



INDIANA
WORKFORCE
DEVELOPMENT

An Economic Development Partner

Strategic Skills Initiative (SSI)

Tuesday, January 17
SHRIC Quarterly Meeting

Presentation Flow

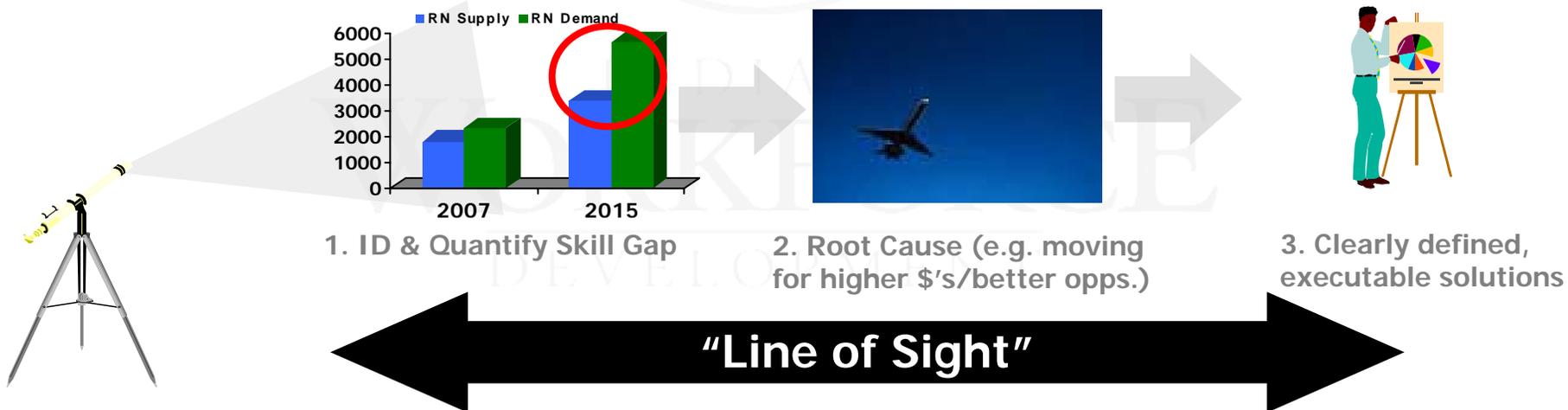
- Goals & Objectives of Initiative
 - I.D. Skill Shortages in High-Wage/High-Demand Industries
 - Build Capacity at *Regional* Level
- Phases of Initiative
 - Pre-Research & ID Phase
 - Research & ID Phase
 - Solutions Implementation Phase
- Funding Flow
- Timeline
- Summary Skill/Occupation Shortages Reports

Goals & Objectives

Primary

Goal: Identify specific skill shortages, root causes, and solutions that exist in the workforce planning regions throughout the state

- Objective:**
- Quantify the shortages, both in near term (2yrs.) and long-term (10 yrs.)
 - Specify the root cause for the shortage
 - Clearly define executable solutions that are tied directly to root cause



Goals & Objectives

Secondary

Goal: Fundamentally shift the way regions approach workforce & economic development

- Objective:**
- Instill demand-driven approach to addressing skill gaps
 - Create interdependency among constituents at regional level
 - Transfer knowledge of process and methodology to regional advisory boards/consortia



Supply (training/solutions) Driven



Demand (Root Cause) Driven

SSI Pre-Research & I.D. Team



R. Stiver

B. Huntington

B. Miller

A. Penca

S. Steele (Special Advisor)



C. Rogers

J. Conover



D. Judy

J. Lommel

B. Hartz

Phases of Initiative

Pre-Rsrch & ID Phase: Preparing Tools & Guidelines for Initiative

Key Components: (Re) Defining Regions
Identifying Staffing Needs
Identifying Agents (Core & Fiscal)
Methodological Development
Construction of RFA Document
Outlining Rollout Forum & Workshop(s)

Research & ID Phase: Consortia compile & submit key reports

Skill Shortages Report: Where and how large are they?

Root Causes Report: Why do shortages *REALLY* exist?

Solutions Report: How are root causes addressed?

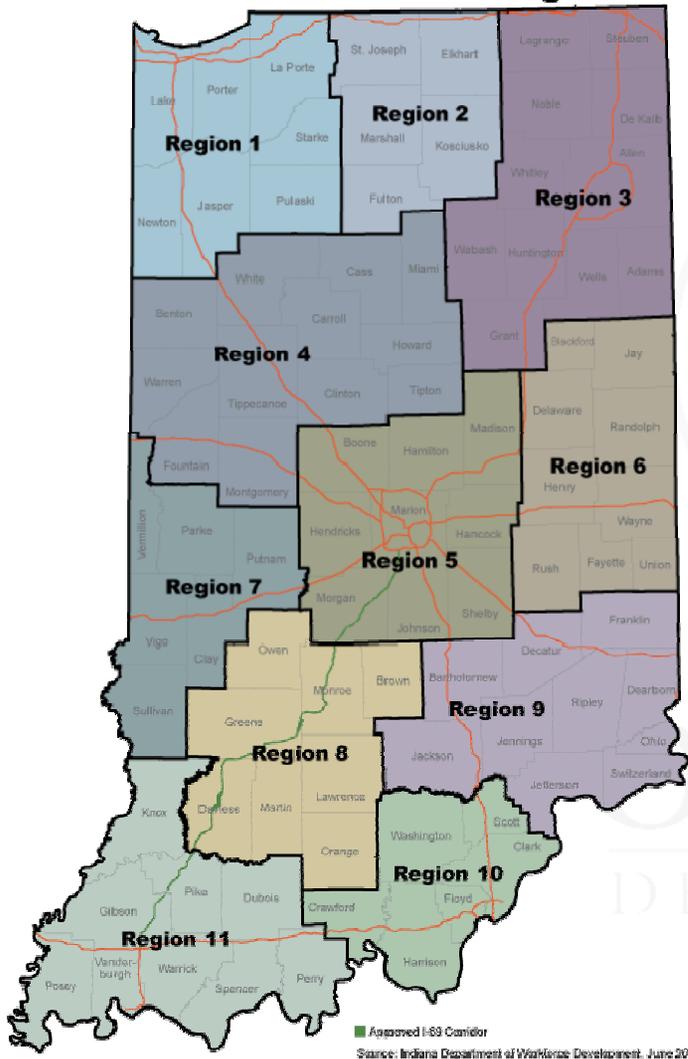
Other Key Aspects: \$3mm available for execution of research/analysis
Reports are reviewed & graded

Solutions Impl.: Competitive Grants Awarded for Solutions Execution

Key Components: \$20mm available for execution of solutions phase
Report/proposal condensing and
sharpening findings in Rsrch & ID Phase

Pre-Research & ID Phase

Economic Growth Regions

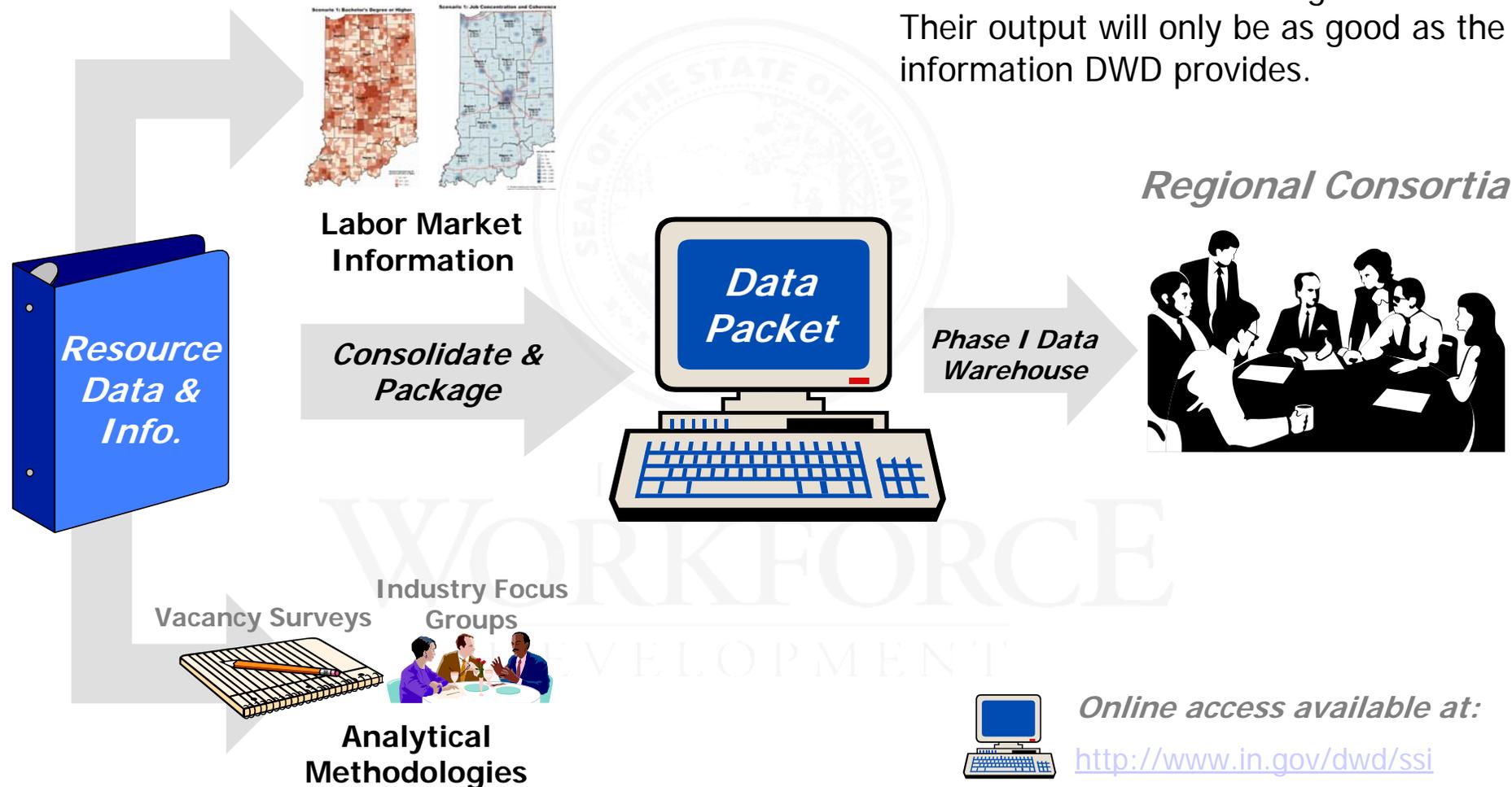


(Re)Definition of Planning Regions

- The new alignment will have 11 Regions
- Boundaries were determined by:
 - Labor markets - commuting patterns
 - Economic cluster data
 - Educational attainment data
 - Job projection data
 - Net Migration by Region (2000-2040)
 - Presence of MSA's
 - Existing WorkOne infrastructure
 - Existing Higher Ed infrastructure
- Will have alignment with IEDC

Pre-Research & ID Phase

Methodological Planning & Data Packets: This will be the most critical and useful tool for the consortia during Phase I. Their output will only be as good as the information DWD provides.



Online access available at:
<http://www.in.gov/dwd/ssj>

Pre-Research and ID Phase

Job Vacancy Surveys: Identify Base Year Shortage

Vacancy Survey Role

$$S_t^{ji} = S_{t-1}^{ji} + G_t^{ji}$$

Shortage in occupation j in industry i for year t

Gap for occupation j in industry i for year t

A solid base year estimate of the shortages is critical for projecting future years.

How Does This Work?

DWD/Vendor



Business

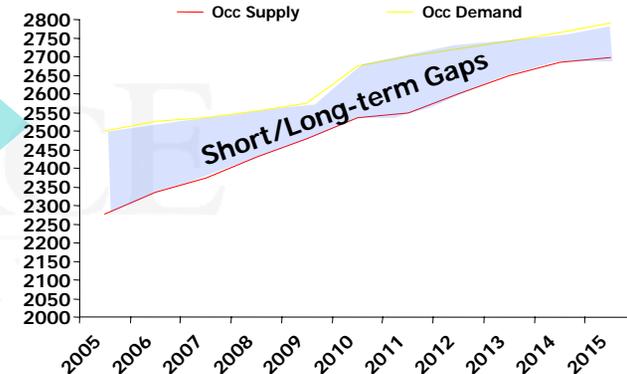


Identify # of current occupational shortages

11 Regions

Analyze & Match w/ KSA's (O*NET)

Estimate Short & Long-Term Skills Gaps



Research & ID Phase

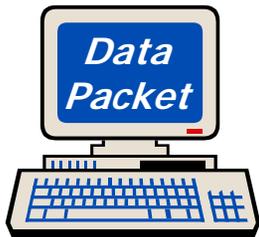
Regional Consortia



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\$3mm (quasi-competitive)

Utilize & Conduct



Secondary Research

Vacancy Surveys



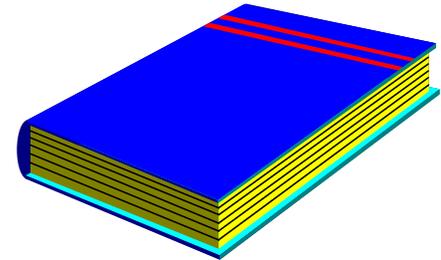
Industry Focus Groups



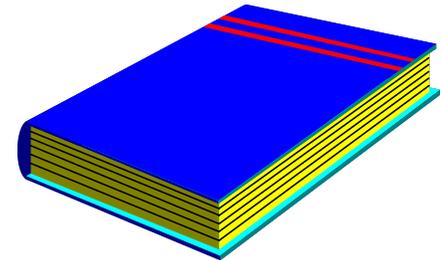
Primary Research

Compile & Submit

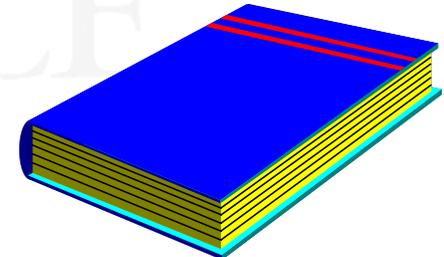
Skill Shortages Report



Root Cause Report



Solutions Report



Research and ID Phase

- Skills Shortage Report
 - “Where and how large are they?”
 - Research builds base for subsequent reports (Utilize *SSI How-To-Handbook* and *Data Packet*)
- Root Causes Report
 - “Why do shortages really exist?”
 - Supply or demand side causes

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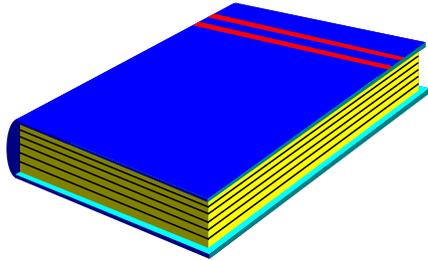
Research and ID Phase

- Regional Solutions Report
 - “How are root causes addressed?”
 - Links Skill Shortages Report and Root Causes Report
 - **Clear “Line-of-Sight”** ← **Critical Theme**
 - Primary document to determine funding
 - Detailed Action Plan
 - Demonstrate sustainability of solutions

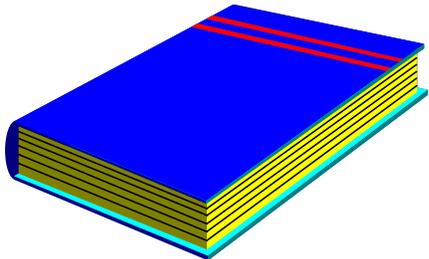
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Solutions Implementation Awards

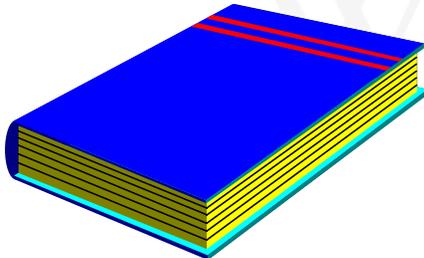
Skill Shortages Report



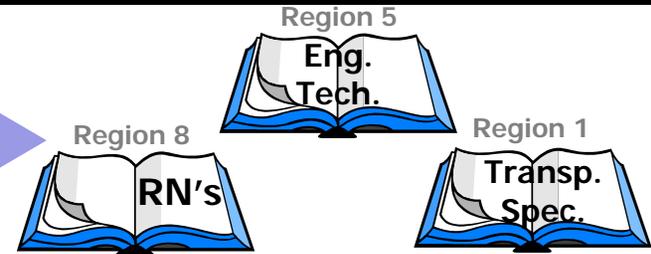
Root Cause Report



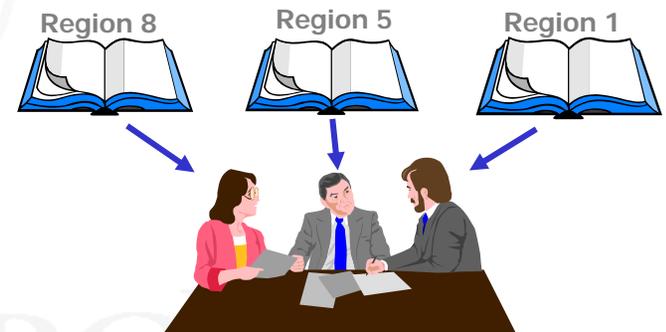
Solutions Report



Condense & Submit



Each training proposal must contain specific matrices & templates that demonstrate training is tied directly to root cause (which, in turn, will address shortage)

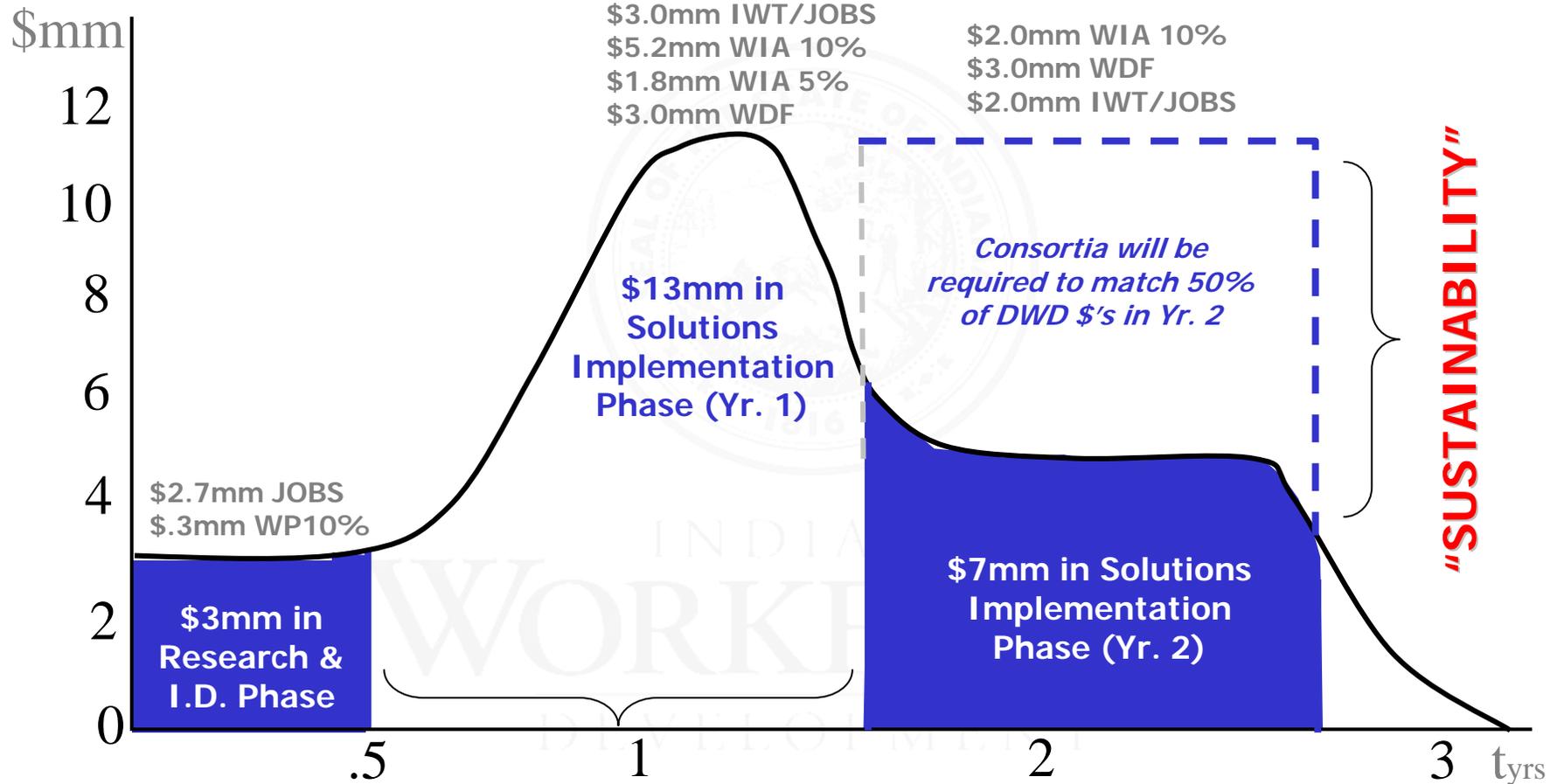


DWD Review Committee

Competitively Award \$20mm
(example)



SSI Funding Flow



Amount of federal and private funding leveraged by consortia will have strong determination in competitive monies awarded.

Timeline

Rollout & Introduction of Initiative:

June '06: Introduction



- Gov. Office Announce
- Meet w/ Core Agents
- RFA "fit to print"

Key Needs:

Funding Sources & \$'s final

Core Agents

Fiscal Agent

WIA 2-yr. Plan complete

- Data Packets

Revising Occupational

Projections & JVS completion

Jun-Aug: Formation



- Core Agents charged with assembling consortia
- Consortia must complete and submit RFA
- Approval of RFA by internal DWD review committee

Sep '05-Apr '06:
Execution (PH 1)



- Consortia begin phase one analysis
- Submit reports, roughly, every 8 weeks

May '06 - May '08:
Execution (PH 2)

- Competitive grants awarded and solution development & execution begins.



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Strategic Skills Initiative

— Summary Report —



Occupational
&
Skills Shortages

January 2006



Prepared By: Indiana Workforce Development, Research and Analysis Division

A Snapshot of Indiana's Occupational Shortages and Critical Skills

Brief Look at Report 1 Results

Statewide Summary

Existing Industries/Occupations

- **Largest shortage reported on industry basis:**
 - Manufacturing: 2725 projected (through 2007); avg wage of \$39,959
 - Health Care: 1962 projected; avg wage of \$40,839
 - TDL: 774 projected; avg wage of \$44,587
 - Retail Trade: 332 projected; avg wage of \$58,582*
- **On Occupational front**
 - RN's reported most frequently by regions (9/11) and in greatest number (1735); avg wage of \$46,903
 - Welders, Brazers, Cutters, and Solders (4/11) with 525; \$32,065
 - Machinists (4/11) with 443; \$35,883

Statewide Summary

<i>Existing Industries/Occupations</i>		<i>Total Regions with Shortage</i>	<i>Estimated 2007 Shortage</i>	<i>Statewide OES Wage</i>
Industry	Occupational Title			
Health Care	Registered Nurses	9	1735	\$46,903
Manufacturing	Welders, Cutters, Solderers, and Brazers	4	525	\$32,065
Manufacturing	Machinists (metal & Plastic)	4	443	\$35,883
Retail Trade	Pharmacists	2	122	\$80,664
TDL	First-Line Supervisors/Managers of Transportation and Material-Moving	2	280	\$47,792
Manufacturing	First-Line Supervisors/Managers of Production and Operating Workers	5	280	\$47,428
Manufacturing	Maintenance Repairer Workers; General	4	344	\$32,819
Manufacturing	Computer-controlled Machine Tool Operators, Metal and Plastic	5	328	\$31,828
TDL	Truck Drivers, Heavy Tractor-Trailer	3	294	\$36,153
Manufacturing	Industrial Maintenance Technicians	4	244	\$43,820
TDL	Sales Reps, Wholesale and Manufacturing, Except Tech/Sci Products	1	200	\$49,815
Manufacturing	Maintenance Workers: Machinery	4	198	\$37,405
Manufacturing	Team Assemblers	1	234	\$30,069
Retail Trade	Electrical and Electronics Engineering Technicians	1	134	\$44,962
Retail Trade	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	2	76	\$49,820
Health Care	Licensed Practical Nurses	6	125	\$33,800
Manufacturing	Inspectors, Testers, Sorters, Samplers, and Weighers	3	129	\$32,312
Health Care	Respiratory Therapist	4	76	\$41,505
Health Care	Radiological Technicians	2	26	\$41,149

Where Should We Focus DWD/State Resources?

<i>Existing Industries/Occupations</i>		<i>Total Regions with Shortage</i>	<i>Estimated 2007 Shortage</i>	<i>Statewide OES Wage</i>
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←
 • Top 20 Occupations Median Salary value*

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What about Industries/Occupations of tomorrow?

Statewide Summary

- **Emerging Industries/Occupations reported:**
 - **Agribusiness: Regions 4 & 6**
 - Technological advancements in biofuels and value-added research
 - Targeted occupations include Life Scientists and Business Operations Specialists
 - **Adv Manufacturing: Region 9**
 - Nanomanufacturing Specialists
 - Microbedded Systems Specialists
 - Fiber Optics Technicians
 - GIS Technicians
 - **Life-Sciences & Health Care: Regions 2 & 11**
 - Cytogenetic technicians
 - Tissue & Eye bank technicians
 - Genetic counselor
 - Tissue process technicians
 - **Scientific & Technical Professions: Region 8**
 - Expected developments from Crane tech commercialization activities
 - Electrical & Electronic Engineering Technicians

What skills appear to be in greatest shortage?

Skills in Highest Demand

Top Skill Shortages and Associated Wages by Region

	Active Learning	Active Listening	Critical Thinking	Complex Prob. Solv	Coordinat	Judgment Dec. Maki	Operation & Control	Reading Comprehe	Science	Speaking	Systems Evaluation	Technol. Design	Time Mgmt.	Trouble-shooting	Mathe-Matics
Region 1	\$48,493	\$32,887	\$45,509		\$43,347			\$39,654	\$52,104	\$37,181					\$35,803
Region 2			\$46,929		\$44,733		\$29,676	\$41,310		\$39,460			\$40,958		
Region 3	\$49,895	\$34,148	\$46,306	\$54,672	\$43,726	\$54,916		\$40,282					\$40,391	\$39,892	
Region 4			\$45,849			\$53,377	\$45,764								\$34,277
Region 5	\$53,538			\$59,377	\$47,136	\$60,294	\$29,676			\$41,226		\$59,200	\$43,586		\$39,448
Region 6				\$49,442		\$51,080					\$86,257				\$32,280
Region 7	\$45,551	\$30,120	\$42,550		\$39,091			\$36,471					\$36,969	\$36,062	
Region 8		\$31,436	\$44,225		\$41,326			\$38,631		\$35,044			\$38,062	\$42,914	
Region 9	\$51,256	\$33,862	\$46,657		\$43,879	\$56,508		\$40,176	\$50,957	\$38,367			\$39,615		
Region 10	\$47,503		\$44,328	\$52,874	\$42,188		\$28,924	\$37,836	\$59,291	\$36,503			\$37,854		\$33,287
Region 11	\$48,545	\$33,092	\$45,309		\$43,005	\$53,232		\$39,290	\$47,761	\$37,731			\$39,654	\$38,362	

(critical overlapping skills for Region's Top 5 shortage occupations OR skills critical to at least 4-5 of the region's shortage occupations)

- **Critical Skills include:**

- Science, Mathematics, Reading Comprehension
- Critical Thinking, Judgment & Decision Making
- Active Learning and Writing
- System Skills (i.e., judgment, decision-making, system analysis, system evaluation)

