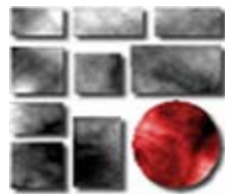

SWPA Labor Market: Applications for Beattie



A.W. Beattie Career Center

December 2007

Presented by TRWIB, Inc.

Ron Painter and Kelleigh Boland

The Next 30 Minutes

- Understand three key takeaways from our research
- Understand the impact of occupational cluster analysis
- Answer your questions
- Continue the dialogue

Three Takeaways

- 1) Beattie's programs are in line with the regional labor market.
- 2) 16 critical KSAs (Knowledge, Skills, and Abilities) are shared by all growing regional occupations.
- 3) 18 occupations have been identified for Beattie's future consideration.

Industry Summary

| NAICS Code | Description | 2004 Jobs | 2006 Jobs | Change | % Change | 2006 Establishments |
|----------------------------------|--|-----------|-----------|---------|----------|---------------------|
| 11 | Agriculture, forestry, fishing and hunting | 14,246 | 13,998 | (248) | (2%) | 190 |
| 21 | Mining | 12,130 | 13,234 | 1,104 | 9% | 300 |
| 22 | Utilities | 8,848 | 7,139 | (1,709) | (19%) | 185 |
| 23 | Construction | 86,557 | 92,311 | 5,754 | 7% | 6,595 |
| 31-33 | Manufacturing | 118,512 | 114,158 | (4,354) | (4%) | 3,300 |
| 42 | Wholesale trade | 53,257 | 56,615 | 3,358 | 6% | 3,990 |
| 44-45 | Retail trade | 180,533 | 176,597 | (3,936) | (2%) | 9,209 |
| 48-49 | Transportation and warehousing | 62,201 | 60,782 | (1,419) | (2%) | 1,820 |
| 51 | Information | 28,564 | 27,979 | (585) | (2%) | 972 |
| 52 | Finance and insurance | 77,171 | 75,941 | (1,230) | (2%) | 4,130 |
| 53 | Real estate and rental and leasing | 43,992 | 44,154 | 162 | 0% | 2,076 |
| 54 | Professional and technical services | 102,006 | 109,869 | 7,863 | 8% | 6,322 |
| 55 | Management of companies and enterprises | 20,309 | 25,491 | 5,182 | 26% | 364 |
| 56 | Administrative and waste services | 78,523 | 77,750 | (773) | (1%) | 2,859 |
| 61 | Educational services | 53,235 | 56,314 | 3,079 | 6% | 659 |
| 62 | Health care and social assistance | 196,848 | 208,686 | 11,838 | 6% | 8,510 |
| 71 | Arts, entertainment, and recreation | 30,290 | 30,606 | 316 | 1% | 1,043 |
| 72 | Accommodation and food services | 99,256 | 101,066 | 1,810 | 2% | 5,348 |
| 81 | Other services, except public administration | 91,794 | 93,165 | 1,371 | 1% | 7,321 |
| 90 | Government | 144,606 | 143,309 | (1,297) | (1%) | 2,270 |
| Source: EMSI Complete Employment | | | | | | |

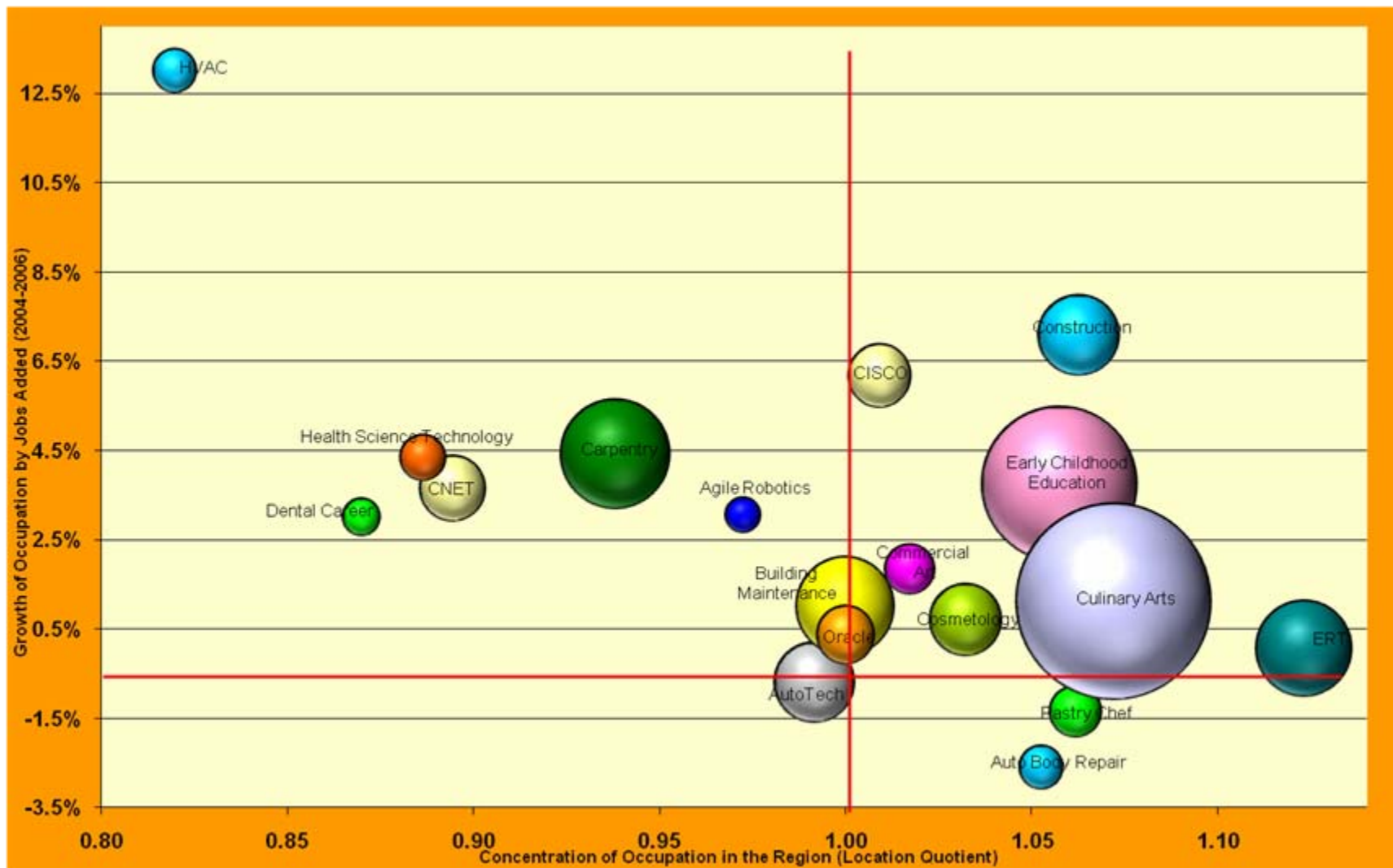
Top Ten Industries

- 5511- Management of Companies and Enterprises
- 6113- Colleges and Universities
- 6211- Offices of Physicians
- 6213- Offices of Other Health Practitioners
- 6241- Individual and Family Services
- 6221- General Medical and Surgical Hospitals
- 7223- Special Food Services
- 5417- Scientific, Research and Development Services
- 5175- Cable and Other Program Distribution
- 4931- Warehousing and Storage

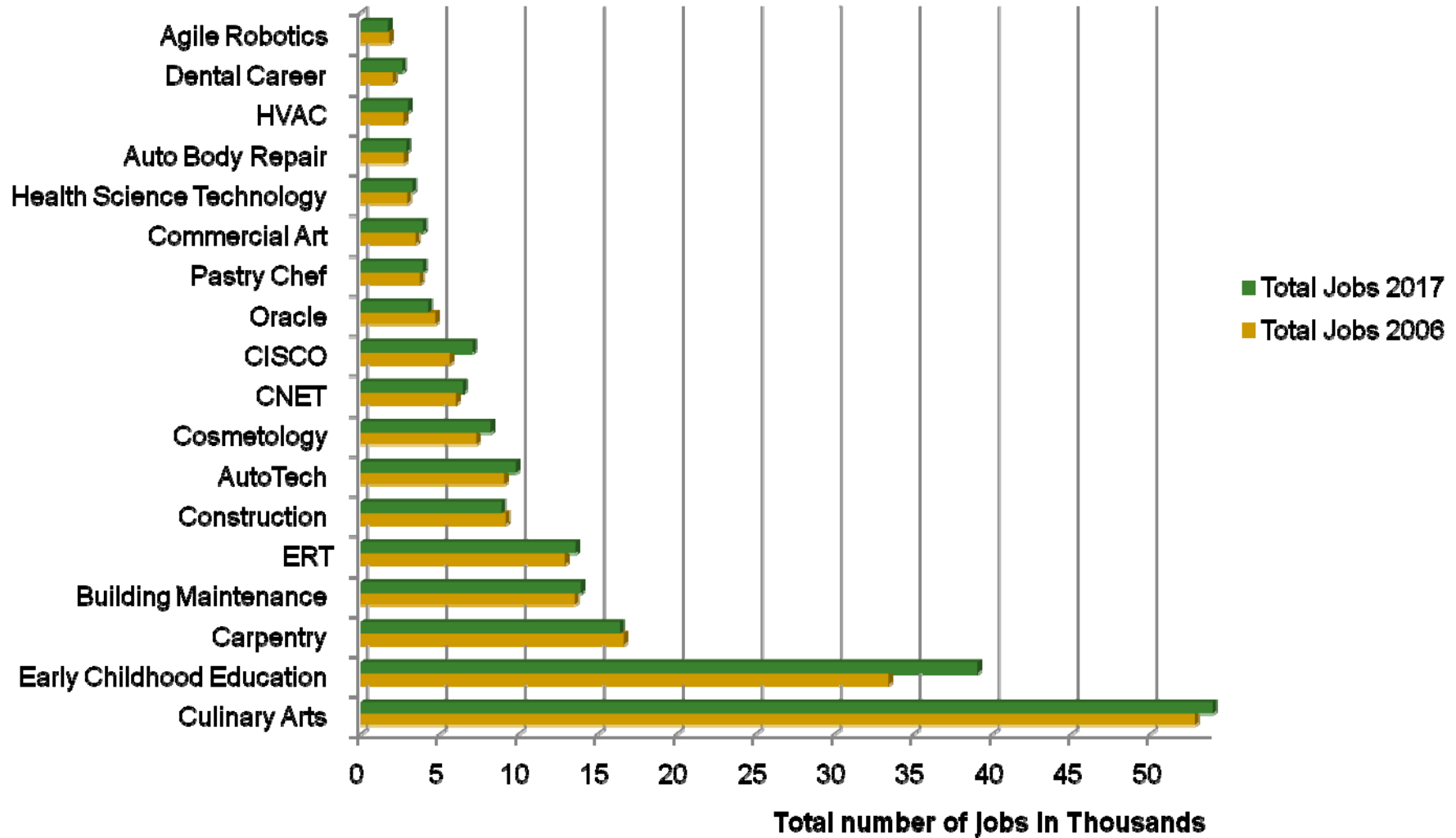
Methodology

- Industry cluster analysis (more than 300 industries analyzed)
- Occupational cluster analysis (more than 780 occupations analyzed)
- KSA analysis (more than 2,000 unique KSAs analyzed)
- Expert opinion panel (13 regional and national professionals consulted)
- Lessons Learned (TRWIB's regional career education initiatives evaluated)
- Literature Review (national research of best practices compiled)

1) Beattie's programs are in line with the regional labor market.



Beattie's Programs: 2006 and 2017 Total Jobs



2) 16 Critical KSAs are shared by all growing regional occupations.

Knowledge

1. English Language
2. Mathematics
3. Administration and Management
4. Customer and Personal Service

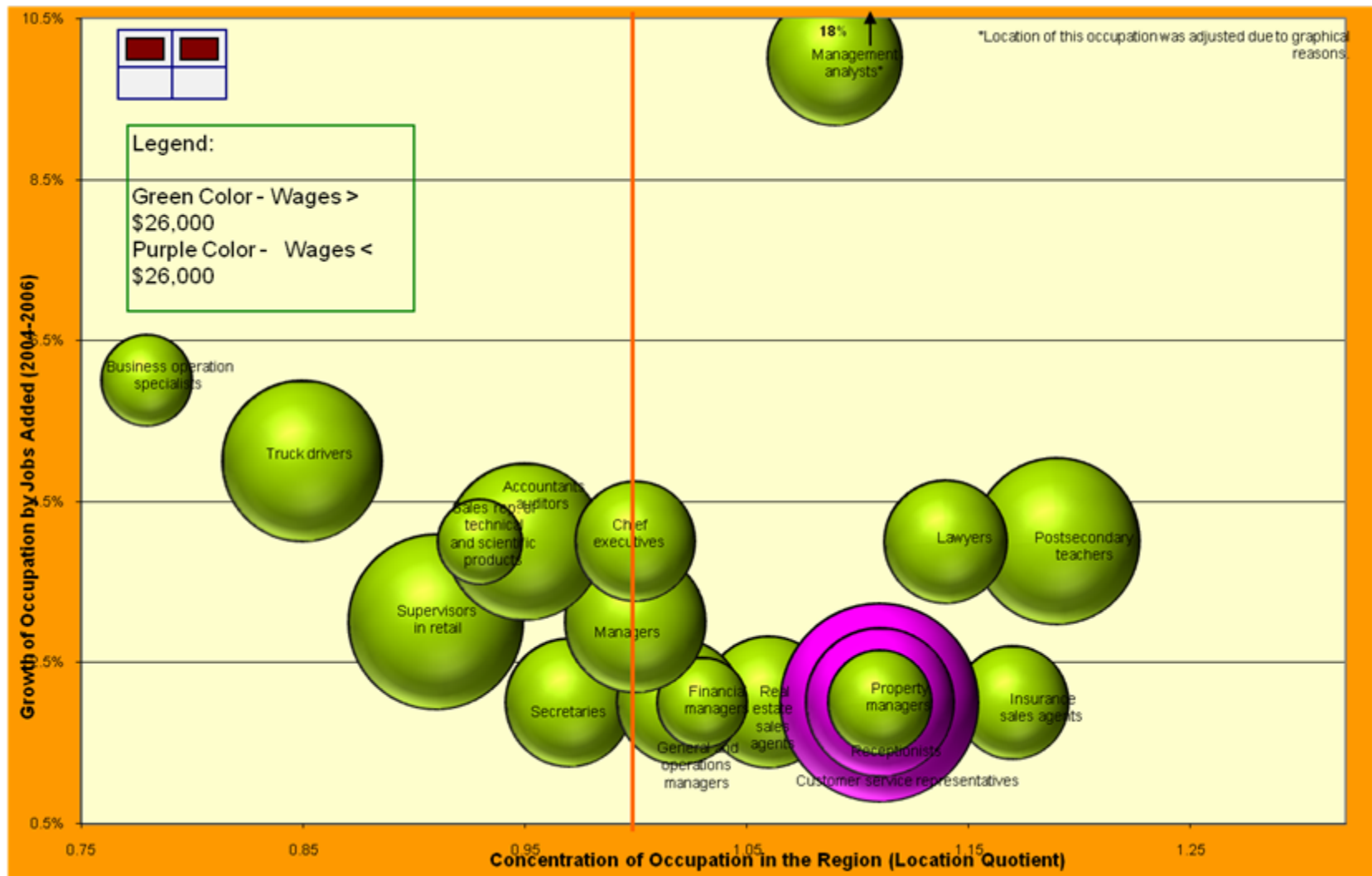
Skills

1. Active Listening
2. Coordination
3. Reading Comprehension
4. Critical Thinking
5. Learning Strategies
6. Speaking
7. Time Management
8. Judgment and Decision Making

Abilities

1. Communication Clarity
2. Information Ordering
3. Problem Sensitivity
4. Written Comprehension

3) 18 occupations have been identified for Beattie's future consideration.



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Average Wages < \$26,000/year

- Customer service representatives
- Receptionists and information clerks

3) 18 occupations have been identified for Beattie's consideration.

Average Wages > \$26,000/year

- Accountants and auditors
- Business operation specialists, all other
- Chief executives
- Executive secretaries and administrative assistants
- Financial managers
- First-line supervisors/managers of retail sales workers
- General and operations managers
- Insurance sales agents
- Lawyers
- Management analysts
- Managers, all other
- Postsecondary teachers
- Property, real estate association managers
- Real estate sales agents
- Sales representatives of technical and scientific products
- Truck drivers, heavy and tractor-trailer

Occupations of interest to Beattie

| “High Touch” Occupations and Welders | Total Jobs 2006 | % growth from 2004-2006 | % of projection from 2006-2017 | Average hourly wage |
|---|------------------------|--------------------------------|---------------------------------------|----------------------------|
| Hairdressers, Hairstylists and Cosmetologists | 6,226 | 1% | 12% | \$7.36 |
| Makeup artists, theatrical and performance | 124 | 8% | 16% | \$11.55 |
| Manicurists and Pedicurists | 467 | 0% | 19% | \$7.89 |
| Shampooers | 296 | 1% | 11% | \$6.32 |
| Skin Care Specialists | 523 | 1% | 11% | \$7.35 |
| | | | | |
| Welders | 3,465 | 8% | -14% | \$14.80 |

Our Charge

- What occupations will SWPA's labor market most likely demand in the short and long term?
- To enter the labor market *or* for further education, what are the basic KSAs students need to obtain at Beattie?
- Where are the opportunities for Beattie?

Three Takeaways

- 1) Beattie's programs are in line with the regional labor market.

Recommended Action:

Consider other programs in conjunction with an ROI discussion that includes:

- An inventory of your business engagement
- Potential partnerships
- The size of market opportunities

Three Takeaways

- 2) **16 critical KSAs (Knowledge, Skills, and Abilities) are shared by all growing regional occupations.**

Recommended Action:

Beattie can ensure a relevant and competitive preparation for all occupations by addressing these and other work readiness competencies to all students. To achieve this Beattie should, with the nine sending districts, examine a complete assessment of how to best integrate them into the curriculum.

Three Takeaways

- 3) 18 occupations have been identified for Beattie's future consideration.

Recommended Action:

Given these occupations, programs in the following content areas should be considered:

- Business Administration Program
- Sales/Customer Service Program

Final Thoughts

- Career & tech education is important to career education and preparing the workforce - 25 % (new and replacement jobs) will require more than high school, less than Bachelors
- Factors that impact labor market forecasts:
 - Technology development and deployment
 - Aging labor force and its implications
 - Changes in the rate and methods of production
- Importance of design - stories - empathy - symphony



Q&A

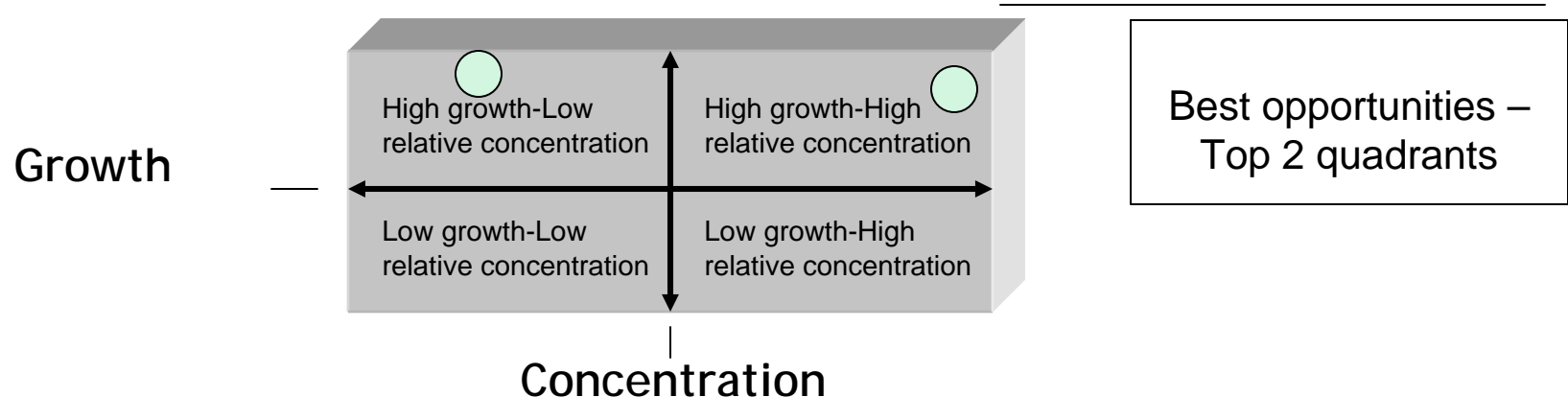
Supplemental Slides

Beattie's Programs

| Description | LQ | 2004-2006 % Change | 2006 Jobs | 2017 Jobs | 2017 % Change |
|---------------------------|------|-----------------------|-----------|-----------|------------------|
| Culinary Arts | 1.07 | 1.1% | 52,865 | 55,951 | 6% |
| Early Childhood Education | 1.06 | 3.7% | 33,456 | 39,082 | 14% |
| Carpentry | 0.94 | 4.4% | 16,691 | 16,454 | -1% |
| Building Maintenance | 1.00 | 1.0% | 13,584 | 13,964 | 3% |
| ERT | 1.12 | 0.1% | 12,956 | 13,640 | 5% |
| Construction | 1.06 | 7.1% | 9,207 | 8,947 | -3% |
| AutoTech | 0.99 | -0.7% | 9,105 | 9,851 | 8% |
| Cosmetology | 1.03 | 0.7% | 7,340 | 8,246 | 11% |
| CNET | 0.89 | 3.7% | 6,049 | 6,506 | 7% |
| CISCO | 1.01 | 6.2% | 5,663 | 7,108 | 20% |
| Oracle | 1.00 | 0.4% | 4,739 | 4,293 | -10% |
| Pastry Chef | 1.06 | -1.4% | 3,769 | 3,962 | 5% |
| Commercial Art | 1.02 | 1.8% | 3,499 | 3,961 | 12% |
| Health Science Technology | 0.89 | 4.3% | 2,974 | 3,304 | 10% |
| Auto Body Repair | 1.05 | -2.6% | 2,755 | 2,918 | 6% |
| HVAC | 0.82 | 13.0% | 2,742 | 3,016 | 10% |
| Dental Career | 0.87 | 3.0% | 2,051 | 2,647 | 29% |
| Agile Robotics | 0.97 | 3.1% | 1,832 | 1,750 | -5% |

About Bubble Charts

- A bubble chart is a variation of a scatter diagram in which the data points are replaced with bubbles. Specific instructions about interpretation have been included in the 12/20/07 presentation.



Research Caveats

In interpreting study findings, please note the following:

- Additional insight can be gained from other data sources and perspectives that are beyond the scope of this summary and our final report including:
 - Perceptions of feeder schools; employers; students; community colleges/universities; experiences of other career and technical schools in the region and outside
- Study findings are based on the most current data available.
 - Findings do not take into account pivotal events such as 9/11, Katrina, and others that impact economic environment.

About the TRWIB

Mission

TRWIB informs decision-making on regional development to ensure that current and future market needs of businesses and job seekers are met.

TRWIB fulfills its mission through:

- Acquiring, managing, interpreting, and sharing relevant workforce data
- Identifying and researching critical workforce issues
- Consulting and advising on public policy with employers and employment sectors.

Vision

- As the leading knowledge broker on regional workforce trends, needs, and characteristics, TRWIB strategically informs economic and community development efforts. Ultimately, TRWIB intelligence helps Southwestern Pennsylvania optimize its greatest asset – the workforce – to attract and retain businesses that result in the region’s economic gain.
- The federal legislation that consolidated sources of employment and training programs, the 1998 Workforce Investment Act (WIA), also created more than 600 local workforce investment boards (WIBs) across the nation. WIBs are responsible for establishing local workforce performance standards, chartering one-stop service delivery centers and satellites (referred to as the PA CareerLink network in Pennsylvania), selecting qualified service providers, and monitoring their performance to ensure accountability.

Overview

- Board members, appointed by the Chief Executive of Allegheny County and the Mayor of Pittsburgh, represent an impressive group of employers, training providers, labor unions, government agencies, and community-based organizations. They are united by a shared concern about the quality of the workforce and the availability of good jobs in this region. In addition to the government compliance responsibilities spelled out in WIA, the TRWIB takes a leadership role in strategic workforce planning –
 - We build bridges between many organizations to help our region grow and prepare for changes in the workforce.
 - We help align employer workforce needs with job seeker skills in southwestern Pennsylvania.