Session:
Technology and the Future of Work

Speaker:
Steven VanAusdale, Walla Walla Community College

September 19, 2012
Federal Reserve Bank of Kansas City, Kansas City, Mo.

For additional information about The Future of Workforce Development Conference, contact:
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#WORKFORCE2012

How Advances in Technology Impact Workforce Development

The Future of Workforce Development
Where Research Meets Practice
September 19, 2012 - Kansas City, MO

Steven VanAusdle, President
Walla Walla Community College

Welcome to

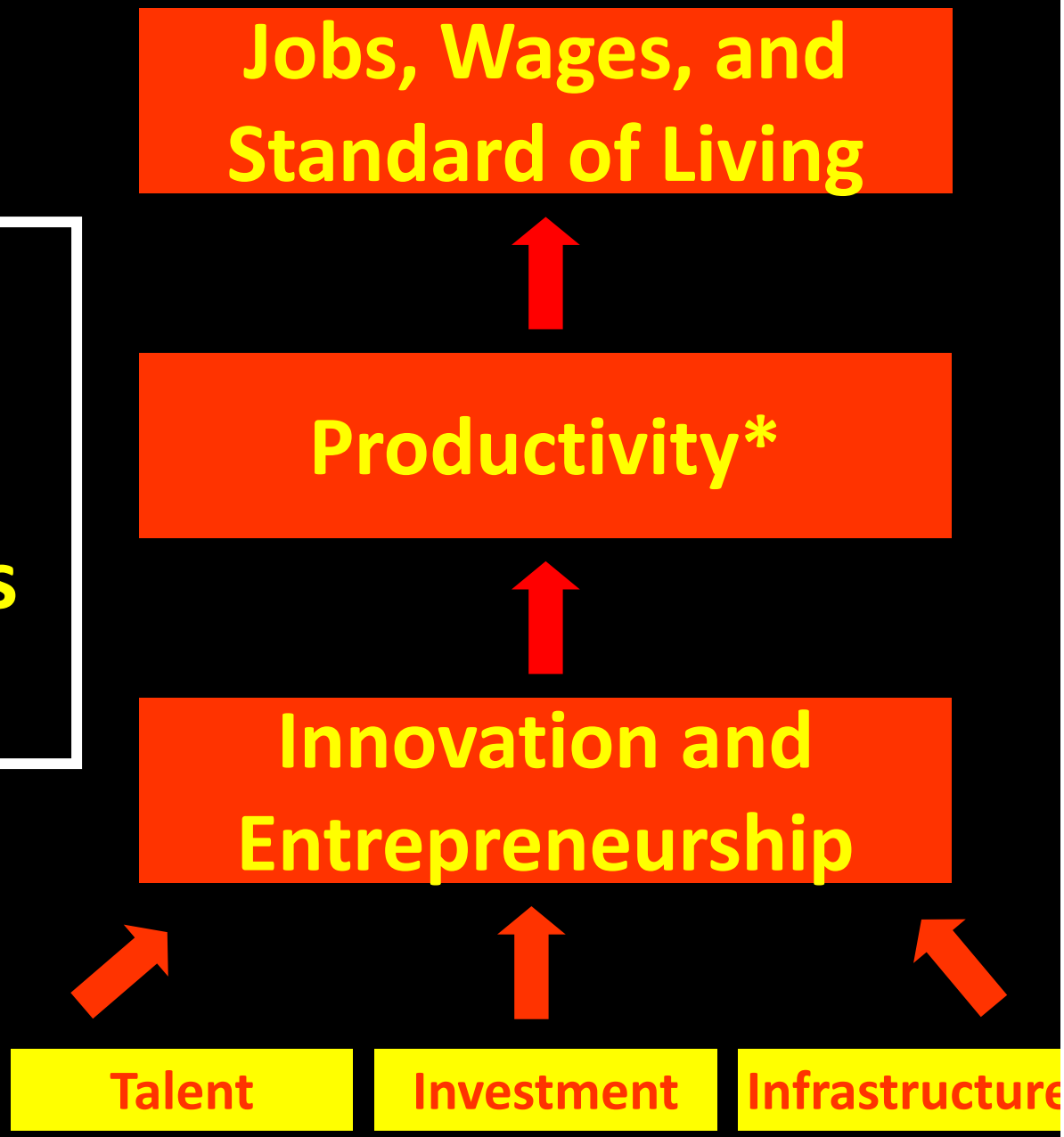
Walla Walla

The Challenges of our Time

Balancing Security, Prosperity, and the Environment

Safety and Security ⇔ **Economic Competitiveness** ⇔ **Environmental Sustainability**

A Strategy for Economic Competitiveness



*Improving Productivity will require more innovative uses of existing resources.

Regional Strategy for Economic Development

Talent

- STEM programs
- High-demand programs
- High school skills center
- Instructional technology for access and efficiency
- Economic studies

Investment & Entrepreneurship

- Increase access to expertise and capital
- Strengthen capabilities of manufacturing
- Provide small business incentives
- Ensure regulations are not barriers
- Promote entrepreneurship

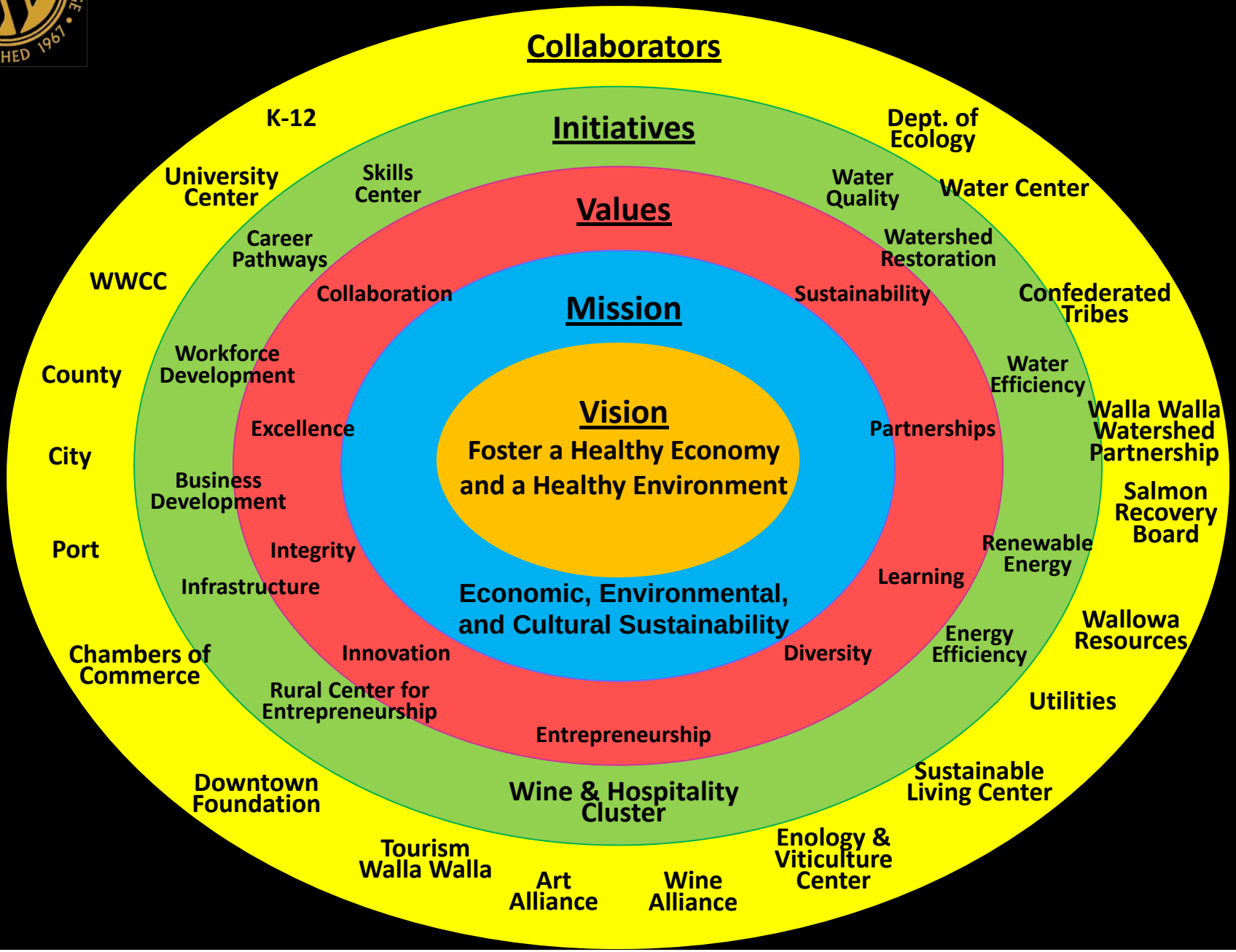
Infrastructure

- Information Technology
- Energy Technology
- Water Technology
- Waste Management Technology
- Transportation Technology

Washington State's Talent Challenge
(A Growing Skills Gap)

- Lack of highly-skilled workers hindering economic recovery.
- Over 60,000 skilled jobs now unfilled in Washington State.
- Only 42 percent of adults have a college degree.
- Need 737,264 additional degrees by 2025.
- **WHAT?** Need high quality degrees and credentials.
- **WHO?** Face growing number of low-income, first generation adult students, more high school graduates with academic deficiencies, and displaced workers.
- **HOW?** Need a highly productive higher education system.
  1. Alignment of workforce programs with labor market needs.
  2. More investment in STEM programs.
  3. Need high quality information systems.
  4. Resources to attract/retain high-quality staff and technology.

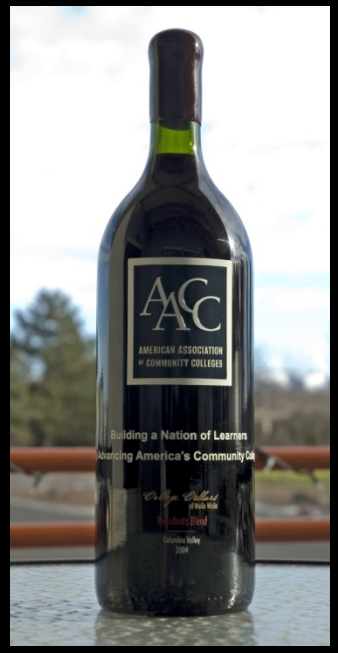
Creating the Innovation Partnership Zone (IPZ) Ecosystem



WWCC Center for Enology & Viticulture

2006 Governor's Workforce and Economic Development Best Practice Award

Our Vision: Wine / Food / Art



WWCC Enology Students

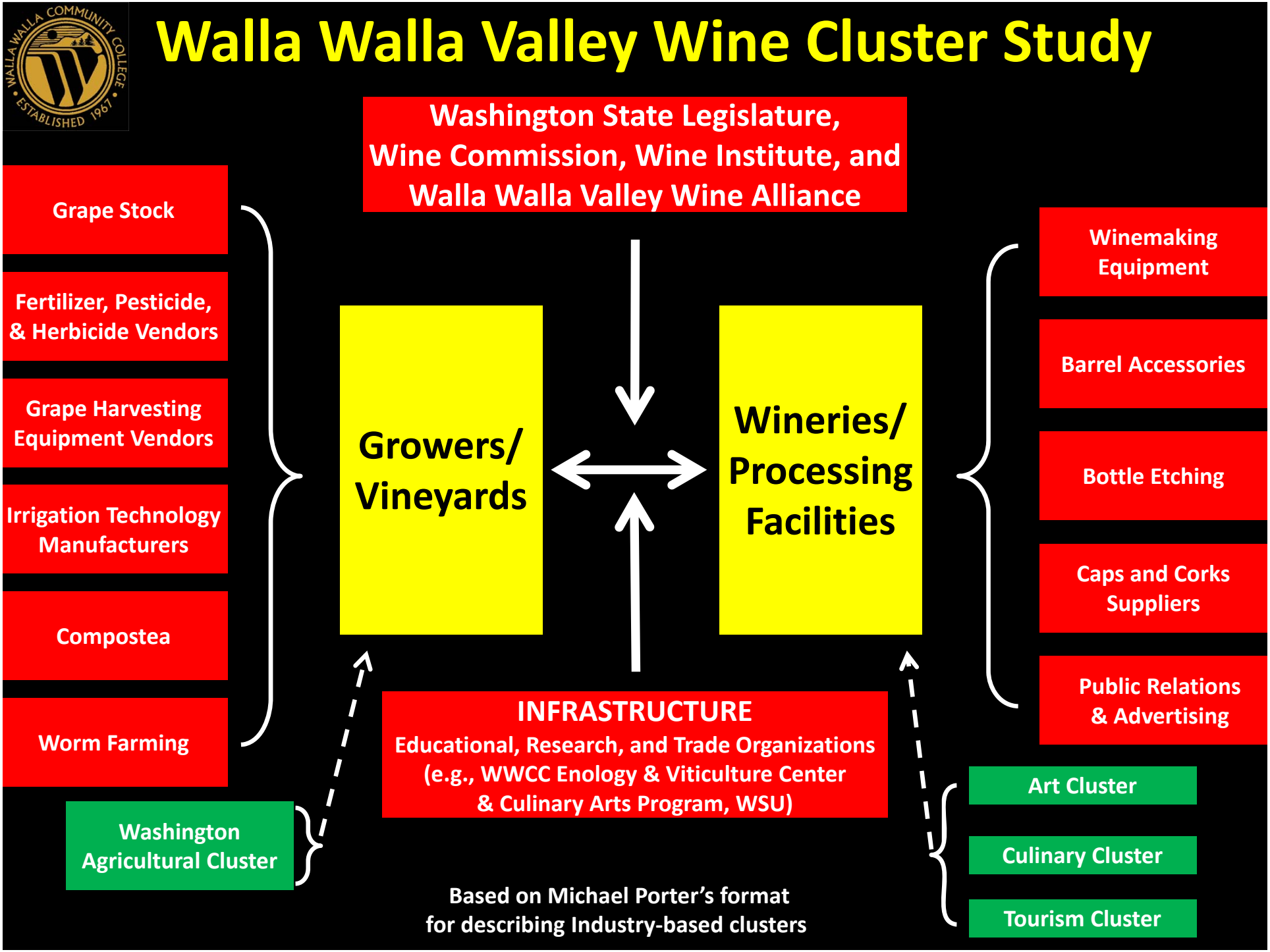
Learning While Creating College Cellars Wine

Wine Country Culinary Institute
With a Focus on Pairing Food and Wine

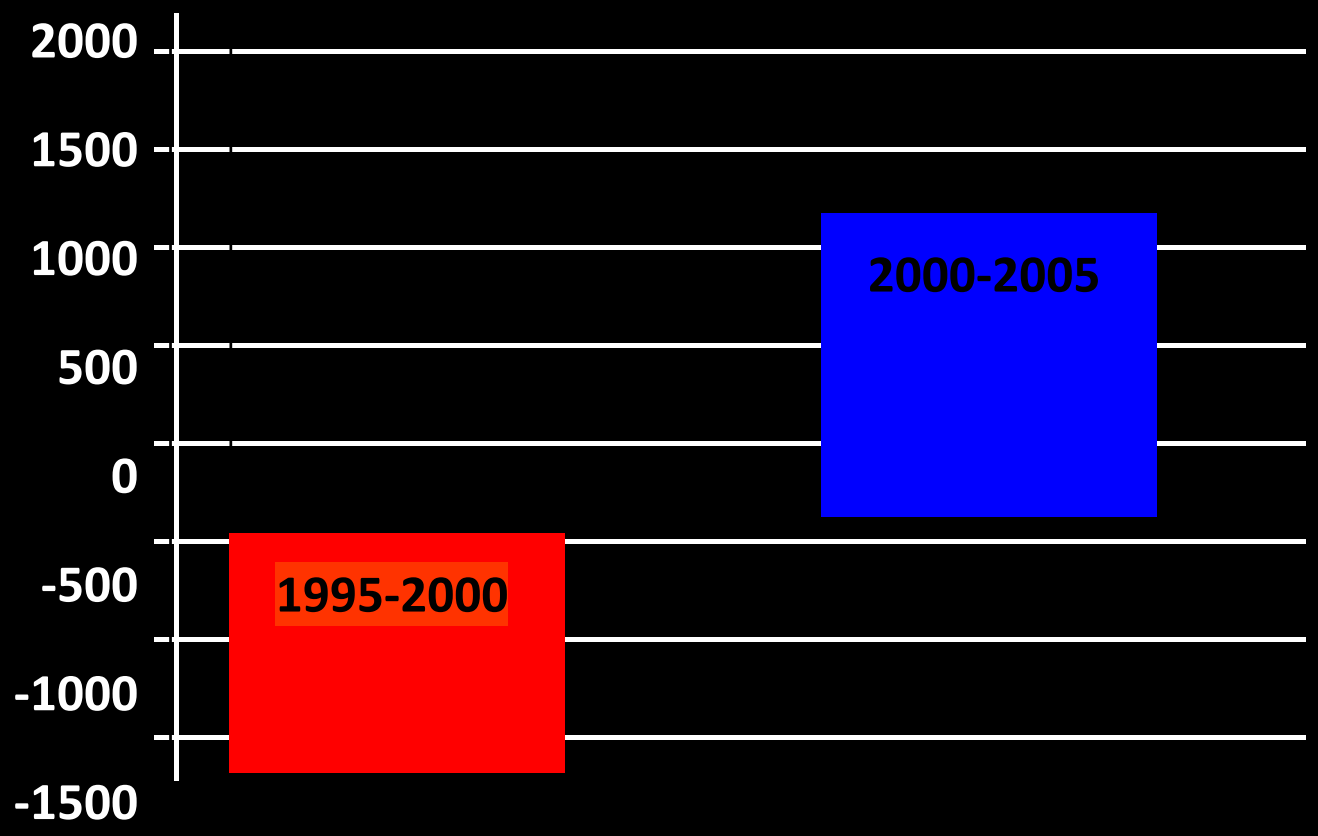
Port of Walla Walla
Wine Incubators

Vinea: Sustainable Wine Farming

Walla Walla Valley Wine Cluster Study

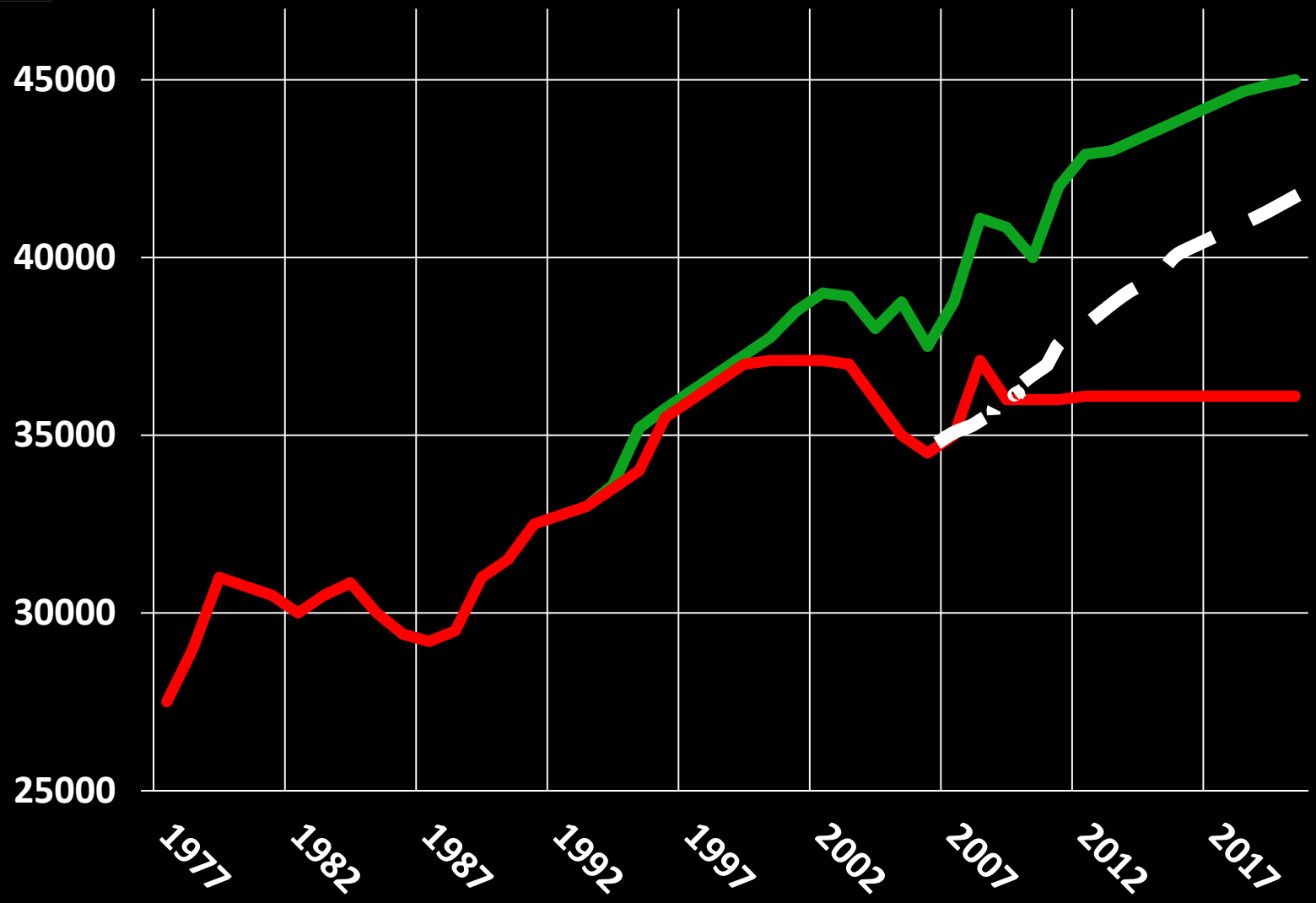


Net Migration, Walla Walla County



Sources: U.S. Census 2000 (Residence 5 years ago), U.S. Census Annual County Population Estimates

Projected IPZ Employment
With and Without the Wine Cluster



_____With _____Without _ _ _ _ 2006 Projections

Walla Walla Regional Wine Economy, 2011

Direct jobs in wine production and wine tourism	2,061
Direct wine cluster employment growth, since 2001	76%
Total earnings generated by the wine cluster	$96 million
Wine cluster jobs, including multiplier effects	6,003
Total regional earnings	$230 million
Total jobs projected to be dependent on the wine cluster in 2017	8,913
Percent of all jobs dependent on wine cluster	14.4%
Projected percent of all jobs dependent on wine cluster in 2020	19.8%
Regional economic growth since 2007	9%
Regional economic growth since 2007, absent the wine cluster	2%

NationalJournal

How Wine Growing in Walla Walla Supports the Economy

By Catherine Hollander
June 1, 2012

"America's economy today feels as sleepy as Walla Walla's two decades ago. Middle-class workers were slammed by the financial crisis, their jobs disappearing, wages stagnating, and future uncertain. To put them back to work, the nation would do well to consider Walla Walla, which seems to have cracked the code on how to get mid-skill workers back into the labor force while revitalizing an economy.

If the country needs a model, this could be it."

WALLA WALLA
Union~Bulletin
Wednesday, May 30, 2012

College Cellars wines win regional acclaim

Eight wines from the local teaching winery took home honors from recent judgings

WALLA WALLA – Student-made wine brought home nearly a case full of hardware at the recent Seattle Wine Awards and Northwest Wine Summit.

In the Seattle Wine Awards, College Cellars won three double gold medals for its 2011 Ice Wine, 2009 Syrah and 2008 Malbec. Silver medals were awarded for the 2011 Sauvignon Blanc and 2010 President's Blend, along with a bronze medal for the 2010 Scholarship Red.

The college's 2011 Chardonnay won gold and its 2011 Semillon won bronze in the Northwest Wine Summit awards, which covers Alaska, Alberta, British Columbia, Idaho, Montana, Oregon, and Washington.

The 7th Annual Seattle Wine Awards is Washington State's largest and most comprehensive independent wine recognition program. On April 21 & 22, local and national wine professionals gathered to taste and evaluate 982 Washington wines in a single-blind format (meaning grape variety or style is known, but not price or producer) and awarded the top wines by consensus with Double Gold, Gold, Silver and Bronze Grand Awards of Excellence.

Water & Environmental Center

Walla Walla Community College ...Your Best Choice
WALLA WALLA COMMUNITY COLLEGE
ESTABLISHED 1967
Walla Walla Community College
Salmon-Safe Certified 2008
Water & Environmental Center
Activities in Action
Hands-On Learning
Riparian Restoration Project
Water Resources Technology
Irrigation Technology
Walla Walla Community College...
...Your Best Choice
The Industry
WWCC's Degree Options
Skills You'll Develop
Career Opportunities
For More Information

Can We Enhance the Energy Cluster in Southeastern Washington?

Rebuilding Hybrid Vehicles

How Green Can You Get?

Southeast Area Technical Skills Center on Walla Walla Community College Campus

Smart Technology Applications Used to Increase Completions

- **Degree Boost:** Students within 30 credits of degree completion meet with an advisor to devise a plan to graduate.
- **Degree Estimator:** This estimates a student's proximity to any degree.
- **Declared and Prepared:** A system that combines an application and face-to-face coaching to help students achieve degree completion.
- **Career Coach:** A web application that connects students to careers.

Impact of Technological Advancement on Selected Programs

1. Information Technology (software development systems support, applications).
2. Enology and Viticulture (laboratory testing equipment, harvesting, and processing equipment).
3. John Deere Technology (guidance systems, robotics, system integration).
4. Energy Systems Technology (Program Logic Controls for energy management and renewables: smart systems).
5. Water Resources Technology (application efficiencies, fish protection, mass spectrometer, smart systems).
6. Automotive Technology (alternative fuels, smart systems).
7. Welding (operation of robotic machines).
8. Mechatronics for food processing (electrical and mechanical engineering, robotics).

Challenges of Technological Advancement For Community Colleges

1. Requires clear understanding of emerging needs via essential partnerships.
2. Requires redesign of programs.
3. Requires ability to attract and retain competent administrators, instructors, and support staff.
4. Requires funds to invest in appropriate technology.
5. Raises the bar for entry requirements.
6. Student retention and completion.