



IMIS Project

Deliverables Report

June 30, 2006

Prepared by

Bluecrane, Inc.



bluecrane ®

OVER 17 YEARS

OF

RISK REDUCTION /
RISK AVOIDANCE
SERVICES

FOR

STATE
AND
LOCAL
GOVERNMENTS



Corporate Headquarters
225 Avenue I, Suite 204
Redondo Beach, CA 90277-5608
www.bluecranesolutions.com
310-792-6241

Other Locations:
Sacramento
Salem/Portland
Honolulu
Olympia, WA

June 30, 2006

David Allen
Oregon Employment Department
875 Union Street NE
Salem, OR 97311

April McGuire
Department of Community Colleges and Workforce Development
255 Capitol Street NE
Salem, OR 97310

Dear Mr. Allen, Ms. McGuire:

This document is a final compilation of the deliverable items from the Preliminary Stage, Stage One, Stage Two, and Stage Three of the WorkSource Oregon Integrated Management Information System Review Project.

Please contact me with any questions or comments.

Sincerely,

Allen Mills



Table of Contents

1. Executive Summary	1
Introduction	1
Project Approach	2
Preliminary Stage	3
Stages One, Two, and Three	3
Summary of Existing Situation	4
Summary of Approaches in Three Other States	4
Summary of Future Needs	5
Summary of Gap Analysis	5
Recommendations	7
Context of <i>bluecrane's</i> Work	7
Addressing Key Operational Issues (Gaps 1, 2, and 3)	8
Addressing Lack of Unique Client Identifier (Gap 4)	11
Addressing Elimination of Redundant Copies of Original Documentation (Gap 5)	11
Addressing Differences in Current Applications (Gap 6)	12
2. Existing Situation	14
Introduction	14
State Business Objectives and Systems	15
iMatchSkills	15
ETA and VETS Reports	15
Oregon Community College Unified Reporting System (OCCURS)	15
WIA Standardized Record Data (WIASRD)	16
TOPSpro	16
Performance Reporting Information System (PRISM)	17
Oregon Vocational Rehabilitation Services (OVRS)	17
Others	17
Regional Systems	19
Differing Requirements at Different Levels	22
Assessment of Existing Situation	23
3. A Review of Approaches in Three Other Jurisdictions	26
Texas	27
Michigan	28
Florida	29
4. Future Vision for Oregon's Approach and Systems	30
5. Gap Analysis	31
Gap 1: Definitional Differences	31
Gap 2: Lack of Common Metrics	32
Gap 3: Lack of Case Portability	33
Gap 4: Lack Unique Client Identifier	34

Gap 5: Duplication of Original Client Documentation.....	35
Gap 6: Lack of Leveraging Common Applications	36
6. Recommendations	37
Context of bluecrane's Work.....	37
Addressing Key Operational Issues (Gaps 1, 2, and 3).....	38
Addressing Lack of Unique Client Identifier (Gap 4).....	41
Addressing Elimination of Redundant Copies of Original Documentation (Gap 5).....	41
Addressing Differences in Current Applications (Gap 6).....	42
APPENDIX: List of Regional Meetings	44

List of Tables

Table 1. Regional Systems for Workforce Development	20
Table 2. Differing Needs Across Levels of Government	22
Table 3. Differing Reporting Output	23
Table 4. Texas Approach Vis-à-vis Oregon Gaps	27
Table 5. Michigan Approach Vis-à-vis Oregon Gaps.....	28
Table 6. Florida Approach Vis-à-vis Oregon Gaps	29

List of Figures

Figure 1. Representative High-Level Network for Key Linkages in WorkSource Oregon	18
---	----



1. Executive Summary

Introduction

WorkSource Oregon is a statewide network of public and private partners linked by the common goal of stimulating job growth by providing a highly skilled, job-ready and well-educated workforce. Such a workforce is key to Oregon's business growth and economic stability.

Designed as a network of partners, WorkSource Oregon supports job seekers, existing local businesses, workforce staff and partners, and individuals and businesses considering relocating to Oregon. WorkSource Oregon provides the following:

- For existing businesses:
 - Pool of trained and skilled employees;
 - Access to workforce development grants;
 - Connections to education and information;
 - Labor market information;
 - Support and counsel related to expansion;
 - Assistance with recruitment, screening, and skill-matching efforts; and
 - Access to training of current workers.

- For workers and job seekers:
 - Referrals and job placement with employers;
 - Listings of potential employers and access to the online skill-matching system;
 - Specialize skills training and education in high-demand occupations;
 - Career assistance such as coaching, resume writing, and basic skills development; and
 - Affordable access to educational programs.

- For business relocation
 - Connections to local economic development partners;
 - Assistance with recruiting, screening, and hiring employees;
 - Provision of a job-ready workforce;
 - Help in building a solid business infrastructure; and
 - Access to labor market information.

The Oregon Workforce Policy Cabinet (WPC) and its local partners (represented by the Oregon Workforce Partnership, or OWP) have announced their commitment to developing an integrated management information system (IMIS) to provide the best information possible on training, employment, and workforce development activities and services provided under the Workforce Investment Act and through various workforce initiatives. The WPC and the OWP are also

committed to connecting and/or incorporating existing systems where possible, and developing the IMIS in the most cost-effective manner.

With these objectives in mind, the State of Oregon contracted with Bluecrane, Inc. ("*bluecrane*") in early 2006 to work with local and regional workforce investment boards and staff and state agency staff to determine and describe the following:

- The goals of an IMIS;
- Information (data) needs of WorkSource Oregon;
- Current technologies and systems operating around the State in WorkSource Oregon and related systems;
- The potential of targeted systems available in three other states; and
- A cost-effective approach to IMIS for WorkSource Oregon's partners.

The WPC and the OWP are jointly overseeing the work through a steering committee. The Oregon Employment Department (OED) and the Department of Community Colleges and Workforce Development (DCCWD) have provided joint Contract Managers.

Project Approach

The current IMIS Project contract is a six – eight month project that provides the following:

- Current situation description and assessment
- A review of approaches in three other states
- Future vision for Oregon's approach and systems
- Gap analysis, contrasting the existing situation with the future vision
- Options and recommendations for closing the gap

The project has been conducted in four "stages," namely:

- Preliminary Stage – Finalize approach and plans
- Stage One – Confirm goals and needs
- Stage Two – Assess intrastate and targeted systems in other states
- Stage Three – Provide recommendations and Gap Analysis

At a meeting with IMIS stakeholders in Salem, Oregon, on February 2, 2006 *bluecrane* confirmed the following objectives and timeline for each stage:

Stage	Objectives	Projected Completion Date
Preliminary	Finalize approach and work plans in close conjunction with State of Oregon team	March 1
One	<ul style="list-style-type: none"> • Confirm system information goals • Confirm data requirements for different levels of system • Confirm data “display and array” requirements for the various programs 	May 1
Two	<ul style="list-style-type: none"> • Assess the intrastate system infrastructure <ul style="list-style-type: none"> ○ Geographic diversity ○ Network capabilities ○ Hardware and software • Assess the targeted systems in other states <ul style="list-style-type: none"> ○ Relative to the Oregon environment ○ Support and operations overview 	June 1
Three	<ul style="list-style-type: none"> • Recommended approach and IT architecture • Gap Analysis – from existing system(s) to recommended approach 	June 16

Preliminary Stage

A previous document, delivered on March 1, 2006, provided a compilation of the deliverables for the Preliminary Stage. *bluecrane* revised and finalized our approach and plans based on the information obtained during and subsequent to the February 2, 2006, meeting with the IMIS Project Stakeholders and working closely with the State of Oregon IMIS Project Team.

Stages One, Two, and Three

We began gathering information needed for Stages One, Two, and Three during meetings in March, 2006, with a wide variety of Stakeholders from the 15 different regions in Oregon. The Appendix to this document provides a list of the regional meetings. A survey was provided to meeting attendees ahead-of-time to stimulate thinking and document information needed for the assessment.

A First Draft Report was submitted by *bluecrane* for review by the steering committee on April 11, 2006. Comments were received and a de-briefing with the steering committee was held with *bluecrane* on May 16, 2006. This Draft is a compilation of the deliverable items completed to-date from the Preliminary Stage, Stage One, Stage Two and Stage Three.

Summary of Existing Situation

“WorkSource Oregon” is a brand that has been implemented as a primary means for businesses and job seekers to identify the state’s workforce development services. Local delivery of services is accomplished by fifteen regions within the state. While the fifteen regions utilize the single brand, delivery of services and the systems for enabling delivery vary widely.

State agencies operate a number of systems that are either directly involved in or have relevance to workforce development. In addition, the fifteen regions operate a wide variety of systems to support workforce development in Oregon. Individual regions – and in some cases, consortia of regions – have developed automated systems to support their business processes and needs.

Stakeholders in every region in the state believe that they are doing a good job of delivering services locally to their clientele, and we concur. The “system” is not “broken” at all. However, there are opportunities for greater efficiencies and better effectiveness. These opportunities involve:

- The efficiency of consolidating information statewide for state and federal reporting.
- The accuracy of performance data collected, when there are many differences in definitions of terms (such as “placement,” “retention,” etc.) across regions and the various levels of government (local, state, and federal).
- The ability to provide consistent, accurate information on state citizens longitudinally, as those citizens relocate within Oregon, leave a workforce program at some point in time and enter another (or the same) program at a later date, etc.

Summary of Approaches in Three Other States

One of the elements of our consulting engagement for the IMIS Project was a requirement to review solutions in three other states with a primary aim of determining whether or not there might be a “turnkey solution” available that would be a good fit for implementation in Oregon. The states of Texas, Michigan, and Florida were selected for our review by the IMIS Project Steering Committee. These three states were believed to represent certain “best of breed” practices in their systems approach.

It is clear from the discussions with the three states selected that there is no “turnkey solution” to be implemented in Oregon – at least none from within this subset of states. Each of the states reviewed has developed its own solution, unique to the characteristics of the state. In the case of Florida, a vendor-supplied “base system” was utilized but even it has been modified to such an extent that the operational system in use there is unique to Florida.



With Oregon's local, client-centric approach to service delivery, the wholesale replacement of the systems in use in Oregon with a single, monolithic, centralized system is not recommended. Not only would such an approach require custom development, it would also be extremely disruptive to the business approach that is working well today in Oregon.

Summary of Future Needs

A future vision for WorkSource Oregon includes:

- Uniform data collection and reporting;
- Uniform performance reporting;
- Common client identification;
- Elimination of duplicate copies of case data;
- No lag time in wage reporting; and
- Elimination of duplicate data entry.

While some other states have realized efficiencies and greater uniformity of operations through centralized solutions (three examples are provided in the body of this document), Oregon's approach has emphasized time spent with the client. We believe that significant strides can be made towards the future needs listed above without jeopardizing the client-centric approach that is working so well in Oregon's service delivery today.

Summary of Gap Analysis

Our assessment identified six key "gaps" which are described in detail in Section 5, Gap Analysis, of this report. The six gaps are:

Gap	Assessment	Gap Analysis Summary	Recommendation
Gap 1: Definitional Differences	Serious	The stakeholders of WorkSource Oregon need to address the definitional differences that exist in the "system." Despite good progress made through prior efforts, there are still differences. Without addressing this gap, there is no technological approach that is going to provide more "accurate" performance information – the data will still be incomplete, ill-defined, and marginally correct.	1



Gap	Assessment	Gap Analysis Summary	Recommendation
Gap 2: Lack of Common Metrics	Serious	The stakeholders of WorkSource Oregon (WSO) need to address the differences in metrics that exist in the "system." Despite good progress made through prior efforts, there are still differences. As with the definitional differences described in Gap 1, without addressing this gap, there is no technological approach that is going to provide more "accurate" performance information – the data will still be incomplete, ill-defined, and marginally correct.	2
Gap 3: Lack of Case Portability	Serious	Because clients move about the state seeking employment, the ability to effectively provide a consistent level of services as well as to accurately record performance information is further compromised.	3
Gap 4: Lack of Unique Client Identifier	Serious	A unique client identifier protocol is sorely needed. For example, WSO might choose to use a subset of the digits of the SSN combined with other demographic data or some other algorithmically-derived unique key not requiring SSN disclosure as the unique identifier to be employed throughout the "system."	4, 5
Gap 5: Duplication of Original Client Documentation	Moderate to Serious	Wherever possible, sharing of documents should be encouraged and redundancies should be eliminated.	6
Gap 6: Lack of Leveraging Common Applications	Serious	The stakeholders of WorkSource Oregon need to address the differences in the applications that exist in the "system" which drive the business processes at the state and within each regional operation. This is an area where a top-down technological approach will dramatically enhance the provision of more "accurate" performance information.	7, 8, 9



Recommendations

Note: While other sections of this Executive Summary are true “summaries” of the detailed information contained in the other sections of the document, in this section we repeat the Recommendations section of the document in full.

Context of *bluecrane*'s Work

We come to all of our consulting engagements with a perspective on state and local government developed and refined over many years. Our meetings and other interactions with the stakeholders of WorkSource Oregon (WSO) provided us the opportunity to focus that perspective into a “point of view” specific to WSO. That point of view provided a pragmatic context for our analysis and a foundation for the recommendations that follow.

Key elements of the context of the project are:

- The life blood of the program flows from the local enterprises which interface directly with the clients and are ultimately responsible / accountable for the efficacy of the “system.”
- It is paramount that the local enterprises be armed with the most consistent set of tools, protocols, and support systems to allow them to continue to successfully meet their mission while retaining their autonomy.
- The wholesale replacement of the information technology applications supporting various operational and reporting structures of the “system” is not only impractical but unaffordable and fraught with potentially significant disruptions and time consuming efforts to organize.
- The notion of a statewide central data warehouse is, in effect, already accomplished albeit in a variety of dispersed and currently disjointed storage silos. All data needed to support the business of WorkSource Oregon currently exists. No new data is needed. Therefore, in effect, a data warehouse for WorkSource Oregon currently exists. "Connecting" the various systems will enhance the efficacy of program operations.
- The data needed is known, the purposes for the data are known, and the shortcomings of the “systems” are known. What is needed is a synopsis of the items “known” combined with a series of sensible, no-nonsense, realistic steps taken at a prudent pace which leverage the investments and significant number of successfully working parts to minimize confusion and enable universal structure and performance measurement.
- The spirit of cooperation between and among the state and local enterprises is strong.
- The commitment by all involved in WorkSource Oregon is unquestionable to the defined mission of growing and improving Oregon for all its citizens.

It is within this context that we carried out our tasks. We submit that this pragmatic approach has resulted in a set of recommendations that can make a difference for WSO without

obfuscating the real issues under a mountain of assumptions, suppositions, alternatives, and technical details.

We encourage WSO to move aggressively in implementing our recommendations, while ensuring that the current levels of functionality and responsiveness in the regions is maintained, if not improved. This can be accomplished through careful coordination and planning, and a thorough understanding of what the regions have developed and implemented to meet ever-changing requirements that come with various sources of funding.

Note also that our recommendations are not based on any funding source. Our recommendations are robust enough to deal with new data requirements.

The set of recommendations that follow do not require significant uplifts in network capacity. Any investments in network capacity that may be required (e.g., if necessary for Recommendation 8) will be marginal and will not require a re-building of existing statewide capabilities.

Finally, it is noteworthy that our analysis does not provide a “silver bullet.” The real value of this assessment and set of recommendations is that we have:

- *Collected* many different points of view, with numerous agreements and consistencies, and more than a few disagreements and inconsistencies;
- *Analyzed* the information collected;
- *Synthesized* the data in order to develop a manageable set of internally consistent recommendations;
- *Made recommendations* that are “actionable.”

“There’s nothing new under the sun” and much of what we’ve derived in our assessment is in accord with the overall direction that WSO has already established. However, we believe that if WSO undertakes the recommendations provided here, many of the problems and issues (“gaps”) that exist in the WSO “system” today will be eliminated.

Addressing Key Operational Issues (Gaps 1, 2, and 3)

In general, the stakeholders of WSO should focus on the three operational issues identified in Gaps 1, 2, and 3. Without fixing those issues, no technological approach is going to address the frustration with today’s situation or the desires for more “accurate” performance information. The data will still be incomplete, ill-defined, and marginally correct. Specific needs, which may change or evolve over time, can be accommodated by re-tooling existing reporting applications as needed. In other words, don’t focus on re-engineering the entire system into a relational data base / data warehouse with unlimited ad hoc inquiry capabilities – at least not until the operational issues are resolved. Recommendations 1, 2, and 3 below address these issues.



It is noteworthy that WSO stakeholders have made good progress on common definitions and common measures through prior efforts. However, more work needs to be done. Moreover, without *enforcement* of common definitions and measures, the agreements on commonality mean little. As one WSO stakeholder commented:

At the local level, program definitions are in place to manage programs and report on customer performance to funding organizations. However, due to local interpretation of the broader fund source definitions, when the definitions are rolled-up to the State, inconsistencies occur. WSO has spent a great deal of time to make sure that Title 1B service definitions are consistent across the State and roll-up into PRISM correctly. There is still more work to be done. Before making any investments in a common data system, WSO needs to have all of the elements well-defined so that the definitions can be consistently implemented.

There are different uses throughout the WSO community of some of the most basic terms such as "entered employment," "retention," and "exit." While each region is adept at knowing the particular definition to use in each particular setting and/or with whom they are conversing, the fact that the same terms have multiple meanings is at a minimum confusing, requiring unique training within each region and, most importantly, is a significant delimiter to commonality of information systems across the WSO community.

Recommendation 1

Priority: Short-Term

Costs: <\$250,000

WorkSource Oregon (WSO) must universally implement a common list of terms which describe essential elements of the system. These terms should be driven first by Federal Departments of Labor, Human Services, and Education terms and definitions and next by those needed for state purposes. Like terms must not be used to describe two different items. To the extent possible, additional terms needed locally should be developed with agreement between locals as much as practical, again, without utilizing like terms for dissimilar items. Implementing this recommendation will, in all likelihood, require the abandonment of existing definitions and the creation of new terms to fit old definitions. Furthermore, the hierarchy of terms should form the basis of all data collected and reported throughout the system.

Recommendation 2

Priority: Short-Term

Costs: <\$250,000

WSO must address the differences in metrics that exist in the "system" by universally implementing a common set of measures.



Recommendation 3

Priority: Short-Term

Costs: <\$250,000

WSO must recognize the lack of case information portability in order to more effectively provide a consistent level of services as well as to accurately record performance information. Implementation of the series of recommendations made in this report will effectively eliminate the case-portability issue. Note that Recommendations 1, 2, 4, 5, 7, and 8 each directly improve the potential for case portability by requiring consistent standards, practices, and processes across regions.



Addressing Lack of Unique Client Identifier (Gap 4)

Recommendation 4

Priority: Short-Term

Costs: >\$250,000

WSO should mandate a client identifier protocol (e.g., using a subset of the digits of the SSN combined with other demographic data or some other algorithmically-derived unique key not requiring SSN disclosure) as the unique identifier to be employed throughout the “system.”

WSO should consider potential solutions that minimize the need for SSN release. Since all parties collect the SSN, the SSN can be used to determine/look-up a unique identifier. At that point, the unique identifier is shared, not the SSN, in order to access shared data (e.g., wage data).

Recommendation 5

Priority: Short-Term

Costs: <\$250,000

As a follow-on action to Recommendation 4, WSO should require all participants with applications feeding into or out of the “system” that the unique identifier must be used in addition to any other identifiers embedded in their existing applications.

Addressing Elimination of Redundant Copies of Original Documentation (Gap 5)

Recommendation 6

Priority: Long-Term

Costs: <\$250,000

WSO should undertake a study of current legislation and regulations governing the need for original documentation to support eligibility of clients to various programs and entitlements. The objective should be to allow sharing of documents and elimination of redundancies wherever possible.



Addressing Differences in Current Applications (Gap 6)

The stakeholders of WorkSource Oregon need to address the differences in the applications that exist in the “system” which drive the business processes at the state and within each regional operation. This is an area where a top-down technological approach will dramatically enhance the accuracy of information and reporting, and the consistency of service provision. This approach would help solve the case portability issue raised in Gap 3, as well.

Recommendation 7

Priority: Long-Term

Costs: >\$250,000

WSO should modify and mandate the statewide use of the iMatchSkills application to accommodate a common “intake” process at any portal, station, or government program in the WorkSource Oregon “system.”

Sharing individual client data is an essential element of this recommendation. If iMatchSkills is the common intake portal of WorkSource Oregon, then information/data has to be shared with the programs for which this application is a common portal. Monthly reports will not be adequate. Rather, the ability to obtain real-time individual client data from the iMatchSkills database will be required.



Recommendation 8

Priority: Long-Term

Costs: >\$250,000

WSO should facilitate and mandate the statewide use of a single case management and membership card application, choosing between either iTrac, the Region 2 Workforce Investment Board application, or GeoSolutions, the TOC/OWA application. This should be a single application operated in a central facility for statewide use.

Most in the WSO community have invested in the swipe card approach for initial client identification and / or registration. The swipe card technology is an omnipresent tool in today's business world with general acceptance and use by the public in a variety of settings. Given the public's acceptance and use of the swipe card technology, as well as the existing presence within the WSO system, it would be prudent to leverage the technology and business application to further the efficacy of the system. We recommend that regions that do not currently have a swipe card solution be included in the implementation of the selected solution.

As to the question of governance, the model that has worked so well in Oregon in the past should be maintained. A "steering committee" composed of stakeholders from the WSO community should include local representatives and should drive the process through a State-local partnership.

Recommendation 9

Priority: Long-Term

Costs: >\$250,000

WSO should modify and expand the PRISM application such that it meets the performance reporting needs of local operational management for all metrics where two or more regions (or regional consortia) require identical management metrics. This effort should include the performance reporting applications currently maintained by the Department of Community Colleges and Workforce Development.

To fully enhance the efficacy of WSO, PRISM will need to be embellished in significant ways. Decisions on these embellishments must be undertaken by the WSO community of stakeholders in a manner and with timing that reflects the priorities and resources of the WSO community. While we consider these embellishments to be significant, we have also confirmed that the PRISM architecture and design is well suited for the types of embellishments needed.



2. Existing Situation

Introduction

WorkSource Oregon is a statewide network of public and private partners linked by the common goal of stimulating job growth by providing a highly skilled, job-ready and well-educated workforce. Such a workforce is key to Oregon's business growth and economic stability.

Designed as a network of partners, WorkSource Oregon supports job seekers, existing local businesses, workforce staff and partners, and individuals and businesses considering relocating to Oregon. WorkSource Oregon provides the following:

- For existing businesses:
 - Pool of trained and skilled employees;
 - Access to workforce development grants;
 - Connections to education and information;
 - Labor market information;
 - Support and counsel related to expansion; and
 - Assistance with recruitment, screening, and skill-matching efforts.

- For job seekers:
 - Referrals and job placement with employers;
 - Listings of potential employers and access to the online skill-matching system;
 - Specialize skills training and education in high-demand occupations;
 - Career assistance such as coaching, resume writing, and basic skills development; and
 - Affordable access to educational programs.

- For business relocation
 - Connections to local economic development partners;
 - Assistance with recruiting, screening, and hiring employees;
 - Provision of a job-ready workforce;
 - Help in building a solid business infrastructure; and
 - Access to labor market information.

In addition, WorkSource Oregon provides Workforce Investment Act (WIA) Title 1B performance reporting.

“WorkSource Oregon” is a brand that has been implemented as a primary means for businesses and job seekers to identify the state's workforce development services. Local delivery of services is accomplished by fifteen regions within the state. While the fifteen regions utilize the single brand, delivery of services and the systems for enabling delivery vary widely.

State Business Objectives and Systems

State agencies operate a number of systems that are either directly involved in or have relevance to workforce development.

iMatchSkills

The Employment Department operates a Web-based system known as iMatchSkills. iMatchSkills was launched to the Web in October, 2004, as a self-service labor exchange tool. In March, 2006, there were 157,000 active job seekers (31% of whom had claimed a week of benefits within a three-week period prior to the census) utilizing iMatchSkills. The system is averaging about 50,000 job seeker logons per month and about 3,000 employer logons per month.

iMatchSkills is utilized throughout the state's fifteen regions. Since not all regions use iMatchSkills in the same manner or to the fullest extent of the capabilities of iMatchSkills, clients currently need to first understand how each region uses iMatchSkills to be able to effectively avail themselves of the services of the particular region in which they are seeking assistance. This situation may necessitate the client entering or re-entering basis information.

iMatchSkills is also used by staff to match job seekers to employer job listings and to record services to employers and job seekers.

ETA and VETS Reports

Utilizing Mathematica software provided by the Federal Department of Labor and data contained in the iMatchSkills database, the Oregon Employment Department produces Common Measures reports, Veterans reports, and others for federal reporting purposes.

Oregon Community College Unified Reporting System (OCCURS)

The Oregon Community College Unified Reporting System (OCCURS) gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges plan, research, and develop programs. Information in OCCURS is used by Oregon community colleges to monitor the progress of students and their success in the workplace and other education programs. OCCURS is written in FoxPro and runs on a PC platform.



WIA Standardized Record Data (WIASRD)

As a part of performance accountability at the state and local levels, the Federal Department of Labor (DoL) requires financial and program reporting by the states. DoL has established a standard set of core data elements that must be maintained for each individual who receives Title IB services beyond self-service and informational activities. The number of data elements that are required to be collected for each individual varies with the intensity of services that the individual receives.

Starting on July 1, 2000, states have been required to submit copies of individual participant records once each year by September 30 for all participants, including participants who exited but for whom information on outcomes is not yet complete. The individual standardized records must be kept strictly confidential.

The Workforce Investment Act Standardized Record Data (WIASRD) contains:

- Relevant demographic characteristics including race, ethnicity, sex, age, and other related information on the participants;
- WIA Title IB and partner program activities in which the participants are enrolled and the length of time the participants are engaged in such activities; and
- Outcomes for the participants, including occupations and placement in non-traditional employment.

In Oregon, WIASRD submission is managed by the Department of Community College and Workforce Development (DCCWD). In addition, DCCWD performs data collection and quarterly and annual reporting for Title 1B. DCCWD also provides reports to the local regions.

TOPSpro

Oregon uses TOPSpro software for federal reporting. Local programs collect data according to state and federal guidelines and export that data annually to the state in a format compatible with TOPSpro. This data provides state and local decision-makers with information to improve programs and monitor progress of basic skills learners. TOPSpro data is cross-matched against other statewide databases to verify outcome information for federal performance reporting.

Workforce Investment Act Title II accountability requires systematic measurement of outcomes for students documented by standardized assessment, collection of quality data at the individual student level, and consistent reporting of aggregate data across Oregon's Title II Adult Education system.



Performance Reporting Information System (PRISM)

The Performance Reporting Information System (PRISM) was developed in the early 2000's as a replacement for the Shared Information System (SIS). PRISM was created to replace the "black box" paradigm of SIS in which workforce partners provided data and received reports on aggregate information, but were never able to access their own raw data again. PRISM is separate from the wage-match system.

Workforce partners/programs utilizing PRISM include the Department of Human Services: Vocational Rehabilitation Services and Children, Adults and Families; Oregon Employment Department: Employment Service; and Department of Community Colleges and Workforce Development: WIA Title 1B participants, Title 2 participants, and the community colleges.

Much effort has been put into establishing common definitions and common measures that are utilized for data roll-up and reporting through PRISM.

PRISM is based on an Oracle Enterprise Database running on a Linux/Intel platform.

Oregon Vocational Rehabilitation Services (OVRs)

The primary application of the Oregon Vocational Rehabilitation Services (OVRs) is Oregon Rehabilitation Client Automation (ORCA). ORCA is a "buy-and-build" system. Several other states, including Michigan (one of the non-Oregon jurisdictions analyzed in this report) use the same, basic vendor-supplied system, with each jurisdiction adding ("building") its own unique aspects to the basic system. Each jurisdiction receives semi-annual updates from the vendor of the basic system which provides currency of laws, regulations, and court rulings.

ORCA feeds information into PRISM (see above) as well as into the state's payment system.

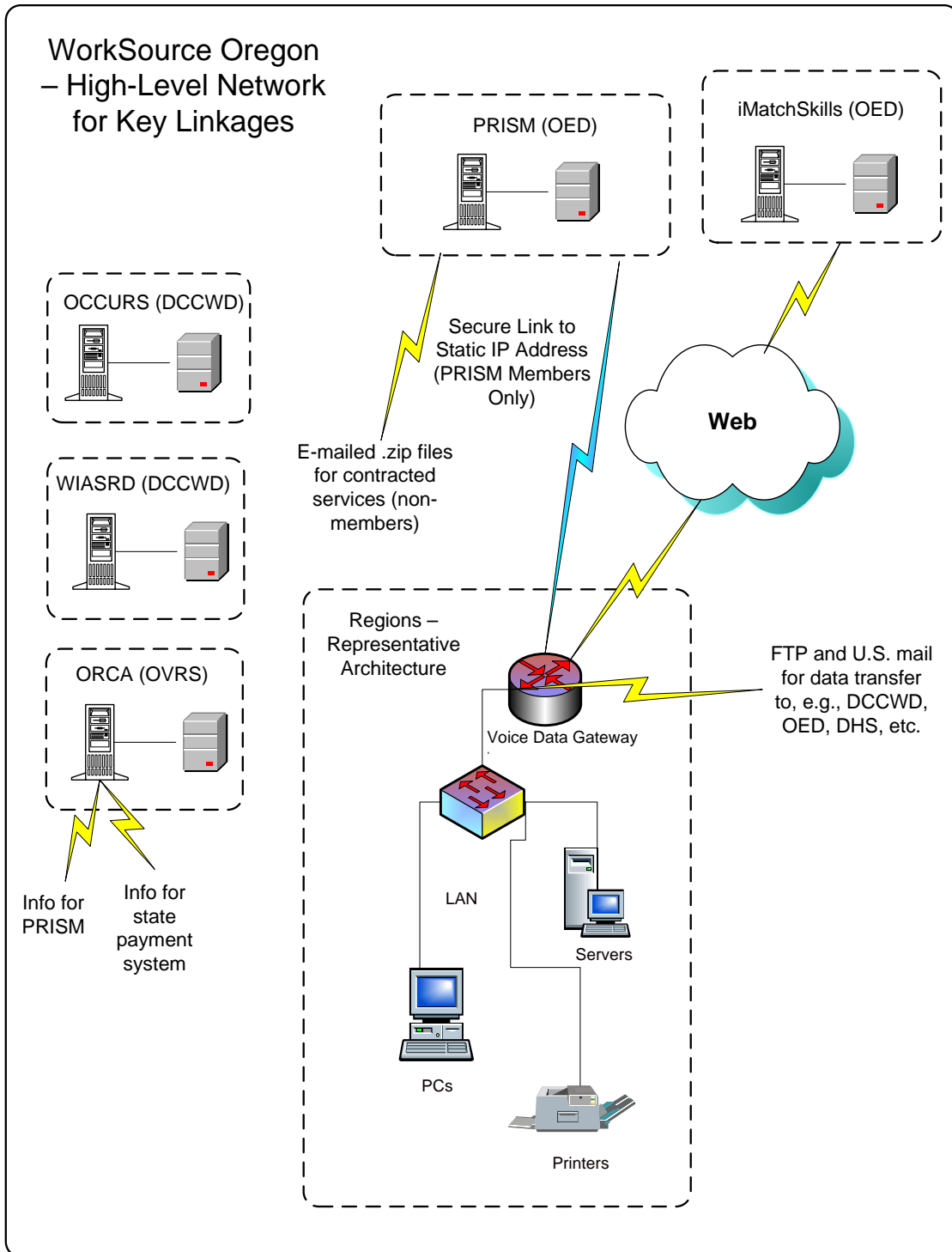
Others

There are many other state systems relevant to workforce development. For example, the Department of Human Services (DHS) operates eligibility and case management systems that track the activities of clients who are receiving benefits and fulfilling requirements for training and seeking work. In particular, the TRACS/JAS system tracks participation periods, activities, and attendance. It is used to authorize support payments.

Figure 1 on the following page provides a high-level view of some of the key linkages between systems utilized by WorkSource Oregon.



Figure 1. Representative High-Level Network for Key Linkages in WorkSource Oregon





Regional Systems

As Table 1, Regional Systems for Workforce Development, shows, a wide variety of systems are used to support workforce development in Oregon. Individual regions – and in some cases, consortia of regions – have developed automated systems to support their business processes and needs.

While stakeholders in every region in the state believe that they are doing a good job of delivering services locally to their clientele, questions arise about:

- The efficiency of consolidating information statewide for state and federal reporting.
- The accuracy of performance data collected, when there are many differences in definitions of terms (such as “placement,” “retention,” etc.) across regions and the various levels of government (local, state, and federal).
- The ability to provide consistent, accurate information on state citizens longitudinally, as those citizens relocate within Oregon, leave a workforce program at some point in time and enter another (or the same) program at a later date.



Table 1. Regional Systems for Workforce Development¹

Business Process Phase	Client ID	Application	Registration / Eligibility	Intensive Services / Placement / Follow-up			Case Management	Employment Verifications	Performance Reporting
				Participation	Training	Follow-up			
Data Needs Region	Basic client identification data	Data related to client identification is collected	Intense data collection for service provision and reporting to U.S. DoL	Client "case file"				Wage data	Wage data
Region 2	Swipe card – i-Trac	i-Trac	i-Trac	i-Trac	i-Trac	i-Trac	i-Trac	Wage data	i-Trac CCWD Qtrly Rpt PRISM. Local Reporting
Region 3	Swipe card	Participation Cohort	Oracle MIS	Oracle MIS	Oracle MIS	Oracle MIS	Oracle MIS	Wage data	PRISM, TOPSpro, Local Reporting
Region 4	Swipe card – iCount	Centralized Data Entry	Access MIS	Access MIS	Access MIS	Access MIS	Act 6.0	Wage data	PRISM, TOPSpro, Local Reporting
Region 5	Swipe card – G*STARS	Centralized Data Entry	Access MIS	Access MIS	Access MIS	Access MIS	G*STARS	Wage data	PRISM, TOPSpro, Local Reporting

¹ Each and every Region provides Core Services through OED systems.



Table 1. Regional Systems for Workforce Development (continued)

Business Process Phase	Client ID	Application	Registration / Eligibility	Intensive Services / Placement / Follow-up			Case Management	Employment Verifications	Performance Reporting
				Participation	Training	Follow-up			
Data Needs	Basic client identification data	Data related to client identification is collected	Intense data collection for service provision and reporting to U.S. DoL	Client "case file"			None	Wage data	Wage data
Region									
Region 8	Swipe card – SCORE	Centralized Data Entry	Access MIS	Access MIS	Access MIS	Access MIS	None	Wage data	PRISM, TOPSpro, Local Reporting
TOC / OWA (Regions 1, 6, 7, 9, 10, 11, 12, 13, 14,)	Swipe card – Geo-Solutions	GeoSolutions service	GeoSolutions service	GeoSolutions service	Geo-Solutions service	Geo-Solutions service	GeoSolutions service	Wage data	PRISM, TOPSpro, Local Reporting
Region 15	i-Trac / manual process	iMatchSkills – self-service	i-Trac	i-Trac	i-Trac	i-Trac	Contact-Wise and i-Trac	Wage data	i-Trac CCWD Qtrly Rpt PRISM, Local Reporting



Differing Requirements at Different Levels

Different levels of the “system” have differing requirements, as shown in Table 2 below.

Table 2. Differing Needs Across Levels of Government

	Performance Reporting	Financial Reporting	Counseling Support
Local Requirements	<ul style="list-style-type: none"> • Need DoL-required data to “roll-up” • Need operational data to make day-to-day management decisions 	<ul style="list-style-type: none"> • Need DoL-required data to “roll-up” • Need operational data to make day-to-day management decisions 	<ul style="list-style-type: none"> • Need Case Management support to administer services • Need to track clients across Regions
State Requirements	<ul style="list-style-type: none"> • Need DoL-required data to “roll-up” 	<ul style="list-style-type: none"> • Need DoL-required data to “roll-up” 	<ul style="list-style-type: none"> • Need Case Management support to administer state-managed services (such as welfare) • Desire to track clients “longitudinally”
Federal Requirements	<ul style="list-style-type: none"> • Specific metrics required for funding purposes; may or may not be relevant to local operational needs 	<ul style="list-style-type: none"> • Specific metrics required for funding purposes; may or may not be relevant to local operational needs 	<ul style="list-style-type: none"> • None



Reporting output and the uses of the output vary for different programs, as shown in Table 3 below.

Table 3. Differing Reporting Output

	Performance Reporting	Financial Reporting	Counseling Support
Program	Over time, there are increases in the percentage of program participants being placed via WorkSource and related programs	Cost performance of programs showing success in job placement	Demand for counseling support to make the program successful
Participant Progress	<ul style="list-style-type: none"> • Changes in job description/profile • Changes in wages earned 	Cost performance of participants' progress	How intensive is the counseling effort required to achieve participant progress
Service Information	Are increasing percentages of participants who utilize a particular service being placed in jobs	Cost performance of service providers	Demand for counseling support to enhance service provider delivery
Participant Groups	Relative performance across groups within a demographic category	Cost performance across groups within a demographic category	How intensive is the counseling effort required to achieve participant group progress

Assessment of Existing Situation

Within the context described above, the *bluecrane* Team worked with stakeholders at the state and local levels to develop the following assessment:

- **Alternative sources of services exist with private sector job placement providers.** To remain viable, the state and local participants in WorkSource Oregon must provide robust capabilities to place job seekers.
- **Swipe card** applications / terms / data captured / client capability enabled vary widely across Oregon's regions.



- **There is a strong reluctance in the regions to run concurrent applications** that require duplicate data entry, especially if the purpose is just to capture needed ad hoc and managerial reporting data.
- **More simplistic / more encompassing reporting through PRISM** is desired. The usage and relevance of existing PRISM reports are unknown.
- **“Common Measures” are not necessarily good to measure local performance.** As with the PRISM reports, there is a disconnect between (1) what is required by the state or the federal government to measure performance or even fund WorkSource Oregon activities and (2) what the regions need as operational management information for making day-to-day decisions in running the businesses of their agencies.
- **A number of state systems are dependent on specific, individual employees.** There are single or limited personnel resources, perspective, decision-making on data processes, and usage in these cases.
- **A number of state applications are “home-grown.”** Existence of documentation is unknown and sustainability without current personnel is questionable.
- **Except through the JOBS program, TANF clients are not clients of WorkSource** and are not likely to be candidates of WorkSource kiosks / self-help. Through the JOBS program, TANF clients may receive WIA universal services to perform job search and create resumes. Some are co-enrolled in TANF and WIA registered services.
- **Need to focus on mission and roles relative to workforce development at the three levels of government** vs. trying to solve the entirety of the systems problems.
- **Assume that building on / leveraging what already exists will be more effective** than a total re-write.
- **The ability / desirability of systems (applications) data to be co-mingled / shared across platforms** has not been assessed fully – and is even questionable as to its desirability, in light of the preceding two bulleted items.
- **The federal government is operating on the assumption that different client program data is / can be linked** in an effective way.
- **Real-time data sharing is rare** across the existing, multiple data systems.



If: We define “effective operation” to mean:

- Consistent and repeatable registration of clients (either self-help or with assistance) for any level of service (required or optional);
- Ability to define, capture, and access all information and statistics across the system about each client and their involvement / use of services / success of employment / wage information from any element of the program; and
- Ability to act on such information to make policy and management decisions at the local and state levels and to verify applicability / outcomes of funding by local, state, and federal levels.

Then: There are fundamentally three issues which are acting as deterrents to the effective operation of the overall program in an enterprise-wide manner.

1. Lack of common and consistent identification of each client and his / her case record(s);
2. Lack of common and consistent definition of terms which describe the client, client activities, and program terms; and
3. Need to replicate and retain original documents and make redundant entries on demographic and other client-identification information into varied systems on varied technology platforms, maintained by various individuals throughout the (business) system.



3. A Review of Approaches in Three Other Jurisdictions

One of the elements of our consulting engagement for the IMIS Project was a requirement to review solutions in three other states with a primary aim of determining whether or not there might be a “turnkey solution” available that would be a good fit for implementation in Oregon. The states of Texas, Michigan, and Florida were selected for our review by the IMIS Project Steering Committee. These three states were believed to represent certain “best of breed” practices in their systems approach.

Texas, Michigan, and Florida all have very centralized approaches that have evolved over a number of years. Issues such as case portability and unique identifier (other than the typical problems of duplicate SSNs, etc.) have not emerged in these jurisdictions because of the use of state-run, centralized systems across all localities within each state.

It is clear from the discussions with the three states selected that there is no “turnkey solution” to be implemented in Oregon – at least none from within this subset of states. Each of the states reviewed has developed its own solution, unique to the characteristics of the state. In the case of Florida, a vendor-supplied “base system” was utilized but even it has been modified to such an extent that the operational system in use there is unique to Florida.

Our approach was to see how each of the three states selected by the steering committee addressed the WSO issues identified in this report. We were not aware of the implementation approaches in any of the states until we interacted with them. We also confirmed that the issues identified in this report were precisely the issues and drivers with which each state dealt. While it is true that each of the targeted states has a centralized system, it is not accurate to draw the conclusion that only a centralized system will work. The conclusion we offer here is that it would be most practical, economical, and achievable to build upon and leverage existing systems and investments to address the issues identified. Each of the targeted states undertook a similar assessment and concluded, from their unique perspectives and circumstances, that it was best to proceed with constructing and implementing a centrally operated and managed system for their entire program.

With Oregon’s local, client-centric approach to service delivery, the wholesale replacement of the systems in use in Oregon with a single, monolithic, centralized system is not recommended. Not only would such an approach require custom development, it would also be extremely disruptive to the business approach that is working well today in Oregon.

We based our conversations with the other jurisdictions on the six gaps presented in the Gap Analysis of the Oregon system. In this way, we were able to focus attention on any relevant best practices employed in these other jurisdictions. The tables which follow below summarize our key findings by gap.



Texas

Contact: Adam Leonard, Texas Workforce Commission, 512-936-6037

At the state level, Texas maintains a comprehensive, integrated and centrally operated workforce information system (The Workforce Information System of Texas – TWIST) that includes Work First (TANF), WIA, Wagner-Peyser, job search (workintexas.com – WIT), and other applications in support of their workforce program.

The entirety of the system took many years and unknown funds to bring to its current state. As an indication, the state was able to quantify the data mart component of the system alone in terms of time to implement (11 months to launch and 9 months of fine tuning, which is still underway) and personnel (12 – 15 FTEs during the initial 11 months; 6 – 7 FTEs during the tuning stage – and still counting). For this component, they stripped data from existing case management systems to build the data mart functionality.

Further, they are beginning the process of re-engineering the entire system, expecting to take 3 years for design and 5 years for implementation. No budget was available for this re-engineering initiative.

Table 4. Texas Approach Vis-à-vis Oregon Gaps

Oregon Gap	Texas Summary of Approach
Gap 1: Definitional Differences	Since the system is centrally maintained and operated, the issue of definitional differences is minimized, although there remains some distinction between the federal and state definitions of some terms. These differences are reconciled with minimal disruption.
Gap 2: Lack of Common Metrics	Since the system is centrally maintained and operated, the issue of common metrics is minimal. Local Boards are able to either request specific ongoing reports from the state or generate ad hoc reports as needed, both from common data in the state-level data warehouse.
Gap 3: Lack of Case Portability	Since the system is centrally maintained and operated, the issue of case portability is minimized, although no particular statistics are maintained to determine the extent of clients requesting services from more than one Board.
Gap 4: Lack of Unique Client Identifier	Since the system is centrally maintained and operated, the issue of a unique client identifier is minimal. The system generates a specific identification number for each client while matching on last name, first name, date of birth, and, when available, social security number. Without the SSN, matching of wage data with other performance measures in Texas, as in Oregon, is not universally possible.
Gap 5: Duplication of Original Client Documentation	Since the system is centrally maintained and operated, the issue of duplication of original client documentation is minimal. There is no current or planned activity to capture and store digital images of relevant documentation.
Gap 6: Lack of Leveraging Common Applications	Since the system is centrally maintained and operated, the leveraging of common applications has been accomplished.



Michigan

Contact: Steve Henrys, Department of Labor and Economic Growth, 517-335-5940

At the state level, Michigan maintains a comprehensive, integrated, and centrally-operated workforce information system that includes Work First (TANF), WIA, Wagner-Peyser, job search (Michigan Talent Bank), and other applications in support of their workforce program.

In 1997, the State started to build their existing functionality, focusing first on their Talent Bank and Wagner-Peyser applications. In 1999, they focused on the JTPA / WIA functions, including Work First / TANF. In 2002, they finished their system with the TAA / NAFTA component. The funding or FTE resources consumed for these efforts is unknown. The data reporting system that existed prior to 1997 is still in use as part of the entirety of the State system. The State is just beginning the process of considering replacement of this reporting system. No budget or timeline is available for this initiative.

Table 5. Michigan Approach Vis-à-vis Oregon Gaps

Oregon Gap	Michigan Summary of Approach
Gap 1: Definitional Differences	Since the system is centrally maintained and operated, the issue of definitional differences is minimized, although there remains some distinction between the federal and state definitions of some terms. These differences are reconciled with minimal disruption.
Gap 2: Lack of Common Metrics	Since the system is centrally maintained and operated, the issue of common metrics is minimal. Local Boards are able to either request specific ongoing reports from the state or generate ad hoc reports as needed, both from common data in the state-level data warehouse.
Gap 3: Lack of Case Portability	Since the system is centrally maintained and operated, the issue of case portability is minimized, although no particular statistics are maintained to determine the extent of clients requesting services from more than one Board.
Gap 4: Lack of Unique Client Identifier	Since the system is centrally maintained and operated, the issue of a unique client identifier is minimal. The system generates a specific identification number for each client while matching on last name, first name, date of birth, and, when available, social security number. Without the SSN, matching of wage data with other performance measures in Michigan, as in Oregon, is not universally possible.
Gap 5: Duplication of Original Client Documentation	Since the system is centrally maintained and operated, the issue of duplication of original client documentation is minimal. There is no current or planned activity to capture and store digital images of relevant documentation.
Gap 6: Lack of Leveraging Common Applications	Since the system is centrally maintained and operated, the leveraging of common applications has been accomplished.



Florida

Contact: Jay Pfeiffer, Department of Education, 850-245-0437

At the state level, Florida maintains a comprehensive, integrated, and centrally operated information system that includes pre-K to Post Graduate education, TANF, WIA, Wagner-Peyser, job search (Workforce Innovation), and other applications in support of the Florida Education and Training Program (FETP) education and workforce programs.

The timelines and costs for bringing the entirety of the State work force enterprise to its current State are unknown. However, the State was able to quantify the data mart component of the system in terms of time to implement (3 years) and personnel (6 – 8 State FTEs and 4 – 5 vendor FTEs during a 3-year project). For this component, data was harvested from existing source systems to build the data mart. Functionality was built “from the ground up.” A nucleus of meta data from various source systems throughout the enterprise was leveraged in the effort.

Table 6. Florida Approach Vis-à-vis Oregon Gaps

Oregon Gap	Florida Summary of Approach
Gap 1: Definitional Differences	Since the system is centrally maintained and operated, the issue of definitional differences is minimized, although there remains some distinction between the federal and state definitions of some terms. These differences are reconciled with minimal disruption.
Gap 2: Lack of Common Metrics	Since the system is centrally maintained and operated, the issue of common metrics is minimal. Local Boards are able to either request specific ongoing reports from the state or generate ad hoc reports as needed, both from common data in the state-level data warehouse.
Gap 3: Lack of Case Portability	Since the system is centrally maintained and operated, the issue of case portability is minimized, although no particular statistics are maintained to determine the extent of clients requesting services from more than one Board.
Gap 4: Lack of Unique Client Identifier	Since the system is centrally maintained and operated, the issue of a unique client identifier is minimal. The system relies on the Social Security Number (SSN) for matching of wage data with other performance measures. The state has developed an extensive set of protocols for validating the accuracy of SSNs.
Gap 5: Duplication of Original Client Documentation	Since the system is centrally maintained and operated, the issue of duplication of original client documentation is minimal. There is no current or planned activity to capture and store digital images of relevant documentation.
Gap 6: Lack of Leveraging Common Applications	Since the system is centrally maintained and operated, the leveraging of common applications has been accomplished.



4. Future Vision for Oregon's Approach and Systems

A future vision for WorkSource Oregon includes the characteristics described below.

Uniform Data Collection and Reporting

In an ideal future, data collected and reported at the local, state, and even federal levels would be consistently defined and used for common purposes.

Uniform Performance Reporting

In an ideal future, performance reporting would be consistent across regions and between levels of government.

Common Client Identification

In an ideal future, there would be a common means of client identification. Today, there is no consistent ability to utilize social security numbers. Other numbers proliferate almost as in lock-step with the number of automated systems in use.

Elimination of Duplicate Copies of Case Data

In an ideal future, there would be little or no need to maintain duplicate copies of client data, including duplicate copies of client certificates and other documentation collected for verification at application and eligibility determination times.

No Lag Time in Wage Reporting

Ideally, there would be no lag time in reporting wage data.

Elimination of Duplicate Data Entry

Ideally, clients would not need to re-enter basic identification and demographic information for multiple purposes or systems.



5. Gap Analysis

The tables below summarize the “gaps” between the existing situation today and the future vision for Oregon’s approach and systems.

Gap 1: Definitional Differences	
Overall Gap Assessment:	Serious
Ideal Description:	Common definitions across regions, levels of government, and systems would be the “ideal”; short of the ideal situation, a “ cross-walk ” that provides a cross-reference or “mapping” between different sets of definitions is sorely needed.
Benefits:	A common set of definitions or at least an accepted cross-walk of differing definitions would help ensure consistency in: <ul style="list-style-type: none"> • Client service across regions; • Regional reporting to the state; • State reporting to the federal government; • Measurement of and reporting on operational efficiency and effectiveness at the regional level.
Existing Application or Structure:	Differences in definitions exist across regions, levels of government, and systems. Examples include the definitions of terms such as: <ul style="list-style-type: none"> • Customer; • Participant; • Registration; • Exit; • Entered employment; • Placement; • Wage enhanced; • One-stop; • Universal (services / customers); • Annual report; and • Retention.
Gap Analysis Summary:	The stakeholders of WorkSource Oregon need to address the definitional differences that exist in the “system.” Despite good progress made through prior efforts, there are still differences. Without addressing this gap, there is no technological approach that is going to provide more “accurate” performance information – the data will still be incomplete, ill-defined, and marginally correct.



Gap 2: Lack of Common Metrics	
Overall Gap Assessment:	Serious
Ideal Description:	A common set of metrics across regions, levels of government, and systems.
Benefits:	A common set of metrics would help ensure consistency in reporting and evaluating: <ul style="list-style-type: none"> • Service level; • Job placements; and • Wages.
Existing Application or Structure:	Differences in metrics today result in differences in performance reporting: <ul style="list-style-type: none"> • Between regions; • Between region(s) and the state; • Between the state's "roll-up" to the federal government and the operational measures used by the regions on a day-to-day basis.
Gap Analysis Summary:	The stakeholders of WorkSource Oregon need to address the differences in metrics that exist in the "system." Despite good progress made through prior efforts, there are still differences. As with the definitional differences described in Gap 1, without addressing this gap, there is no technological approach that is going to provide more "accurate" performance information – the data will still be incomplete, ill-defined, and marginally correct.



Gap 3: Lack of Case Portability	
Overall Gap Assessment:	Serious
Ideal Description:	Seamless portability of client information across regional boundaries.
Benefits:	Elimination of manual intervention for cross-regional information sharing.
Existing Application or Structure:	There is a lack of portability of client information across regional boundaries, leading to the need for manual client-by-client interconnection between regions.
Gap Analysis Summary:	Because clients move about the state seeking employment, the ability to effectively provide a consistent level of services as well as to accurately record performance information is compromised.



Gap 4: Lack Unique Client Identifier	
Overall Gap Assessment:	Serious
Ideal Description:	A single, unique identifier would be utilized to track clients across regions and levels of government. Moreover, the same identifier would be utilized to track clients longitudinally as they re-enter the “system” after exiting.
Benefits:	Elimination of duplicate information and reduction in potential fraud.
Existing Application or Structure:	Today, there is no consistent ability to utilize social security numbers. Other numbers proliferate almost as in lock-step with the number of automated systems in use.
Gap Analysis Summary:	A unique client identifier protocol is sorely needed. For example, WSO might choose to use a subset of the digits of the SSN combined with other demographic data or some other algorithmically-derived unique key not requiring SSN disclosure as the unique identifier to be employed throughout the “system.”



Gap 5: Duplication of Original Client Documentation

Overall Gap Assessment:	Moderate to Serious
Ideal Description:	Original client documentation (social security card, birth certification, professional certifications, diplomas, etc.) required for application and eligibility determination would be verified, imaged, and stored a single time for retrieval at a later date, without requiring the client to produce the documents again and without the need to for the regions or state to store multiple copies of the same documents.
Benefits:	Elimination of duplicate information and the need for additional storage.
Existing Application or Structure:	Today, clients are required to present the same documents multiple times and duplicate paper copies are stored in various agencies, both locally and at the state level.
Gap Analysis Summary:	Wherever possible, sharing of documents should be encouraged and redundancies should be eliminated.



Gap 6: Lack of Leveraging Common Applications	
Overall Gap Assessment:	Serious
Ideal Description:	<p>Seamless Statewide applications for</p> <ul style="list-style-type: none"> • Membership card / client registration • Application • Case Management • Job Matching and Skills Tracking / Assessment • Performance Metrics and Reporting
Benefits:	<p>If the stakeholders of WorkSource Oregon leverage common applications for the areas identified in the “Ideal Description” above, this would facilitate:</p> <ul style="list-style-type: none"> • Efficient, consistent consolidation of information statewide for state and federal reporting. • Accurate performance data collection and reporting. • Consistent, accurate information on state citizens longitudinally, as those citizens relocate within Oregon, leave a workforce program at some point in time and enter another (or the same) program at a later date.
Existing Application or Structure:	<p>Diverse applications across the regions of the state (see Table 1 of this report). Individual regions – and in some cases, consortia of regions – have developed automated systems to support their business processes and needs.</p>
Gap Analysis Summary:	<p>By leveraging a set of common applications to drive the business processes at the state and within each regional operation, the stakeholders of WorkSource Oregon could dramatically enhance the accuracy of information and reporting, and the consistency of service provision. This approach would help solve the case portability issue raised in Gap 3, as well.</p>



6. Recommendations

Context of bluecrane's Work

We come to all of our consulting engagements with a perspective on state and local government developed and refined over many years. Our meetings and other interactions with the stakeholders of WorkSource Oregon (WSO) provided us the opportunity to focus that perspective into a "point of view" specific to WSO. That point of view provided a pragmatic context for our analysis and a foundation for the recommendations that follow.

Key elements of the context of the project are:

- The life blood of the program flows from the local enterprises which interface directly with the clients and are ultimately responsible / accountable for the efficacy of the "system."
- It is paramount that the local enterprises be armed with the most consistent set of tools, protocols, and support systems to allow them to continue to successfully meet their mission while retaining their autonomy.
- The wholesale replacement of the information technology applications supporting various operational and reporting structures of the "system" is not only impractical but unaffordable and fraught with potentially significant disruptions and time consuming efforts to organize.
- The notion of a statewide central data warehouse is, in effect, already accomplished albeit in a variety of dispersed and currently disjointed storage silos.
- The data needed is known, the purposes for the data are known, and the shortcomings of the "systems" are known. What is needed is a synopsis of the items "known" combined with a series of sensible, no-nonsense, realistic steps which leverage the investments and significant number of successfully working parts to minimize confusion and enable universal structure and performance measurement.
- The spirit of cooperation between and among the state and local enterprises is strong.
- The commitment by all involved in WorkSource Oregon is unquestionable to the defined mission of growing and improving Oregon for all its citizens.

It is within this context that we carried out our tasks. We submit that this pragmatic approach has resulted in a set of recommendations that can make a difference for WSO without obfuscating the real issues under a mountain of assumptions, suppositions, alternatives, and technical details.

We encourage WSO to move aggressively in implementing our recommendations, while ensuring that the current levels of functionality and responsiveness in the regions is maintained, if not improved. This can be accomplished through careful coordination and planning, and a



thorough understanding of what the regions have developed and implemented to meet ever-changing requirements that come with various sources of funding.

Note also that our recommendations are not based on any funding source. Our recommendations are robust enough to deal with new data requirements.

The set of recommendations that follow do not require significant uplifts in network capacity. Any investments in network capacity that may be required (e.g., if necessary for Recommendation 8) will be marginal and will not require a re-building of existing statewide capabilities.

Finally, it is noteworthy that our analysis does not provide a “silver bullet.” The real value of this assessment and set of recommendations is that we have:

- *Collected* many different points of view, with numerous agreements and consistencies, and more than a few disagreements and inconsistencies;
- *Analyzed* the information collected;
- *Synthesized* the data in order to develop a manageable set of internally consistent recommendations;
- *Made recommendations* that are “actionable.”

“There’s nothing new under the sun” and much of what we’ve derived in our assessment is in accord with the overall direction that WSO has already established. However, we believe that if WSO undertakes the recommendations provided here, many of the problems and issues (“gaps”) that exist in the WSO “system” today will be eliminated.

Addressing Key Operational Issues (Gaps 1, 2, and 3)

In general, the stakeholders of WorkSource Oregon should focus on the three operational issues identified in Gaps 1, 2, and 3. Without fixing those issues, no technological approach is going to address the frustration with today’s situation or the desires for more “accurate” performance information. The data will still be incomplete, ill-defined, and marginally correct. Specific needs, which may change or evolve over time, can be accommodated by re-tooling existing reporting applications as needed. In other words, don’t focus on re-engineering the entire system into a relational data base / data warehouse with unlimited ad hoc inquiry capabilities – at least not until the operational issues are resolved. Recommendations 1, 2, and 3 below address these issues.

It is noteworthy that WSO stakeholders have made good progress on common definitions and common measures through prior efforts. However, more work needs to be done. Moreover, without *enforcement* of common definitions and measures, the agreements on commonality mean little. As one WSO stakeholder commented:



At the local level, program definitions are in place to manage programs and report on customer performance to funding organizations. However, due to local interpretation of the broader fund source definitions, when the definitions are rolled-up to the State, inconsistencies occur. WSO has spent a great deal of time to make sure that Title 1B service definitions are consistent across the State and roll-up into PRISM correctly. There is still more work to be done. Before making any investments in a common data system, WSO needs to have all of the elements well-defined so that the definitions can be consistently implemented.

There are different uses throughout the WSO community of some of the most basic terms such as "entered employment," "retention," and "exit." While each region is adept at knowing the particular definition to use in each particular setting and / or with whom they are conversing, the fact that the same terms have multiple meanings is at a minimum confusing, requiring unique training within each region and, most importantly, is a significant delimiter to commonality of information systems across the WSO community.



Recommendation 1

Priority: Short-Term

Costs: <\$250,000

WorkSource Oregon (WSO) must universally implement a common list of terms which describe essential elements of the system. These terms should be driven first by Federal Departments of Labor, Human Services, and Education terms and definitions and next by those needed for state purposes. Like terms must not be used to describe two different items. To the extent possible, additional terms needed locally should be developed with agreement between locals as much as practical, again, without utilizing like terms for dissimilar items. Implementing this recommendation will, in all likelihood, require the abandonment of existing definitions and the creation of new terms to fit old definitions. Furthermore, the hierarchy of terms should form the basis of all data collected and reported throughout the system.

Recommendation 2

Priority: Short-Term

Costs: <\$250,000

WSO must address the differences in metrics that exist in the "system" by universally implementing a common set of measures.

Recommendation 3

Priority: Short-Term

Costs: <\$250,000

WSO must recognize the lack of case information portability in order to more effectively provide a consistent level of services as well as to accurately record performance information. Implementation of the series of recommendations made in this report will effectively eliminate the case-portability issue. Note that Recommendations 1, 2, 4, 5, 7, and 8 each directly improve the potential for case portability by requiring consistent standards, practices, and processes across regions.



Addressing Lack of Unique Client Identifier (Gap 4)

Recommendation 4

Priority: Short-Term

Costs: >\$250,000

WSO should mandate a client identifier protocol (e.g., using a subset of the digits of the SSN combined with other demographic data or some other algorithmically-derived unique key not requiring SSN disclosure) as the unique identifier to be employed throughout the “system.”

WSO should consider potential solutions that minimize the need for SSN release. Since all parties collect the SSN, the SSN can be used to determine/look-up a unique identifier. At that point, the unique identifier is shared, not the SSN, in order to access shared data (e.g., wage data).

Recommendation 5

Priority: Short-Term

Costs: <\$250,000

As a follow-on action to Recommendation 4, WSO should require all participants with applications feeding into or out of the “system” that the unique identifier must be used in addition to any other identifiers embedded in their existing applications.

Addressing Elimination of Redundant Copies of Original Documentation (Gap 5)

Recommendation 6

Priority: Long-Term

Costs: <\$250,000

WSO should undertake a study of current legislation and regulations governing the need for original documentation to support eligibility of clients to various programs and entitlements. The objective should be to allow sharing of documents and elimination of redundancies wherever possible.



Addressing Differences in Current Applications (Gap 6)

The stakeholders of WorkSource Oregon need to address the differences in the applications that exist in the “system” which drive the business processes at the state and within each regional operation. This is an area where a top-down technological approach will dramatically enhance the accuracy of information and reporting, and the consistency of service provision. This approach would help solve the case portability issue raised in Gap 3, as well.

Recommendation 7

Priority: Long-Term

Costs: >\$250,000

WSO should modify and mandate the statewide use of the iMatchSkills application to accommodate a common “intake” process at any portal, station, or government program in the WorkSource Oregon “system.”

Sharing individual client data is an essential element of this recommendation. If iMatchSkills is the common intake portal of WorkSource Oregon, then information / data has to be shared with the programs for which this application is a common portal. Monthly reports will not be adequate. Rather, the ability to obtain real-time individual client data from the iMatchSkills database will be required.



Recommendation 8

Priority: Long-Term

Costs: >\$250,000

WSO should facilitate and mandate the statewide use of a single case management and membership card application, choosing between either iTrac, the Region 2 Workforce Investment Board application, or GeoSolutions, the TOC/OWA application. This should be a single application operated in a central facility for statewide use.

Most in the WSO community have invested in the swipe card approach for initial client identification and / or registration. The swipe card technology is an omnipresent tool in today's business world with general acceptance and use by the public in a variety of settings. Given the public's acceptance and use of the swipe card technology, as well as the existing presence within the WSO system, it would be prudent to leverage the technology and business application to further the efficacy of the system. We recommend that regions that do not currently have a swipe card solution be included in the implementation of the selected solution.

As to the question of governance, the model that has worked so well in Oregon in the past should be maintained. A "steering committee" composed of stakeholders from the WSO community should include local representatives and should drive the process through a State-local partnership.

Recommendation 9

Priority: Long-Term

Costs: >\$250,000

WSO should modify and expand the PRISM application such that it meets the performance reporting needs of local operational management for all metrics where two or more regions (or regional consortia) require identical management metrics. This effort should include the performance reporting applications currently maintained by the Department of Community Colleges and Workforce Development.

To fully enhance the efficacy of WSO, PRISM will need to be embellished in significant ways. Decisions on these embellishments must be undertaken by the WSO community of stakeholders in a manner and with timing that reflects the priorities and resources of the WSO community. While we consider these embellishments to be significant, we have also confirmed that the PRISM architecture and design is well suited for the types of embellishments needed.



APPENDIX: List of Regional Meetings

The following tables provide schedules, locations, lead Stakeholder, and attendee lists for the meetings:

Date	Time	Location
March 8, 2006	8:00 a.m. to 12:00 noon	711 SW Alder, 2nd Floor, Multnomah Room, Portland
Participants Andrew McGough Janice Frater Lori Bean John Gardner Kelly Jain Jerry Fugere David Allen	Region 2	Survey / Instructions Sent to: Kelly Jain 503-478-7332 kjain@worksystems.org

Date	Time	Location
March 8, 2006	2:00 p.m. to 4:00 p.m.	Clackamas Community College 19600 S. Molalla Ave, Gregory Forum, Rm 108-A, Oregon City
Participants Dian Connett Dave Griffiths Catherine Nopp Tom Previs Cathie Moravec Sharon Fulton Terri Houde	Region 15	Survey / Instructions Sent to: Leslie Palmer 503-657-6958 x5286 lesliep@clackamas.edu

Date	Time	Location
March 13, 2006	9:00 a.m. to 11:00 a.m.	OED, 875 Union Street NE Room 3, Salem
Participants David Allen April McGuire Laurie Warner Joanne Truesdell Amanda Richards Lily Sehon Lita Colligan Dave Lyda Greg White Steve Simms	Policy Group	Survey / Instructions Sent to: NA David Allen 503-526-2774 david.k.allen@state.or.us April McGuire 503-378-6846 x372 april.mcguire@state.or.us



Date	Time	Location
March 13, 2006	11:00 a.m. to 12:30 p.m.	OED Bldg, 875 Union Street NE, Salem
Participants Gus Johnson Velva Warden John Glen Rashmi Joshi Greg Pelton Chuck Oswalt David Allen	OED iMS / PRISM Technical	Survey / Instructions Sent to: John Glen 503-947-1234 john.l.glen@state.or.us
May 3, 2006	11:00 a.m. to 11:30 p.m.	Teleconference Call 503-947-1222
John Glen Chuck Oswalt		

Date	Time	Location
March 13, 2006	1:30 pm. To 2:30 p.m.	Human Services Building, 500 Summer Street NE, Room 285, Salem
Participants Dave Lyda Monte Burke Leo Ott Margret Armantrout Paul Kilgore Leslie Potter Michael Scott	DHS - Technical	Survey / Instructions Sent to: Dave Lyda 503-945-6122 dave.m.lyda@state.or.us

Date	Time	Location
March 13, 2006	4:00 p.m. to 5:00 p.m.	Public Services Building, 255 Capitol Street NE, CCWD Meeting Room 2, 3rd Floor
Participants Al Pierce Al Newman Amanda Richards	CCWD - Technical	Survey / Instructions Sent to: Joanne Truesdell 503-378-8648 x468 joanne.truesdell@state.or.us



Date	Time	Location
April 25, 2006	10:00 a.m. to 10:45 a.m.	Teleconference Call 503-986-0098
Participants Tawni Bean Ted Werth	Economic Development	

Date	Time	Location
March 14, 2006	9:00 a.m. to 11:00 a.m.	Chemeketa Community College South Campus, 4001 Winema Place NE, Suite 200, Salem
Participants Cynthia Currin Gene VanBrunsven Tiffany Taylor Deanna Webber Robbie McCormack Kellie Schellenberg Chen Mandanino Chesta Bauer Diane Lorin Marilyn Ulrich	Region 3	Survey / Instructions Sent to: Cynthia Currin 503-399-2355 ccurrin@chemeketa.edu

Date	Time	Location
March 15, 2006	9:30 a.m. to 12:30	300 Country Club Road, Suite 120, Eugene
Participants Region 4 Steve Bekofsky Virgil Ezell Sue Hankins Tanarae Greeman	Regions 4, 5, 8	Survey / Instructions Sent to: Chuck Forster 541-682-7227 chuck.forster@co.lane.or.us Steve Bekofsky Phone Number
Region 5 Kristina Payne Chuck Forster Darryl Osmus Jim Pfarrer Christina Kocks		
Region 8 Marie Finch Jean Work		



Date	Time	Location
March 22, 2006	10:00 a.m. to 12:00 noon	Columbia Columns, 500 North Columbia River, Ste 300, St. Helens
Participants Joyce Aho Lee Coleman Patrick McConahay Becky Read Ralph Orr Chris Kelso Mickey Surlong Ray Warder Jeff Dickason Teri Williams Julie Gassner	TOC, Region 1	Survey / Instructions Sent to: Julie Gassner 503-325-1156 jgassner@mtctrains.com

Date	Time	Location
April 11, 2006	10:00 to 11:00	
Participants Aaron Hughes	OVRS - Technical	Survey / Instructions Sent to: Kristina Kennedy kristina.kennedy@state.or.us
May 1, 2006	2:00 p.m. to 2:30 p.m.	Teleconference Call 503-945-6709
Aaron Hughes Jim Simpson		

Date	Time	Location
April 26, 2006	2:30 p.m. to 3:00 p.m.	Teleconference Call 503-378-3156 ext 226
Participants John Radford	DAS - State Controller	

A survey was provided to meeting attendees ahead-of-time to stimulate thinking and document information needed for the assessment.