

Santa Ana Workforce Investment Board

Results of the Phase III Return on Investment (ROI): Calendar Year 2008



Submitted to:

**Lee McMurtray, Chair of Santa Ana
Workforce Investment Board &
Stacey Sanchez, Chair of the
Oversight and Data Committee**

Prepared by:

**Laura Gil-Trejo, M.A. M.P.H.,
Acting Director
Adrian Fleissig, Ph.D., Professor of
Economics, CSU Fullerton, &
Emily Otis, CATI Project
Manager**

Table of Contents

List of Tables and Figures	3
List of Acronyms	3
Acknowledgements	4
Note	4
Executive Summary	5
1 Introduction	6
1.1 Phase I ROI.....	6
1.2 Phase II ROI.....	6
1.3 Phase III ROI.....	7
2 Method	8
2.1 Telephone Surveys.....	8
2.1.1 Baseline Survey.....	8
2.1.2 Follow-Up Survey.....	9
2.2 Estimating Return on Investment.....	10
2.2.1 Qualifying Cases from Survey Data for Use in ROI Analysis.....	10
2.2.2 Description of Benefits.....	11
2.2.3 Estimation of Benefits.....	12
2.2.4 Cost Information.....	12
3 Results	13
3.1 Telephone Survey Respondent Demographics.....	13
3.1.1 Age and Gender.....	13
3.1.2 Race/Ethnicity.....	14
3.1.3 Education.....	15
3.2 Patterns of Service Utilization.....	16
3.2.1 During Quarter of Enrollment.....	14
3.2.2 Between End of Quarter of Registration and December 31.....	15
3.3 Satisfaction with Services Recieved.....	22
3.3.1 During Quarter of Enrollment.....	20
3.3.2 Value Placed on WORK Center Services During Quarter of Registration.....	21
3.3.3 Between End of Quarter of Registration and December 31.....	22
3.4 Return on Investment.....	22
3.5 Returns Not Estimated.....	22
3.5.1 Receipt of Government Assistance at Baseline.....	23
3.5.2 Receipt of Government Assistance at Follow-Up.....	25
3.5.3 Physical and Mental Health Indicators at Baseline.....	26
3.5.4 Physical and Mental Health Indicators at Follow-Up.....	27
4 Conclusion	28

Appendix A Technical Approach to Telephone Survey Data Collection31
Appendix B Baseline Survey Instrument.....34
Appendix C Follow-up Survey Instrument.....49
Appendix D Detail of ROI Calculations64

List of Tables and Figures

Table 3-1 Race/ Ethnicity of Survey Sample.....14

Table 3-2 Comparison of all Santa Ana WORK Center Clients and
Survey Respondents for 3rd and 4th Quarters15

Table 3-3 Educational Attainment of Survey Sample15

Figure 3-1 Pattern of WORK Center Usage Across Quarters16

Table 3-4 Santa Ana WORK Center Service Utilization and Rating17

Table 3-5 Santa Ana WORK Center Most Useful Services Rating.....18

Table 3-6 Santa Ana WORK Center Service Utilization and Rating19

Table 3-7 Santa Ana WORK Most Useful Services Rating20

Figure 3-2 Willingness to pay for WORK Center Services by Level of Satisfaction With
Services21

Table 3-8 Success in Finding Employment during 2008 Calendar Year22

Table 3-9 Return on Investment23

Table 3-10 Count of Baseline Respondents Receiving Public Support/ Assistance
During Quarter of Enrollment24

Table 3-11 Count and Proportion of Baseline Respondents Receiving at Least One Form of
Public Support/ Assistance During Quarter of Employment by Employment Status25

Table 3-12 Count of Follow-Up Respondents Receiving Public Support Assistance Between
Last Day of Quarter of Enrollment and End of the 2008 Calendar Year25

Figure 3-13 Count and Proportion of Follow-Up Respondents Receiving at Least one Form Of
Public Support/ Assistance During the Quarter of Enrollment by Employment Status26

Table 3-14 Ratings of Physical and Mental Health Among Baseline Survey Respondents.....27

Table 3-15 Ratings of Physical and Mental Health Among Follow-Up Survey Respondents.....28

List of Acronyms

AAPOR	American Association of Public Opinion Research
RR3	Rate Calculation Method 3
CATI	Computer Assisted Telephone Interviewing
ROI	Return on Investment
SSRC	Social Science Research Center
WIA	Workforce Investment Act
WIB	Workforce Investment Board

Acknowledgements

We wish to thank Mr. Lee McMurtray, Chair of Santa Ana Workforce Investment Board for his continued support during the completion of this project and Ms. Stacey Sanchez, Chair of the Oversight and Data Committee for providing her guidance and insightful feedback on various drafts of the survey instruments and final report. A special thanks to the Mr. Dietz, former Chair of the Santa Ana Workforce Investment Board for his vision and guidance in the critical first stages of this study. This study would not have been possible without the diligent contributions of Ms. Fran Jutzi, WIB administrator who assisted the authors at every stage of the process. Finally, we would also like to thank Jaime Lopez and the members of the Santa Ana Workforce Investment Board, especially Rob Claudio, Orange County Deputy Division Chief for the California Employment Development Department (EDD) Workforce Services Branch and Dr. Erlinda Martinez, President of Santa Ana College for their input to the development of the survey questionnaire, their thoughtful comments on earlier drafts of this report.

Note

Ms. Laura Gil-Trejo,¹ acting Director of the Social Science Research Center, is the principal investigator. Dr. Adrian R. Fleissig² performed the ROI analysis. Dr. Gregory Robinson, former Director of the Social Science Research Center (SSRC), Cal State University Fullerton is responsible for developing the research design utilized to collect that data on which this report is based. Ms. Shelley N. Osborn, former acting Associate Director of the SSRC contributed to the development of the original survey questionnaire. Ms. Emily Otis³, SSRC CATI project manager, oversaw data collection and assisted with data analysis. Ms. Gil-Trejo contributed to later versions of the telephone survey instrument, provided overall project supervision, and performed supplementary data analysis.

Halfway through the completion of this study, the Santa Ana WORK Center transitioned from a “Universal Access model,” where clients *not enrolled* in Workforce Investment Act programs (adults and dislocated workers) could avail themselves of the various services provided at their own discretion, to an “Integrated Model.” The Integrated Model dictates that *everyone* who enrolls at the Santa Ana WORK Center participates in an assessment to determine their needs and receives individualized services tailored to meet those needs.

¹ Contact Information-lgil-trejo@fullerton.edu

² Contact Information – afleissig@fullerton.edu

³ Contact Information –eotis@fullerton.edu

Executive Summary

The Return on Investment (ROI) for services provided by the Santa Ana WORK Center during the calendar year 2008 is estimated to be 147%. This represents a significant ROI given the severe economic recession and increased costs incurred by the WORK Center. Specifically, in the Santa Ana-Anaheim-Irvine metropolitan division, the unemployment rate increased to 5.3% which is the highest since 1994 while non-farm employment declined by 2.0%, the largest decline since 1991. Given the relatively high local unemployment rate and decline in employment in year 2008, the ROI remains high even though it is lower than prior estimates. Additionally, the cost of providing services to WORK Center clients increased during the 2008 calendar year as a result of transitioning from a “Universal Access” model to an “Integrated” model halfway through the calendar year. The Integrated Model requires that *everyone* who enrolls at the WORK Center, participates in an assessment to determine their needs and receives individualized services tailored to meet those needs. This process is more costly than the “Universal Access” model where clients utilized services at their own discretion.

The ROI was calculated from estimated benefits and costs for providing the integrated services. The estimated costs of providing services to Santa Ana WORK Center clients and operating the Center were provided by the WORK Center staff. The costs include personnel costs, operating expenses, overhead costs, fixed costs and other costs including sending participants to vocational schools for training.

The estimated benefits are based upon data collected through a Telephone Survey conducted by the Social Science Research Center (SSRC) at CSU Fullerton. The Santa Ana Work Center furnished the SSRC with a database including contact information for 5,843 individuals who first registered as Santa Ana WORK Center clients during the 2008 calendar year. The SSRC administered the first of two telephone surveys at the end of each quarter to 400 clients randomly selected from this database. Individuals who registered to use the WORK Center during the first three quarters were surveyed again at the conclusion of the 2008 calendar year.

Some important benefits from the WORK Center services provided to clients include (1) additional tax revenue from individuals who get a new job, (2) additional tax revenue from the businesses (and their owners and employees) patronized by these individuals, and (3) a reduction in public support received by WORK Center clients.

The ROI estimate is conservative because there was insufficient data to estimate the third benefit of a reduction in public support because few survey respondents provided useable data and the amount was relatively small compared to all other benefits.

1 Introduction

The City of Santa Ana was approved by the State of California as a Local Workforce Investment Area (LWIA) in 2000. The Santa Ana Workforce Investment Board (WIB) was appointed by the Santa Ana City Council. It consists of 35 members, the majority of whom are local, private sector business leaders. Members of the Board oversee Workforce Investment Act funds. The Santa Ana WORK Center was funded to operate as its comprehensive One-Stop center. In 2008, the Santa Ana WORK Center and its partners served between 1,463 and 1,500 clients every quarter, and over 5,900 new clients register to use its resources. To evaluate the benefits of the WORK Center from 2003 through 2008, three ROI studies were performed.

1.1 Phase I ROI

In 2003, members of the Santa Ana WIB expressed keen interest in evaluating the efficacy and benefit of WORK Center services, and in March 2004, the WIB procured and funded its first ROI study. This analysis focused solely on clients enrolled in Workforce Investment Act programs (adults and dislocated workers) during program year (PY) 2002-2003. This clients group comprised only five percent of the Santa Ana WORK Center clients. The first ROI was restricted to this clients group because they were case-managed by the WORK Center and the funds expended to serve them were easily documented. Additionally, the Santa Ana WIB had access to their pre- and post-WIA participation employment status. This first ROI study (henceforth referred to as the Phase I ROI study) was conducted by Dr. Thomas Turk and Dr. Cristina M. Giannoantonio of the Argyros School of Business and Economics at Chapman University.⁴ The results of this study were very encouraging.

The ROI for services provided by the WORK Center to Universal Access Clients during the PY 02-03 is estimated to be between 272%-329%.

1.2 Phase II ROI

Impressed and encouraged by these results, the Santa Ana WIB sought next to conduct an ROI study focusing upon the other 95% of the persons utilizing the Santa Ana WORK Center. In August 2005, the board authorized a Phase II ROI study to investigate the return to the government on its investment in serving Universal Access clients for PY 03-04. A competitive request for proposals was released, and a contract was subsequently awarded to the Social Science Research Center (SSRC) at California State University, Fullerton.

In contrast to the Phase I ROI study, employment and wage data for this study was to be provided directly by the clients. After executing a confidentiality agreement, the Santa Ana WORK Center provided a database consisting of the names, addresses, and telephone numbers of 4,834 Universal Access clients who used the Santa Ana WORK Center during PY 03-04.

⁴ Turk, T. and Giannoantonio, C. M., "Return on Investment Report. Program Year 2002-2003." June 2004.

These data comprise the sample frame from which the SSRC selected a random sample to conduct the present ROI.

The ROI for services provided by the Santa Ana WORK Center to Universal Access Clients during PY 03-04 is estimated to be 473%⁵.

1.3 Phase III ROI

In 2007, the Santa Ana WIB contracted with the Social Science Research Center to conduct its third ROI study for the 2008 Calendar Year. The phase III ROI study differed from the Phase II ROI in three important aspects. The first was in the research methodology employed. In the Phase II ROI, the telephone survey was administered to a sample of Universal Access clients at the conclusion of the project year, regardless of when they enrolled for services. Utilizing this design, the period of recall for respondents who enrolled at the Santa Ana WORK Center on the first day of the fiscal year would be a little more than 12 months. In other words, these individuals were being asked to recall their work history for an entire year, possibly reducing the accuracy of the data obtained. In order to reduce the bias inherent when utilizing a 12 month period of recall, a sample of Santa Ana WORK Center clients were surveyed on a quarterly basis for the ROI III. At the conclusion of each quarter, the Santa Ana WIB furnished the SSRC with a list of unique enrollees, which then constituted the sample frame from which a random sample was contacted for baseline survey completion. Utilizing this design, the period of recall was reduced to four months, which was assumed would yield more accurate data. In order to obtain employment outcomes for the entire 2008 Calendar Year, respondents who enrolled at the Santa Ana WORK Center in the first through third quarters were re-contacted in January of 2009 for a follow-up survey. The follow-up survey assessed employment outcomes from the time the first survey was completed until December 31st, 2008. Because the sample of fourth quarter enrollees completed the baseline survey in December of 2008, there was no need for them to be re-contacted for follow-up.

The second difference is in the way the period under investigation is defined. In contrast to the Phase II ROI where the period under investigation was the PY 2003-2004 (From July 1st, 2003 to June 30th, 2004); the Phase III ROI examines the 2008 Calendar Year (January 1st, 2008 to December 31st, 2008).

The last difference is in the way services were delivered during the 2008 Calendar Year. Halfway through the 2008 Calendar Year, the Santa Ana WORK Center transitioned from a "Universal Access model," where clients *not enrolled* in Workforce Investment Act programs (adults and dislocated workers) could avail themselves of the various services provided at their own discretion, to an "Integrated Services Model." The Integrated Model dictates that *everyone* who enrolls at the Santa Ana WORK Center participates in an assessment to determine their

⁵ The confidence interval for this estimate is $\pm 5.72\%$. This means that within the constraints of the procedures utilized to calculate the ROI in Phase II. We are 95% confident that the actual ROI (the results one would obtain if all 4,834 Universal Access clients were surveyed) falls between 446% and 500%.

needs and receives individualized services tailored to meet those needs. The costs associated with an “Integrated Model” are undoubtedly higher than those associated with the “Universal Access Model.”

Phase III of the ROI was conducted by Dr. Adrian R. Fleissig of the College of Business and Economics at California State University, Fullerton. The Phase III of the ROI covers the calendar year 2008 when the U.S. economy was in a severe economic recession. In addition, the costs of delivering services to Santa Ana WORK Center increased as a result of transitioning to an “Integrated Services Model.” There was also a severe economic slowdown in California resulting in higher unemployment, significantly fewer jobs available, considerable layoffs and lower paying jobs. Given that there were generally fewer jobs available and many jobs paid lower wages, the tax revenue benefits from the Santa Ana WORK Center was expected to decline, while the costs of providing services increased. In addition, the economic multiplier was set to a lower value of 1.3 compared the 1.6 value used in calculating the Phase II ROI. During the calendar year 2008, the estimated ROI was 147%.

The ROI for services provided by the Santa Ana WORK Center to clients during the calendar year 2008 is estimated to be 147%.

2 Method

2.1 Telephone Surveys

2.1.1 Baseline Survey

For the first and second quarter baseline telephone surveys, the sample frame was obtained by accessing the user profiles on the www.santaanaworkcenter.org website. The sample frame for the first quarter included contact and demographic information for all 1,615 individuals who registered at the Santa Ana WORK Center between January 1 and March 31, 2008. From the 1,615 registered individuals, 245 (15.2%) were randomly chosen to be contacted for survey completion. The second quarter sample frame included the same information for the 1,347 Santa Ana WORK Center clients that registered between April 1 and June 30, 2008, of which 239 (17.7%) were randomly chosen to be contacted for survey completion.

The sample frame for the third and fourth quarter baseline telephone surveys was provided directly to the SSRC by the Santa Ana WORK Center, and included contact and demographic information for all Santa Ana WORK Center clients who registered during that time period. The third quarter sample frame consisted of the 1,531 people who registered at the Santa Ana WORK Center between July 1 and September 30, 2008, of which 181 (12.3%) were randomly chosen for inclusion in the study. For the fourth quarter, 197 of the 1,350 people who registered to use the Santa Ana WORK Center between October 1 and December 31, 2008 (14.6%) were randomly chosen to be contacted for participation in the survey.

Interviews were conducted between 4:00 pm and 9:00 pm local time Monday through Thursday, and between 11:00 am and 7:00 pm local time Saturday and Sunday. A total of 3,915 individual dial attempts were made to 862 randomly selected telephone numbers to complete 400 interviews. Within households, interviewers asked to speak with the listed contact person that had visited the Santa Ana WORK Center during the quarter of reference. Once on the phone, interviewers elicited informed consent to participate in the research, then administered the questionnaire or scheduled a call-back. A detailed explanation of the technical approach to data collection is provided in Appendix A.

The largest proportion of baseline interviews were completed on the first call attempt ($n= 154$, 38.5%). Ninety-one surveys (22.8%) were completed on the second attempt, 50 (12.5%) on the third, 37 (9.3%) on the fourth, and 20 (5.0%) on the fifth attempt. Another 48 (12.0%) records required six or more attempts, with as many as 17 attempts being made before a survey was completed. The response rate for the baseline survey, calculated using the American Association of Public Opinion Research (AAPOR) RR3 formula, is 72.2%. This is an excellent outcome for a study of this nature, promoting confidence in the generalizability of sample results to the entire population of Santa Ana WORK Center clients that visited the Center during the calendar year.

Utilizing the listed sample frame described above, the SSRC completed 400 telephone interviews with Santa Ana WORK Center clients, 237 (59.3%) in English and 163 (40.8%) in Spanish. The baseline survey instrument was constructed by the principal investigators in collaboration with Santa Ana Workforce Investment Board, WIB Oversight and Data Committee members, and WIB and Santa Ana WORK Center staff, and is reproduced in Appendix B.

2.1.2 Follow-Up Survey

The sample frame for the follow-up survey consisted of all 300 Santa Ana WORK Center clients who had completed a baseline telephone survey for the first, second, or third quarter of 2008. The purpose of the follow-up survey was to assess whether respondents' work status had changed between the end of the quarter in which they registered and the end of 2008. As such, fourth quarter respondents were not included in the follow-up survey, since their experiences during this through December 31, 2008 were already recorded in their baseline surveys.

A total of 2,071 dial attempts were made to these 300 phone numbers to complete 192 surveys, 112 of which were conducted in English (58.3%), and 80 of which were conducted in Spanish (41.7%). The protocol for data collection was the same as described for the baseline survey. The follow-up survey instrument, which varied slightly from the baseline survey, was also constructed by the principal investigators in collaboration with Santa Ana Workforce Investment Board, WIB Oversight and Data Committee members, and WIB and Santa Ana WORK Center staff, and is reproduced in Appendix C.

More than one-third of the follow-up surveys were completed on the first attempt ($n= 66$, 34.4%), 38 (19.8%) were completed on the second attempt, 17 (8.9%) on the third, 15 (7.8%) on the fourth, and 7 (3.6%) on the fifth attempt. Another 49 (25.5%) required between six and 33 attempts to obtain a completed survey. In total, follow-up surveys were completed with 192 of the 300 (64.0%) respondents sampled during the first three quarters. The fact that only 62% of previously surveyed respondents participated in the follow-up survey is indicative of the transitory residential situation characteristic of Santa Ana WORK Center clients. A significant proportion of Santa Ana WORK Center clients who completed the baseline telephone survey had changed residences at follow-up.

2.2 *Estimating Return on Investment*

The Return on Investment (ROI) is usually calculated as the ratio of the benefits of the service to the costs of providing the service (Benefits/Costs). In this study, the ROI for the Santa Ana WORK Center was estimated on the basis of benefits and costs associated with the sample of clients that completed telephone surveys.

The ‘Benefits’ in this calculation are taken to be economic benefits derived by the government as a result of the services provided by the Santa Ana WORK Center from January 1, 2008 through December 31, 2008. There are three such benefits:

1. Total additional tax revenue from individuals who got a new job
2. Total additional tax revenue from the businesses (and their owners and employees) patronized by these individuals as their income, and consequently their spending increased
3. Total reduction in public support received by Santa Ana WORK Center clients who got a job or a new job.

Because it is possible that an individual’s income from a new job may have been less than their previous job, the total benefit in each of the three categories above is *net* of the total positives and total negatives per category.

The ‘Costs’ in the calculation are costs incurred by the Santa Ana WORK Center during the period of January 1, 2008 through December 31, 2008 for providing services to clients. Estimation of benefits and costs is detailed in the sub-sections below.

2.2.1 Qualifying Cases from Survey Data for Use in ROI Analysis

The following information collected during the telephone survey was used in the ROI calculations:

1. Whether the respondent was employed on January 1, 2008.

2. Whether the respondent became employed or found another job during calendar year 2008.
3. The earnings of a respondent who found a new job.
4. The difference between a respondent's income from taking a new job compared to the previous job.
5. The start date of a new job of the respondent.
6. The length of time that the respondent worked at the new job.

Data from the sample of the 400 respondents were used to estimate any information for which an individual failed to provide sufficient information.

2.2.2 Description of Benefits

We now discuss the three benefits listed in section 2.2.1.

Additional Tax Revenue from Santa Ana WORK Center Clients – When a Santa Ana WORK Center client got a new job during the study period, their income changed. For survey respondents who were previously unemployed and find a job, there is an increase in income. For respondents who previously had a job and then moved to a new job, their income may have increased, decreased, or stayed the same. An increase in income leads to an increase in taxes paid. However, when the new job pays less than the previous job, the individual's income decreases which causes a decline in tax revenue. The total additional tax revenue collected by the government is the overall *net* increase or decrease in taxes paid due to a change in income.

Additional Tax Revenue from the Community – Finding a new job can increase, decrease or leave income unchanged. When a respondent's income increases (or decreases), they spend more (less) on purchasing taxable goods and services. These purchases provide increased (reduced) income to the community providing those goods and services. This change in the total income of the community results in a change in the taxes paid to the government by the community. The total additional tax revenue collected by the government is the overall *net* increase in the taxes paid by the community due to a change in the income of Santa Ana WORK Center clients based on the telephone survey.

Reduction in Government Support – Finding a new job can also lead to a reduction in government support received by respondents whose income increases due to a new job. This reduction in support may be due to an individual no longer requiring a form of government assistance or a change in eligibility status. In contrast, a decrease in income could lead to an increase in government support provided. The overall *net* decrease in aid provided by the government is a benefit to the government. Survey results describing reductions in government support associated with utilization of Santa Work Center services are provided in Section 3.4 *Returns not Estimated*.

2.2.3 Estimation of Benefits

A conservative approach was used to estimate benefits. For respondents who failed to provide sufficient information, the data used from the sample of respondents is unlikely to result in an overestimate of benefits.

In keeping with this conservative approach, reduction in government support was not included in the calculation of overall benefits because the information provided by respondents on this topic was scant. Each of the remaining two benefits was calculated individually for each qualified case (survey respondent). The benefits were then summed across all qualified cases to calculate the total benefits. The general procedure for calculating each of the benefits (excluding the benefit from reduction in public support) from the sample of Santa Ana WORK Center clients is discussed below and the detailed calculation procedure is provided in Appendix D.

Additional Tax Revenue from Santa Ana WORK Center Clients – This tax revenue comes from four sources:

- Payroll Tax
- Federal Income Tax
- State Income Tax
- Sales Tax

The tax rate data provided in the Phase I and Phase II ROI studies was utilized here. Sales tax was applied to the fraction of the annual income estimated as spent on taxable goods and services.

Additional tax revenue was calculated by subtracting the tax revenue from income from the previous job (zero for those respondents who were unemployed) from tax revenue from income from new job.

Additional Tax Revenue from the Community – The change in the income of the community due to change in income of Santa Ana WORK Center clients was estimated using an income multiplier. The Phase I ROI study estimated the value of the income multiplier to lie between 1.6 and 2.0. For the Phase II ROI, the lower bound of 1.6 was used. This means that the change in the income of the community was 60% of the amount of change in Santa Ana WORK Center clients' incomes. However, since the U.S. economy has been in a severe economic recession since December 2007, many firms have laid off workers resulting in higher unemployment. In addition, there are significantly fewer jobs available. As a result, consumer spending has fallen significantly so that the income multipliers used in the previous ROI studies are no longer valid and would provide an overestimate of the income of the community. Consequently, for the Phase III ROI, the income multiplier was set to 1.3. The additional tax revenue from the community was then calculated using the same four tax revenue sources previously mentioned.

The income tax rates applied to the community differ compared to the income tax rates used for clients. Tax rate data was also carried forward from the Phase I and Phase II ROI studies.

2.2.4 Costs Information

The Santa Ana WORK Center is a comprehensive One-Stop center that operates in conjunction with its partners to provide a variety of services to its clients. The Santa Ana WORK Center partners that contribute funds to serve clients are:

- City of Santa Ana/ WIA funded programs
- Employment Development Department
- Social Service Agency
- Goodwill Industry
- Santa Ana College

Only a portion of the funds contributed by each partner is used to provide Santa Ana WORK Center services. Using standard guidelines⁶, the Santa Ana WORK Center staff isolated each partner's fair share of allocable costs that were incurred to provide services during calendar year 2008. These costs were then prorated to the size of the survey sample before inclusion in the analysis.

3 Results

3.1 Telephone Survey Respondent Demographics

3.1.1 Age and Gender

The age of the random sample of 400 Santa Ana WORK Center clients responding to the baseline telephone survey ranges from 18 years ($n=9$, 2.3%) to 76 years ($n=1$, 0.3%). The average age is 41.36 years and the median age (the point in the distribution above which and below which half the scores fall) is 43 years of age. Sixteen respondents (4.0%) declined to state their age. Respondent age at baseline is not related to the quarter in which they enrolled.

Two hundred and thirty-four baseline respondents are male (58.5%) and 164 (41.0%) female. The gender of three respondents could not be determined by name and voice alone (0.5%). Respondent gender is not related to the quarter in which they enrolled.

⁶ The WORK Center Staff used the following guidelines to estimate costs:

- *Federal Register*, 66 (105), May 31, 2001. US Department of Labor, Employment and Training Administration.
- "One-Stop Comprehensive Management Technical Assistance Guide," US Department of Labor, Employment and Training Administration, October 2001.

Among the 300 1st through 3rd quarter enrollees who completed a baseline survey, those who completed a follow-up survey did not differ from those who did not with regard to age and gender.

3.1.2 Race/Ethnicity

As depicted in Table 3-1, nearly three-quarters of baseline respondents ($n= 290$, 74.2%) are Hispanic/ Latino. Eight respondents (2.0%) report their race or ethnicity as “other,” and of these, five described themselves as being of mixed race, two as “Middle Eastern,” and one individual as “Cherokee.” Nine respondents refused to provide information regarding their race or ethnicity and are omitted from the total. A significantly larger proportion of survey respondents in the 4th quarter self-identify as Caucasian/ White ($n= 26$; 26.5%) than those in the 1st ($n= 11$; 11.5%), 2nd ($n= 13$; 13.3%), and 3rd ($n= 12$; 12.1%) quarters; $\chi^2 (12, N = 391) = 24.5, p <.05$.

Among the 300 1st through 3rd quarter enrollees who completed a baseline survey, those who completed a follow-up survey did not differ from those who did not with regard to race/ ethnicity.

Table 3-1
Race/ Ethnicity of Survey Sample

Race/ Ethnicity	Survey Sample ^b	
	Count	Percentage
Latino/ Hispanic	290	74.2%
Caucasian/ White	62	15.9%
Asian/ Pacific Islander	21	5.4%
Black/ African American	10	2.6%
Other	8	2.0%
Total	391	100.0%
a. Results from the random sample of 400 respondents		
b. Nine individuals refused to provide race/ethnicity information.		

Table 3-2 compares the race/ethnicity of all Santa Ana WORK Center clients who registered at the Santa Ana WORK Center during the third and fourth quarters of 2008 with the race/ethnicity of survey completers for those quarters. Hispanic/Latino Santa Ana WORK Center clients are more heavily represented among survey completers than among the total population of users, while African Americans and individuals of “Other” racial/ethnic groups are underrepresented among survey completers. Racial/ethnic data is currently unavailable for Santa Ana WORK Center clients who registered during the first and second quarters, therefore no comparison can be made.

Table 3-2
Comparison of all Santa Ana WORK Center Clients and
Survey Respondents for 3rd and 4th Quarters

Race/ Ethnicity	Santa Ana WORK Center Clients Database ^a		Survey Sample ^b	
	Count	Percentage	Count	Percentage
Latino or Hispanic	1,852	64.3%	146	74.1%
Caucasian or White	618	21.5%	38	19.3%
Asian or Pacific Islander	191	6.6%	10	5.1%
Black or African American	163	5.7%	2	1.0%
Other	56	2.0%	1	0.5%
Total	2,880	100.0%	197	100.0%

a. Results from sample frame of all 2,880 Santa Ana WORK Center clients who registered during the third or fourth quarters.

b. Three individuals refused to provide race/ethnicity information.

3.1.3 Education

Table 3-3 shows the educational attainment of baseline survey respondents. More than one-third of respondents ($n= 142$, 35.9%) did not complete high school or obtain a GED, and only 16.7% ($n= 66$) completed a degree or certificate program after high school. Educational attainment did not differ significantly between quarters.

Among the 300 1st through 3rd quarter enrollees who completed a baseline survey, those who completed a follow-up survey did not differ from those who did not with regard to educational attainment.

Table 3-3
Educational Attainment of Survey Sample^a

Category	Count	Percent
Less than 8 th Grade	76	19.2%
Between 8 th and 11th Grade	66	16.7%
High School Education or GED	91	23.0%
Some College, No Degree	96	24.3%
AA or Trade School Degree or Certificate	40	10.1%
Bachelor's Degree	17	4.3%
Graduate or Professional Degree	9	2.3%
Total	395	100.0

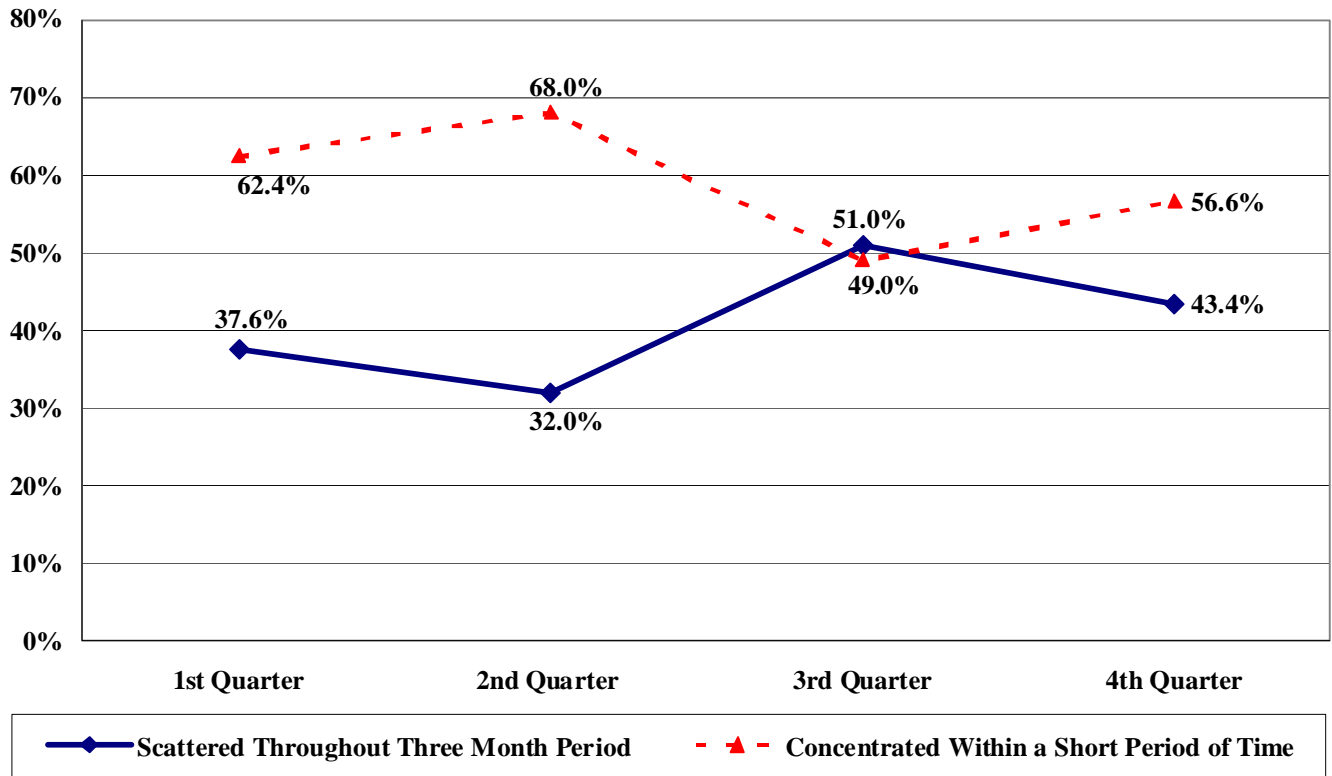
a. Results from the random sample of 400 respondents. Five individuals refused to provide educational attainment information.

3.2 Patterns of Service Utilization

3.2.1 Patterns of Service Utilization During Quarter of Registration

The majority of Santa Ana WORK Center clients who provided a response characterize their pattern of attendance during the quarter in which they registered to use the WORK Center as “concentrated within a short period of time” ($n= 228$; 58.9%) and 159 (41.1%) indicated that their visits were, “scattered throughout the three-month period.” Thirteen individuals declined to provide a response. While the majority proportion of respondents report utilizing Santa Ana WORK Center services within a concentrated period of time, this is not true of respondents who enrolled during the 3rd quarter. As can be seen in Figure 3-1, the proportion of respondents in the third quarter who report using Santa Ana WORK Center services “Scattered throughout the three month period” and “Concentrated within a short period of time” is roughly equivalent.

Figure 3-1
Pattern of WORK Center Usage Accross Quarters



Baseline survey respondents report visiting the Santa Ana WORK Center between one and 60 times during the quarter they were enrolled. The mean number of visits made to the Santa Ana WORK Center during the quarter of enrollment is 4.76 times, and the median is 3.00. The mean

number of times that clients visited the center during the quarter differed significantly depending upon their quarter of registration. Clients who registered during the first and second quarters visited the Santa Ana WORK Center an average of 3.79 and 3.37 times respectively during the quarter, whereas clients who registered during the third quarter visited an average of 6.28 times during the quarter, and fourth quarter registrants visited 5.53 times during the quarter, on average; $F(3, 393) = 4.99, p < .01$.

To determine which services were utilized by Santa Ana WORK Center clients, and to assess the frequency of service utilization, nine specific services were listed by interviewers, and respondents were asked whether they had, “Never used this service,” used it, “Only once or twice,” “Three or four times,” or “Five or more times.” The number of respondents who reported using each service at least once at the time of the baseline survey is reported in Table 3-4. To calculate a conservative estimate of the number of times each service was utilized by respondents in the survey sample, the number of respondents endorsing “Only once or twice” was multiplied by 1.5, the number reporting “Three or four times” by 3.5, and the number of clients saying they’d used a service “Five or more times” was multiplied by six. These sums are reported in the “Projected Number of Uses” column in Table 3-4. As can be seen in Table 3-4 one-on-one assistance preparing a resume is the most frequently used service at the Santa Ana WORK Center during the 2008 calendar year, with the largest proportion of survey respondents utilizing this service at least one and the largest number of projected uses.

Table 3-4
Santa Ana WORK Center Service Utilization and Rating^a

Integrated Services	Number of Clients		Projected Number of Uses
	Count	Percent	Count
Received one-on-one help preparing a resume	304	76.2%	1,269
Used computers to search for jobs on the internet	294	73.5%	1,062
Review job postings on the Job Order Board	278	70.2%	1,121
Received one-on-one counseling	262	64.7%	299
Used telephones or office equipment	185	46.3%	894
Attended a Job Search Workshop	158	39.8%	921
Used computers to send or check emails	156	39.2%	774
Attended on-site job interviews or job fairs	144	36.0%	902
Received assistance with an unemployment insurance claim	113	28.5%	839
“Other”	165	41.7%	620

a. Results from the random sample of 400 baseline respondents. Individuals who did not recall whether they had used a service are not included in the percentage calculation.

CATI was programmed to display the list of services each respondent had used, and after reading this list, interviewers asked, “Which of the services you used during that time period were most helpful?” Survey respondents endorsed one ($n=240$, 67.2%), two ($n=84$, 23.5%), or three or more services ($n=33$, 9.2%), as “Most helpful.” Another forty-three respondents did not name the service that they found to be most helpful. Table 3-5 depicts the ratio of respondents who indicate that each service was “Most helpful” to the total number who also used it and provided a response. “Using the Internet to search for jobs” and “One-on-one help preparing a resume” were rated as the most helpful services by the highest proportions of survey respondents.

**Table 3-5
Santa Ana WORK Center Most Useful Service Rating^a**

Integrated Services	Number of Clients		
	Used Service	Rated Service as Most Helpful	Percent
Used computers to search for jobs on the internet	271	151	55.7%
Received one-on-one help preparing a resume	272	131	48.2%
Received one-on-one counseling	155	50	32.3%
Used computers to send or check emails	143	44	30.8%
Attended a Job Search Workshop	145	26	17.9%
Review job postings on the Job Order Board	258	40	15.5%
Used telephones or office equipment	174	20	11.5%
Received assistance with an unemployment insurance claim	103	10	9.7%
Attended on-site job interviews or job fairs	135	10	7.4%
“Other”	20	6	30.0%

a. Results from the random sample of 400 baseline respondents. Forty-three respondents did not name a “most helpful” service, and are not included in this table.

3.2.2 Patterns of Service Utilization Between End of Quarter of Registration and December 31

Seventy (38.5%) follow-up survey respondents characterize their pattern of attendance at the Santa Ana WORK Center between the end of the quarter during which they registered and December 31, 2008 as “Scattered throughout the period,” while 54 (29.7%) indicate that their visits were “Concentrated within a short period of time.” Fifty-eight (31.8%) did not visit the Santa Ana WORK Center during that time. This distribution in the pattern of services utilized did not differ by quarter of enrollment. Ten individuals declined to give a response to this item.

Follow-up survey respondents used the Santa Ana WORK Center from one ($n= 22$, to 90 times between the end of the quarter of their registration and the end of the year, with a mean number

of visits of 7.46 times and a median of three. Those who registered during the third quarter averaged the most visits ($M= 8.20$) during this time, second quarter clients logged fewer visits ($M= 7.49$), and first quarter clients the fewest of all ($M= 4.19$). However, these differences are not statistically significant.

Table 3-6 presents the number of follow-up survey respondents who visited the Santa Ana WORK Center between the end of their quarter of registration and December 31, 2008, and reported using each service at least once, along with the projected number of uses among these individuals for each service. Consistent with the findings observed at baseline, one-on-one help preparing a resume is the service utilized by the majority of Santa Ana WORK Center Clients who were surveyed.

**Table 3-6
Santa Ana WORK Center Service Utilization and Rating^a**

Integrated Services	Number of Clients		Projected Number of Uses
	Count	Percent	Count
Received one-on-one help preparing a resume	119	82.1%	232
Used computers to search for jobs on the internet	155	80.4%	421
Review job postings on the Job Order Board	107	73.8%	379
Used telephones or office equipment	82	56.6%	268
Used computers to send or check emails	68	47.2%	253
Attended on-site job interviews or job fairs	61	42.4%	152
Received assistance with an unemployment insurance claim	60	41.4%	107
Received one-on-one counseling	53	36.8%	104
Attended a Job Search Workshop	53	36.6%	136
“Other”	12	8.3%	44

a. Results from 146 follow-up respondents who reported using at least one service. Individuals who did not recall whether they had used a service are not included in the percentage calculations.

Follow-up survey respondents were also asked which of the services they utilized between the end of their quarter of registration and December 31 they found to be “most helpful.” Respondents named one ($n=69, 56.6%$), two ($n=28, 23.0%$), or three or more services ($n=25, 20.5%$), as “Most helpful.” Another twenty-four respondents who used the Santa Ana WORK Center during this time period did not name the service that they found to be most helpful. Table 3-5 depicts the ratio of respondents who indicate that each service was “Most helpful” to the total number who used it and provided a response. “Using the Internet to search for jobs” and “one-on-one help preparing a resume” were rated as the most helpful services by the highest proportion of survey respondents.

**Table 3-7
Santa Ana WORK Center Most Useful Service Rating^a**

Integrated Services	Number of Clients		
	Used Service and Rated Most Helpful Services	Rated Service as Most Helpful	Percent
Received one-on-one help preparing a resume	103	61	59.2%
Used computers to search for jobs on the internet	105	56	53.3%
Used computers to send or check emails	64	21	32.8%
Received one-on-one counseling	49	16	32.7%
Used telephones or office equipment	74	22	29.7%
Received assistance with an unemployment insurance claim	53	12	22.6%
Review job postings on the Job Order Board	93	18	19.4%
Attended on-site job interviews or job fairs	54	8	14.8%
Attended a Job Search Workshop	46	3	6.5%
“Other”	12	3	25.0%
a. Results from 192 follow-up survey respondents.			

3.3 *Satisfaction with Services Received*

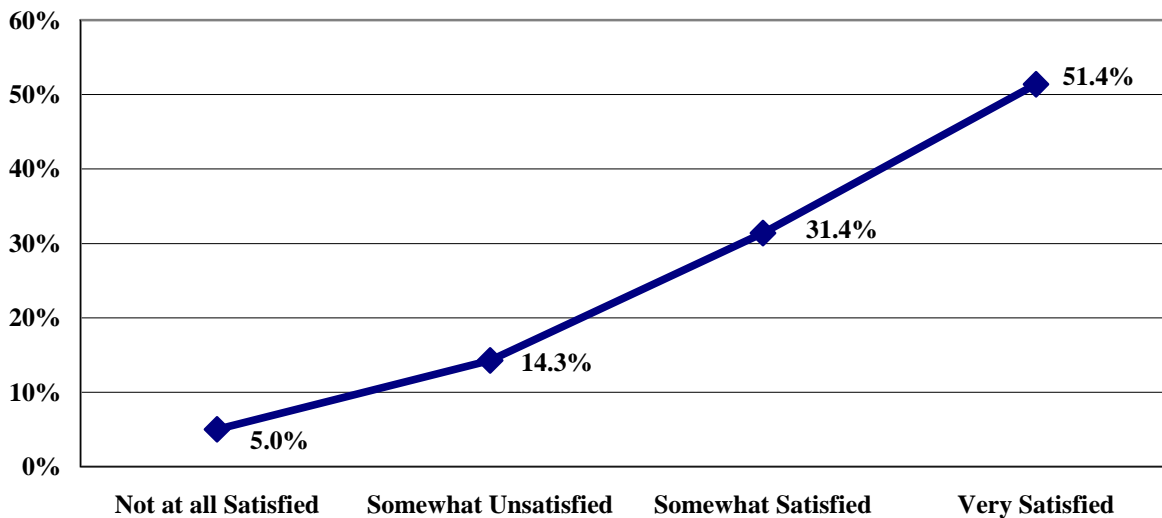
3.3.1 Satisfaction with Services Received During Quarter of Registration

Telephone respondents rated their level of satisfaction with the services they received at the WORK Center during the quarter that they enrolled on a scale from one to four where 1= “Not at all satisfied” to 4= “Very satisfied.” The majority of Santa Ana WORK Center clients who provided a response indicate that they were “Very satisfied” with the services they received at the WORK Center during the quarter in which they registered ($n= 226$; 58.0%). Another 31.6% ($n= 125$) report being “Somewhat satisfied” with these services. Nearly 10% report being either “Somewhat dissatisfied” ($n= 21$; 5.3%) or “Not at all satisfied” ($n= 20$; 5.1%). Five survey respondents declined to provide an answer to this item. Treating this item as a continuous variable, the mean satisfaction rating is a 3.43, less than halfway between “Very satisfied” and “Somewhat satisfied.” Respondent level of satisfaction is not related to quarter of enrollment, the pattern of service utilization, or the mean number of times the WORK Center was visited.

3.3.2 Value Placed on WORK Center Services During Quarter of Registration

In order to assess the monetary value WORK Center clients place on the services they received, an item on the baseline survey inquired “We want to ensure you that the Santa Ana WORK Center will continue to provide their services free of charge. Had there been a charge for the services, though, would you have paid for them?” Slightly more than four in ten survey respondents ($n= 158$; 40.6%) indicate that they would be willing to pay for services provided by the WORK Center. Willingness to pay for WORK Center services was unrelated to quarter of enrollment, the pattern of service utilization, or the mean number of times the WORK Center was visited. Willingness to pay for services was, however, positively related to level of satisfaction with the services received. As illustrated in Figure 3-2, more than half of survey respondents who were “Very satisfied” with the services received at the WORK center, would be willing to pay for services ($n= 114$; 51.4%). In stark contrast, only 5% of those who report being “Not at all satisfied” would do the same. This relationship is statistically significant; $\chi^2 (3, N= 384) 31.4, p<.001$.

Figure 3-2.
Willingness to pay for WORK Center Services
by Level of Satisfaction with Services



Of the 158 WORK Center clients who indicated they would have paid for the services they received, 111 (70%) provided information on how much they would have paid. Thirty-five respondents specified an hourly rate they would be willing to pay for WORK Center services that ranged from \$1.00 per hour to \$30.00 per hour, with a mean rate of \$8.90 per hour. Sixty-nine survey respondents specified a fixed fee they would be willing to pay for Center services that ranged from \$1.00 to \$250.00, with a mean of \$26.42. Seven survey respondents reported what percent of their annual salary they would be willing to pay for WORK Center services. One

of these seven respondents reports that they would be willing to pay 1% of their annual salary; four indicate they would be willing to pay 5%, and one indicates the willingness to pay 10% of their annual salary for WORK Center services

3.3.3 Satisfaction with Services Received Between End of Quarter of Registration and December 31

Recall that 124 of WORK Center clients who had enrolled at the Santa Ana WORK Center during the first, second, or third quarter of 2008 had visited the Center again at least once between the last day of the quarter they enrolled and December 31st 2008. More than half of these respondents report being “Very satisfied” with the services they received ($n= 62$; 51.2%) and another 43.8% ($n=53$) indicate being “Somewhat satisfied.” Five percent indicate either being “Somewhat dissatisfied” ($n = 4$; 3.3%) or “Very dissatisfied” ($n= 2$; 1.7%). Three individuals declined to rate their level of satisfaction with the services received and the WORK Center. Again, treating this item as a continuous variable, the mean satisfaction rating is a 3.45, less than halfway between “Very satisfied” and “Somewhat satisfied.” Consistent with baseline findings, respondent level of satisfaction is not related to quarter of enrollment, the pattern of service utilization, or the mean number of times the WORK Center was visited.

Survey respondents were not asked to indicate whether and how much they would be willing to pay for WORK Center services during the follow-up survey.

3.4 *Return on Investment*

Table 3-8 shows how the random sample of 400 Santa Ana Santa Ana WORK Center clients that used Santa Ana WORK Center services during calendar year 2008 and answered questions on employment.

**Table 3-8
Success in Finding Employment in Calendar Year 2008**

	Found Job	Not Find Job	Don't Know	Refused	Total
Employed as of the First Day of the Quarter Enrolled	51 13%	81 20%	0 0%	0 0%	132 33%
Not Employed as of the First Day of the Quarter Enrolled	97 24%	168 42%	2 1%	1 0%	268 67%
Don't Know	- -	- -	- -	- -	- -
Refused to Answer	- -	- -	- -	- -	- -
Total	148 37%	250 62%	2 1%	1 0%	400 100%

The total number of respondents that found employment or another job during calendar year 2008 is 148 which is 37% of the sample. There were 250 (62%) respondents who did not find a job during the calendar year 2008. Two people did not know if they were employed and one person refused to answer.

Our analysis estimates that the Santa Ana WORK Center integrated services provided an ROI of 146.7%. The breakdown of estimated benefits and costs for the survey sample of 400 is provided in Table 3-9.

**Table 3-9
Return on Investment^a**

Benefits (for survey sample of 400)	
Additional Tax Revenue from Santa Ana WORK Center Clients (Found Employment)	\$170,830
Additional Tax Revenue from Santa Ana WORK Center Clients (Found Another Job)	\$11,436
Additional Tax Revenue from the Community	\$83,049
Total Benefits	\$265,315
Costs of Providing Service (prorated for survey sample of 400)	
Total Costs	\$180,843
Return on Investment	146.7%
a Tax revenue data are estimated from the sample of 400 respondents. Costs were provided by Santa Ana Workforce Investment Board staff.	

3.5 Returns not Estimated

3.5.1 Receipt of Government Assistance at Baseline

Baseline survey respondents indicated whether they had received support from each of nine public assistance programs listed in Table 3-10 during the quarter in which they had enrolled. One hundred and eighty eight (47.6%) respondents indicate not having received support from *any* of the nine public assistance programs, 156 (39.5%) report receiving support from one, 35 (8.9%) from two, and 16 (4.1%) from three or more public assistance programs listed in Table 3-10. As can be seen in Table 3-10, among those who report receiving at least one form of aid during the quarter they were enrolled ($n=207$), the largest proportion were receiving unemployment insurance (76.8%).

**Table 3-10
Count of Baseline Respondents Receiving Public Support/
Assistance during the Quarter of Enrollment**

Public Support Program	Number of Clients
	Count
Unemployment Insurance	159
Food Stamps	35
Medi-Cal (Cal Optima)	31
WIC Program	22
CalWORKS or Welfare to Work	18
Medicare	7
Section 8 or HUD Housing/ Military housing	3
Child care Assistance	3
Disability Insurance	1
a. Results from 207 baseline respondents who report receiving at least one form of public assistance b. Because 51 respondents report receiving more than one form of public assistance, the sum of the percentages in this Table exceeds 100, and are not reported.	

In order to examine the relationship between employment status and the receipt of public assistance, survey respondents were classified into one of four categories; 1) Employed at the beginning of the quarter, and found another job, 2) Employed at the beginning of the quarter, but did *not* find a new job, 3) Unemployed at the beginning of the quarter, but became employed, and 4) Unemployed at the beginning of the quarter and did *not* find a job. As can be seen in Table 3-11, a significantly higher proportion of respondents who were unemployed on the first day of the quarter in which they enrolled and remained so on the last day of that quarter report receiving public assistance during the quarter; $\chi^2(3, N = 393) 17.39, p < .01$, compared to the respondents classified as being in the remaining three categories. Looking at this another way, 61.5% of respondents who were unemployed at the end of the quarter they enrolled report receiving at least one form of public assistance during this time period, while only 42.6% of those who were employed at the end of the quarter they enrolled report the same.

Table 3-11
Baseline Clients Receiving at least one Form of Public Support/Assistance
During the Quarter of Enrollment by Employment Status

Employment Category at the End of the Quarter of Enrollment	Number of Clients	
	Count	Percent
Employed, Found Another Job	11	39.3%
Employed, Did Not Find Another Job	49	48.5%
Unemployed, Found a Job	20	33.9%
Unemployed, Did Not Find a Job	126	61.2%
a. Results from 393 baseline respondents who provided a response to this item		
b. Seven respondents who declined to provide a response are not include here		

3.5.2 Receipt of Government Assistance at Follow-Up

At follow-up, respondents who enrolled at the Santa Ana WORK Center during the first through third quarter of the 2008 calendar year ($n=192$) were asked to indicate whether they had received public assistance from each of the same nine sources listed in Table 3-10 between the last day of the quarter they were enrolled and December 31st (the last day of the calendar year). Ninety-seven (51.1%) respondents indicate not having received support from *any* of the nine public assistance programs, 68(35.8%) report receiving support from one, 14 (7.4%) from two, and 11 (5.8%) from three or more public assistance programs. As can be seen in Table 3-12, among those who report receiving at least one form of aid during the specified period ($n= 93$), the largest proportion (77.4%) receives unemployment insurance.

Table 3-12
Follow-Up Clients Receiving Public Support/ Assistance
Between Last Day of Quarter of Enrollment to December 2008

Public Support Program	Number of Clients
	Count
Unemployment Insurance	72
Food Stamps	17
Medi-Cal (Cal Optima)	17
WIC Program	11
Child care Assistance	7
CalWORKS or Welfare to Work	6
Medicare	4
Section 8 or HUD Housing/ Military housing	2
a. Results from 93 follow-up respondents who report receiving at least one form of public assistance	
b. Because 25 respondents report receiving more than one form of public assistance, the sum of the percentages in this Table exceeds 100, and are not reported.	

In order to assess to examine the relationship between employment status and the receipt of public assistance at follow-up, survey respondents were classified into two categories (1) Employed at the end of the calendar year, and (2) Unemployed at the end of the calendar year. As can be seen in Table 3-13, a significantly higher proportion of respondents who were unemployed on at the end of the 2008 calendar year report receiving public assistance during the quarter than those who were employed; $\chi^2 (1, N = 186) 17.23, p < .001$.

Table 3-13
Follow-Up Clients Receiving at least one Form of Public Support/ Assistance
During the Quarter of Enrollment by Employment Status

Employment Status at the End of the Calendar Year	Number of Clients	
	Count	Percent
Employed	20	29.4%
Unemployed	72	61.0%
a. Results from 186 baseline respondents who provided a response to this item		
b. Six respondents who declined to provide a response are not include here		

3.5.3 Physical and Mental Health Indicators at Baseline

At baseline, 394 survey respondents rated their physical and mental health on a scale from one to five with 1= “Poor” and 5= “Excellent.” As can be seen in Table 3-14, the largest proportion of survey respondents rate their physical health as being “Good.” The next largest proportions rate their physical health as being “Excellent” or “Very good.” Treating this item as a continuous variable, the mean rating of physical health is 3.37, less than half way between “Good” and “Very good.

As also shown in Table 3-14, the largest proportion of survey respondent’s rate their mental health as being “Excellent” followed by the next largest proportion who rate it as being “Good” and “Very Good. Again, treating this item as a continuous variable, the mean rating of mental health is 3.84, slightly higher than the mean rating for physical health. Mean rating of physical health is positively related to mean rating of mental health, meaning that respondents who rate their physical health highly, rate their mental health highly as well; this relationship is statistically significant; $r = .443, p < .01$. Interestingly, ratings of physical and mental health are not related to respondent employment status at the end of the quarter in which they enrolled.

Table 3-14
Ratings of Physical and Mental Health
Baseline Survey Respondents

Rating	Physical Health		Mental Health	
	Count	Percent	Count	Percent
Poor	27	6.9%	11	2.8%
Fair	42	10.7%	21	5.3%
Good	168	42.0%	127	32.2%
Very Good	76	19.3%	89	22.6%
Excellent	81	20.6%	146	37.1%
a. Results from 394 baseline respondents who rated their physical and mental health.				
b. Six respondents who declined to provide a response are not include here				

Three hundred and ninety four respondents also indicated how many days “During the past 30 days” their physical health was “Not good.” Responses ranged from zero days ($n = 312$; 79.2%) to 30 days ($n = 21$; 5.3%), with a mean of 2.47 days. Consistent with previous findings, employment status at the end of the quarter enrolled is not related physical health, as measured by the mean number of day’s respondents report that their health was “Not good.” Respondents also provided information on the number of days “During the past 30 days” their mental health was “Not good.” Responses ranged from zero days ($n = 297$; 76.0%) to 30 days ($n = 24$; 6.1%), with a mean number of 2.95 days. Respondents who were unemployed as of the last day of the quarter they enrolled report a higher number of days that their mental health was “Not good” ($M = 3.69$) than those who were employed ($M = 2.20$), a difference that does not quite reach statistical significance; $F(1, 388) = 3.70, p = .055$.

3.5.3 Physical and Mental Health Indicators at Follow-Up

At follow-up, respondents who enrolled at the Santa Ana WORK Center during the first through third quarter of the 2008 calendar year rated their physical and mental health on the same scale that was utilized in the baseline survey. As can be seen in Table 3-15, the largest proportion of survey respondents rate their physical health as being “Good.” The next largest proportions rate their physical health as being “Very good” or “Excellent.” Treating this item as a continuous variable, the mean rating of physical health is 3.27, ten points less than what was observed at baseline.

As also shown in Table 3-15, the largest proportion of survey respondent’s rate their mental health as being “Good” followed by the next largest proportion who rate it as being “Excellent” and “Very Good. Again, treating this item as a continuous variable, the mean rating of mental health is 3.80, higher than the mean rating for physical health. Consistent with baseline findings ratings of physical health are positively related to ratings of mental health, meaning that respondents who rate their physical health highly, rate their mental health highly as well, vice versa; this relationship is statistically significant; $r = .487, p < .01$.

While respondents employed at the end of the 2008 calendar year rate their physical health and mental health as better as indicated by mean ratings ($M= 3.43$ for physical health and $M= 3.90$ for mental health) than those who were unemployed, ($M= 3.18$ and 3.77 , respectively) this difference is not statistically significant.

Table 3-15
Ratings of Physical and Mental Health
Among Follow-Up Survey Respondents

Rating	Physical Health		Mental Health	
	Count	Percent	Count	Percent
Poor	14	7.4%	5	2.6%
Fair	25	13.2%	11	5.8%
Good	78	41.3%	61	32.3%
Very Good	40	21.2%	52	27.5%
Excellent	32	16.9%	60	31.7%
a. Results from 189 baseline respondents who rated their physical and mental health.				
b. Three respondents who declined to provide a response are not include here				

One hundred and eighty seven follow-up survey respondents also indicated how many days “During the past 30 days” their physical health was “Not good.” Responses ranged from zero days ($n = 131$; 70.1%) to 30 ($n = 13$; 4.3%), with a mean of 3.39 days, higher than that observed at baseline ($M= 2.47$ days). Respondents who were employed at the end of the calendar year report a lower number of days that their physical health was “Not good” ($M = 2.76$), than those who were unemployed ($M = 3.63$); a difference that is not statistically significant, however.

Respondents also provided information on the number of days “During the past 30 days” their mental health was “Not good.” Responses ranged from zero days ($n = 127$; 69.4%) to 30 days ($n = 7$; 3.8%), with a mean number of 3.08, slightly higher than that observed at baseline (2.95 days). Respondents who were unemployed at the end of the calendar year report a higher number of days that their mental health was “Not good” ($M = 3.12$) than those who were employed ($M = 2.71$), a difference that is not statistically significant.

4 Conclusion

The Return on Investment for services provided by Santa Ana WORK Center during the calendar year 2008 is estimated to be 147%. This represents a significant ROI given the severe economic recession and increased costs incurred by the WORK Center from the transition an “Integrated” model halfway through the calendar year. During the recession, Santa Ana-Anaheim-Irvine metropolitan division unemployment has dramatically increased while non-farm payroll

significantly declined. The increased costs of operating the Integrated model occurred because WORK Center participants now receive individualized services.

The ROI was calculated from estimated benefits and costs for providing the integrated services. The WORK Center staff provided the estimated costs for providing the WORK Center services and includes personnel costs, operating expenses, overhead costs, fixed costs and other costs including sending participants to vocational schools for training. The estimated benefits are based upon data collected through a Telephone Survey conducted by the Social Science Research Center (SSRC) at CSU Fullerton. Each quarter, the SSRC administered telephone surveys to 400 clients randomly selected from the 5,843 individuals who first registered as Santa Ana WORK Center during calendar year 2008. The response rate was excellent at 72.2%. The estimated benefits include additional tax revenue from individuals who get a new job and additional tax revenue from the businesses (and their owners and employees) patronized by these individuals.

The ROI estimate is conservative because there was insufficient data to estimate a reduction in public support received by WORK Center clients.

APPENDICES

Appendix A

Technical Approach to Telephone Survey Data Collection

The SSRC implements Computer Assisted Telephone Interviewing (CATI) through WinCATI® software to facilitate control of the sample, track scheduled call-backs, and monitor progress regarding the completion of sample design quotas. Programming is carried out using the CI3 scripting language which allows for the randomization of questions and question sets within a survey to eliminate response-order biases, response range limits to reduce recording errors, and complex interview navigation commands to ensure the proper administration of survey items.

Survey questions and response options appear on a computer screen while the interviewer is speaking to the respondent. Data are entered directly into the system so coding or keying errors are reduced. SSRC supervisors are present during all interviewing and "random check" call-monitoring is routinely performed to verify the accuracy of the data. Each of our supervisors previously worked as an interviewer, and each has been trained in telephone interviewing techniques and methodological considerations.

The CATI system includes a sophisticated call tracking and call-back scheduling procedure. This system assigns sample records to interviewing stations based on user configurable rules which include a randomization element, and also consider call history, and interviewer capability/training. An attempt history is maintained for each sample record which can be used to calculate productivity and other process related statistics. If no contact is made, the call record will note the time of day and the interviewer who attempted the call. The call will then be automatically reassigned at a later time based upon an algorithm that reduces the probability that the call will come up again on the same day and time. When a contact is made, but the interview is not completed, call information is recorded that includes whether a call-back has been scheduled, who the interviewer spoke with, who they should talk to if the eligible respondent is not at home, and the current disposition of the call (for example, immediate refusal, answering machine, mid-interview termination, etc.). In addition, the time of each call, the number of times the record has been called, and any interviewer-generated notes are recorded. If, during any contact attempt, a determination can be made regarding the language spoken within the household of a particular sample record, a language flag is set which ensures future attempts will be assigned only to interviewers with the appropriate language skill.

The CATI system allows the researcher to set the number of times a sample record is to be called before it is retired. SSRC standard operating procedure dictates 21 attempts at contact. If contact is not established after 21 calls, the number is transferred to a holding queue. Our policy regarding immediate refusals is to call back at random intervals not less than 48 hours after the initial refusal. Experience shows that about 30% of initial refusals can be converted simply by contacting another resident at the same number. Our procedure for converting refusals by respondents whose eligibility has been established involves two steps. After the first refusal, we call back at a different time. We ask for the eligible respondent, beginning by apologizing for bothering them again, and subsequently attempting to explain the scientific reason for our interest in speaking with them. This procedure converts about 20% of refusals who are known to be eligible for the survey. If this results in a second refusal, we will try one additional time using a "please help" approach. This generally yields a conversion rate of 10%. After three refusals,

the telephone number is retired and classified accordingly. This procedure is a modification of Dillman's (1978) Total Design Method.

Each interview reflected a survey instrument/ questionnaire consisting of approximately 46 items. All respondents were asked approximately 31 questions to collect basic demographic information and address opinions concerning their experience with the Santa Ana WORK Center and their employment both before and after visiting the Center. The length of time to complete each telephone interview ranged from three to twenty-three minutes. The average survey completion time was eight minutes.

A.1 Response Rate

The SSRC's estimated response rate for this telephone survey is 71.20%. This response rate is calculated using the American Association of Public Opinion Researchers' (AAPOR) Response Rate Calculation Method 3 (RR3), which includes an estimate of eligibility among unscreened sample records based on the eligibility rate among respondents for whom a final determination could be made:

$$Rate = \frac{C}{(C + I) + (R + N) + eU}$$

Where C = complete interviews, I = incomplete interviews, R = eligible refusals, N = other eligible non-complete records, e = estimate of eligibility, and U = records with unknown eligibility.

In this equation, eligible respondents include all individuals who responded at least to the initial screening questions, regardless of the result. The response rate should not be confused with the completion rate. Completion rates are generally considered as the number of completed interviews over the total sample size, including all potential respondents, eligible or not. The difference between response rates and completion rates is determined by the difference between the number of eligible and ineligible respondents.

A total of 9,647 individual attempts were made to 2,477 telephone numbers to complete 415 interviews for the Santa Ana WORK Center. The last disposition of all sample records used is detailed in Table 1.

Of the 9,647 telephone numbers attempted, 719 (29%) numbers were ineligible because they were disconnected, temporarily out of service, determined to be fax machines or businesses. Another 508 (21.0%) numbers were ineligible because they did not meet the requirements to participate in the study, the contact could no longer be reached at that number, there was no eligible respondent, the quota was filled for that specific criteria or some other reason. Eligibility for participation in the study was unclear for 773 (31.2%) numbers. These numbers were dispositioned a language problem, busy signal, no answer, answering machine, call blocking, incoherent, unqualified refusal and unqualified callback.

Twenty-two percent of the completed interviews were completed on the first attempt, 21% on the second attempt, 15% were completed on the third attempt, 12% on the fourth attempt, 9% on the fifth attempt, and 21% were completed on the sixth attempt and higher. Up to twenty-two calls were made to reach eligible respondents to complete the interview.

Table A-1
Final Disposition of Attempted Telephone Numbers in the Listed Survey Sample

Final Disposition	Count
Completed Interview	400
Incomplete/Break-off	20
Telephone Answering Device	126
No Answer	19
Busy	7
Call Blocked/ Technological Barrier	7
Unqualified Callback	48
Phone Disconnect/Out of Service	97
Number Changed	76
Not a Residence	20
FAX Machine/Data Device	7
Ineligible	39
Final Unqualified Refusal	3
Total	869

Appendix B
Phase III ROI Study Baseline Questionnaire

SHELLO Hello, this is _____, calling from the Social Science Research Center at California State University, Fullerton.
Have I reached [READ PHONE NUMBER]?

SCONTACT May I please speak with [PARTICIPANT'S NAME]?

1. YES [SKIPTO SINTRO]
2. NO [SKIPTO CALLBK1]
3. NOT AVAILABLE AT THIS NUMBER [CONTINUE]

QTRACK1 We are calling on behalf of the California Employment Development Department (EDD), the Santa Ana Workforce Investment Board and the Santa Ana WORK Center, located upstairs at the Santa Ana Train Station.

We would appreciate your help in contacting [PARTICIPANT'S NAME] to ask her/ him a few questions concerning his/her experiences with the Santa Ana WORK Center.

Any information that [PARTICIPANT'S NAME] provides will remain strictly confidential.

Do you have a phone number for [PARTICIPANT'S NAME]?

PHONE NUMBER>
999-999-9999. REFUSED

CALLBK1 When may we call back to reach [PARTICIPANT'S NAME]?

SINTRO We are calling on behalf of the California Employment Development Department (EDD), the Santa Ana Workforce Investment Board and the Santa Ana WORK Center, located upstairs at the Santa Ana Train Station. Our records indicate you first visited the WORK Center on [INSERT DATE]. We would like to ask a few questions concerning your experience with the Santa Ana WORK Center and your employment before visiting the Center and now. This survey will take less than ten minutes to complete. You are not required to answer any question you do not wish to answer, and your responses will remain confidential to the extent permitted by law.

SINTRO2 I should mention that this call may be monitored by my supervisor for quality control purposes only.

If it is all right with you, I'll ask the survey questions now.

1. YES [SKIP TO TRANS1]
2. NO

CALLBK2 When may we call you back?

TRANS1 First, we'd like to ask some questions about your use of the services at the Santa Ana WORK Center. We are interested in your experiences between January 1st and March 31st, 2008.

Q1 Which of the following best describes your pattern of attendance at the WORK Center between January 1st and March 31st, 2008? Would you say your visits were...

1. Scattered throughout this three-month period, or
2. Concentrated within a short period of time?
7. DON'T KNOW
9. REFUSED

Q2 Between January 1st and March 31st, 2008, approximately how many times did you visit the Santa Ana WORK Center, located upstairs at the train station?

- SPECIFY NUMBER OF TIMES >
77. DON'T KNOW
 99. REFUSED

Q3 I'd like to read a list of services and facilities available at the Santa Ana WORK Center. Please tell me how many times you used each service.

- a. Reviewed job postings on the Job Order Board
- b. Attended a Job Search Workshop
- c. Received one-on-one help preparing your resume
- d. Attended on-site job interviews or job fairs
- e. Used computers to search for jobs on the Internet
- f. Used computers to send or check emails
- g. Used telephones or used office equipment (or had help using office equipment), to make copies or send or receive faxes
- h. Received assistance with an unemployment insurance claim
- i. Received one-on-one counseling
- j. Please tell us about any other service or facility you may have used...(SPECIFY)>
 1. Never used this service
 2. Once or twice
 3. Three or four times
 4. Five or more times
 7. DON'T KNOW
 9. REFUSED

Q4 Overall, how satisfied were you with the services you used at the WORK Center between January 1st and March 31st, 2008?

1. Not at all satisfied
2. Somewhat unsatisfied
3. Somewhat satisfied
4. Very satisfied
7. DON'T KNOW
9. REFUSED

Q5 Which of the services you used during that time period were most helpful?
[SHOW ONLY Q3 ITEMS GT 1; SELECT ALL THAT APPLY]

JOB POSTINGS (JOB ORDER BOARD)
JOB SEARCH WORKSHOP
ONE-ON-ONE HELP PREPARING YOUR RESUME
ON-SITE JOB INTERVIEWS OR JOB FAIRS
INTERNET TO SEARCH FOR JOBS
INTERNET TO SEND OR CHECK EMAILS
USE OF FAX, TELEPHONES, OR OTHER OFFICE EQUIPMENT
ASSISTANCE WITH A UI (UNEMPLOYMENT INSURANCE) CLAIM
ONE-ON-ONE COUNSELING
OTHER SERVICE
DON'T KNOW/ NO RESPONSE
REFUSED

Q6 We want to assure you that the Santa Ana WORK Center will continue to provide these services free of charge. Had there been a charge for these services, though, would you have paid for them?

- | | | |
|----|------------|------------------|
| 1. | YES | [CONTINUE] |
| 2. | NO | [SKIP TO TRANS2] |
| 7. | DON'T KNOW | |
| 9. | REFUSED | |

Q6A How much would you have paid for the services? You can answer by providing a rate per hour, specifying a fixed fee, or a percentage of your first year's salary from a job you obtained by using the services.

- | | |
|----|----------------------------|
| 1. | PER HOUR > |
| 2. | FIXED FEE > |
| 3. | PERCENT OF ANNUAL SALARY > |
| 7. | DON'T KNOW |
| 9. | REFUSED |

TRANS2 Now I'd like to ask some questions about your job experiences between January 1st and March 31st, 2008.

Q8 Were you employed as of January 1st, 2008?

- | | | |
|----|------------|---------------|
| 1. | YES | [SKIP TO Q11] |
| 2. | NO | [CONTINUE] |
| 7. | DON'T KNOW | |
| 9. | REFUSED | |

Q9 Between January 1st and March 31st, 2008, did you receive assistance or support in the form of cash or non-cash aid from....

- a. CalWORKs or Welfare to Work
- b. Section 8 or HUD housing support or military housing
- c. Food stamps
- d. Medi-Cal (Cal Optima)
- e. Medicare
- f. WIC Program (Woman, Infants and Children)
- g. Child Care Assistance
- h. Unemployment insurance
- i. Disability insurance

1. YES
2. NO
7. DON'T KNOW
9. REFUSED

[REPEAT Q9A THROUGH Q9D FOR EACH 'YES' RESPONSE TO Q9a THROUGH Q9j]

Q9A What is the value of the [INSERT TYPE OF ASSISTANCE] you are or were receiving each month?

1. AMOUNT >
7. DON'T KNOW
9. REFUSED

Q9B For how many months have you received [INSERT TYPE OF ASSISTANCE]?

1. NUMBER OF MONTHS >
7. DON'T KNOW
9. REFUSED

Q9C Are you still receiving [INSERT TYPE OF ASSISTANCE]?

1. YES [SKIP TO Q10]
2. NO [CONTINUE]
7. DON'T KNOW
9. REFUSED

Q9D What is the primary reason you stopped receiving [INSERT TYPE OF ASSISTANCE]?

1. Change in health condition
2. Change of marital status
3. Increased income due to employment
4. Problems with forms or paperwork
5. Program time limits
6. Change in residence
7. Partner/ Spouse's income was counted
8. OTHER (SPECIFY)
77. DON'T KNOW
99. REFUSED

Q10 Did you find a job between January 1st and March 31st, 2008?

1. YES [SKIP TO TRANS3]
2. NO [SKIP TO TRANS4]
7. DON'T KNOW
9. REFUSED

[IF EMPLOYED, FROM Q8]

Q11 How much money were you earning at that time?

- 1 HOURLY WAGE > [CONTINUE]
- 2 MONTHLY SALARY > [SKIP TO Q12]
- 3 YEARLY SALARY > [SKIP TO Q12]
77. DON'T KNOW
99. REFUSED

Q11A. Approximately how many hours were you working, either per week, or per month?

1. HOURS PER WEEK>
2. HOURS PER MONTH>
7. DON'T KNOW
9. REFUSED

Q12 Between January 1st and March 31st, 2008, did you receive assistance or support in the form of cash or non-cash aid from....

- a. CalWORKs
- b. Section 8 or HUD housing support or military housing
- c. Food stamps
- d. Medi-Cal (Cal Optima)
- e. Medicare
- f. Woman, Infants and Children
- g. Child Care Subsidy
- h. Alternative Child Care Payment
- i. Unemployment insurance
- j. Disability insurance

- 1. YES
- 2. NO
- 7. DON'T KNOW
- 9. REFUSED

[REPEAT Q12A THROUGH Q12D FOR EACH 'YES' RESPONSE TO Q12a THROUGH Q12j]

Q12A What is the value of the [INSERT TYPE OF ASSISTANCE] you are or were receiving each month?

- 1. AMOUNT >
- 7. DON'T KNOW
- 9. REFUSED

Q12B For how many months have you received [INSERT TYPE OF ASSISTANCE]?

- 2. NUMBER OF MONTHS >
- 7. DON'T KNOW
- 9. REFUSED

Q12C Are you still receiving [INSERT TYPE OF ASSISTANCE]?

- 1. YES [SKIP TO Q13]
- 2. NO [CONTINUE]
- 7. DON'T KNOW
- 9. REFUSED

Q12D What is the primary reason you stopped receiving [INSERT TYPE OF ASSISTANCE]?

- 9. Change in health condition
- 10. Change of marital status
- 11. Increased income due to employment
- 12. Problems with forms or paperwork
- 13. Program time limits
- 14. Change in residence
- 15. Partner/ Spouse's income was counted
- 16. OTHER (SPECIFY)
- 77. DON'T KNOW
- 99. REFUSED

Q13 Did you find another job between January 1st and March 31st, 2008?

- 1. YES [SKIP TO Q15]
- 2. NO [CONTINUE]
- 7. DON'T KNOW
- 9. REFUSED

Q14 How much money were you earning as of March 31st, 2008?

- 1. REPORTED AS HOURLY WAGE >
- 2. REPORTED AS MONTHLY SALARY >
- 3. REPORTED AS YEARLY SALARY >
- 0. NO INCOME
- 77. DON'T KNOW
- 99. REFUSED

Q14A. Approximately how many hours did you work, either per week or per month?

- 1. HOURS PER WEEK> [ALL SKIP TO TRANS4]
- 2. HOURS PER MONTH>
- 7. DON'T KNOW
- 9. REFUSED

Q15 How much money were you earning just before you were hired at your new job?

- 1. HOURLY WAGE > [CONTINUE]
- 2. MONTHLY SALARY > [SKIP TO TRANS3]
- 3. YEARLY SALARY > [SKIP TO TRANS3]
- 77. DON'T KNOW
- 99. REFUSED

Q15A. Approximately how many hours were you working, either per week or per month?

1. HOURS PER WEEK>
2. HOURS PER MONTH>
7. DON'T KNOW
9. REFUSED

[ASK IF FOUND A JOB OR FOUND ANOTHER JOB BETWEEN JANUARY 1st AND MARCH 31st, 2008]

TRANS3 Please tell us a little bit about that new job.

Q16 What industry was that job in?

1. Construction
2. Manufacturing
3. Retail Trade
4. Finance
5. Food Processing
6. Services
7. Aerospace
8. Technology
9. Electronics
10. Transportation/ Distribution
11. OTHER (SPECIFY)>
77. DON'T KNOW
99. REFUSED

Q17 When did you begin your employment at that job?

1. SPECIFY MONTH >
2. SPECIFY DAY >
3. SPECIFY YEAR >
7. DON'T KNOW
9. REFUSED

Q18 How much money were you earning when you were first hired?

1. REPORTED AS HOURLY WAGE > [CONTINUE]
2. REPORTED AS MONTHLY SALARY > [SKIP TO Q19]
3. REPORTED AS YEARLY SALARY > [SKIP TO Q19]
0. NO INCOME
77. DON'T KNOW
99. REFUSED

Q18A. Approximately how many hours did you work, either per week or per month?

1. HOURS PER WEEK>
2. HOURS PER MONTH>
7. DON'T KNOW
9. REFUSED

Q19 For how long did you have that job?

1. DAYS >
2. WEEKS >
3. MONTHS >
4. YEARS >
5. STILL HAVE JOB
7. DON'T KNOW
9. REFUSED

TRANS4 Next I'd like to ask a few questions about your health, personal habits, and quality of life. I'd like to remind you that all of your responses will remain completely confidential and will be combined with those of other survey participants for reporting purposes.

Q20 Would you say, in general, that your physical health is poor, fair, good, very good, or excellent?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q21 Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

- _____ Enter number of days.
77. DON'T KNOW/ NO RESPONSE
99. REFUSED

Q22 Would you say, in general, that your mental health is poor, fair, good, very good, or excellent?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q23 Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

- _____ Enter number of days
77. DON'T KNOW/ NO RESPONSE
99. REFUSED

Q24a Would you say, in general, that the quality of your relationships with family members is poor, fair, good, very good, or excellent?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
6. DO NOT HAVE RELATIONSHIPS WITH FAMILY MEMBERS
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q24b Has the quality of your relationships with family members become worse, stayed the same, or improved in the past three months?

1. BECOME WORSE
2. STAYED THE SAME
3. IMPROVED
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q24c Would you say, in general, that the quality of your relationships with friends and acquaintances is poor, fair, good, very good, or excellent?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
6. DO NOT HAVE RELATIONSHIPS WITH FAMILY MEMBERS
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q24d Has the quality of your relationships with friends and acquaintances become worse, stayed the same, or improved in the past three months?

1. BECOME WORSE
2. STAYED THE SAME
3. IMPROVED
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q25 During the past month, how many days per week on average did you drink any alcoholic beverages?

- _____ Enter number of days.
77. DON'T KNOW/ NO RESPONSE
 99. REFUSED

[SKIP IF Q25=0]

Q26 A drink is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. On the days when you drank, about how many drinks did you drink on the average?

_____ Enter number of drinks

77. DON'T KNOW/ NO RESPONSE

99. REFUSED

Q27 During the past month, approximately how many days did you use drugs like marijuana, cocaine, or ecstasy, or pharmaceutical drugs that were not prescribed to you?

_____ Enter number of days.

77. DON'T KNOW/ NO RESPONSE

99. REFUSED

Q28 In the past three months how frequently have you had contact with law enforcement, including the police, sheriff or CHP, for example, times the police were called to your home, times you were pulled over for a traffic stop, and times you were arrested?

1. Never

2. Once or twice <SPECIFY IF Q₂₈>

3. Three or four times

4. Five or more times

7. DON'T KNOW/ NO RESPONSE

9. REFUSED

Q29 Would you say, in general, that your present quality of life is: Excellent, Very good, Good, Fair, or Poor?

1. Poor

2. Fair

3. Good

4. Very good

5. Excellent

7. DON'T KNOW/ NO RESPONSE

9. REFUSED

Q30 Has your quality of life improved, stayed the same, or become worse in the past three months?

1. BECOME WORSE
2. STAYED THE SAME
3. IMPROVED
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

TRANS5 We have just a few more questions for statistical purposes only.

AGE First, what is your age?

AGE>

77. DK/NR
99. REFUSED

RACE Which of the following best describes your racial or ethnic background?

1. Asian or Pacific Islander
2. Black or African American
3. Latino or Hispanic
4. Caucasian or White
5. Other
7. DON'T KNOW
9. REFUSED

EDUC Which of the following best describes the amount of formal education you have received?

1. Less than 8th grade
2. Between 8th and 11th grade
3. High school education or GED
4. Some college, no degree
5. AA or trade school education
6. Four-year degree such as a BA or BS
7. Graduate or Professional degree
77. DON'T KNOW
99. REFUSED

TRANS6 We have just a few more questions.

COMM Do you have any other comments about your experiences with the Santa Ana WORK Center you would like to share or recommendations to improve their services?

1. YES, SPECIFY>
2. NO

FG Would you be willing to be contacted for an in-depth interview?

1. YES [GET STANDARD CONTACT INFO]
2. NO [END SURVEY]

CONCLUD That concludes our survey. Thank you very much for your participation.

Appendix C
Phase III ROI Study Follow-Up Questionnaire

SHELLO Hello, this is _____, calling from the Social Science Research Center at California State University, Fullerton.
Have I reached [READ PHONE NUMBER]?

SCONTACT May I please speak with [PARTICIPANT'S NAME]?

- 4. YES [SKIPTO SINTRO]
- 5. NO [SKIPTO CALLBK1]
- 6. NOT AVAILABLE AT THIS NUMBER [CONTINUE]

QTRACK1 We are calling on behalf of the California Employment Development Department (EDD), the Santa Ana Workforce Investment Board and the Santa Ana WORK Center, located upstairs at the Santa Ana Train Station.

We would appreciate your help in contacting [PARTICIPANT'S NAME] to ask her/ him a few questions concerning his/her experiences with the Santa Ana WORK Center.

Any information that [PARTICIPANT'S NAME] provides will remain strictly confidential.

Do you have a phone number for [PARTICIPANT'S NAME]?

PHONE NUMBER>
999-999-10000. REFUSED

CALLBK1 When may we call back to reach [PARTICIPANT'S NAME]?

SINTRO We are calling on behalf of the California Employment Development Department (EDD), the Santa Ana Workforce Investment Board and the Santa Ana WORK Center, located upstairs at the Santa Ana Train Station. Our records indicate you first visited the WORK Center on [INSERT DATE]. We would like to ask a few questions concerning your experience with the Santa Ana WORK Center and your employment before visiting the Center and now. This survey will take less than ten minutes to complete. You are not required to answer any question you do not wish to answer, and your responses will remain confidential to the extent permitted by law.

SINTRO2 I should mention that this call may be monitored by my supervisor for quality control purposes only.

If it is all right with you, I'll ask the survey questions now.

- 3. YES [SKIP TO TRANS1]
- 4. NO

CALLBK2 When may we call you back?

TRANS1 First, we'd like to ask some questions about your use of the services at the Santa Ana WORK Center. We are interested in your experiences between October 1st and December 31st, 2008.

Q1 Which of the following best describes your pattern of attendance at the WORK Center between October 1st and December 31st, 2008? Would you say your visits were...

- 3. Scattered throughout this three-month period, or
- 4. Concentrated within a short period of time?
- 8. DON'T KNOW
- 10. REFUSED

Q2 Between October 1st and December 31st, 2008, approximately how many times did you visit the Santa Ana WORK Center, located upstairs at the train station?

SPECIFY NUMBER OF TIMES >

- 78. DON'T KNOW
- 99. REFUSED

Q3 I'd like to read a list of services and facilities available at the Santa Ana WORK Center. Please tell me how many times you used each service.

- k. Reviewed job postings on the Job Order Board
- l. Attended a Job Search Workshop
- m. Received one-on-one help preparing your resume
- n. Attended on-site job interviews or job fairs
- o. Used computers to search for jobs on the Internet
- p. Used computers to send or check emails
- q. Used telephones or used office equipment (or had help using office equipment), to make copies or send or receive faxes
- r. Received assistance with an unemployment insurance claim
- s. Received one-on-one counseling
- t. Please tell us about any other service or facility you may have used...(SPECIFY)>

- 5. Never used this service
- 6. Once or twice
- 7. Three or four times
- 8. Five or more times
- 7. DON'T KNOW
- 9. REFUSED

Q4 Overall, how satisfied were you with the services you used at the WORK Center between October 1st and December 31st, 2008?

- 5. Not at all satisfied
- 6. Somewhat unsatisfied
- 7. Somewhat satisfied
- 8. Very satisfied
- 7. DON'T KNOW
- 9. REFUSED

Q5 Which of the services you used during that time period were most helpful?
[SHOW ONLY Q3 ITEMS GT 1; SELECT ALL THAT APPLY]

- JOB POSTINGS (JOB ORDER BOARD)
- JOB SEARCH WORKSHOP
- ONE-ON-ONE HELP PREPARING YOUR RESUME
- ON-SITE JOB INTERVIEWS OR JOB FAIRS
- INTERNET TO SEARCH FOR JOBS
- INTERNET TO SEND OR CHECK EMAILS
- USE OF FAX, TELEPHONES, OR OTHER OFFICE EQUIPMENT
- ASSISTANCE WITH A UI (UNEMPLOYMENT INSURANCE) CLAIM
- ONE-ON-ONE COUNSELING
- OTHER SERVICE
- DON'T KNOW/ NO RESPONSE
- REFUSED

Q6 We want to assure you that the Santa Ana WORK Center will continue to provide these services free of charge. Had there been a charge for these services, though, would you have paid for them?

- 3. YES [CONTINUE]
- 4. NO [SKIP TO TRANS2]
- 8. DON'T KNOW
- 9. REFUSED

Q6A How much would you have paid for the services? You can answer by providing a rate per hour, specifying a fixed fee, or a percentage of your first year's salary from a job you obtained by using the services.

1. PER HOUR >
2. FIXED FEE >
3. PERCENT OF ANNUAL SALARY >
7. DON'T KNOW
9. REFUSED

Q7 When you came to the WORK Center, in what kind of industry did you want to find work? Would you say... [CHECK ALL THAT APPLY.]

1. Construction
2. Finance
3. Food processing
4. Electronics
5. Manufacturing
6. Retail/ Trade
7. Service
8. Technology
9. Transportation
10. OTHER> SPECIFIED
11. NO PARTICULAR INDUSTRY
77. DON'T KNOW/ NO RESPONSE
99. REFUSED

TRANS2 Now I'd like to ask some questions about your job experiences between October 1st and December 31st, 2008.

Q8 Were you employed as of October 1st, 2008?

3. YES [SKIP TO Q11]
4. NO [CONTINUE]
7. DON'T KNOW
9. REFUSED

Q9 Between October 1st and December 31st, 2008, did you receive assistance or support in the form of cash or non-cash aid from....

- a. CalWORKs or Welfare to Work
- b. Section 8 or HUD housing support or military housing
- c. Food stamps
- d. Medi-Cal (Cal Optima)
- e. Medicare
- f. WIC Program (Woman, Infants and Children)
- g. Child Care Assistance
- h. Unemployment insurance
- i. Disability insurance

- 1. YES
- 2. NO
- 7. DON'T KNOW
- 9. REFUSED

[REPEAT Q9A THROUGH Q9D FOR EACH 'YES' RESPONSE TO Q9a THROUGH Q9j]

Q9A What is the value of the [INSERT TYPE OF ASSISTANCE] you are or were receiving each month?

- 1. AMOUNT >
- 7. DON'T KNOW
- 9. REFUSED

Q9B For how many months have you received [INSERT TYPE OF ASSISTANCE]?

- 3. NUMBER OF MONTHS >
- 7. DON'T KNOW
- 9. REFUSED

Q9C Are you still receiving [INSERT TYPE OF ASSISTANCE]?

- 1. YES [SKIP TO Q10]
- 2. NO [CONTINUE]
- 7. DON'T KNOW
- 9. REFUSED

Q12 Between October 1st and December 31st, 2008, did you receive assistance or support in the form of cash or non-cash aid from....

- k. CalWORKs
 - l. Section 8 or HUD housing support or military housing
 - m. Food stamps
 - n. Medi-Cal (Cal Optima)
 - o. Medicare
 - p. Woman, Infants and Children
 - q. Child Care Subsidy
 - r. Unemployment insurance
 - s. Disability insurance
-
- 1. YES
 - 2. NO
 - 7. DON'T KNOW
 - 9. REFUSED

[REPEAT Q12A THROUGH Q12D FOR EACH 'YES' RESPONSE TO Q12a THROUGH Q12j]

Q12A What is the value of the [INSERT TYPE OF ASSISTANCE] you are or were receiving each month?

- 1. AMOUNT >
- 7. DON'T KNOW
- 9. REFUSED

Q12B For how many months have you received [INSERT TYPE OF ASSISTANCE]?

- 4. NUMBER OF MONTHS >
- 7. DON'T KNOW
- 9. REFUSED

Q12C Are you still receiving [INSERT TYPE OF ASSISTANCE]?

- 1. YES [SKIP TO Q13]
- 2. NO [CONTINUE]
- 7. DON'T KNOW
- 9. REFUSED

Q12D What is the primary reason you stopped receiving [INSERT TYPE OF ASSISTANCE]?

1. Change in health condition
2. Change of marital status
3. Increased income due to employment
4. Problems with forms or paperwork
5. Program time limits
6. Change in residence
7. Partner/ Spouse's income was counted
8. OTHER (SPECIFY)
77. DON'T KNOW
99. REFUSED

Q13 Did you find another job between October 1st and December 31st, 2008?

3. YES [SKIP TO Q15]
4. NO [CONTINUE]
7. DON'T KNOW
9. REFUSED

Q14 How much money were you earning as of December 31st, 2008?

4. REPORTED AS HOURLY WAGE >
5. REPORTED AS MONTHLY SALARY >
6. REPORTED AS YEARLY SALARY >
0. NO INCOME
77. DON'T KNOW
99. REFUSED

Q14A. Approximately how many hours did you work, either per week or per month?

3. HOURS PER WEEK> [ALL SKIP TO TRANS4]
4. HOURS PER MONTH>
7. DON'T KNOW
9. REFUSED

Q15 How much money were you earning just before you were hired at your new job?

- 4. HOURLY WAGE > [CONTINUE]
- 5. MONTHLY SALARY > [SKIP TO TRANS3]
- 6. YEARLY SALARY > [SKIP TO TRANS3]
- 77. DON'T KNOW
- 100. REFUSED

Q15A. Approximately how many hours were you working, either per week or per month?

- 3. HOURS PER WEEK>
- 4. HOURS PER MONTH>
- 7. DON'T KNOW
- 9. REFUSED

[ASK IF FOUND A JOB OR FOUND ANOTHER JOB BETWEEN OCTOBER 1st AND DECEMBER 31st, 2008]

TRANS3 Please tell us a little bit about that new job.

Q16 What industry was that job in?

- 12. Construction
- 13. Manufacturing
- 14. Retail Trade
- 15. Finance
- 16. Food Processing
- 17. Services
- 18. Aerospace
- 19. Technology
- 20. Electronics
- 21. Transportation/ Distribution
- 22. OTHER (SPECIFY)>
- 78. DON'T KNOW
- 99. REFUSED

Q17 When did you begin your employment at that job?

1. SPECIFY MONTH >
2. SPECIFY DAY >
3. SPECIFY YEAR >
8. DON'T KNOW
9. REFUSED

Q18 How much money were you earning when you were first hired?

4. REPORTED AS HOURLY WAGE > [CONTINUE]
5. REPORTED AS MONTHLY SALARY > [SKIP TO Q19]
6. REPORTED AS YEARLY SALARY > [SKIP TO Q19]
0. NO INCOME
77. DON'T KNOW
99. REFUSED

Q18A. Approximately how many hours did you work, either per week or per month?

3. HOURS PER WEEK>
4. HOURS PER MONTH>
7. DON'T KNOW
9. REFUSED

Q19 For how long did you have that job?

6. DAYS >
7. WEEKS >
8. MONTHS >
9. YEARS >
10. STILL HAVE JOB
8. DON'T KNOW
9. REFUSED

TRANS4 Next I'd like to ask a few questions about your health, personal habits, and quality of life. I'd like to remind you that all of your responses will remain completely confidential and will be combined with those of other survey participants for reporting purposes.

Q20 Would you say, in general, that your physical health is poor, fair, good, very good, or excellent?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q21 Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

- _____ Enter number of days.
77. DON'T KNOW/ NO RESPONSE
 99. REFUSED

Q22 Would you say, in general, that your mental health is poor, fair, good, very good, or excellent?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q23 Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

- _____ Enter number of days
77. DON'T KNOW/ NO RESPONSE
 99. REFUSED

Q24a Would you say, in general, that the quality of your relationships with family members is poor, fair, good, very good, or excellent?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
6. DO NOT HAVE RELATIONSHIPS WITH FAMILY MEMBERS
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q24b Has the quality of your relationships with family members become worse, stayed the same, or improved in the past three months?

4. BECOME WORSE
5. STAYED THE SAME
6. IMPROVED
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q24c Would you say, in general, that the quality of your relationships with friends and acquaintances is poor, fair, good, very good, or excellent?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
6. DO NOT HAVE RELATIONSHIPS WITH FAMILY MEMBERS
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q24d Has the quality of your relationships with friends and acquaintances become worse, stayed the same, or improved in the past three months?

4. BECOME WORSE
5. STAYED THE SAME
6. IMPROVED
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q25 During the past month, how many days per week on average did you drink any alcoholic beverages?

- _____ Enter number of days.
77. DON'T KNOW/ NO RESPONSE
99. REFUSED

[SKIP IF Q25=0]

Q26 A drink is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. On the days when you drank, about how many drinks did you drink on the average?

- _____ Enter number of drinks
77. DON'T KNOW/ NO RESPONSE
99. REFUSED

Q27 During the past month, approximately how many days did you use drugs like marijuana, cocaine, or ecstasy, or pharmaceutical drugs that were not prescribed to you?

- _____ Enter number of days.
77. DON'T KNOW/ NO RESPONSE
99. REFUSED

Q28 In the past three months how frequently have you had contact with law enforcement, including the police, sheriff or CHP, for example, times the police were called to your home, times you were pulled over for a traffic stop, and times you were arrested?

5. Never
6. Once or twice <SPECIFY IF Q≥2>
7. Three or four times
8. Five or more times
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q29 Would you say, in general, that your present quality of life is: Excellent, Very good, Good, Fair, or Poor?

1. Poor
2. Fair
3. Good
4. Very good
5. Excellent
7. DON'T KNOW/ NO RESPONSE
9. REFUSED

Q30 Has your quality of life improved, stayed the same, or become worse in the past three months?

- 4. BECOME WORSE
- 5. STAYED THE SAME
- 6. IMPROVED
- 7. DON'T KNOW/ NO RESPONSE
- 9. REFUSED

TRANS5 We have just a few more questions for statistical purposes only.

AGE First, what is your age?

AGE>

- 77. DK/NR
- 99. REFUSED

RACE Which of the following best describes your racial or ethnic background?

- 6. Asian or Pacific Islander
- 7. Black or African American
- 8. Latino or Hispanic
- 9. Caucasian or White
- 10. Other
- 7. DON'T KNOW
- 9. REFUSED

EDUC Which of the following best describes the amount of formal education you have received?

- 8. Less than 8th grade
- 9. Between 8th and 11th grade
- 10. High school education or GED
- 11. Some college, no degree
- 12. AA or trade school education
- 13. Four-year degree such as a BA or BS
- 14. Graduate or Professional degree
- 78. DON'T KNOW
- 99. REFUSED

TRANS6 We have just a few more questions.

COMM Do you have any other comments about your experiences with the Santa Ana WORK Center you would like to share or recommendations to improve their services?

- 3. YES, SPECIFY>
- 4. NO

FG Would you be willing to be contacted for an in-depth interview?

- 3. YES [GET STANDARD CONTACT INFO]
- 4. NO [END SURVEY]

CONCLUD That concludes our survey. Thank you very much for your participation.

**Appendix D
Detail of ROI Calculations**

The total benefits to the government come from two sources (excluding benefits derived from reduction in government support provided, which was omitted for the reasons described in section 2.2.3):

- Additional tax revenue from Santa Ana WORK Center clients
- Additional tax revenue from the community

The procedure for estimating each of the above benefits is described in detail below.

D.1 Additional Tax Revenue from Santa Ana WORK Center Clients

The additional tax revenue for the government from Santa Ana WORK Center clients is the change in taxes paid by the clients resulting from finding a new job. Furthermore, these additional taxes have to be considered for the entire period of the new job found during calendar year 2008.⁷

To calculate the total additional tax revenue from survey respondents, the tax revenue for each qualified⁸ respondent was first calculated. These individual tax revenues were then summed.

The steps involved in calculating additional tax revenue from a *single* Santa Ana WORK Center survey respondent are depicted below.

(a) Annualize the income information

Income information is collected as one of the following:

- Annual Income
- Monthly Income
- Hourly Wage with number of hours worked per week or per month

This data was annualized according to the table below.

**Table D-1
Procedure for Annualizing Income**

Reported Income	Annualized Income
Annual Income	Same
Monthly Income	(Monthly Income) x 12
Hourly Wage with Hours Per Week	(Hourly Wage) x (Hours Per Week) x 50.4 Weeks
Hourly Wage with Hours Per Month	(Hourly Wage) x (Hours Per Month) x 12 Months

⁷The benefits of finding a job during calendar year 2008 are accrued to the government over the entire period that that job is held.

⁸ See section 2.2.1 for criteria for qualifying cases.

(b) Calculate change in annual income

There are two types of clients that contribute to additional tax benefits:

- Those that *did not* have a job at the start of the calendar year (January 1, 2008) and found a job, and
- Those that *had* a job at the start of the calendar year (January 1, 2008) and found another job.

The information pertaining to this calculation collected from the respondents who indicated that they found a job during calendar year 2008 includes the following:

- Earnings just before hired
- Earnings when first hired at new job

For respondents that failed to provide information, the earnings were estimated from the sample of respondents who provided the information. The above earnings data was annualized as described in step (a) above, and the change in annual income for each qualified respondent was calculated as follows:

Earnings When First Hired – Earnings Just Before Hired

For clients who did not have a job as of January 1, 2008 ‘Earning Just Before Hired’ was zero.

(c) Calculate time at new job

To facilitate respondent reporting, this information was collected as one of the following:

- Days
- Weeks
- Months
- Years
- Still Have Job

These data were standardized by converting to years. Estimates from the sample were used for respondents that indicated invalid responses (such as time at new job is more than three years).

Assumption: For those respondents that indicated that they were still at the new job, it was assumed that their last day at the job was the day of the phone survey. This is a conservative assumption; it is very likely that these respondents would have continued to be employed at their new job beyond the date of the survey.

The time at the new job was calculated as follows:

**Table D-2
Procedure for Calculating Time at New Job**

Data Provided As	Time at New Job (In Years)
Days	Days / 365
Weeks	Weeks / 52
Months	Months / 12
Years	Same
Still Have Job	(Survey Date – Start Date at New Job) / 365

The information on start date at the new job in the above table was requested in the survey as month, day, and year. Many of the respondents that indicated that they found a job during calendar year 2008 did not provided one or more pieces of this information. In these cases, the midpoint of the quarter were used to estimate the start date of the job.

(d) Calculate cumulative additional income earned

The benefits of finding a job during calendar year 2008 are accrued to the government over the entire period that that job is held. The cumulative additional income taxed is calculated as:

$$(\text{Change in Annual Income}) \times (\text{Time at New Job})$$

Assumption: The underlying assumption here is that for those respondents who had a previous job and moved to a new one during calendar year 2008, had they not received the new job, they would have continued in their old job. This is a conservative assumption because not knowing how they long they would have continued in their old job this assumption gives the lowest value for cumulative income.

Note: The above formula for calculating cumulative additional does not use any discounting of tax revenue earned over multiple years. This is a reasonable assumption given that the average time at new job is about one year and two months.

(e) Calculate additional taxes paid

Additional taxes paid are calculated by applying the tax rates to the above-calculated cumulative additional income. Sales tax paid was calculated by first estimating the amount of income spent on taxable goods and services, and then applying the sales tax rate to this spending. Thus, the various taxes were calculated as follows:

**Table D-3
Procedure for Calculating Taxes**

Tax	Tax Paid
Payroll Tax	(Change in Annual Income) x (Payroll Tax Rate)
Federal Income Tax	(Change in Annual Income) x (Federal Income Tax Rate)
State Income Tax	(Change in Annual Income) x (State Income Tax Rate)
Sales Tax	(Change in Annual Income) x (Fraction Spent on Taxable Goods) x (Sale Tax Rate)

The values for various tax rates and parameters, applicable to Santa Ana WORK Center clients, in Table F-4 were taken from the Phase I and Phase II ROI study and are as follows:⁹

**Table D-4
Tax Rates and Taxable Spending – Respondents**

Parameter	Rate
Payroll Tax	15.3%
Federal Income Tax	7.4%
State Income Tax	1.4%
Sales Tax	7.75%
Fraction of Income Spent on Taxable Goods & Services	38.0%

D.2 Additional Tax Revenue from the Community

As in the case for Santa Ana WORK Center telephone survey respondents, for calculating the total additional tax revenue from the community, the additional tax revenue from the community because of additional income earned by each qualified respondent was first calculated. These individual tax revenues were then summed.

The steps involved in calculating additional tax revenue from the community due to a *single* respondent are given below.

(a) Annualize the income information

This calculation is the same as that described in step (a) in section F.1.

(b) Calculate change in annual income

This calculation is the same as that described in step (b) in section F.1.

(c) Calculate time at new job

This calculation is the same as that described in step (c) in section F.1.

(d) Calculate cumulative additional income earned

This calculation is the same as that described in step (d) in section F.1.

⁹ It is assumed that the tax rates and the fractional spending on taxable goods and services remain constant.

(e) Calculate cumulative additional income earned by the community

As discussed previously in sections 2.2.2 and 2.2.3, because clients spend their income within their communities, a change in income among clients leads to a change in income of the providers of the various taxable goods and services that the clients purchase. This change in income of the community then leads to a change in taxes paid by the community to the government, and is estimated using an income multiplier.¹⁰

The cumulative additional income earned by the community due to a single respondent is calculated as:

$$(\text{Income Multiplier} - 1) \times (\text{Cumulative Additional Income Earned by a Client})$$

(f) Calculate additional taxes paid by the community

The community pays the same four taxes that the clients pay, the only difference being that the income tax rates for the community are different. Therefore, the calculation procedure for these taxes is the same as that described in step (e) for additional tax revenue from clients. The values of the various tax rates and parameters for the community were taken from the Phase I and Phase II ROI study, and are given below:¹¹

**Table D-5
Tax Rates and Taxable Spending – Community**

Parameter	Rate
Payroll Tax	15.3%
Federal Income Tax	13.2%
State Income Tax	3.7%
Sales Tax	7.75%
Fraction of Income Spent on Taxable Goods & Services	38.0%

¹⁰ It is assumed that the income multiplier remains constant.

¹¹ It is assumed that the tax rates and the fractional spending on taxable goods and services remain constant.