FDSS Training Manual

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Instructions for Using the Frontline Decision Support System

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FDSS Training Manual

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Background

The Workforce Investment Act (WIA) of 1998 emphasized the integration and coordination of employment services. Central to achieving this aim is the federal requirement that local areas receiving WIA funding must establish one-stop centers, with providers of various employment services within a local labor market assembled in one location. A major challenge facing staff centers is the expected large volume of customers resulting from relaxed program eligibility rules. Nonetheless, resources for assessment and counseling are limited, and frontline staff have few tools to help them make informed referral decisions.

The Frontline Decision Support System (FDSS) is a set of administrative tools developed by the W.E. Upjohn Institute for Employment Research with support and cooperation from the Georgia Department of Labor and the U.S. Department of Labor, to help frontline staff and customers make better decisions about job prospects and appropriate services.

The Upjohn Institute is in a unique position to design, develop, test, and implement FDSS. The Institute not only conducts employment-related research, but also administers the state and federal employment programs that are the responsibility of the local Workforce Investment Board.

Purpose

FDSS is comprised of two independent but complementary modules that produce recommendations to help staff and customers make informed decisions. Recommendations provided by these tools are based on recent activity in the state of Georgia including labor market information, historical service data, and customer characteristics. The modules of FDSS are:

Systematic Job Search Module (SJSM)

Provides customized information about the job market

Reemployment Probability and Estimated Earnings
Probability of Return to Work in Prior Industry
Expected Job Growth in Prior Occupation
Likely Reemployment Earnings

Related Occupations

Service Referral Module (SRM)

 Provides customized information about the likely effectiveness of various reemployment and training services

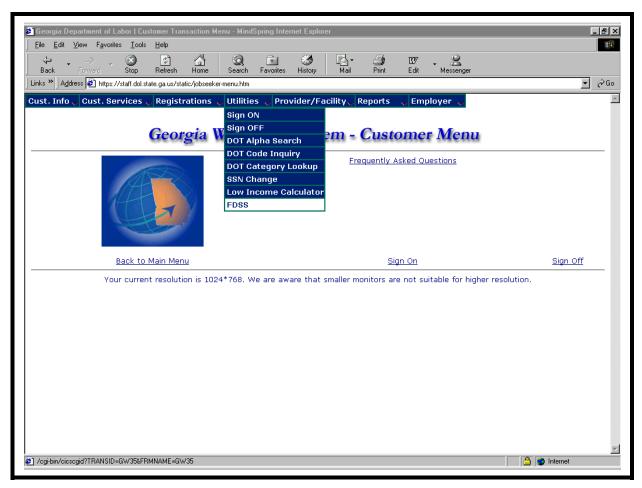
Service Referral Training Statistics

How FDSS Works?

Getting Started

FDSS has been added to the internet-based operating system called the Georgia Workforce System (GWS).

In GWS, from the Customer Menu, select the FDSS link in the drop-down menu under the Utilities button.



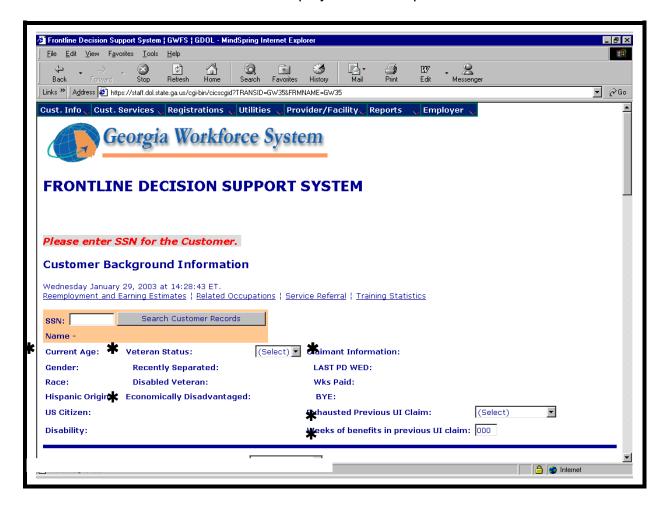
Key customer's Social Security Number (SSN) and click the Search Customer Records button.

Customer Background Information will display.

Move within FDSS by using the browser scroll bar or by clicking the underlined link for a specific section.

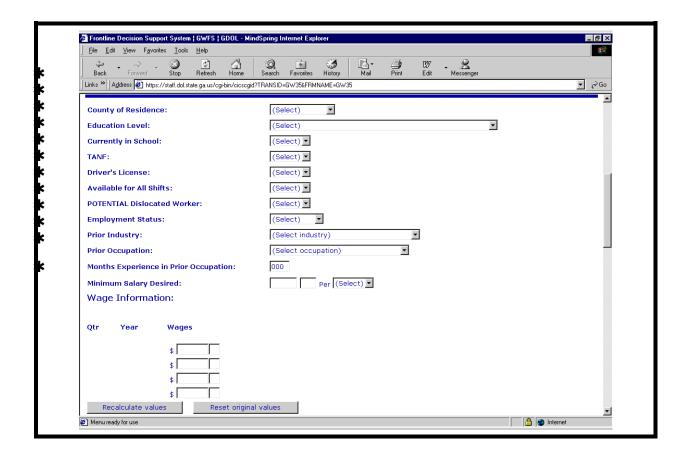
CUSTOMER BACKGROUND INFORMATION

This information is displayed in two separate sections.



Static Characteristics (except Veteran and Previous UI Claim Information) Displayed above the blue line

- Characteristics and values displayed are from the Customer Information, Expanded Customer Information, Customer Skills/Profile, and Unemployment Insurance pages of the GWS and CICS transactions.
- Items with an asterisk () are characteristics used in evaluating FDSS models.
- Items without an asterisk are displayed for informational purposes.
- Floating identifiers (CAP or Profile Potential / Participant and GoodWorks!) display when applicable.
- The values of static characteristics, except the Veteran and Previous UI Claim fields, can only be changed through GWS pages.



Dynamic Characteristics (Displayed below the blue line)

- Characteristics and values displayed are from the Customer Information, Expanded Customer Information, Customer Skills/Profile, and Wage File pages of the GWS.
- Items with an () are characteristics used in evaluating FDSS models.
- Items without an asterisk are displayed for informational purposes.
- Prior Occupation options are grouped into ten categories based on Standard Occupational Classifications.

These groups are as follows:

Management, Business, and Financial

Professional and related occupations

Services, including Military

Sales and related occupations

Office and Administrative Support

Farming, Fishing, and Forestry

Construction and Extraction

Installation, Maintenance, and Repair

Production

Transportation and Material Moving

- Missing wages or other information may be added.
- Characteristic values can be temporarily changed for What If? Scenarios.
- Additions/changes to characteristic values will not update the GWS pages/database.

What If? Scenarios

Dynamic characteristic values in the Customer Background Information section of FDSS may be modified to show customers the impact such changes can have on the resulting recommendations and on their job search prospects.

To display a What If? scenario, change the characteristic value or select the desired option from the drop-down list then click the Recalculate Values button. The FDSS page will reload with the changes made. To return to the original characteristic values, click the Reset Original Values button. More than one characteristic can be changed before recalculating values.

What If? Scenario Example

Within FDSS, a customer's education level influences the Reemployment Probability and Estimated Earnings outcomes. Changing the Education Level field from no high school diploma to a diploma or GED OR from high school to an Associate or Bachelor Degree may change a customer's reemployment opportunities, including likely earnings. This scenario shows customers how their job market prospects can be impacted if additional education is obtained.

Changing characteristic values will effect the recommendations of FDSS.

No FDSS recommendations, original or as a result of a What If? scenario, will be stored in the GWS.

Systematic Job Search Module (SJSM)

The SJSM is a means to conduct a structured search of job orders. The module provides customers with personalized information about factors influencing reemployment prospects. FDSS recommendations from this module are presented in two groups.

Reemployment Probability and Estimated Earnings

This section of FDSS provides a snapshot of the customer's :

- probability of returning to work in their prior industry,
- expected job growth rate in their prior occupation, and
- likely reemployment earnings.

This information can help guide the next step in a customer's job search process. It can also be a personalized "reality check" about employment prospects.

Related Occupations

This section of FDSS provides a randomly selected list of five occupations with skill and aptitude requirements similar to a customer's prior occupation.

Information displayed for each related occupation includes:

- the approximate starting hourly wage,
- expected average annual job growth rate, and
- corresponding O*NET Code.

This information can help guide the next step in a customer's job search process. It can be used as a starting point for career exploration.

The Related Occupations produced by FDSS are derived from the O*NET Database. Because the current occupational coding system within the GWS is based on the Dictionary of Occupational Titles (DOT), each customer's DOT code is converted to an O*NET SOC code. Because of the reduced number of occupations within the O*NET Database (974 compared to 12,000 in the DOT), a one-to-one conversion is not feasible; therefore, a customer's DOT code may convert to one of the 150 O*NET SOCs with no related occupations. If this situation occurs, the message 'NO RELATED OCCUPATIONS' will display.

After either of these sections is used, a review of job orders by region, occupation, and earning requirements should be conducted.

SYSTEMATIC JOB SEARCH MODULE (SJSM)

Reemployment Probability and Estimated Earnings



Probability of Return to Work in Prior Industry

This probability is based on models that differ by:

Region of Georgia
 Atlanta Metro
 North Georgia
 Coastal
 Balance of State

Customer Types
 Youth (21 or less)
 Economically Disadvantaged
 Other (8 industries)

Industry Groups

Agriculture, Mining, and Construction
Manufacturing
Transportation, Communication, and Utilities
Wholesale Trade
Retail Trade
Finance, Insurance, and Real Estate
Services
Public Administration

Expected Job Growth in Prior Occupation

Labor Market Information (LMI) from the Workforce Information and Analysis Division of the GDOL is used to estimate the annual expected job growth rate over the next five years in the customer's prior occupation.

Likely Reemployment Earnings

The hourly wages are based on actual Georgia UI wage records and models that differ by:

Region of Georgia
 Atlanta Metro
 North Georgia
 Coastal
 Balance of State

Customer Types
 Youth (21 or less)
 Economically Disadvantaged
 Other (8 industries)

Industry Groups

Agriculture, Mining, and Construction
Manufacturing
Transportation, Communication, and Utilities
Wholesale Trade
Retail Trade
Finance, Insurance, and Real Estate
Services
Public Administration

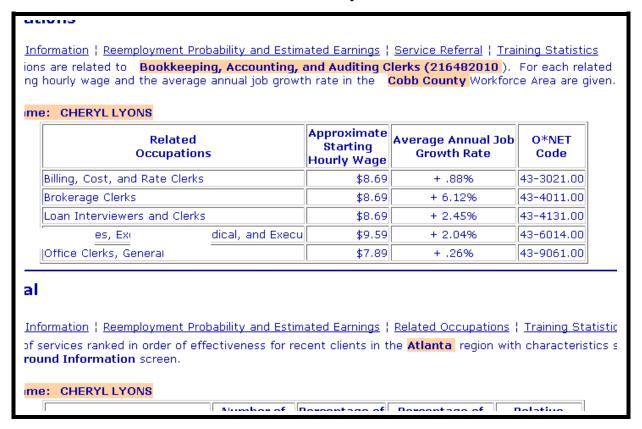
Appropriate Job Openings by Region, Occupation, and Earnings Requirements

Given information on the probability of return to prior industry, expected job growth in the prior occupation, and likely reemployment earnings, a systematic examination of job orders

in the local region and in neighboring areas may be conducted.

SYSTEMATIC JOB SEARCH MODULE (SJSM)

Related Occupations



This listing should be used to show customers opportunities that may be available in other occupations that use similar skills, aptitudes, and interests.

- Wage statistics are based on county data.
- Job growth statistics are based on Workforce Area data.
- Negative job growth rates are in red.
- O*NET Online can be used to further explore the listed related occupations.
- The message 'NO RELATED OCCUPATIONS' will display if a customer's DOT code is converted to one of the 150 O*NET SOCs with no related occupations.
- A review of job orders in the local region and in neighboring areas may be conducted for these related occupations.

Service Referral Module (SRM)

The SRM identifies the activities that most often lead to successful employment for customers with similar background characteristics. FDSS produces a ranking of employability and training services likely to be most effective. The module is based on an employability index.

Employability Index

The employability index is an estimate of the likelihood an individual will find employment based upon recent experience. This index is based on the customer's:

- prior work history,
- personal characteristics, and
- educational attainment.

Separate models were created for each of the four regions of Georgia (Atlanta Metro, North Georgia, Coastal, and Balance of State) and two program types (Unemployment Insurance [UI] Eligible and Employment Service [ES] only) for a total of eight.

Using the employability score as a summary measure of how personal and labor market characteristics influence employability, customers are divided into five equal sized groups, or quintiles, of the employability distribution.

Within each quintile, different patterns of service use most effective to customers are identified.

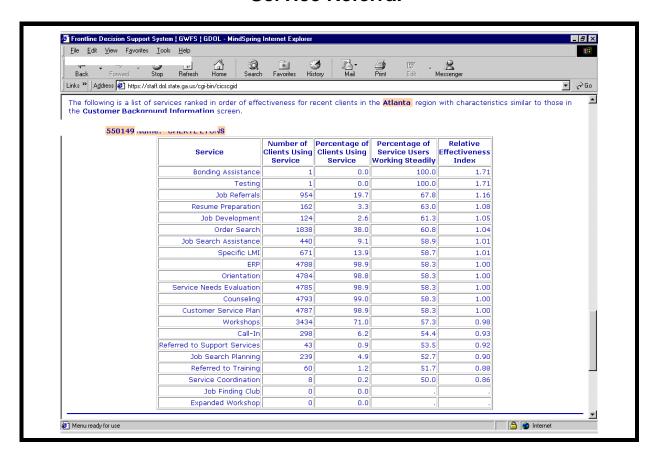
Regional UI employability models establish two program sub-groups: CAP/Profile and Other. There are a total of 40 UI employability quintiles (4 regions, 2 sub-groups, 5 quintiles).

Regional ES employability models establish quintile groups for one program. There are a total of 20 ES employability quintiles (4 regions, 1 group, 5 quintiles).

FDSS provides distinct rankings of services and training types for customers who may be classified in any of the 60 employability quintiles.

SERVICE REFERRAL MODULE (SRM)

Service Referral



Services are ranked in order of effectiveness for recent customers with similar characteristics in one of the four regions of Georgia.

- A minimum of 19 services is ranked in order of effectiveness. The order of the services may change with each customer.
- For each service, the following is displayed:
 - A number count of customers in the specified region using the service.
 - Percentage of all customers in the specified region using the service.
 - Percentage of customers using the service who are working steadily.
 Working steadily is defined as having earnings of at least \$2,500 in two consecutive quarters after receiving services.
 - Relative Effectiveness Index (REI) for each service in the specified region. The REI is defined as a numerical indicator that shows how effective a particular service is relative to the average effectiveness of all services available to that customer, given the customer's background characteristics.

SERVICE REFERRAL MODULE (SRM)

Training Statistics

Call-In 298 6.2 54.4 0.93 Referred to Support Services 43 0.9 53.5 0.92 Job Search Planning 239 4.9 52.7 0.90 Referred to Training 60 1.2 51.7 0.88 Service Coordination 8 0.2 50.0 0.86 Job Finding Club 0 0.0 Sxpanded Markebook 0 0.0	Call-In				
Referred to Support Services	Call-In			31.10	
Job Search Planning 239 4.9 52.7 0.90 Referred to Training 60 1.2 51.7 0.88 Service Coordination 8 0.2 50.0 0.86 Job Finding Club 0 0.0 Sxpanded Marketon 0 0.0 ICS Iformation Reemployment Probability and Estimated Earnings Related Occupations Service Re		298	6.2	54.4	0.93
Referred to Training 60 1.2 51.7 0.88 Service Coordination 8 0.2 50.0 0.86 Job Finding Club 0 0.0	to Support Services	43	0.9	53.5	0.92
Service Coordination 8 0.2 50.0 0.86 Job Finding Club 0 0.0 Fixpanded Merkeben 0 0.0 ics iformation Reemployment Probability and Estimated Earnings Related Occupations Service Re	Job Search Planning	239	4.9	52.7	0.90
Job Finding Club 0 0.0	Referred to Training	60	1.2	51.7	0.88
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	the recent use of the fou ackground Information scr	ir general type	_		
dult Education, Basic Skills, Literacy 3 0.5 66.7	the recent use of the fou ackground Information scr RYL LYONS	Number of Clients Using	Percentage of Clients Using	Percentage of Service Users	Atlanta region Relative Effectivenes
Occupational Skills Training 301 53.7 60.8 :	the recent use of the fou ackground Information scr RYL LYONS Fraining Type	Number of Clients Using Service	Percentage of Clients Using Service	Percentage of Service Users Working Steadily	Relative Effectivenes

Four types of training are ranked in order of effectiveness for recent customers with similar characteristics in one of the four regions of Georgia.

- The order of the training types may change with each customer.
- For each training type, the following is displayed:
 - A number count of customers in the specified region using the service.
 - Percentage of all customers in the specified region using the service.
 - Percentage of customers using the service who are working steadily.
 Working steadily is defined as having earnings of at least \$2,500 in two consecutive quarters after receiving services.
 - Relative Effectiveness Index (REI) for each service in the specified region.
 The REI is defined as a numerical indicator that shows how effective a particular service is relative to the average effectiveness of all services available to that customer, given the customer's background characteristics.

When FDSS Can be Used with Different Customer Types

FDSS is expected to be a relevant tool for frontline staff to use during one-on-one sessions with customers. Such sessions may be part of an initial claim for UI benefits or registration for job search with ES. It may also be useful during delivery of a particular service such as labor market information, job search assistance, a service needs evaluation, job search planning, a customer service plan, counseling, service coordination, or an ERP.

The only requirement for FDSS usage is the completion of the Customer Background Characteristics. The Customer Information, Expanded Customer Information, Customer Skills/Profile, Unemployment Insurance, and Wages pages of GWS contain the information necessary for FDSS to produce recommendations. Messages will display if data necessary to produce valid recommendations is missing.

FDSS may be appropriate at different times in the job search process depending on the type of customer being served. As a general rule, the sooner FDSS is used with the customer, the better. The first practical opportunity to use FDSS would be the first one-on-one sessions with a customer.

The following are ideas of when FDSS can be used for six main categories of customers.

UI Claimant - CAP and /or Profile eligible

- one-on-one session at the time of claim filing
- first visit to a Career Center after an Internet claim has been filed
- at or after the Orientation service
- any subsequent visit including an eligibility review (ERP) or workshop
- at time of job order referral, especially when customer is unable to successfully identify job opportunities through self-service methods

UI Claimant – not CAP/Profile eligible

- one-on-one session at the time of claim filing
- first visit to a Career Center after an Internet claim has been filed
- any subsequent visit including UI ERP
- at time of job order referral, especially when customer is unable to successfully identify job opportunities through self-service methods

ES Customer (not UI eligible)

- at time of registration
- any subsequent visit
- at time of job order referral, especially when customer is unable to successfully identify job opportunities through self-service methods

FDSS could be extremely helpful for customers who became unemployed as a result of a business layoff or closure. The Systematic Job Search Module (SJSM) can not only provide the customer a "reality check", but also other occupations to explore. Recommendations from the Service Referral Module (SRM) can help staff and the customer make informed decisions as to the best service strategy for reemployment.

Veteran

- at time of registration
- during the case management/service coordination process
- any subsequent visit
- at time of job order referral, especially when customer is unable to successfully identify job opportunities through self-service methods

Public Assistance (TANF Applicants/Recipients, GW!)

- at time of registration
- during the case management/service coordination process
- any subsequent visit
- at time of job order referral, especially when customer is unable to successfully identify job opportunities through self-service methods

Youth

FDSS provides customized information and guidance to job seekers aged 21 years or less

- at time of registration
- when making youth program services decisions
- any subsequent visit
- at time of job order referral, especially when customer is unable to successfully identify job opportunities through self-service methods

FAQs Frequently Asked Questions about FDSS

- **1. Q.** Are staff required to follow the suggestions provided by FDSS?
 - A. No. The information and recommendations provided by FDSS are to support staff decision-making and are based on patterns of recent customers with similar characteristics. No sanctions will result. It is recognized that each customer is unique with distinct backgrounds and aspirations.
- **2. Q.** How should FDSS use with a customer be documented in the GWS?
 - A. Career Centers piloting FDSS should document FDSS use with a customer on the Services Entry page of GWS. The options for documentation are: Job Search, Career / Vocational Guidance, and Counseling. When FDSS is used, "check" the With FDSS box in addition to the corresponding service.
- **3. Q.** How often is the Georgia specific labor market information in FDSS updated?
 - A. The labor market information in FDSS comes directly from GDOL's Workforce Information and Analysis (WI & A) Division. Examples of LMI used in FDSS include local unemployment rates, growth rates, and wage information. Although each of these data elements may be calculated for different time periods (i.e. monthly, quarterly, yearly), FDSS will automatically update when new information is collected. The model for the Probability of Return to Work in Prior Industry is currently being updated to include more specific factors including local layoffs.
- **4. Q.** FDSS indicates that "over the next 5 years, employment in a customer's prior occupation is expected to grow by <u>+ 2.25%</u> per year in the county of residence. Is a 2.25% growth rate large or small? How does that rate compare with the growth rate of employment in other occupations?
 - A. Analysis of 786 occupations measured by GDOL's WI & A Division reveals that the median projected annual job growth rate is 1.62% over the next five years. This means half of the occupations will grow faster and half will either grow slower or decline. One-quarter of occupations are predicted to have growth rates above 2.78% and one quarter is predicted to grow less than 0.54%. Only computer scientists are forecast to have double-digit growth. Employment will be steady or declining for about 20% or approximately 157 occupations.

- **5. Q.** What does it mean when the message 'NO RELATED OCCUPATIONS' displays?
 - A. The message 'NO RELATED OCCUPATIONS' displays when a customer's DOT code converts to one of the 150 O*NET SOCs with no related occupations. This situation occurs because the Related Occupations in FDSS are derived from the O*NET Database. Because the current occupational coding system within the GWS is the DOT, each customer's DOT code is converted to an O*NET SOC code. The occupations in the O*NET Database are related by a common framework that describes job requirements and worker attributes, as well as the content and context of work, using over 239 descriptors. This common framework provides a basis for cross-occupational comparisons resulting in 974 occupations as opposed to the 12,000 occupations within the DOT. The reduced number of occupations within the O*NET Database does not allow a one-to-one DOT to O*NET SOC conversion.

Staff are encouraged to use either O*NET Online (http://online.onetcenter.org) or the O*NET Code Connector (http://www.onetcodeconnector.org) to try to identify a more specific occupational code. On either website, use the keyword search and enter the DOT Job Title displayed in FDSS. From the list of occupations produced, select a title that relates more to the customer's prior occupation. Staff are also encouraged to review the customer's assigned DOT code to determine if it accurately reflects the customer's prior occupation.

Glossary of Terms

Adult Education, Basic Skills, and Literacy - This training service consists of activities that a customer may need to participate and succeed in other training or to meet occupational requirements. Examples of classes or activities include GED, English as a second language, and reading / comprehension skills.

Algorithm - A computerized formula that provides a numerical answer based on available data. In FDSS, computer algorithms based on characteristics and activities of customers and labor market information, provide answers intended to inform job search and service selection.

Comprehensive Assessment - This service is an examination of the capabilities, needs, and vocational potential of a customer. The in-depth evaluation examines many areas including a customer's basic skills, education, work history, occupational skills, interests and aptitudes, work attitudes and motivation, employment barriers, family situation, supportive service needs, and financial resources.

Estimated Earnings - A range of estimated hourly reemployment earnings for customers in the same geographic area having similar background characteristics. Three points in the reemployment earnings distribution are provided in FDSS: 25th, 50th (median), and 75th percentiles.

Occupational Skills Training - This training service consists of classroom instruction or some other activity for occupation-specific skill attainment. An example is nurse aid training.

On - the - Job Training - This training service consists of skill training / development at a particular employer with the objective of continued employment after completing the OJT.

O*NET - O*NET, the Occupational Information Network, is a comprehensive database of worker attributes and job characteristics. As the replacement for the *Dictionary of Occupational Titles* (DOT), O*NET will be the primary source of occupational information. Visit www.onetcenter.org, http://online.onetcenter.org, or http://online.onetcenter.org, or additional information.

Percentile - In a frequency distribution, the location of a value, at or above, a given percentage of data. For example if a child scores at the 97th percentile on a standardized test, that means 97 percent of the test takers had lower scores. If a customer's earnings are at the 75th percentile for an occupation, that means 75 percent of others in the occupation had lower earnings.

Probability - A numerical measurement of the chance that something will happen. If the probability of an event is 90 percent it is very likely to happen. Measurement of probabilities is based on the relative frequency of an event. The meaning of a probability should be interpreted in context. For example, a major league baseball player who hits safely with a 30% probability (a .300 hitter) will be a multi-millionaire, while a weather forecaster who is correct 30% of the time may soon be unemployed.

Quintile - In a frequency distribution, the percentile values divide the data into five equal parts. The frequency distribution is formed by ordering the values of a variable from lowest to highest, with a count of the number for each value. The first quintile is the 20th percentile and the fourth quintile is the 80th percentile.

Reemployment Probability - A number between 0 and 100 percent that provides an estimate of the probability that a customer in a given geographic area will return to work in their prior industry of employment. For example, 70% means that chances are 7 in 10 of returning to the prior industry.

Relative Effectiveness Index (REI) - A number that indicates how effective a particular service is relative to the average effectiveness of all services available to that customer, given the customer's background characteristics. Effectiveness is measured by the "percentage of service users steadily working." The REI is the ratio of the "Percentage of Service Users Getting Steady Work" to the mean of that same concept across all services for this customer. An REI of 1.00 means that service is as effective as the average service available. An REI of 1.50 means the service is 50% more effective than the average service, while an REI of 0.50 means the service is half as effective as the average service.

Customer Background Information—Static Characteristics Influence on Algorithms in FDSS Modules Algorithm Return Expected Likely Static Growth in Reemployment to Related Characteristic Prior Prior **Earnings Occupations Employability** Occupation Industry Current Age Χ Χ Χ Gender Race Hispanic Origin US Citizenship Disability Veteran Status X X X Recently Separated Disabled Veteran **Economically** Disadvantaged X X X X Claimant X X Last PD WED Wks Paid BYE Exhausted **Previous** X X **UI Claim** Weeks of

X

X

Characteristic Displayed for Informational Purposes

Benefits in Previous UI

Claim

Customer Background Information-Dynamic Characteristics Influence on Algorithms in FDSS Modules

Algorithm

Dynamic Characteristic	Return to Prior Industry	Expected Growth in Prior Occupation	Likely Reemployment Earnings	Related Occupations	Employability
County of Residence	X	X	X		Х
Education					
Level includes High School Graduate and GED	X		X		х
Currently in School	Х		X		
TANF	Х		X		Х
Driver's License			X		Х
Available for All Shifts			X		х
POTENTIAL Dislocated Worker	x		x		х
Employment Status	Х		х		
Prior Industry	X		X		X
Prior Occupation	Х	X	Х	X	Х
Months Experience in Prior Occupation			Х		х
Minimum Salary Desired					
Wage Information			X		X

Characteristic Displayed for Informational Purposes