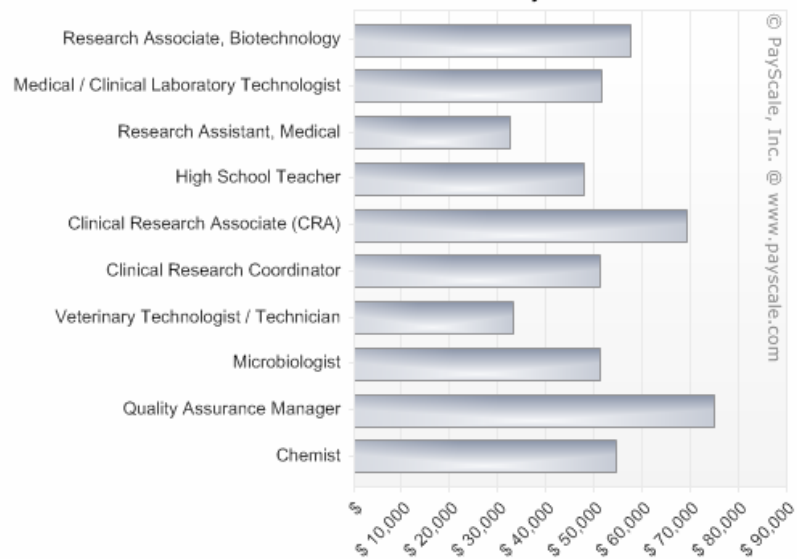
# Most Popular Majors/Jobs

10 Most Popular Jobs for Business Management Majors



Business Major

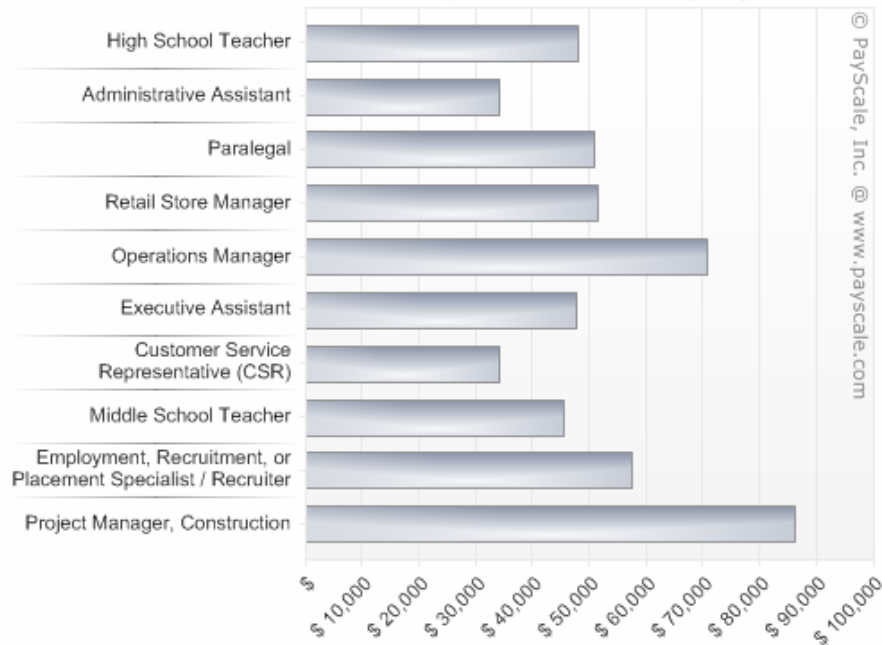
10 Most Popular Jobs for Biology Majors



Biology Major

# Most Popular Majors

10 Most Popular Jobs for History Majors



History Major

10 Most Popular Jobs for Political Science Majors



Political Science Major

Other 6 of the top 10 include Computer Sciences, Criminal Justice, English, Economics, Mechanical Engineering, Psychology

## *Envisioning the New California High School*, May 2010

- California is not succeeding in preparing students for ongoing education and employment in the 21st Century.
- Not all high school graduates will choose to attend college or university but to earn a self-sustaining income, they will need to prepare for ongoing education and training of some kind.
- There is a need for a stronger unifying vision of the purpose of high school in preparing graduates for college **AND** career.



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# *Building on our Assets* October 2011

- Even in these times of high unemployment, employers report having difficulty finding qualified workers for jobs requiring high levels of technical education and experience.
- Middle skill jobs are the biggest share of California's jobs—47% of all jobs in 2009, but at the same time, it is estimated that only 38% of workforce possess the relevant skills for these jobs.
- STEM jobs are growing much faster than any other. But  $\frac{3}{4}$  of STEM jobs predicted through 2016 will require post-secondary education and half will require 4-year degrees.



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# *Partnerships are needed*

*Building on our Assets* calls for:

- A multi-pronged effort to address our workforce challenges including a more active role for business to inform the workforce training agenda and curricula.
- An expansion and enhancement of business involvement with educational institutions at every level but especially with East Bay high schools and community colleges.
- An alignment of education experiences with the world of work through innovative curricula and high quality industry engagement.



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# *Common “Asks”*

- Can you participate on our advisory board?
- Can you provide internships for our students?
- Will you be a guest speaker in my classroom?
- Can I bring my students for a tour at your site?



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# *Why would business be engaged?*

- **Financial factors—**
  - Higher employment recruitment opportunities
  - Lower training costs
  - Lower employee turnover
  - Higher morale for workers
  - Increased positive public relations
  - Greater market exposure



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# *Alignment of Purpose*

**What innovative approaches already exist?**

**For example:**

**Innovation Tri-Valley**—a partnership between public sector, business, and **education** that aims to **attract businesses** to the region, create an “eco-system” of innovation in the Tri-Valley, and generate/attract public funding for economic development which includes such businesses as:

Sybase

Adept

Sandia National Laboratories

The Hertz Foundation

Chevron

Livermore Chamber of Commerce

Las Positas College

Lawrence Livermore National Laboratory

Wente Vineyards



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# *Alignment Beyond Local*

In addition to Local Chambers of Commerce Bus/Ed Committees and Local NGOs (like Community Fund, PPIE, etc.) consider:

- Regional business organizations (EBEDA, CCC, Industrial associations and councils)
- Regional economic development systems
- Regional workforce investment systems
- State CDE strategies (CPA, Linked Learning)
- Federal efforts (STEM, WIA, ESEA)



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# *Tips for Sustained Engagement*

- *Assess whether a generic approach is preferable to strategic sector strategies*
- *Know your business community profile and be responsive*
- *Connect with broader regional momentum and strategic efforts*
- *Build the business case for engagement*
- *Understand the business needs and interests and consider ROI—one size does not fit all.*
- *Consider alignment with long-term workforce pipeline needs that provide compelling backdrop*



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# *Tips for Sustained Engagement*

- *Share data and commit to full accountability for improvements*
- *Find common interests that compel sustained engagement*
- *Where possible, build a model based upon collaboration of multi-school efforts (for example, PLTW Engineering) rather than isolated engagement.*
- *Go slow to go fast! Transformative strategies take time.*



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# *Remember: Ultimate Goal*

Ensure students have purposeful transitional next steps from high school to post-secondary experiences (without remediation) connected to sustainable-wage careers.

Increase the college-going rates. Decrease the drop-out rates.

Enrich the learning experiences for high school students that provide a rigorous, relevant educational experience that *integrates* hands-on (CTE) with core academics and *connects* learning to real people doing real things in the local economy.



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# ***For more information:***

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