

**WASHINGTON STATE
WORKFORCE TRAINING AND EDUCATION COORDINATING BOARD
MEETING NO. 133
MARCH 12, 2009**

**IDENTIFYING STRATEGIC INDUSTRY CLUSTERS FOR WORKFORCE
DEVELOPMENT**

Purpose

This item requests the Board's action on criteria and a policy for identifying *strategic* industry clusters for workforce development. Identifying strategic clusters helps assure that workforce investments are prioritized for clusters that have the best outlook for employment and wages.

Background

See the agenda item from January 2009 (meeting no.132) entitled "Identifying Strategic Industry Clusters For Workforce Development" for a complete background about the process undertaken to develop strategic cluster criteria.

Since the January Board meeting, Board staff have had additional discussions with the Department of Community, Trade and Economic Development (CTED) and the Economic Development Commission (EDC) about identifying strategic clusters. CTED has agreed to establish its strategic cluster lists using the same source data and analytic techniques as the Workforce Board. The EDC agreed to respond to the agencies' lists in the context of its statewide strategic plan for economic development. Staff are in now process of providing technical assistance to CTED in developing their list and staff understanding of the process.

The purpose of the agenda item on March 12 is to adopt policy guidelines and criteria that the Board finds best to identify strategic clusters for workforce development. A proposed policy, set of criteria, and list of strategic clusters for workforce development follow this face sheet.

Board Action Required: Adopt recommended motion.

RECOMMENDED MOTION

WHEREAS, The Workforce Training and Education Coordinating Board has been called upon by the 2007 Legislature to establish criteria for identifying strategic clusters which are important to economic prosperity in the state; and

WHEREAS, Governor Gregoire directed the Workforce Training and Education Coordinating Board, the Department of Community, Trade, and Economic Development, and the Economic Development Commission to “develop a plan to support coordination at the state and regional levels, with a special emphasis on key economic clusters;” and

WHEREAS, The Workforce Training and Education Coordinating Board, in collaboration with partner agencies, developed process and criteria for identification of substate geographic concentrations of firms or employment in an industry and the industry’s customers, suppliers, supporting businesses, and institutions; and

WHEREAS, The Workforce Training and Education Coordinating Board’s *Skills for the Next Washington* advances the industry cluster concept as a key workforce development strategy;

THEREFORE BE IT RESOLVED, That the Workforce Training and Education Coordinating Board adopts the recommended policy guidelines, and criteria for identifying strategic industry clusters for workforce development.

Policy for Using Strategic Clusters for Workforce Investments

Purpose

This policy explains the Workforce Training and Education Coordinating Board's (Workforce Board) policy on using *strategic* industry clusters for workforce development.¹ Focusing on strategic clusters helps assure that workforce investments are prioritized for clusters that have the best outlook for employment and wages.

Policy

It is the policy of the Workforce Board that:

- 1) Strategic industry clusters shall be identified for the purpose of guiding and informing policy and investment decisions for workforce education and training, such as the awarding of discretionary funds for cluster-based workforce development initiatives.
- 2) Rankings of strategic clusters shall be used to steer investments toward those clusters that are most strategic for workforce development. The Board will guide investments toward clusters that are at the higher rather than the lower end of the strategic rankings.

Guiding Principles

- Methodologies for identifying strategic clusters inform and guide investment decisions by basing them on evidence-based, quantitative data.
- Workforce and economic development partner agencies, such as Community, Trade and Economic Development, may work from different lists of strategic clusters because investment strategies vary.
- In the interest of consistency, the Workforce Board encourages partner agencies to use a shared set of cluster source data and indexing processes to identify strategic clusters.
- Clusters are but one of many strategies for workforce and economic development.
- Local areas may provide supplemental data and supporting evidence that the Workforce Board can use to improve lists of strategic clusters.
- *Potential* (or “emerging”) clusters are not identified in the scope of the 2008-09 analysis of clusters and strategic clusters. They do, however, have a role in other workforce and economic development initiatives.
- The geographic locus of strategic clusters is regional, not statewide.
- Strategic cluster lists shall be updated periodically to keep pace with changing economic conditions.

High Skills, High Wages 2008-2018, the state's comprehensive plan for workforce development directs the workforce development system to focus on strategic industry clusters:

Industry Objective 2: The workforce development system strengthens Washington's economy, focusing on strategic industry clusters as a central organizing principle.

No later than 2018:

- Washington's workforce and economic development programs have established track records of effective services to the state's strategic industry clusters.
- Washington's workforce development system prepares the number of workers needed to fill jobs openings in strategic industry clusters.

¹ **Industry Cluster:** A geographic concentration of interdependent competitive firms that do business with each other, including firms that sell inside and outside of the geographic region as well as support firms that supply new materials, components, business services, and other institutions including government and education.

Criteria for Identifying Strategic Industry Clusters for Workforce Development

Strategic clusters for workforce development shall be identified by creating an index of the 12 variables provided in Sommers et al (2008) plus output per employee and weighting three workforce variables to count twice, as shown below.²

Rationale: Of all the characteristics examined in the cluster study, **employment** and the **percent of middle- and high-wage occupations (jobs)** are the variables that offer the most direct indicators of a cluster’s potential to offer good and plentiful employment opportunities to the state’s workforce.

Cluster Analysis Variables	Workforce Index
Location Quotient	✓
Employment	Count twice
Output	✓
Earnings/ Worker	✓
Percent of Occs. in Middle Wage Range	Count twice
Percent of Occs. in High Wage Range	Count twice
Change in Establishments 2001-07	✓
Change in Employment 2001-07	✓
Change in Wages 2001-07	✓
Projected Empl. Increase 2006-16	✓
R & D Occupations as a Percent of Total Empl.	✓
Exports as a Percent of Output	✓
Output/Employment	✓

² Sommers et al, *Industry Cluster Analysis for Washington State Workforce Development Areas*, November 2008.
<http://www.wtb.wa.gov/ClusterAnalysis.asp>

STRATEGIC INDUSTRY CLUSTERS FOR WORKFORCE DEVELOPMENT

Olympic Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Navy Focused Cluster	1	1
Ship and Boat Building	2	2
Architectural and Engineering Services	3	3
Construction	4	7
Wood Products Focused Cluster	5	4
Sporting Goods Mfg.	6	5
Business Support Services	7	6
Nursing and Residential Care Facilities	8	9
Amusement, Gambling, & Recreation	9	8
Fishing	10	10

Pacific Mountain Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Forest Products	1	1
Animal Production - except Cattle & Poultry	2	2
Coal Mining	3	4
Heavy and Civil Engineering Construction	4	5
Sporting Goods Mfg.	5	3
Health care services	6	7
Business Support Services	7	6
Fishing, Seafood Processing & Shipbuilding	8	8
Travel Trailer & Camper Mfg.	9	9
Animal Production and Cattle Ranching	10	10
Agriculture and Forestry Support	11	11

Northwest Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Petroleum Refining	1	1
Boat Building	2	2
Forest Products	3	3
Agriculture-Food Products	4	7
Fishing & Seafood Processing	5	4
Heating Equipment	6	5
Aluminum	7	8
Cement and Concrete Manufacturing	8	9
Canvas and Rope Manufacturing	9	6

Snohomish County Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Aerospace	1	1
Abrasive Products Mfg.	2	2
Sheet Metal Products	3	3
Military	4	4
Electrical Machinery	5	5
Specialty Trades Construction (utility, heavy)	6	6
Metal Forming Machine Tools	7	9
Boat Builders	8	7
Forest Products	9	8
Doll-Toy-Game Mfg.	10	10
Wood Kitchen Cabinets	11	11
Custom Steel Roll Forming	12	12
Fisheries & Seafood Products	13	13

Seattle-King County Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Software/Computer Services, including Programming	1	1
Aerospace	2	2
Health Care	3	5
Water Transportation (water transportation of passengers and cargo)	4	3
Scientific Research & Development	5	7
Nonstore retailers (sales of merchandise in venues other than stores. Example: Sodexo)	6	6
Telecommunications	7	9
Specialty Construction (utility, street/bridge, heavy)	8	8
Travel Arrangement (such as Holland America)	9	10
Depository Credit	10	11
Overhead Cranes & Hoist Mfg.	11	12
High Tech Manufacturing (includes computers, computer peripherals, instrumentation and electrical devices)	12	15
Heavy Truck Mfg.	13	14
Spectator Sports	14	13
Air Transportation	15	17
Fisheries	16	16
Sporting Goods and Toy Mfg.	17	19
Performing Arts	18	18

Tacoma-Pierce County Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Military	1	1
Computer Services	2	2
Aircraft Parts Mfg.	3	3
Gypsum Products Mfg.	4	4
Offices of Physicians, Dentists and Other Health Care Practitioners	5	7
Construction	6	9
Office administrative services (office-based support of day-to-day operations of other organizations)	7	5
Plastic Bottle Mfg.	8	6
Forest Products	9	10
Concrete Products Mfg.	10	8
Health Care Services	11	11
Fishing & Seafood Processing	13	15
Warehousing and Storage	14	12
Confectionary Mfg.	15	14

Southwest Washington Workforce Development Area *

Cluster or Industry	Workforce Rank	Overall Rank
Forest Products	1	4
Federal Electrical Utilities	2	1
Health Care Services	3	2
Industrial Machinery, including Sawmill and Paper Machinery Mfg.	4	3
Construction	5	6
Semiconductors	6	5
Pump & Pumping and Air & Gas Equipment Mfg.	7	7
Commercial and Service Industry Machinery Mfg., including Audio & Video Equipment	8	9
Auto Rental	9	8
Lighting Fixture Mfg.	10	10
Food Products Manufacturing, include Poultry Processing	11	11
Gambling	12	13

* Southwest Washington includes clusters that overlap into the Portland Metropolitan Area (Multnomah, Clackamas and Washington Counties). In particular, those clusters include the following industries that have high location quotients in both Southwest Washington and the Portland Metro Area: industrial machinery, sawmill and paper machinery, pump equipment, semiconductors, and audio and video equipment.

North Central Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Health Care Services	1	1
Agriculture & Food Products	2	2
Electrical Utilities	3	3
Cut Stone production	4	4
Metal Manufacturing, including Foundaries and Castings	5	5
Forest Products	6	6
Gambling & Recreation	7	7

South Central Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Agriculture & Food Products	1	1
Motor Home Mfg.	2	2
Ornamental metalwork	3	3
Forest Products	4	4
Health Care Services	5	5
Warehousing	6	6

Eastern Washington Partnership Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Mining	1	1
Forest Products	2	2
Heating Equipment Except Warm Air Furnaces	3	3
Depository Credit Organizations	4	6
Agriculture & Food Products	5	5
Agricultural & Forestry Support Services (independent establishments from actual producers, such as farm or forestry management).	6	4
Cattle Ranching	7	7

Benton-Franklin Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
Computer Related Services	1	1
Waste Remediation & Management (includes portions of the Hanford reservation)	2	2
Health Care Services	3	4
Architecture & Engineering	4	5
Scientific Research & Development	5	6
Other Basic Inorganic Chemical Mfg.	6	3
Agriculture & Food Products	7	7
Nonstore retailers (sales of merchandise in venues other than stores. Example: Sodexho)	8	10
Cattle Farms	9	8
Rail Transport	10	9
Gambling & Recreation	11	11
Grain Farms	12	12

Spokane Area Workforce Development Area

Cluster or Industry	Workforce Rank	Overall Rank
High Tech Manufacturing (includes computers, computer peripherals, instrumentation and electrical devices)	1	2
Health Care Services	2	4
Construction	3	6
Prof. & Technical Services	4	1
Metal & Machinery Manufacturing	5	3
Sheet Metal & Metal Bldgs	6	7
Federal Electric Power Services	7	5
Concrete Products Mfg.	8	8
Wood Kitchen Cabinet mfg.	9	11
Business Support Services	10	9

