

TECHNICAL ASSISTANCE REPORT  
FOR THE  
ACCESS TO RECOVERY GRANT PROGRAM

COMPILATION OF  
TECHNICAL ASSISTANCE REPORTS ON  
RATE SETTING PROCEDURES

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# **1. Introduction**

## 1. Introduction

During the summer of 2007, the Center for Substance Abuse Treatment in the Substance Abuse and Mental Health Services Administration, (SAMHSA/CSAT) tasked its Access to Recovery (ATR) technical assistance contract, the Performance Management Technical Assistance Coordinating Center (PM TACC), to develop a set of resource materials for incoming second-round ATR grantees. The PM TACC prime contractor, the American Institutes for Research (AIR), and their subcontractor, JBS International, Inc., brought to this product-development task the experiential knowledge rooted in service to CSAT and the ATR Round 1 grantees throughout all phases of the first-round grants-- from the pre-application roll-out of the Presidential initiative, to early implementation and sustained operation of the grant programs, to their eventual close-out. SAMHSA/CSAT's selected topics for the resource materials target key issues, barriers, challenges, and decision points that faced the first-round grantees during each of these phases. They are written from the PM TACC contract's experiences with the 15 grantees that broke new ground for the substance abuse field by demonstrating the feasibility of using a voucher model for providing publicly-funded treatment and recovery services.

Some of the newly developed resource materials modify, update, and consolidate technical assistance (TA) reports emanating from the Round 1 grantees' TA experiences. Other products provide syntheses of the Round 1 grantees' experiences related to various topics central to effective and efficient planning, implementation and management of an ATR grant. CSAT has requested that these reports be made available to Round 2 ATR grantees so that the new cohort may benefit from the experience and work accomplished by the initial ATR grant recipients. Below are lists of the available reports.

### SYNTHESES

- Access to Recovery Report: Lessons Learned from Round 1 Grantees' Implementation Experiences
- Administrative Management Models: Compilation of Approaches by Initial Access to Recovery Grantees
- Planning and Implementing a Voucher System for Substance Abuse Treatment and Recovery Support Services: *A Start-Up Guide*
- Setting Up a System for Client Follow-Up
- Recovery Support Services
- Case Management
- Summary and Analysis of Grantee Fraud, Waste, and Abuse Activities

### TA CONSOLIDATED REPORTS

- Basics of Forecasting and Managing Access to Recovery Program Expenditures
- Compilation of Technical Assistance Reports on Rate Setting Procedures
- Development of a Paper-based Backup Voucher System
- Financial Management Tools and Options for Managing Expenditures in a Voucher-Based System: Round 1 Grantee Experiences
- Motivational Interviewing: A Counseling Approach for Enhancing Client Engagement, Motivation, and Change
- Outreach to Faith-Based Organizations: Strategic Planning and Implementation

- Strategies for Marketing Access to Recovery to Faith-Based Organizations
- Targeted Populations: Technical Assistance Examples

## **About this TA Report**

This document, *Compilation of Technical Assistance Reports on Rate Setting Procedures*, consolidates reports from technical assistance requests made by Round 1 ATR grantees on the how to establish fee-for-service rates for the new recovery support services (RSS) supported by ATR. The grantees have been challenged to establish fee-for-service rates for the new RSS and many organizations that are funded through volunteerism, small grants, and contributions now have to be able to identify costs for providing the services.

To meet these challenges, grantees have asked for technical assistance (TA) in the following areas:

1. Setting consistent program rates for various recovery support services
2. Determining whether a bundled rate (one rate that includes many individual services) is more appropriate than rates for single service types
3. Providing guidance to help small organizations determine an appropriate rate needed to cover the cost of providing RSS.

The guidance in item 3 above was developed for recovery support providers, but it could also provide insight to grantees in identifying specific costs to be included in calculations for establishing rates the program will pay for specific services.

## **About the ATR Program**

ATR is a competitive discretionary grant program funded by SAMHSA that provides vouchers to clients for purchase of substance abuse clinical treatment and Recovery Support Services (RSS). ATR program goals include expanding capacity, supporting client choice, and increasing the array of faith-based and community-based providers for clinical treatment and recovery support services. Key among ATR's goals is providing clients with a choice among qualified providers of clinical treatment and RSS. Under the ATR program, treatment and RSS can be provided by both nonsectarian and faith-based organizations (FBOs).

## **Considerations for Payment Rates**

In addition to the tools described above, ATR grantees used a variety of existing sources to help determine the payment rates for RSS provided under the grant. In most cases, the processes for determining rates include current and historical data. For example, a service provided before ATR generally had an established rate that was acceptable under the grant. New rates had to be set in cases of new services or services provided by faith-based or nontraditional providers that prior to ATR were not reimbursable or did not have a historical cost basis.

In determining rates for new or previously nonreimbursable RSS, grantees found it was important to price services consistently for similar services across all agencies in the ATR grant

environment. This consistency prevents one agency from undercutting another agency on the basis of cost. For example, housing reimbursements should not compete with rates set by HUD; medical services should be delivered at a rate consistent with Medicaid rates, etc. It is important to set rates at a level that providers are familiar with either from previous experiences in delivering publicly funded services or because they had previously received that rate from other funding sources.

Several other rate-setting methodologies were used, but above all else, the rates should be defensible under public examination. Some grantees used rates set by other ATR grantees in similar economic environments to establish rates for comparable services. Other sources of helpful information are other programs already funding these types of services, such as State or local welfare programs. Where already established rates were not available, grantees used processes similar to those described in a CSAT ATR TA document titled *Compilation of Technical Assistance Reports on Rate Setting Procedures*.

Similarly, rate caps for services were often set to control costs. This is the case especially for services where there is a potential for abuse or excessive costs could occur. Most often, these services were considered “living expenses” that could be barriers to continuation in treatment and recovery. For example, if transportation is provided under ATR to assist the client in getting to and from treatment and job training services, a cap could be imposed on the number of trips authorized at a specific cost. Similarly, allowances for basic personal needs, such as toothpaste, shampoo, etc., can be set for a certain dollar amount, permitting the client to purchase identified items on a priority basis or in reasonable quantities.

Costs were controlled by establishing a time limit for the use of vouchers. Some grantees established expiration dates of 90 days for vouchers, and a few stretched the period to 180 days. This limit ensures that the client is utilizing the services in a timely manner and helps to keep the treatment process moving. Voucher expiration dates also help with the issue of obligated versus expended funds. Funds can be tied up excessively if an issued voucher is not used. Expiration dates on vouchers help the program reclaim unused funds and redirect them to other clients as needed.

Rates paid for individual services are highly dependent on how the particular service is defined and the qualifications established for provider staff, such as length of service, level of training or skill of the provider, and prevailing rates for the service in a particular community. At Appendix A is a list of RSS with rates from a sampling of first cohort ATR grantees. Keep in mind, however, that without the actual service parameters, these rates can serve merely as a guide.

## Appendix A: Sample rates from 2004 ATR Grantees

SERVICE	RANGE OF RATES
<b>Acupuncture Treatment</b>	\$15/15 minutes; \$8.94
<b>Case Management</b>	\$168/mo; \$30 to 45 per session; \$10 to 22.50/15 minutes
Care Coordination	\$40/hr; \$5/15 minutes
Case Supervision	\$52; \$15/15 minutes
Recovery Support Coordination	\$52; \$35/hr; \$5 – 15/15 minutes
<b>Child Care</b>	\$3.85 – 10/hour; \$1.75 – 2/hour; \$26.50 to 30/day per
After School Program	\$12/hour
<b>Drop In Center</b>	\$10/day
<b>Coaching</b>	
Recovery	\$20/hour
Needs Evaluation	\$35
Peer Coaching/Mentoring	\$20/hour; \$8.75/15 minutes
Residential Recovery Support	\$40/day
Peer-Based Individual (provided by	\$40/session
Peer-Based Individual (unlicensed)	\$35/session; \$8 to 8.75/15 minutes
Peer-Based Group (provided by Masters/no license	\$15/session
Peer-Based Group (Unlicensed)	\$12.50/session; \$4 to 6/15 minutes
Relapse Prevention/Skills – Individual	\$30/session
Relapse Prevention/Skills – Group	\$20/session; \$10/hour
Spiritual – Group	\$10/session; \$10 to 20.50/hour; \$2/15 minutes
Spiritual – Individual	\$20/hour; \$4/15 minutes; \$20 to 25/session
Employment	\$7.50/15 minutes
<b>Counseling</b>	
Individual	\$25/hour; \$22.50/15 minutes
Group	\$30 – 42/session
Pastoral Counseling	\$20 to 25/hour; \$10/15 minutes
Post-Traumatic	\$20/session
<b>Educational Services</b>	
Group	\$10 to 20/session; \$4/client
Individual	\$30 to 42/session
GED	\$125; \$15/15 minutes
<b>Employment</b>	
Physical Examination	\$75
Preparation	\$20 session; \$5/15 minutes
Vocational/Educational Services – Support Level 1	\$20 to 30/session
Vocational/Educational Services – Support Level 2 –	\$20/session
Coaching	\$30 to 40/session; \$10 – 47.79/hour; \$5/client; \$7.50/15
Community Employment Program	\$45/day
Work Adjustment Training	\$14/hour
Education/Academic Skills Development	\$35/hour; \$8/15 minutes
<b>Housing</b>	

<b>SERVICE</b>	<b>RANGE OF RATES</b>
Safe and Sober Adult Housing	\$11.50/day; HUD standard rate
Emergency/Temporary Housing	\$20 to 55/day; \$1,000/month
Recovery Home Daily	\$45.29
Drug-Free or Transitional Housing	\$125/week
Extended Residential Support	\$20/day
Transitional housing (adults and adolescents)	\$20 to 71/day; \$350/month
Recovery House	\$2,055/month
Recovery Living Center	\$487/month
Assistance	\$25/hour
Room and Board	\$487/month
<b>Life Skills</b>	
Training	\$10 to 25/hour; \$3/15 minutes; \$31/15
Parenting Classes	\$11.56 to 40/hour; \$20/session
Character Development	\$20/session
Anger Management	\$20/session
Assertiveness Training	\$20/session
Conflict Resolution	\$20/session
Effective Decision Making	\$20/session
Home Economics	\$20/session
Recreational Therapy	\$20/session
Translation Services	\$20/session; \$35/hour
Mentoring	\$25/session; \$33/hour; \$4/15 minutes
Nutritional Counseling	\$50/hour; \$10/15 minutes; \$30/20 (individual/group)
Domestic Violence Support	\$30/hour; \$30/20 (individual/group)
House Management Services	\$23/hour
HIV/AIDS Educational	\$8.57/15 minutes
Relapse Prevention	\$17.50/15 minutes
<b>Marriage and Family</b>	
Individual	\$25
Group	\$10
Couples	\$30/hour; \$20/session
Family	\$20/session; \$3 to 6.25/15 minutes; \$30/20
Parenting	\$20/session
Marriage and Family	\$22.50/15 minutes
<b>Spiritual Life Skills</b>	
Individual (provided by Masters/no license)	\$40/session
Individual (unlicensed)	\$30 to 35/session; \$24 to 95/hour; \$10-12/15 minutes
Group (provided by Masters/no license)	\$15/session; \$100/hour
Group (unlicensed)	\$12.50 to 20/session; \$10 to 45/hour
Family	\$36/hour; \$8.75/15 minutes
<b>Traditional Healing Services</b>	
Individual	\$10/15 minutes
Group	\$8/15 minutes

<b>SERVICE</b>	<b>RANGE OF RATES</b>
<b>Transportation</b>	
Mileage	\$.34 to 2.60/mile; \$30 to 50/round trip
Bus Tokens	\$1.10/\$1.75; \$25/month
Client/Family	\$3 to 25/one way

## **2. Techniques for Setting Voucher Service Rates at the Grantee Level**

## **2. Techniques for Setting Voucher Service Rates at the Grantee Level**

### **A. Scope and Purpose**

Grantees will utilize an electronic voucher system to manage its Access to Recovery (ATR) grant, which will enable substance abusers to obtain various “wraparound” or recovery support services (RSS) while being treated for substance abuse problems. The technical assistance (TA) consultant was tasked with helping the grantee establish a fair set of initial prices to pay for these services. More precisely, the TA consultant was asked to:

- Work with the grantee to define or specify the content/characteristics of the categories/subcategories of RSS for which prices/payment rates would be developed
- Work with the grantee to develop and document a rate-setting method for multiple subcategories of the following RSS for which the grantee has developed preliminary rates: (1) educational services, (2) employment services, (3) education sessions, (4) mentoring/coaching, (5) transportation, and (6) childcare
- Assess the reasonableness of the corresponding payment rates that the grantee proposes
- Contact six State ATR grantees and solicit available information about the methods, procedures, and rates that they have established for comparable RSS
- Make appropriate recommendations

### **B. Methods and Procedures**

The TA consultant worked with the grantee to identify State/local agencies and proprietary providers in the ATR grantee coverage area that might offer RSS that the grantee planned to cover under its ATR grant. The TA consultant also contacted representatives of six states to solicit specific information about their ATR RSS. All contacts were by telephone and e-mail.

After the project began, the grantee and the TA consultant concluded that the list of “priced” RSS would be redefined to be:

- Individual instruction and tutoring services
- Group instruction and tutoring services
- Mentoring services

The first two services (individual and group instruction and tutoring) were recast as educational services and employment services.

Educational services encompassed such topics as literacy, academic subject areas, life skills development, parenting responsibilities, family reunification, health and hygiene, financial

literacy, violence prevention, and understanding nontraditional families. Additionally, educational enrichment activities such as sports, leadership development, recreational activities, skill building in the visual and performing arts could be areas of instruction and/or tutoring.

Employment services included such tasks as skills assessment and development, job coaching, career exploration, résumé writing, interview skills, marketing skills, labor market information, job search assistance, job retention tips, and assistance in bonding.

### **C. Education—Instruction and Tutoring Services**

Several community-based vendors of educational services were contacted to learn about their programs and their prevailing rates for both individual tutoring and group education in a more or less classroomlike setting.

The contacted vendors generally said that tutoring services could be furnished in either a group/classroom setting or on an individual basis. They also seemed comfortable covering a wide range of topics from academic subjects to homework/study skills training, to the arts, to leadership/ethics training. Additionally, nearly all the vendors felt comfortable with, and had had experience with, providing instruction in employment-related areas that included résumé writing, interview skills, and job searching skill. Most of the vendors could provide space in which to furnish educational services, while others only arranged for tutors to make home visits to provide one-on-one tutoring services.

The key determinant in pricing educational services (and employment services) was found to be whether the services were rendered on an individual or group basis. Within group instruction, a pricing distinction was ordinarily made for group size. Therefore, the prices/payment rates discussed below are for:

- Individual instruction and tutoring
- Small group instruction and tutoring
- Large group instruction and tutoring

Significantly, prices for instructional services were reported as generally not varied with the subject matter, except in the cases of higher level mathematics and science. Partly because of the shortage of instructors skilled in mathematics above algebra, and in physics and chemistry, these subjects usually commanded a higher payment than did other instruction services. Similarly, the specialty area of instruction to prepare for taking standardized tests (e.g., SAT) generally demands a higher fee.

**Staff Qualifications**—Existing proprietary networks of educational and tutoring services in the grantee's location had a range of minimum qualifications for the instructors they employed. Some companies required that their instructors be fully certified teachers under the State's teacher certification program, while other companies only required their instructors to hold a 4-year degree appropriate to the subject matter being taught. The TA consultant wished to emphasize the need for the grantee to establish a minimum educational and/or certification

requirement for providing instruction and/or tutoring services under its ATR grant program. The recommended prices/rates below assume a minimum education level of a 4-year college degree.

**Quoted Rates**—Prices quoted for individual tutoring sessions spanned approximately \$40 to \$50 an hour. No significant cost variance was observed across the geographical area being served. Some vendors cited a cost variance based on subject matter, with advanced science and mathematics above intermediate algebra costing slightly more than other subjects. This presumably was based on the difficulty in recruiting individuals with the skills necessary to provide this kind of tutoring.

Prices quoted for group/classroom education were a bit more varied. Some providers stated that they could offer a rate of approximately \$90 for a one-hour group class of approximately 5 to 10 students. Other vendors stated that in small groups (2 to 9 students) they might charge \$50 for the first student and then a supplemental charge of \$10 for each additional student, while in larger groups (10 to 30 students) they might charge \$10 per student.

**Recommended Rates**—For individual and group instruction, the rates recommended below assume that a billable unit/session of instruction will be between 60 and 90 minutes. Small group instruction will consist of no fewer than 2 students and no more than 9 students. Large group instruction would consist of no fewer than 10 students and no more than 30 students.

- Individual instruction and tutoring: A price of \$42 per session is recommended.
- Small group instruction and tutoring: A price of \$10 per student or \$60 per session, whichever is higher, is recommended.
- Large group instruction: A price of \$10 per student for each student in the group is recommended.
- For instruction in mathematics above the level of algebra, in physics and chemistry, and in preparation for standardized testing, a 10 percent surcharge to the above-mentioned fees is recommended.

The recommended prices are consistent with the goals of increasing the number and variety of providers that render services to eligible persons, and augmenting client choice. Based on conversations with existing service providers, these rates do not appear to be excessive or overly generous.

The grantee should note that the recommended prices are at the lower end of the range that vendors charge today. After the grantee begins to enroll providers, it may therefore conclude that an upward adjustment is necessary to meet needs.

## **D. Mentoring Services**

Mentoring services differ significantly from instruction and tutoring in various ways. Chief among them are (1) the longer lasting nature of mentoring relationships and (2) the fact that mentors are generally not paid for their services. Mentors under the ATR program are expected

to have frequent face-to-face, one-on-one contact with their mentees. The mentors must provide council, support, advocacy, positive reinforcement, and a constructive example to the mentees.

Several individuals in organizations having extensive experience in providing mentoring services were contacted. These individuals operated large and varied mentoring programs. One interviewee ran the mentoring program for 8 years until budget cuts caused the program to be massively downsized. Reportedly for that 8-year period, the mentoring program was the largest in the country.

The contacted individuals maintained that mentoring should not be paid on an hourly basis. Instead, they insisted that, when paid, payment should be based on a “match” between the mentor and the mentee. Operating a mentor program requires extensive front-end costs to (1) recruit and screen potential mentors and mentees, (2) train mentors and mentees regarding what is expected of them, and (3) perform background checks on prospective mentors. Background checks are particularly important when mentees are minors.

After a “match” is made, the sponsoring organization must perform significant ongoing activities in order to support and retain the mentor, and monitor and evaluate the relationship between the mentor and mentee. Generally speaking, after a match is made, the relationship is expected to exist for approximately a year and to consist of regular mentoring sessions (usually at least weekly) for that period of time. It should be noted that mentors generally are not paid a fee for their service, but some organizations did say that they reimbursed mentors for certain costs they incurred (i.e., tickets to sporting events or theatre productions they attended with mentees).

**Staff Qualifications**—It is not technically appropriate to discuss the minimum qualifications of a mentor in terms of educational or certification requirements. The key reason is that a successful mentoring experience depends largely on the appropriateness of the matching of a mentor with a mentee. Establishment of a potentially efficacious match reportedly requires a significant amount of prescreening and training for both the mentor and the mentee, not to mention thorough background checks and ongoing monitoring. Thus, the minimum qualifications need to apply to the organization that makes the match and not to the individual mentor.

**Quoted Rates**—The consensus among these vendors regarding a fair price for a match is approximately \$1,500.

**Recommended Rates**—According to the deputy director of the grantee’s governmental mentoring partnership, the current best-practice standards for mentoring organizations are contained in “Elements of Effective Practice” (a publication developed by the National Mentoring Partnership and United Way of America). The grantee should require organizations wishing to provide mentoring services under the ATR grant to comply with the standards in the latest version of this document, which covers a wide range of best practices, too extensive to restate here. A key expectation worth noting, however, is that a mentoring relationship is likely to involve a minimum of 4 hours per month for at least 1 year. For academic settings, the mentoring might be reduced to the length of the academic year.

For organizations complying with best-practice standards, a price of \$1,500 per successful match is recommended. The grantee could pay this amount in increments (e.g., half of the payment at

the time of the match, another quarter payment if the mentoring relationship lasts 3 months, and a final quarter payment when the mentoring relationship reaches the 6-month point). This will provide additional incentive for the sponsoring agency to work toward a successful mentoring relationship.

## **E. Employment Services**

States often have employment services, and checking for a Web site listing services and locations often will lead to job service centers offering free services such as how to:

- Prepare a job application
- Create a résumé
- Explore career options
- Improve interview skills

While advanced training in specific professions may be available to some individuals after a lengthy application process, and subject to the availability of funds, the services listed above are regularly provided free of charge to anyone willing to sign up for the classes offered at the job service locations. Some ATR clients may therefore be able to obtain employment services at no cost to the ATR program.

The TA consultant recommends that the grantee work to ensure optimal use of such free educational services in order to maximize the benefit of limited ATR funding.

## **F. State Survey**

- The TA consultant was provided with the names and e-mail addresses on ATR contacts in six locations. At the time the telephone calls were made, these grantees were still planning to define and implement their RSS. However, this information may now be available on the Web sites of the various ATR grantees in Round 1 of the funding.

## **G. Postimplementation Surveys**

The grantees need to closely monitor the units of RSS actually provided by the various vendors. The TA consultant strongly recommends that the grantee periodically survey its vendors regarding the adequacy of ATR prices. A price that may be adequate in 2007 may not be adequate in 2008, perhaps not even if it is updated for inflation.

Similarly, consumer satisfaction surveys could be conducted periodically. Providers that fail to meet a standard of customer satisfaction might be offered TA. Repeated failure to achieve a standard of customer satisfaction could result in a vendor's no longer being certified as an ATR provider.

# **3. Analyzing the Appropriateness of Using Bundled Service Rates**

### 3. Analyzing the Appropriateness of Using Bundled Service Rates

#### A. Introduction

##### 1. Overview

The grantee is interested in constructing a bundled rate for recovery support services (RSS) provided by faith-based organizations (FBOs) under the Access to Recovery (ATR) initiative. Currently, proposed reimbursement rates are offered on a per-service unit basis in six different categories: (1) educational services, (2) employment services, (3) mentoring, (4) spiritual coaching, (5) childcare, and (6) transportation.

##### *Recovery Support Services Categories*

**Educational services** include academic tutoring, homework assistance, life-skills development, parenting responsibilities, family reunification, financial literacy, health promotion, and violence prevention. Also included are educational enrichment activities, such as sports, leadership development, and recreational activities; as well as skill building in visual or performing arts and music. Educational services are reimbursable at \$42 per individual session or \$10 per individual in a group session. Both individual and group sessions are 60 to 90 minutes in duration.

**Employment services** include skills assessment and development, job coaching, career exploration, résumé writing, interview skills, marketing skills, labor market information, job search assistance, job application assistance, job retention tips, and assistance in bonding. Employment services are reimbursable at \$42 per individual session or \$10 per individual in a group session. Both individual and group sessions are 60 to 90 minutes in duration.

**Mentoring** involves a face-to-face, one-on-one contact between the client and an adult, who is matched with the client by a sponsoring mentoring organization that is an eligible provider. In this particular situation, mentoring is reimbursable at \$25 per 60 to 90 minute contact (the grantee decided to base the payment for mentoring services on a fee per contact basis instead of a mentor-mentee match process).

**Spiritual coaching** involves helping an individual or group of individuals develop spiritually to initiate or sustain recovery. Services include establishing or reestablishing a relationship with a higher power, acquiring skills needed to cope with life-changing events, adopting positive values or principles, identifying a sense of purpose and mission for one's life, and achieving serenity and peace of mind, as well as responsible decision-making, social engagement, and family responsibility. Persons providing spiritual coaching must be recognized by the agency's governing authority as being trained and qualified to provide this service. Spiritual coaching is reimbursable at \$25 per individual session of 60 minutes or \$10 per individual in a group session of 60 to 90 minutes.

**Childcare** is provided by a licensed (or license-waived) childcare professional in compliance with State law regarding childcare facilities. Childcare may be provided for the participant's

child or children while the client is engaged in ATR services, and is reimbursable at \$10 per hour.

**Transportation** of clients receiving ATR services is that provided by an authorized provider in vehicles owned by the agency for the purpose of transporting clients and only for the purpose of participating in ATR services. Transportation is reimbursable only when the following criteria are met: (1) there is no other payment source for this service, (2) the client has no reliable transportation alternative, and (3) no public transportation is available, or use of public transportation would create a hardship for the client. Transportation is reimbursable at the State-approved mileage rate (\$.34 per mile) for a maximum of 500 miles per client.

## **2. Methodology**

### ***Type of Assistance Provided***

To obtain data on the type, number, and duration of RSS offered by FBOs in the grantee's service area, a brief, 26-item survey was constructed. To minimize respondent burden and maximize the number of organizations contacted, a Microsoft Excel format was used, and the questionnaire was e-mailed as an attachment to a total of 79 e-mail recipients. (Note: The list provided to the consultant contained 8 expired addresses, as well as multiple contacts for the same FBO.) Several followup e-mails were sent, telephone calls made, and voice-mail messages left to encourage survey participation. However, due to time constraints, it was decided to proceed with data analysis after a total of 5 completed surveys had been received. In addition to general program information, the questionnaire asked the respondent to record the number of each type of RSS (as defined by the proposed reimbursement rate structure) his or her organization delivered to each client during a typical week.

### ***Data Analysis***

Since the number of each type of RSS reported by the surveyed programs differed (as they would in the total population of programs), it was necessary to model this variation, using a Monte Carlo simulation. Using a Microsoft Excel plug-in software application, @Risk (see [www.palisade.com](http://www.palisade.com)), the uncertainty in the expected number of each type of RSS was expressly modeled according to the statistical distribution observed in the sample data. Next, a Monte Carlo simulation of 10,000 iterations was conducted. This process involved the simultaneous random selection of all model inputs (i.e., the number of each type of RSS) according to its assumed distribution. As a result, the calculated expected total reimbursement amount for a typical week (or day) was derived as a distribution itself, which allowed for statistical inference regarding the expected number of organizations that would fall under different areas of the curve. That is, the analysis provided the results necessary to determine how many FBOs would fare just as well under the bundled rate reimbursement regime as under the per-service unit reimbursement rate structure.

### ***Study Limitations***

Several study limitations should be considered along with the results. Most important, the sample size was very small ( $n = 5$ ), and it is quite possible that the respondent FBOs do not represent the true population of FBOs that would offer RSS and consequently be affected by the recommended bundled reimbursement rate. In addition, this study assumes that the proposed per-service rates

are adequately set. Preferably, these service-unit reimbursement rates, as well as the recommended bundled rate, would reflect the economic or opportunity cost of FBOs delivering RSS. Finally, since these data are self-reported, appropriate caution should be used in interpreting and relying on them for analysis and inference. Respondents who suspected that reimbursement-rate setting was the purpose of the survey might have inflated their responses.

## **B. Description of Work Performed**

### **1. Data Collection**

The interview survey data were cleaned and aggregated into a single spreadsheet for analysis. Assuming the sample data reflect the distribution of the number of types of RSS delivered by FBOs in the grantee's area, the expected total reimbursement amount (in dollars) can be calculated as the sum of the products of the number of each type of service times its respective proposed unit reimbursement rate. From the survey data, this expected total reimbursement is derived for a typical week of RSS. Therefore, this amount can be used as an alternative reimbursement rate, or a "bundled" weekly rate (or daily rate, if divided by 7). Under this weekly (or daily) rate, the typical FBO delivering RSS can expect to receive the same total reimbursement amount as it would have received under a per-service-unit regime.

### **2. Recovery Support Services Utilization**

#### ***Educational Services***

The number of reported individual educational sessions ranged from 0 to 4 per week, with a mean of 2.6. The duration of these individual sessions ranged from 20 to 90 minutes, with a mean of 52.5 minutes. The number of reported group educational sessions ranged from 1 to 5 per week, with a mean of 1.8. The duration of these group sessions ranged from 20 to 120 minutes, with a mean of 79 minutes.

#### ***Employment Services***

The number of reported individual employment sessions ranged from 0 to 5 per week, with a mean of 2.2. The duration of these individual sessions ranged from 20 to 60 minutes, with a mean of 45 minutes. The number of reported group employment sessions ranged from 0 to 2 per week, with a mean of 0.6. The duration of these group sessions ranged from 60 to 105 minutes, with a mean of 80 minutes.

#### ***Spiritual Coaching***

The number of reported individual spiritual coaching sessions ranged from 1 to 5 per week, with a mean of 3.1. The duration of these individual sessions ranged from 20 to 60 minutes, with a mean of 50 minutes. The number of reported group spiritual coaching sessions ranged from 0 to 10 per week, with a mean of 4.1. The duration of these group sessions ranged from 45 to 90 minutes, with a mean of 60 minutes.

### ***Mentoring***

The number of reported individual mentoring sessions ranged from 0 to 2 per week, with a mean of 0.8. The duration of these individual sessions ranged from 45 to 90 minutes, with a mean of 65 minutes.

### ***Childcare***

The number of reported hours of childcare ranged from 0 to 20 per week, with a mean of 4.2 hours.

### ***Transportation***

The number of reported miles of transportation ranged from 0 to 500 per week, with a mean of 105.5 miles.

### ***Census and Length of Stay***

The number of reported clients receiving RSS at any given time ranged from 2 to 25, with a mean of 15 clients. These clients received RSS from the FBOs for between 24 and 75 weeks, with a mean of 43 weeks.

## **C. Recommendations**

After multiplying the distribution of the expected number of each type of RSS by its unit-reimbursement rate, these dollar amounts were summed to derive the expected weekly reimbursement amount. This figure was divided by 7 to derive the expected daily reimbursement rate. Two separate calculations were made. The first did not take into account the reported duration of the services provided, while the second calculation weighted the service by its reported duration in minutes and subsequently imposed the minimum reimbursable duration for each service, as currently defined by the ATR initiative. As a result, using the time-weighted calculation, the total daily reimbursable amount of the typical FBO for RSS had a median of \$45.71, with a 5th percentile of \$16.24 and a 95th percentile of \$85.56.

The recommended bundled reimbursement rate is **\$45 per day** (or **\$315 per week**). According to the analysis, application of this rate would provide the “average” FBO with a dollar value equivalent to what it would receive if reimbursed on a per-service basis. Stated differently, if this rate were used, 50 percent of FBOs would fare worse under this regime and 50 percent of FBOs would be better off than if compensated on a per-service basis. It is, of course, worth noting that if implemented, this daily reimbursement rate would quickly exhaust the \$600 cap in total vouchers allowed to a single client. In fact, this rate would allow reimbursement for only 2 continuous weeks, which is well below the 30-week median length of stay. Budget constraints will likely dictate whether it is possible to raise the cap, to allow for a greater duration of delivery of RSS, or whether a lower daily bundled rate will be required.

## Appendix B. Questionnaire for Faith-Based Organizations

<b>RECOVERY SUPPORT SERVICES</b>	
<b>Center for Substance Abuse Treatment (CSAT) Technical Assistance Questionnaire for Faith-Based Organizations</b>	
Respondent Name and Title:	
Program Name:	
Street Address:	
City:	
State:	
ZIP:	
Telephone:	
E-mail:	
<b>Please provide the requested information below regarding the type, number, and duration of RECOVERY SUPPORT SERVICES provided by your organization</b>	
<b>EDUCATIONAL SERVICES</b>	
Educational services include academic tutoring, homework assistance, life skills development, parenting responsibilities, family reunification, financial literacy, health promotion, and violence prevention. Also included are educational enrichment activities, such as sports, leadership development, recreational activities; skill building in visual or performing arts, and music. Staff providing educational services must have at least a 4-year college degree. <sup>1</sup>	
How many EDUCATIONAL SERVICES sessions does the typical participant receive per WEEK:	
Number of individual sessions?	
Number of group sessions?	
How many minutes is an individual session?	
How many minutes is a group session?	
<b>EMPLOYMENT SERVICES</b>	
Employment services include skills assessment and development, job coaching, career exploration, résumé writing, interview skills, marketing skills, labor market information, job search assistance, job application assistance, job retention tips, and assistance in bonding. Staff providing employment instruction must have at least a 4-year college degree. <sup>2</sup>	
How many EMPLOYMENT SERVICES sessions does the typical participant receive per WEEK:	
Number of individual sessions?	
Number of group sessions?	
How many minutes is an individual session?	
How many minutes is a group session?	

<sup>1</sup> Grantee does not require staff providing educational services to complete a 4-year degree.

<sup>2</sup> The grantee does not require staff providing employment services to complete a 4-year degree.

<b>SPIRITUAL COACHING</b>	
<p>Spiritual coaching is helping an individual or group of individuals to develop spiritually to initiate or sustain recovery. Services include establishing or reestablishing a relationship with a higher power, acquiring skills needed to cope with life-changing incidents, adopting positive values or principles, identifying a sense of purpose and mission for one's life, and achieving serenity and peace of mind as well as responsible decisionmaking, social engagement, and family responsibility. Persons providing spiritual coaching must be recognized by the agency's governing authority as being trained and qualified to provide this service.</p>	
<p>How many SPIRITUAL COACHING sessions does the typical participant receive per WEEK:</p>	
Number of individual sessions?	
Number of group sessions?	
How many minutes is an individual session?	
How many minutes is a group session?	
<b>MENTORING</b>	
<p>Mentoring is a face-to-face, one-on-one contact between the client and an adult who is matched with the client by a sponsoring mentoring organization that is an eligible ATR provider.</p>	
<p>How many MENTORING sessions does the typical participant receive per WEEK:</p>	
Number of individual sessions?	
How many minutes is an individual session?	
<b>CHILDCARE</b>	
<p>Licensed (or license-waived) childcare, in compliance with State law regarding childcare facilities. Childcare may be provided for the client's child(ren) while the client is participating in ATR services.</p>	
<p>How many HOURS of CHILDCARE does the typical participant receive per WEEK:</p>	
Number of hours?	
<b>TRANSPORTATION</b>	
<p>Transportation of clients receiving ATR services must be provided by an authorized provider in vehicles owned by the agency for the purpose of transporting clients and only for the purpose of access to ATR services when the client has no reliable transportation alternative, no public transportation is available, or the use of public transportation would create a hardship on the client, and there is no other payment source for transportation.</p>	
<p>How many MILES of TRANSPORTATION does the typical participant receive per WEEK:</p>	
Number of miles?	

<b>PARTICIPANT CENSUS AND LENGTH-OF-STAY</b>	
At any given time, how many participants are receiving recovery support services from your organization?	
Number of participants?	
How many WEEKS does the typical participant receive recovery support services from your organization?	
Number of weeks?	
Thank you for your participation! Please save and forward this file to:	
<b>XXXX@xxx.com</b>	

## Appendix C. Aggregate Data

RECOVERY SUPPORT SERVICES	SURVEY RESPONSE					
	#1	#2	#3	#4	#5	Distribution
<b>EDUCATIONAL SERVICES</b>						
Number of individual sessions?	2	0	3	4	4.5	2.7
Number of group sessions?	1	5	1	1	1.5	1.9
How many minutes is an individual session?	90	0	20	55	45	42
How many minutes is a group session?	90	120	20	75	90	79
<b>EMPLOYMENT SERVICES</b>						
Number of individual sessions?	0	5	1	3	2	2.2
Number of group sessions?	0	1	0	2	0	0.6
How many minutes is an individual session?	0	45	20	55	60	36
How many minutes is a group session?	0	105	0	75	60	48
<b>SPIRITUAL COACHING</b>						
Number of individual sessions?	1	5	3	1.5	5	3.1
Number of group sessions?	7.5	10	2	1	0	4.1
How many minutes is an individual session?	60	60	20	50	60	50
How many minutes is a group session?	60	45	45	90	60	60
<b>MENTORING</b>						
Number of individual sessions?	0	1	1	0	2	0.8
How many minutes is an individual session?	0	90	60	0	45	39
<b>CHILDCARE</b>						
Number of hours?	0	20	0	1	0	4.2
<b>TRANSPORTATION</b>						
Number of miles?	27.5	0	0	500	0	105.5
<b>CENSUS &amp; LENGTH OF STAY</b>						
Number of participants?	2	8	25		25	12
Number of weeks?	24	75	30			25.8

PER-SERVICE REIMBURSEMENT RATES	TOTAL REIMBURSED AMOUNT	PER-SERVICE REIMBURSEMENT RATES	TOTAL REIMBURSED AMOUNT—ADJUSTED FOR SESSION DURATION
\$42.00	\$113.40	\$42.00	\$79.38
\$10.00	\$19.00	\$10.00	\$19.00
\$42.00	\$92.40	\$42.00	\$55.44
\$10.00	\$6.00	\$10.00	\$4.80
\$25.00	\$77.50	\$25.00	\$64.58
\$10.00	\$41.00	\$10.00	\$41.00
\$25.00	\$20.00	\$25.00	\$13.00
\$10.00	\$42.00	\$10.00	\$42.00
\$0.34	\$35.87	\$0.34	\$35.87
	\$447.17	per week	\$355.07
	\$63.88	per day	\$50.72
		<b>Daily Reimbursement Rate</b>	
	\$29.12	5th Percentile	\$16.24
	\$62.71	Median	\$45.71
	\$102.29	95th Percentile	\$85.56

## Appendix D. Simulation Summary: Quick Report

### Simulation Summary

Summary Information	
Workbook Name	ATR RSS TA— File Name v3.xls
Number of Simulations	1
Number of Iterations	10,000
Number of Inputs	26
Number of Outputs	2
Sampling Type	Latin Hypercube
Simulation Start Time	3/15/2006 8:31
Simulation Stop Time	3/15/2006 8:32
Simulation Duration	00:00:49
Random Seed	1

Output		Statistics						
Name	Cell	Minimum	Mean	Maximum	x1	p1	x2	p2
Daily reimbursement	I28	\$5.00	\$63.88	\$147.14	\$29.12	5%	\$102.29	95%
Daily reimbursement—time scaled	K28	\$2.26	\$47.72	\$136.09	\$16.24	5%	\$85.56	95%

Input		Statistics						
Name	Cell	Minimum	Mean	Maximum	x1	p1	x2	p2
Number of individual sessions? / #5	F3	4	4.5	5	4	5%	5	95%
Number of individual sessions? / Distribution	G3	0	2.7004	5	0	5%	5	95%
Number of group sessions? / #5	F4	1	1.5	2	1	5%	2	95%
Number of group sessions? / Distribution	G4	1	1.9	5	1	5%	5	95%
How many minutes is an individual session? / Distribution	G5	0	42	90	0	5%	90	95%
How many minutes is a group session? / #4	E6	60.00193787	75.00000265	89.99961853	61.49726868	5%	88.49981689	95%
How many minutes is a group session? / Distribution	G6	20	79.02182885	120	20	5%	120	95%
Number of individual sessions? / Distribution	G8	0	2.2	5	0	5%	5	95%
Number of group sessions? / Distribution	G9	0	0.6	2	0	5%	2	95%
How many minutes is an individual session? / #4	E10	50.00049591	55.00000101	59.99954987	50.49983978	5%	59.49934387	95%
How many minutes is an individual session? / Distribution	G10	0	35.9828261	60	0	5%	60	95%

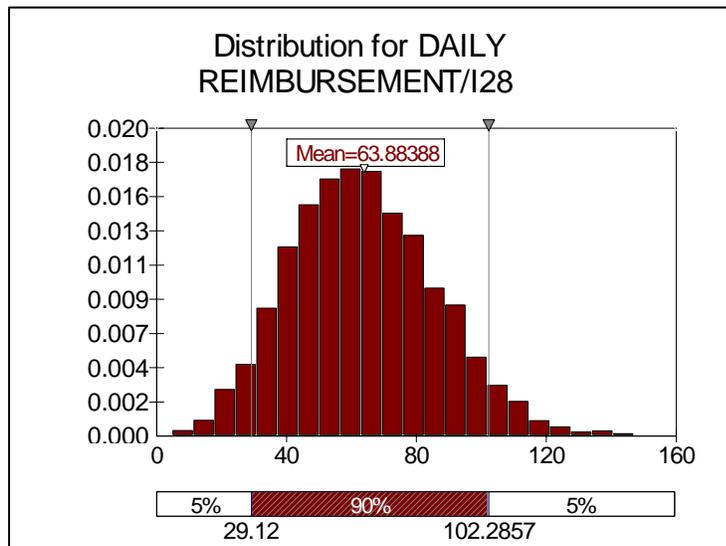
*Compilation of Technical Assistance Reports on Rate Setting Procedures*

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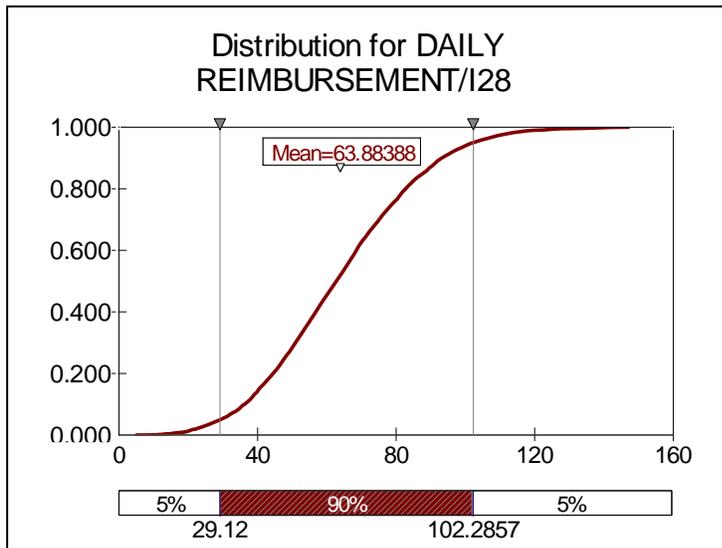
Input		Statistics						
Name	Cell	Minimum	Mean	Maximum	x1	p1	x2	p2
How many minutes is a group session? / #2	C11	90.00084686	104.9999768	119.9981995	91.49717712	5%	118.4972458	95%
How many minutes is a group session? / #4	E11	60.00068283	75.00000464	89.99777222	61.4998703	5%	88.49782562	95%
How many minutes is a group session? / Distribution	G11	0	48.01989314	119.9942856	0	5%	112.4681015	95%
Number of individual sessions? / Distribution	G13	1	3.1	5	1	5%	5	95%
Number of group sessions? / Distribution	G14	0	4.1	10	0	5%	10	95%
How many minutes is an individual session? / Distribution	G15	20	50	60	20	5%	60	95%
How many minutes is a group session? / #4	E16	60.00373459	90.00002945	119.9955597	62.99464417	5%	116.9994965	95%
How many minutes is a group session? / Distribution	G16	45	60.06152679	119.9585876	45	5%	105.621727	95%
Number of individual sessions? / Distribution	G18	0	0.8	2	0	5%	2	95%
How many minutes is an individual session? / Distribution	G19	0	39	90	0	5%	90	95%
Number of hours? / Distribution	G21	0	4.2	20	0	5%	20	95%
Number of miles? / #1	B23	25.00047684	27.50000039	29.99994278	25.24982834	5%	29.74960899	95%
Number of miles? / Distribution	G23	0	105.5010549	500	0	5%	500	95%
Number of participants? / Distribution	G25	0	12	25	0	5%	25	95%
Number of weeks? / Distribution	G26	0	25.8	75	0	5%	75	95%

## Appendix E. Simulation Results for Daily Rate 1

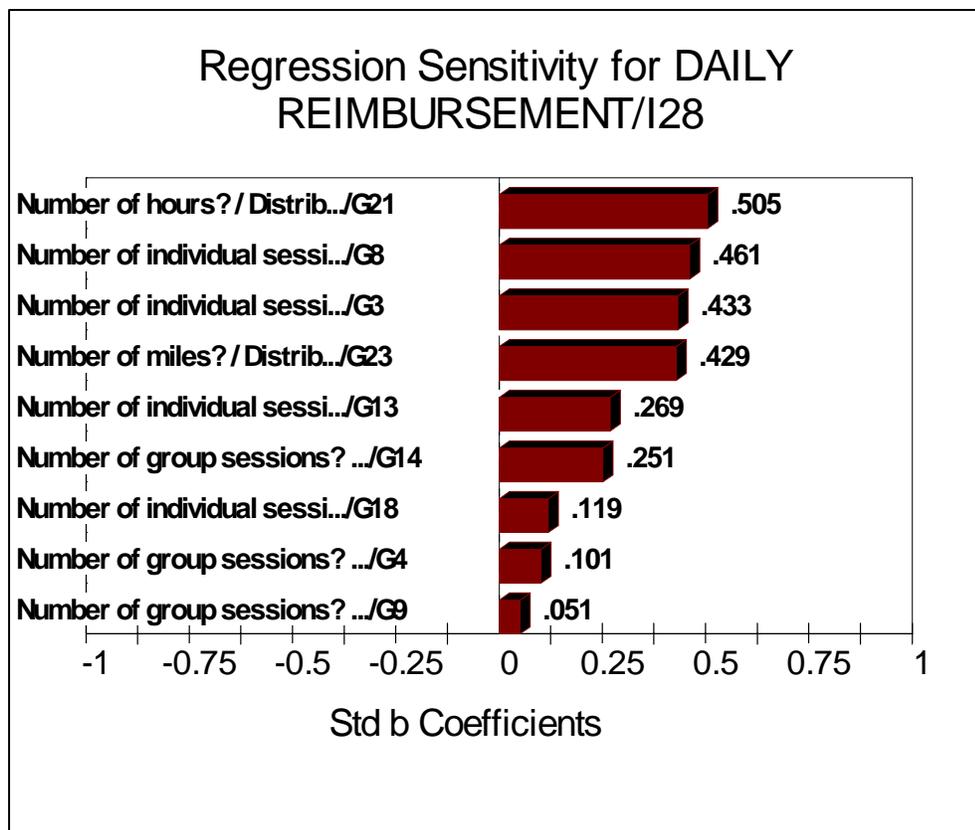
### Simulation Results for Daily Reimbursement/I28



Summary Information	
Workbook Name	ATR RSS TA— File Name v3.xls
Number of Simulations	1
Number of Iterations	10,000
Number of Inputs	26
Number of Outputs	2
Sampling Type	Latin Hypercube
Simulation Start Time	3/15/2006 8:31
Simulation Stop Time	3/15/2006 8:32
Simulation Duration	00:00:49
Random Seed	1



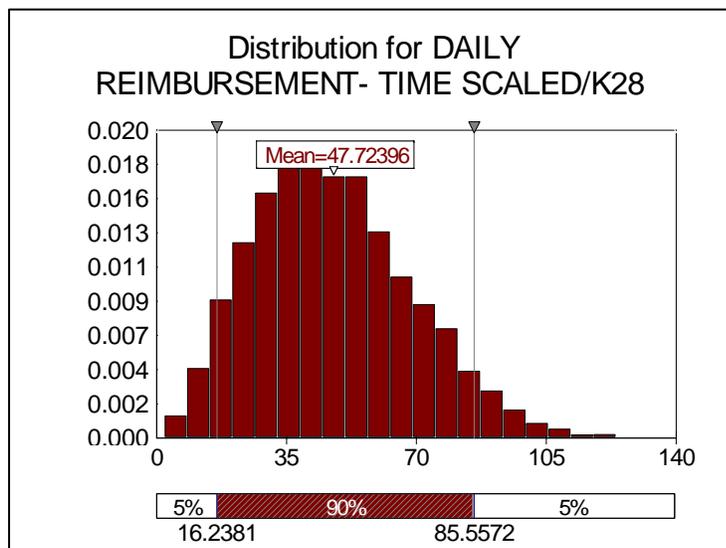
Summary Statistics			
Statistic	Value	%tile	Value
Minimum	\$5.00	5%	\$29.12
Maximum	\$147.14	10%	\$36.24
Mean	\$63.88	15%	\$40.43
Std Dev	\$22.38	20%	\$44.54
Variance	500.9550608	25%	\$47.79
Skewness	0.316032398	30%	\$51.00
Kurtosis	2.983745228	35%	\$53.86
Median	\$62.71	40%	\$56.80
Mode	\$52.14	45%	\$59.79
Left X	\$29.12	50%	\$62.71
Left P	5%	55%	\$65.71
Right X	\$102.29	60%	\$68.57
Right P	95%	65%	\$71.57
Diff X	\$73.17	70%	\$75.00
Diff P	90%	75%	\$78.86
#Errors	0	80%	\$82.71
Filter Min		85%	\$87.71
Filter Max		90%	\$93.14
#Filtered	0	95%	\$102.29



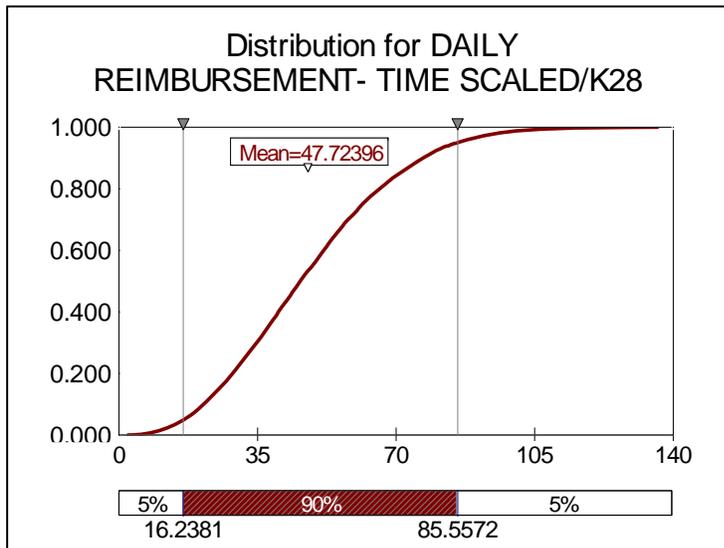
Sensitivity			
Rank	Name	Regression	Correlation
#1	Number of hours? / Distribution / \$G\$21	0.505	0.395
#2	Number of individual sessions? / Distribution / \$G\$8	0.461	0.463
#3	Number of individual sessions? / Distribution / \$G\$3	0.433	0.419
#4	Number of miles? / Distribution / \$G\$23	0.429	0.340
#5	Number of individual sessions? / Distribution / \$G\$13	0.269	0.251
#6	Number of group sessions? / Distribution / \$G\$14	0.251	0.231
#7	Number of individual sessions? / Distribution / \$G\$18	0.119	0.122
#8	Number of group sessions? / Distribution / \$G\$4	0.101	0.091
#9	Number of group sessions? / Distribution / \$G\$9	0.051	0.052
#10	How many minutes is an individual session? / Distribution / \$G\$15	0.000	0.004
#11	How many minutes is a group session? / #4 / \$E\$16	0.000	-0.001
#12	How many minutes is a group session? / #4 / \$E\$11	0.000	0.013
#13	How many minutes is an individual session? / #4 / \$E\$10	0.000	-0.002
#14	How many minutes is a group session? / Distribution / \$G\$11	0.000	-0.005
#15	How many minutes is a group session? / #2 / \$C\$11	0.000	0.005
#16	Number of group sessions? / #5 / \$F\$4	0.000	-0.006

## Appendix F. Simulation Results for Daily Rate 2

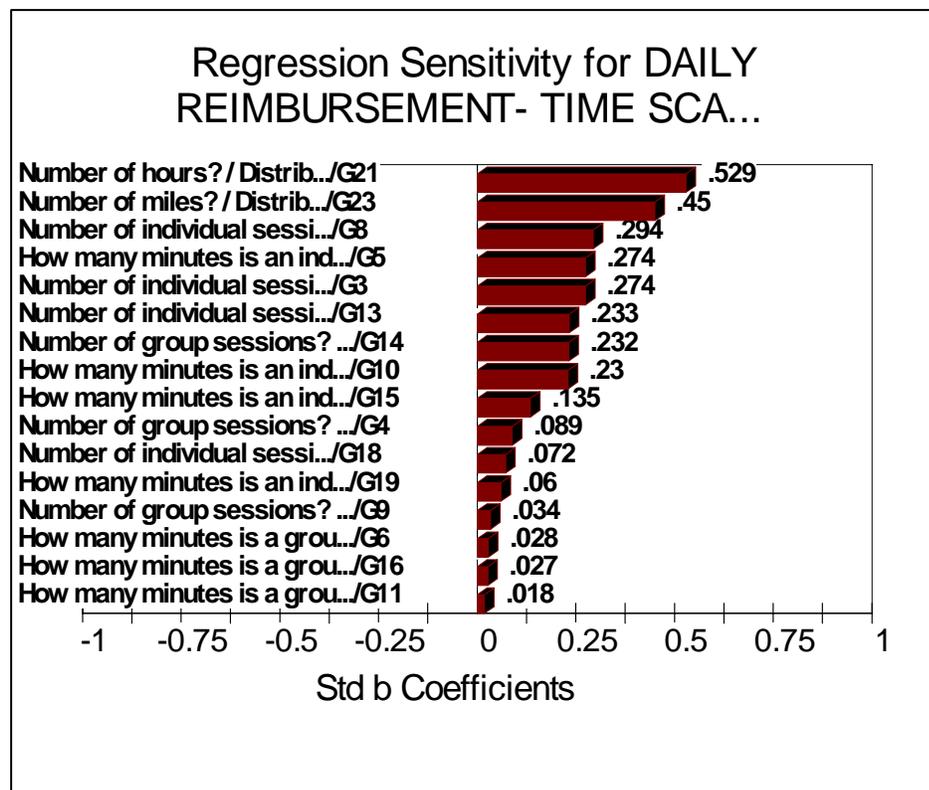
### Simulation Results for Daily Reimbursement—Time Scaled/K28



Summary Information	
Workbook Name	ATR RSS TA—File Name v3.xls
Number of Simulations	1
Number of Iterations	10,000
Number of Inputs	26
Number of Outputs	2
Sampling Type	Latin Hypercube
Simulation Start Time	3/15/2006 8:31
Simulation Stop Time	3/15/2006 8:32
Simulation Duration	00:00:49
Random Seed	1



Summary Statistics			
Statistic	Value	%tile	Value
Minimum	\$2.26	5%	\$16.24
Maximum	\$136.09	10%	\$21.43
Mean	\$47.72	15%	\$25.12
Std Dev	\$21.29	20%	\$28.63
Variance	453.3832834	25%	\$31.71
Skewness	0.470108496	30%	\$34.71
Kurtosis	2.960131107	35%	\$37.57
Median	\$45.71	40%	\$40.24
Mode	\$19.29	45%	\$43.07
Left X	\$16.24	50%	\$45.71
Left P	5%	55%	\$48.86
Right X	\$85.56	60%	\$51.67
Right P	95%	65%	\$54.60
Diff X	\$69.32	70%	\$57.86
Diff P	90%	75%	\$61.45
#Errors	0	80%	\$65.86
Filter Min		85%	\$70.89
Filter Max		90%	\$76.90
#Filtered	0	95%	\$85.56



Sensitivity			
Rank	Name	Regression	Correlation
#1	Number of hours? / Distribution / \$G\$21	0.529	0.418
#2	Number of miles? / Distribution / \$G\$23	0.450	0.357
#3	Number of individual sessions? / Distribution / \$G\$8	0.294	0.303
#4	How many minutes is an individual session? / Distribution / \$G\$5	0.274	0.276
#5	Number of individual sessions? / Distribution / \$G\$3	0.274	0.262
#6	Number of individual sessions? / Distribution / \$G\$13	0.233	0.216
#7	Number of group sessions? / Distribution / \$G\$14	0.232	0.219
#8	How many minutes is an individual session? / Distribution / \$G\$10	0.230	0.225
#9	How many minutes is an individual session? / Distribution / \$G\$15	0.135	0.116
#10	Number of group sessions? / Distribution / \$G\$4	0.089	0.083
#11	Number of individual sessions? / Distribution / \$G\$18	0.072	0.075
#12	How many minutes is an individual session? / Distribution / \$G\$19	0.060	0.055
#13	Number of group sessions? / Distribution / \$G\$9	0.034	0.038
#14	How many minutes is a group session? / Distribution / \$G\$6	0.028	0.028
#15	How many minutes is a group session? / Distribution / \$G\$16	0.027	0.063
#16	How many minutes is a group session? / Distribution / \$G\$11	0.018	0.020

**4. Service-Unit Cost  
Analysis—A Guide for  
Providers of  
Recovery Support  
Services To Determine  
Service-Unit Costs**

## **4. Service-Unit Cost Analysis—A Guide for Providers of Recovery Support Services To Determine Service-Unit Costs**

### **Introduction**

Access to Recovery (ATR) is a competitive discretionary grant program funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) that provides vouchers to clients for purchase of substance abuse clinical treatment recovery support services (RSS). ATR program goals include expanding organizations' capacity to provide services, supporting client choice, and increasing the array of faith-based and community-based providers of clinical treatment and RSS. The ATR program provides a grantee with the opportunity to fund services and providers not previously eligible for public reimbursement.

One of ATR's primary goals is to provide clients with choice among qualified providers of clinical treatment and RSS. Under the ATR program, RSS can be provided by both nonsectarian organizations and faith-based organizations (FBOs). Examples of RSS available to clients with vouchers include employment coaching, recovery coaching, spiritual support, childcare, housing support, literacy training, traditional healing practices, and transportation. If an organization is a provider of human services that are helpful to persons recovering from substance abuse and the service being provided is not listed above in the examples, it is helpful to talk with the ATR grantee project director to explain the service and to determine if it falls within a description of services covered by the ATR program. Often there is lack of clarity between service systems that leads to misunderstandings of the services included under more general classifications, and the ATR program may be providing or interested in providing the service being offered.

Clients participating in an ATR program are granted vouchers for services they need as indicated through assessments. With the vouchers, clients choose the providers of clinical treatment and RSS that they feel best meet their needs, and the ATR program reimburses the selected providers on an established service-unit rate. Many RSS organizations have experience providing services but, because they have operated through grants and donations in the past, have never identified the costs associated with providing a unit of service.

The Center for Substance Abuse Treatment (CSAT), under the American Institutes for Research<sup>®</sup> (AIR) Performance Management Technical Assistance Coordinating Center contract, asked AIR to develop the following service-unit cost analysis guide to assist RSS organizations that are new to service-unit reimbursement in calculating the service-unit costs of providing ATR services. Calculating service-unit costs gives providers the essential information to evaluate rates, to present cases for rate modification when such discussions are possible, and to compare their costs to the costs of other organizations and thereby identify opportunities for improved efficiency.

This guide is intended to help provider organizations develop useful internal information. It is not intended to be a guidebook for reporting according to generally accepted accounting principles. Organizations are encouraged to rely on the expertise of their professional accountants to ensure that reports conform to these principles.

The guide is intended for nonfinancial managers whose organizations are either current or potential providers of ATR services. A working knowledge of middle-school-level arithmetic operations—addition, subtraction, multiplication, division, decimals, and percentages—is sufficient to use the guide to calculate service-unit costs. Accounting professionals and managers with extensive financial experience new to the field of substance abuse treatment may find parts 2 and 3 of the guide to be useful.

The guide is organized into four parts and an appendix, as follows:

- Part 1. Evaluating Financial Risk—an overview of the variables influencing financial risk for ATR providers, as well as steps to minimize such risk
- Part 2. Standards for Evaluating Rates—an overview of the financial standards that define success and help guide business decisions
- Part 3. Calculating Service-Unit Cost—a method for calculating unit costs and an example
- Part 4. Complete the Forms To Calculate Service-Unit Costs—provides example forms with instructions for completion
- Appendix. Example of Service-Unit Cost Calculations

**It is recommended that users read through the guide completely before using the forms in part 4 to calculate service-unit costs, referring to the instructions in part 3 at each step.**

## **Part 1. Evaluating Financial Risk**

This section presents

- An operational definition of financial risk
- An overview of the variables influencing financial risk
- Some practical ways to evaluate and reduce risk

### ***An Operational Definition of Financial Risk***

In the context of ATR, financial risk refers to the probability that an organization will spend money to provide services and not receive adequate and timely reimbursement for this financial outlay.

### ***Variables Influencing Risk***

- The amount of additional money the organization will need to spend to become an ATR provider is the most important variable influencing financial risk.

**An organization already providing the ATR reimbursable service**—If an organization is already providing the potential ATR service, the organization may be taking little or no risk in becoming an ATR provider of that service. Such organizations will need to consider

- Added transaction costs (see the section on transaction costs below)
- Expansion of capacity to meet ATR demand, if such expansion is necessary and the organization decides to expand its capacity to provide services (see the section on capacity expansion below)
- The extent to which the ATR reimbursement level is consistent with the organization’s business model (see part 2)
- However, beyond these three considerations, the organization may find that ATR represents a little or no risk revenue opportunity.
- **An organization not already providing the ATR reimbursable service**—This involves a degree of risk that is proportionate to the startup costs of services. A startup can involve space, equipment, and personnel costs, and these costs can be substantial.

- Transaction costs

- Transaction costs refer to the added costs of the business transaction beyond the direct costs of doing business. In substance abuse and behavioral health, transaction costs have increased enormously during the past few decades. Yet they are easily ignored and underestimated when providers evaluate business opportunities. Examples of transaction costs are
  - **Documenting, reporting, and billing costs**—The organization will need to document and track the information needed to report client progress, as required, submit a bill for the service, track payment, and follow up when bills are not paid. These activities are usually simple and straightforward when only one or two entities are paying for services, a usual situation for ATR providers.
  - **The length of time between submitting the bill and receiving payment**—The average time between bill submission and receipt of payment, or the “days in receivable,” is a critical variable. The greater the time between billing and payment, the larger the cash reserves the organization will need in order to remain a viable provider.
  - **Authorization costs**—Not all potential clients are automatically eligible for ATR services. Usually some other entity needs to authorize their eligibility. In addition, most ATR programs have a ceiling on the amount paid per client. Consequently, the organization needs a system to verify initial and continuing eligibility for services.

- **Bad debt**—This refers to the loss of expected revenue due to nonpayment of amounts billed for services; that is, the difference between the amount billed (after discounts and sliding scale allowances) and the amount actually collected.

ATR providers can best assess the above dimensions by investigating the payer’s current track record. To assess this, they should ask questions such as

- What are the documentation requirements? What information must be included?
- How often is reporting required? What information is included, and how does this need to be done?
- What is the billing process? What does the form look like?
- How difficult is it to track services? Who within the organization will do billing and tracking of monies due the organization, and what is the person’s capacity and incentive for doing this well? Is tracking services as simple as counting the days in residence on a calendar or taking attendance?
- What is the average length of time between receiving and paying a bill? How will the organization cover its expenses of providing services while it is waiting for payment? How many bills are denied?

### ***Practical Ways of Evaluating and Reducing Risk***

When issues such as those described below are identified, the potential provider needs to determine whether the organization can live with the possible risk the situation may present, and therefore determine whether participating is a risk the provider cannot afford.

- Risk associated with rollout of a new payment system
  - An important variable is the assignment of risk between the purchaser and provider should there be widespread payment problems with the rollout of a new system. If widespread payment problems emerge—and they often do when grantees introduce new services and payment systems—it is important to know if the purchaser will provide an advance on bills submitted while the problems in the system are resolved. If not, providers will be at financial risk for the rollout of the new system, a potentially difficult situation.
- The provider’s ability to engage and retain clients in treatment
  - Generating billable services depends on a provider’s ability to engage and retain clients in treatment. Following are some risk variables:
    - **Ability to market services**—If the provider can directly engage clients in services and, along the way, arrange for these clients to be assessed for ATR, then the provider has some control over bringing clients into ATR-funded services. However, a

provider that depends on other organizations for referrals may be vulnerable to the changing needs, preferences, and affiliations of those organizations.

- **Ability to reinforce engagement**—Many clients in beginning recovery are ambivalent about receiving services. Provider organizations that can rely on outside systems to encourage clients to remain in treatment have a better chance of retaining clients. Outside systems able to encourage retention include child welfare systems, the legal systems, families, and other systems able to reinforce health choices.

The potential provider should also consider the following ways in which to decrease risk.

- **Gradually add service capacity (the ability to provide more services), such as additional staff members**—While there are many unserved people in need of recovery services and supports, engaging and retaining these people can be difficult. In addition, developing referral and engagement systems can take time. Consequently, it is easy for providers to add more capacity than will be needed for months. Many ATR providers can minimize risk by gradually phasing in capacity as demand and service activity warrant. For example, some ATR providers have access to space that they can use at little or no direct cost. These providers can gradually add direct-service staff members as increased demand warrants.
- **Pay direct-service staff members on a split fee or direct-service-hour basis**—Various methods of paying direct-service staff members in proportion to the revenues that they generate reduce the organization’s risks and give staff members a powerful productivity incentive. Most salaried staff members need to be reminded to devote the majority of their time to providing billable services, to completing paperwork and tracking data that support billing, and to satisfying the preferences of referral sources. Staff members paid a proportion of revenues need no such reminders. (Note: If you have some staff whose compensation consists of a split of fees [e.g., on bookings or collected fees that they generate], these staff members can often be paid fringe benefits, including health insurance, depending on the proportion of the time they work and the organization’s contract with the health insurance plan. However, some staff can be paid on a “split fee” basis and also are independent contractors; these people typically are not eligible for fringe benefits,- according to insurance plans.)
- **Develop step-by-step diagrams (process charts) for key transactions**—Some providers discover the details of billing, authorization, and referral systems after they begin providing services. Providers can get a head start by drawing up step-by-step diagrams of those processes that influence financial success. In addition, the process of developing these process charts can identify opportunities, and threats, not already considered. For example, while interviewing potential referral sources, the provider may discover greater or lesser service demand than the provider has assumed.

## Part 2. Standards for Evaluating Rates

Part 2 offers several financial performance standards that are relevant to ATR services, as well as the implications of these standards for ATR providers. Evaluating ATR rates depends on the

organization's standard for evaluating acceptable rates. The standard should reflect the organization's values, constraints, mission, goals, and context.

### **Requiring That Rates Cover All Costs, Including Administrative Costs**

Conventional nonprofit business wisdom holds that providers should obtain payment rates that cover actual costs. Doing so supports the providers' ability to deliver stable, high-quality services and to reserve private charity support for serving those not covered by other sources of payment.

### **Standards for Accepting Below-Cost Rates**

#### **THE FAVORITE JOKE OF COST ACCOUNTANTS**

Accountant to hardware store owner: Do you realize that you're losing \$.85 on every hammer that you sell?  
Owner's reply: It's nothing to worry about—we make up for it in volume.

In the real world of reimbursement for substance abuse treatment, rates often lag behind the reasonable costs of providing these services. Consequently, many providers face the choice of either accepting below-cost rates or not accepting any public rates. These narrow alternatives have influenced the willingness of many provider organizations to accept below-cost rates. Below are two standards for accepting below-cost rates:

- Requiring that rates cover direct program costs but not necessarily administrative costs
  - Administrative costs refer to the costs of the general management activities that support more than one service program. If a rate covers direct service costs and a portion of administration, the organization may be further ahead by having the direct service costs and some administrative costs covered than by not providing the service and having none of the administrative costs covered. Consequently, some organizations establish covering direct service cost as their standard for accepting rates.
- Accepting rates that do not cover direct service costs on the grounds that anything is better than nothing
  - Some organizations can afford to accept below-cost rates for the short term. In addition, under some circumstances, below-cost rates can result in a financial gain. For example, if a program receives a public or private grant to provide a service and a purchaser offers to pay for some of these services on a fee-for-service basis, the below-cost services can add to revenues without adding to costs.
  - Some thoughts about accepting below-cost rates: As noted above, accepting below-cost rates can work when other payers are covering all or most of the costs of providing the service and the below-cost rate adds to the organization's bottom line. However, this practice can cause several problems when providers engage in it for the long term. First, by accepting below-cost rates, the organization may be using resources to subsidize the rates that might otherwise be reserved for charity care.

Second, many stakeholders value services by the price that is paid for the service. Deeply discounted rates can erode the regard that stakeholders have for the service. Third, as financial circumstances and revenue sources change, providers may find that they are depending more and more on revenue from unfavorable arrangements. Finally, by detaching cost from rates and subsidizing rates with private dollars, providers can avoid the pressures that can bring about greater efficiency.

### **Part 3. Calculating Service-Unit Cost**

Part 3 presents discussion on

- How to calculate service-unit costs
- Meeting MCFC and learning how this organization uses the service-unit costing method

#### ***How To Calculate Service-Unit Costs***

- Calculating the actual cost per service unit

ATR reimbursement rates are expressed as rates per service units. For example, the rates paid might be expressed as \$22 per hour for recovery mentoring services, \$28 for a day of residence, and \$22 for a 90-minute employment-tutoring session provided in a group. Calculating the actual cost per service unit is simply a matter of dividing the total actual cost of the service by the number of service units provided. For example, if the annual cost of providing a recovery mentoring program is \$69,921, and the organization provided 2,445 hours of recovery mentoring services during the year, then the cost per hour for the service would be \$69,921 divided by ( $\div$ ) 2,445 hours of recovery mentoring, or \$28.60 per hour.

- Calculating the projected cost per service unit

In the example above, the net service cost for a past year was calculated. The same calculation can be used to project the cost per service unit for a future period. For example, consider a projected annual budget for housing of \$124,000, and an estimate that a total of 4,015 client bed days will be provided during the year. By dividing the project cost (\$124,000) by the projected bed days (4,015), the projected cost per bed day is \$30.88 ( $\$124,000 \div 4,015 \text{ bed days} = \$30.88/\text{bed day}$ ).

It can be that easy. So, the calculation is no more complicated than dividing the actual or projected cost by the actual or projected number of service units. If an organization does nothing but provide one type of service, then it can close this guide, turn on a calculator, and divide its total (actual or projected) cost by its total (actual or projected) number of service units, and—presto—the result is the actual or projected costs. (Organizations might also wish to read the sections below about depreciation as a cost of doing business, and adding the cost of donated goods and services as a cost. If choosing to add depreciation and donated goods and services as costs, that step should be first, and then costs—including depreciation and donated goods and services—should be divided by the number of service units, and the calculation is complete.)

But calculating service-unit costs is usually more complicated. Most organizations provide more than one service. Most organizations will need to go through several steps to assign expenses to their various service programs. After that, they can divide the service-program costs by the units of service. For large, complex organizations such as hospitals, the process of assigning costs to programs is complex and requires much technical knowledge. Fortunately, large, complex organizations usually have the accountants and information systems that can complete the task. Fortunately, the task is simpler for smaller organizations.

### ***Step 1. Identify the Service-Program Categories and the Administrative Activities***

#### ***Service-program categories***

We begin by identifying the program categories for which we wish to calculate costs. We may do this by type of service, such as housing, daycare, employment, training, and the like. Alternatively, we may do this by type of service and location, such as the costs of operating housing services at locations A, B, and C, or the costs of operating daycare services at location A and location B. On the other hand, we may want to determine certain costs within a program, such as the costs of housing (room, board, and security) versus counseling (individual and group) within a residential treatment program.

When identifying the service-program categories for which we will collect information and calculate costs, we should consider two primary factors: (1) Which information will be most useful, as for reporting purposes or calculating cost per unit; and (2) the resources required to collect the information. To be most cost effective, we should limit the number of categories to those for which there is a clear need for the information.

#### ***Administrative activities***

- In addition to looking at the different services or programs across the organization, we must also identify administrative activities, so that we will be able to determine administrative costs. Administrative costs are costs that support services without being part of the direct costs of one service or another. Some examples of administrative costs are the cost of the director's efforts to manage the organization as a whole, the building costs associated with housing administrative staff members, and the costs of accounting, purchasing, and payroll services provided across programs.
  - At this stage we identify administrative activities separately from service-program activities. Later we will assign some portion of the costs of administrative activities to each program. Having done that, we will be able to divide the total costs—direct program and the program's share of administrative costs—by the number of service units, and we will have our service-unit costs.

## **Meeting Mid-City Faith Council**

### **Mid-City Faith Council**

Meet MCFC, a nonprofit corporation whose shareholders are a group of affiliated churches. Since 1970 MCFC has provided social services and faith outreach in a high-poverty section of a midsized city. MCFC's services include operating food, clothing, and furniture banks; emergency financial assistance; making referrals to community services; literacy, preemployment training, and household budgeting classes; and recovery support mentoring. Its staff includes the following:

- Director
- Part-time bookkeeper
- Full-time coordinator of the food, clothing, and furniture banks
- Full-time coordinator for adult education, emergency financial services, referral services, and preemployment training
- Full-time adult-education instructor
- Part-time preemployment instructor
- Full-time coordinator for recovery mentoring and a three-quarters-time recovery mentor
- One full-time and one half-time staff member providing faith outreach
- Part-time secretary/receptionist
- MCFC relies on contributions from its affiliated churches, direct community contributions, and support from local foundations. It has never received public funding. Its board of directors is aware that ATR funding could begin to support its recovery mentoring and preemployment training services. Timing is critical because nearly 10 years of foundation support for recovery mentoring services is about to end. The board has tasked the executive director to advise them about the financial implications of participating as an ATR provider. The director has taken a deep breath and said, "Let us proceed to calculate our service-unit costs for the year just completed."

### ***MCFC's Step 1. Identify the Service-Program Categories***

MCFC decided to assign its direct-service program costs into three categories:

- Preemployment training
- Recovery mentoring
- Other activities (MCFC did not have a compelling reason to develop service-unit costs for religious outreach, adult education, and its other services. Consequently, the council combined all these other costs into an "other activities" category.)

## **Step 2. Assign Costs to Administration and Service Programs**

### **Step 2a. Assign Personnel Costs and Full-Time-Equivalent Staff Members**

We begin with personnel. There are two reasons for doing this. First, we are in the “people” business, and our largest single cost group is personnel costs. Second, the assignment of other costs sometimes follows the assignment of personnel costs. We record two totals: the dollar cost of the positions we assign and the number of full-time-equivalent staff members (FTEs). We keep track of FTEs because doing so can help us assign other costs later. In addition to salary costs, we add fringe benefit costs, which include the costs of the statutory benefits, such as payroll tax and unemployment insurance, and add these to the programs in which there are staff.

**Note about fringe benefit costs:** Larger organizations identify fringe benefits as a separate line item or items. Doing so helps them to track the proportion of fringe benefit costs to other compensation costs, something especially important because health insurance costs have been rising at rates much higher than other costs. On the other hand, very small organizations whose benefit costs vary greatly from person to person may find it easier to calculate the total compensation costs as a single cost in a single line item.

The staff members who devote all their time to a single program are assigned 100 percent to that program. The organization has a more difficult task when it begins to assign staff members whose activities cross programs. For example, an organization’s director may spend most of his or her time providing indirect administrative services and some time providing direct services to clients. Counselors may devote some of their time to one program and some of their time to other programs. A supervisor may provide direct counseling services in one program and clinical supervision in others, and a secretary-receptionist may provide reception and secretarial services for all programs in a single location, such as education services, daycare, residential, and administration. Organizations typically assign the costs of staff members working in more than one program according to the portion of activity that the staff member devotes to each program.

Following are examples of staff-member-cost assignments, according to activities:

- A director spends most of his or her time providing indirect administrative services and 1 day per week providing direct services to clients.

The organization would assign compensation costs according to the portion of time that the director spends providing direct services (including client-related paperwork and service preparation) and the proportion of time spent in administration. In this case, .8 of the director’s compensation would be assigned to administration and .2 to the counseling program.

- Four FTE counselors devote 3 days per week to one program and 2 days per week to another.

The organization would assign the portion of compensation costs according to the time spent in one program or another. In this case, each counselor devotes .6 of his or her time to one program and .4 to another. As a result, the organization could assign 60 percent of the costs and 2.4 FTE counselors (or .6 times 4 FTEs) to one program and 40 percent of the costs and 1.6 FTE counselors (or .4 times 4 FTEs) to the second program.

- A receptionist provides reception and some secretarial services for two programs (one residential and one outpatient) and administration in a single location.

The organization could study the receptionist's work for a representative week. Let us say that the study found that about 5 percent of the calls were related to residential services, about 15 percent were for administration, and 80 percent were related to outpatient services. In addition, the receptionist reported that the proportion of visitors and secretarial work roughly followed this general distribution. The organization would then assign the receptionist's FTE and costs as follows: .05 to residential services, .15 to administration, and .8 to outpatient services.

As can be seen from the example above, there is no "one size fits all" principle for assigning staff costs to programs, even when we have decided to assign these costs according to staff activities. In assigning staff costs—and all other costs—we consider the following:

- The assignment of costs should be logical. For example, assigning the cost of staff members according to where they devote their time is logical.
- The assignment of costs should be consistent. For example, assigning supervisory time to different programs according to the portion of FTE staff members (FTEs) supervised is consistent across programs.
- The effort to gather the information must be in proportion to the value of the information gathered. For example, in the secretary-receptionist example above, the organization could assign the costs of the secretary-receptionist according to an elaborate and detailed formula that incorporates the portion of phone calls, visitors, and documents prepared for each program. In addition, the organization could conduct this study monthly, and assign costs accordingly as the organization develops its monthly financial statement. The organization would have accurate and refined cost data, but the value of these data would hardly be worth the effort.

*MCFC's assignment of personnel costs and FTEs to service programs and administration (see table 1):*

- The director's time is assigned equally to administration and "other activities" because about half her activities are management and fundraising and the remainder are providing assessments and referrals in the "other activities" category.
- The bookkeeper devotes about half of his part-time position to administration (payroll, financial reporting) and the other half to services within "other activities" (receiving donations, emergency assistance).
- The education coordinator plans and supervises all education, including preemployment, which he estimates is about .1 of his time. Therefore, .1 of his time is assigned to preemployment.
- The secretary/receptionist assignments are based on a 1-month study of calls, visitors, and document preparation.
- Total fringe benefits costs, including the costs of FICA and employment insurance, have been calculated separately at the average rate of .22 of salary.

*MCFC’s Step 2a. Assign Personnel Costs and Full-Time-Equivalent Staff Members*

**Table 1. MCFC Personnel Expenses, Most Recent Fiscal Year**

Personnel	Total Org.		Rec. Mentoring		Preemployment		Other Activities		Total Program		Administration	
	Salaries	FTEs	Salaries	FTEs	Salaries	FTEs	Salaries	FTEs	Salaries	FTEs	Salaries	FTEs
Executive director	\$32,000	1					\$16,000	0.5	\$16,000	0.5	\$16,000	0.5
Bookkeeper	\$7,000	0.3					\$3,500	0.15	\$3,500	0.15	\$3,500	0.15
“Banks“ coordinator	\$26,000	1					\$26,000	1	\$26,000	1		
Education coordinator	\$26,000	1			\$2,600	0.1	\$23,400	0.9	\$26,000	1		
Preemployment instructor	\$9,000	0.33			\$9,000	0.33			\$9,000	0.33		
Literacy instructor	\$27,000	1					\$27,000	1	\$27,000	1		
Rec. mentor coordination	\$26,000	1	\$26,000	1					\$26,000	1		
Recovery mentor	\$18,000	0.75	\$18,000	0.75					\$18,000	0.75		
Faith outreach staff	\$32,000	1.5					\$32,000	1.5	\$32,000	1.5		
Secretary/receptionist	\$5,940	0.33			\$900	0.05	\$3,240	0.18	\$4,140	0.23	\$1,800	0.1
<b>Total</b>	<b>\$208,940</b>	<b>8.21</b>	<b>\$44,000</b>	<b>1.75</b>	<b>\$12,500</b>	<b>0.48</b>	<b>\$131,140</b>	<b>5.23</b>	<b>\$187,640</b>	<b>7.46</b>	<b>\$21,300</b>	<b>0.75</b>
Benefits at .22 of salary	\$45,967		\$9,680		\$2,750		\$28,851		\$41,281		\$4,686	
<b>Total compensation</b>	<b>\$254,907</b>		<b>\$53,680</b>		<b>\$15,250</b>		<b>\$159,991</b>		<b>\$228,921</b>		<b>\$25,986</b>	

Note: Rec. = recovery. FTEs = full-time-equivalent staff members. “Total program” here refers to service programs, as distinct from administration. In this case, “total program” is the sum of the service programs “recovery mentoring,” “preemployment,” and “other activities” (i.e., other service-program activities).

**Step 2b. Assign Nonpersonnel Costs to Each Program and to Administration**

Having assigned personnel costs and totaled the number of FTEs, the next step is to assign all other costs to administration and the service programs. There are many ways to categorize expenses, and the organization will probably want to use whatever expense categories it already uses for budgeting and reporting, especially if these categories have meaning for those reading its reports.

As with personnel costs, the nonpersonnel the easiest costs to assign are those that are 100 percent attributable to one program. For example, a cost associated with the operation of a van might be assigned 100 percent to a single program if this van is used by no other program. Likewise, the full range of facility costs (lease, depreciation, insurance, utilities, maintenance, and housekeeping) can be assigned 100 percent to one program if that program is the only user of the facility. However, assigning costs that are shared takes some judgment. Just as some programs share staff, some programs also share facilities and office equipment, supplies, telephone expenses, computer expenses, and the like. As with the assignment of personnel, the assignment of other costs should be logical, defensible, and consistent, and the effort required to refine the assignment should be proportionate to the value of the information. Table 2 presents common methods for assigning certain types of nonpersonnel costs.

**Table 2. Examples of Methods of Assigning Typical Nonpersonnel Costs**

Types of Nonpersonnel Costs	Assignment of Costs
Facility costs, such as lease, depreciation, insurance, utilities, maintenance, and housekeeping	When two or more programs share the same building, the usual method of assigning costs is according to the portion of square feet occupied by each program. When staff members from different programs share the same offices, the proportion-ate numbers of FTEs might be used to allocate building costs.
The costs of office equipment, such as copy machines	Some organizations track usage of certain machines, such as copy machines, by program, and assign costs accordingly. Some smaller programs use a simpler method, such as the proportion of FTEs from different programs that use the equipment, assuming usage is roughly the same.
Telephone costs	The costs of telephones might be assigned according to the number of telephone lines (not telephones) assigned to each program. Alternatively, the proportion of FTEs might be used when two or more programs use the same telephone lines.
Computer costs	The costs of systems and software licensing fees, including Internet access, are assigned according to the proportionate number of users per program.
Supply costs	Supplies are usually assigned per FTE unless there is some reason to believe that a program uses proportionately higher quantities of supplies than another program uses.

Note: FTEs = full-time-equivalent staff members.

**MCFC’s Step 2b. Assign Nonpersonnel Costs to Each Program and to Administration**

MCFC assigned all the facility costs according to the proportion of FTEs in each program. This method is not conventional. More often than not, organizations assign facility costs according to the proportion of square feet occupied by each program. However, in this case, MCFC staff members frequently shared offices and education rooms, so proportion of FTEs seemed more reflective of the use of the building. The proportion of FTEs for each program was determined by dividing the number of FTEs in the program by the total number of FTEs in the organization (8.21). Table 3 illustrates the calculation to determine the proportion of FTEs per program.

**Table 3. MCFC’s Calculation of FTE Proportions by Program**

<b>Total FTEs in the Organization: 8.21</b>	<b>Total FTEs Assigned to Administration: 0.75</b>	<b>Total FTEs Assigned to Recovery Mentoring: 1.75</b>	<b>Total FTEs Assigned to Pre-employment: 0.48</b>	<b>Total FTEs Assigned to Other Activities: 5.23</b>
Proportion of FTEs calculation	0.75/8.21 total	1.75/8.21 total	0.48/8.21 total	5.23/8.21 total
Proportion of total FTEs	0.09	0.21	0.06	0.64

Note: FTEs = full-time-equivalent staff members.

Table 4 shows the allocation of the organization’s nonpersonnel expenses. MCFC is depreciating its facility at \$3,000 (an amount developed by the organization’s volunteer accountant) per year, and this depreciation was treated as a facility expense.

As with building costs, the organization assigned the costs of staff development, publications, and “miscellaneous” according to the proportion of FTEs in each expense category.

MCFC assigned client transportation costs according to the proportionate number of persons served in each category. This calculation follows the steps illustrated in table 3, with “persons served” in place of “FTEs.”

Several costs—supplies/equipment, staff travel/mileage, public information, professional liability insurance, telephone/mobile/Web, and postage—were easily traceable to the program that incurred the costs. Consequently, the organization assigned these costs directly to the responsible program, without needing to calculate a proportion. The “proportion” (“Prop.”) column in table 4 is blank for these items.

**Table 4. MCFC Nonpersonnel Expenses, Most Recent Fiscal Year**

Nonpersonnel items	Total Org.		Rec. Mentoring		Preemployment		Other Activities		Total program		Administration	
	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.
Facility												
Building insurance	\$928	1	\$195	0.21	\$56	0.06	\$594	0.64	\$844	0.91	\$84	0.09
Utilities	\$7,056	1	\$1,482	0.21	\$423	0.06	\$4,516	0.64	\$6,421	0.91	\$635	0.09
Housekeeping supplies	\$1,021	1	\$214	0.21	\$61	0.06	\$653	0.64	\$929	0.91	\$92	0.09
Maintenance, repair	\$2,479	1	\$521	0.21	\$149	0.06	\$1,587	0.64	\$2,256	0.91	\$223	0.09
Depreciation (building)	\$3,000	1	\$630	0.21	\$180	0.06	\$1,920	0.64	\$2,730	0.91	\$270	0.09
Facility subtotal	<b>\$14,484</b>	<b>1</b>	<b>\$3,042</b>	<b>0.21</b>	<b>\$869</b>	<b>0.06</b>	<b>\$9,270</b>	<b>0.64</b>	<b>\$13,180</b>	<b>0.91</b>	<b>\$1,304</b>	<b>0.09</b>
Supplies/equipment												
Office supplies	\$4,128		\$413		\$206		\$2,064		\$2,683		\$1,445	
Program supplies	\$12,333		\$617		\$1,233		\$10,483		\$12,333			
Computer/office equipment	\$11,888		\$238		\$1,189		\$9,510		\$10,937		\$951	
Supplies/equip. subtotal	<b>\$28,349</b>		<b>\$1,268</b>		<b>\$2,628</b>		<b>\$22,057</b>		<b>\$25,953</b>		<b>\$2,396</b>	
Other												
Client transportation	\$2,677	1	\$134	0.05	\$134	0.05	\$2,409	0.9	\$2,677	1		
Staff development	\$1,232	1	\$259	0.21	\$74	0.06	\$788	0.64	\$1,121	0.91	\$111	0.09
Publications	\$328	1	\$69	0.21	\$20	0.06	\$210	0.64	\$298	0.91	\$30	0.09
Staff travel/mileage	\$2,045		\$842		\$58		\$925		\$1,825		\$220	
Public information	\$2,198		\$212		\$92		\$851		\$1,155		\$1,043	
Profess. liability insurance	\$1,350		\$398		\$322		\$630		\$1,350			
Telephone/mobile/Web	\$2,002		\$988		\$142		\$702		\$1,832		\$170	
Postage	\$892		\$52		\$24		\$306		\$382		\$510	
Miscellaneous	\$2,478	1	\$520	0.21	\$149	0.06	\$1,586	0.64	\$2,255	0.91	\$223	0.09
Other subtotal	<b>\$15,202</b>		<b>\$3,474</b>		<b>\$1,015</b>		<b>\$8,407</b>		<b>\$12,895</b>		<b>\$2,307</b>	
Total nonpersonnel costs	<b>\$58,035</b>		<b>\$7,784</b>		<b>\$4,512</b>		<b>\$39,734</b>		<b>\$52,028</b>		<b>\$6,007</b>	

Note: Prop. = proportion; rec. = recovery; "total program" refers to total service-program expenses and proportions (as distinct from administration) and is the sum of recovery mentoring, preemployment, and "other activities." Detail may not sum to totals because of rounding.

***Step 2c. Add the Costs of Donated Goods, Space, and Services***

Many organizations receive donated equipment, space, and services. These organizations may wish to include the value of these donated goods and services when establishing costs, as this helps establish the full value of the services and may help in rate negotiations. On the other hand, the organizations may wish to calculate their costs without adding the value of donated goods, space, and services. This method would help the organization's policymakers better assess their financial risk, because risk is related to an organization's cash expenditures or losses (i.e., their vulnerability to potential cash losses, as through nonpayment of amounts owed them or delays in receiving cash payment for services).

Organizations use "market value" as the principle for establishing the value of donated services and items. A value of a donated vehicle can be established with a quick reference to its Blue Book value. The value of donated services can be established by finding the market rate for a similarly credentialed professional providing the same service. The value of real estate can be established by a market review of similar properties with lease arrangements similar to those used as the benchmark rate.

***MCFC's Step 2c. Add the Costs of Donated Goods, Space, and Services***

MCFC receives many donated services and materials. However, the donated goods, space, and services are for other programs, that is, the "other activities" category. The organization's furniture and equipment are largely donated, although their value is not great.

***Step 2d. Recognize Depreciation as a Cost of Doing Business***

Depreciation is the loss of economic value occurring as buildings, leasehold improvements, and equipment age and wear out. For example, a computer system has a useful life of about 5 years at best, and organizations recognize this loss by subtracting the approximate loss in value each year. As a vehicle adds age and miles, its value decreases, and organizations recognize this loss by subtracting its annual loss in value from the organization's net assets. A leasehold improvement—an improvement made to leased property to make the property suitable for the organization's purposes—also is depreciated. "For profit" organizations must attend to depreciation for tax purposes. Rules governing financial reporting also require nonprofit organizations to attend to depreciation.

Depreciation can be treated as an expense that can be assigned to the program or programs that use the asset. Many organizations depreciate the value of most office equipment and vehicles at the rate of 20 percent per year until the value of the asset "zeros out" at the close of Year 5. This means that 20 percent of the original value is recorded as a cost of doing business each year. Leasehold improvements are often depreciated at the rate of 10 percent per year.

***MCFC's Step 2d. Recognize Depreciation as a Cost of Doing Business***

As noted above, MCFC's facility costs include recognition of \$3,000 in depreciation. However, the organization leases its copy machines, and other equipment does not have substantial value. Therefore, depreciation of leased items and those with no substantial value are not recorded as a cost of doing business.

**Step 2e. Add the Personnel and Nonpersonnel Costs To Arrive at Direct Program Costs**

**MCFC’s Step 2e. Add the Personnel and Nonpersonnel Costs To Arrive at Direct Program Costs**

This is a simply a matter of adding the total personnel and nonpersonnel costs, with the sum of this operation being the direct program costs, as shown in table 5.

**Table 5. MCFC Direct Program Expenses, Most Recent Fiscal Year**

	Total		Rec. mentoring		Preemployment		Other activities		Total program		Administration	
	Salaries	FTEs	Salaries	FTEs	Salaries	FTEs	Salaries	FTEs	Salaries	FTEs	Salaries	FTEs
Total personnel	\$254,907	8.21	\$53,680	1.75	\$15,250	.48	\$159,991	5.23	\$228,921	7.46	\$25,986	.75
Total nonpersonnel	\$58,035		\$7,783		\$4,512		\$39,735		\$52,029		\$6,006	
Program direct costs	\$312,942	8.21	\$61,463	1.75	\$19,762	.48	\$199,726	5.23	\$280,950	7.46	\$31,992	.75

Note: Rec. = recovery. FTEs = full-time-equivalent staff members. Detail may not sum to totals because of rounding.

**Step 3. Allocate Administrative Expenses to Direct Program Costs**

To allocate administrative costs to the service programs, there must be a logical method for determining the proportion of administrative costs that are allocated to each service program. The two most frequently used methods are (1) allocating administrative costs to service programs according to the proportion of FTEs in each service program, and (2) allocating administrative costs to service programs according to each service program’s proportion of total service-program expenditures.

The “proportion of FTEs” method of allocating administrative costs follows the theory that administrative effort and number of staff members are closely related. The “proportion of expenditures” method follows the theory that administrative effort and volume of service-program expenditures are closely related.

Both FTE and expenditure proportions are calculated using the same basic computation. When the relative portion of FTEs among programs is the chosen allocation principle, divide the number of FTEs within the program by the sum of the FTEs within all programs (being sure not to include administrative FTEs). The resulting decimal is the portion of administrative costs to be allocated to the program. To complete the calculation, multiply the decimal by the administrative costs and add the resulting product to the program costs.

When the allocation principle is the relative proportion of expenditures by service programs, divide the direct-service-program expenditures of each service program by the sum of all service-program expenditures (being sure not to include administrative costs). The resulting number is the proportion of administrative costs to be allocated to the program. To complete the calculation, multiply (×) the number by the administrative costs and add the resulting product to the program costs.

**MCFC’s Step 3. Allocate Administrative Expenses to Direct Program Costs**

MCFC opted to allocate administrative costs according to the proportion of staff members in each program (see table 6). Notice that MCFC has a total of 8.21 FTEs. Service programs accounted for 7.46 FTEs and administration accounted for 0.75 FTEs. MCFC excluded the 0.75 administrative FTEs when they calculated the proportion below because they are allocating administrative costs to programs, and the costs of these FTEs were administrative costs. They divided the number of FTEs in each program by 7.46 FTEs (the total number of FTEs devoted to service programs).

**Table 6. MCFC’s Determination of Proportion of Administrative Costs Assigned to Each Program**

	Total MCFC direct program FTEs	Recovery mentoring	Preemployment counseling	Other activities
FTE staff members	7.46	1.75	0.48	5.23
Formula for FTE proportion		$1.75 \div 7.46$	$0.48 \div 7.46$	$5.23 \div 7.46$
Program FTE proportion		0.2346	0.0643	0.7011

Note: FTEs = full-time-equivalent staff members. “Other activities” refers to other service-program activities.

MCFC’s administrative costs total \$31,992. The organization multiplied the \$31,992 times the FTE proportion to determine the administrative costs to be assigned to each program.

- Recovery mentoring’s share of administration:  $\$31,992 \times 0.2346 = \$ 7,505$
- Preemployment counseling:  $\$31,992 \times 0.0643 = \$2,057$
- Other activities:  $\$31,992 \times 0.7011 = \$22,430$

Once MCFC decided the amount of administrative costs to be allocated to each program, all that was left was to add these amounts to the direct program costs (see table 7).

**Table 7. MCFC Program Costs With Administrative Costs Allocated**

	Recovery mentoring	Preemployment counseling	Other activities	Total program	Administration
Program direct costs	\$61,463	\$19,762	\$199,725	\$280,950	\$31,992
Assigned admin. costs	\$7,505	\$2,057	\$22,430	\$31,992	-\$31,992
Total program costs	\$68,968	\$21,819	\$222,155	\$312,942	\$0

Notice that the cost of administration totaled zero. This is because the organization assigned a portion of administration to each program.

***MCFC’s Step 4. Divide the Costs by the Number of Service Units***

The following calculation can be used to identify the cost/service unit. When this calculation is complete, a potential provider can begin to assess whether they are willing to participate in service provision at a rate already established by the funder. Please remember to identify and evaluate any outlying situations related to this funding source, such as possible payment delays, not being selected as a provider by enough participants, etc., before a final decision is made on participation.

Program costs ÷ number of service units = cost/service unit.

During the past fiscal year MCFC provided 1,722 hours of one-on-one recovery mentoring services and 258 hours of group preemployment counseling, with an average number of 5.2 service recipients in each group.

**Table 8. Service Unit Costs, Recovery Mentoring**

Program costs ÷	Number of service units	= Cost/service unit
\$68,968 ÷	1,722	= \$40.05

The grantee’s ATR pays preemployment counseling by client service hour provided in group. MCFC must calculate the cost of client group counseling hours by multiplying the number of group counseling hours (258) by the average number of service recipients in each group (5.2).

**Table 9. Service Unit Costs, Group Preemployment Counseling**

Program costs ÷	Number of service units	= Cost/service unit
\$21,819 ÷	1,342	= \$16.26

## **Discussion**

The grantee's ATR rate for preemployment training is \$15 per group hour, and the grantee's rate for RSS is \$30 per hour. The director had no difficulty recommending the advantages of having preemployment counseling services funded by ATR. MCFC was already providing these services at a cost approximating the ATR rate, and modest efficiencies or increases in productivity would make the ATR rate profitable. In any case, MCFC would continue the service with or without ATR funds, and the ATR funds would add to total revenues.

The decision about RSS was more difficult. The organization's cost for providing the service was 33 percent more than the ATR reimbursement, and foundation funding for the service was due to end. After meetings with the recovery mentor staff members, the director decided to recommend that the board continue the service, with ATR funding. He felt the service could be provided without a loss because staff members agreed to be compensated on a fixed rate per hour of direct service instead of a fixed salary. Compensation for recovery mentors accounted for \$53,680 of the program's total \$61,463, so paying a fixed rate per hour of direct service minimized MCFC's financial risk. This is because compensation would only be paid when staff members provided ATR-reimbursable services, and compensation represented 87 percent of all program costs. In addition, during the preceding year, recovery mentors devoted 53 percent of their total hours to providing billable services. The mentors felt that they could substantially improve this rate of productivity. In any case, accepting a rate per hour allowed the recovery mentors to remain employed.

**If you would like to have more practice in costing out units of service before you start with your own program information, please see the appendix for another example you can work with.**

## **Part 4. Complete the Forms To Calculate Service-Unit Costs**

You may wish to make several copies of the forms before you begin. The same forms (presented here as tables to be completed) can be used to calculate your actual service-unit costs, in which case you will derive expenses either from your financial reports or from your budget. You may also wish to use a computerized spreadsheet program, which will save you time and allow you to change assumptions easily. However, a pencil and a calculator will be sufficient to complete the calculations.

### **Step 1. Identify the Service-Program Categories**

Review part 3. Then begin filling in the values on the "Personnel costs" form (table 10, below). Start by entering the name(s) of your service program or programs across the top row. If you have more than three programs, use additional sheets, as needed.

### **Step 2. Assign Costs to Administration and Service Programs**

#### **Step 2a. Assign Personnel Costs and Full-Time-Equivalent Staff Members**

- Review part 3. Then, in the column "2.a. Personnel" in table 10, enter the position titles of your staff members. Use additional sheets, if needed.

- Enter your staff members' salaries in the "Total org. Salaries" column. If you wish, you may include the employees' total salaries and fringe benefits, including the costs of the statutory benefits, in this amount. Alternatively, you may enter the costs of benefits in a later step.
- Enter the decimal proportion of full time for each employee of your organization in the "Total org. FTEs" column. FTEs should be entered as "1.0." Part-time employees should be listed by the decimal proportion that represents their portion of full-time employment, with half-time employees at .5, quarter-time employees at .25, and so forth.
- Enter the FTE assignments of each staff member under the specific service program(s) and administration FTE columns, as appropriate. Also, enter the total direct-service program FTEs in the "Total program" FTEs" column.
- Enter the salary allocation of each staff member under the specific service program and "Administration Salaries" columns according to their FTE proportion in each category. Also, enter the total direct-service program salaries in the "Total program Salaries" column.



- Complete the “Total” row by adding the salaries and FTEs in each column. Note that the sum of the “Total program Salaries” amount and the “Administration Salaries” amount should equal the “Total org. Salaries” amount. Similarly, the sum of the “Total program FTEs” amount and the “Administration FTEs” amount should equal the “Total org. FTEs” amount.
- If your “Salaries” amounts already include the total cost of compensation (salaries plus benefits), you have already finished entering your total personnel costs in the “Total” row.
- If your salary amounts did not include the cost of fringe benefits, then enter the fringe benefit costs in the next row, being sure to include the costs of the statutory benefits. Employers usually calculate this amount by determining the percentage of salaries that fringe benefits represent, an amount that normally ranges somewhere between 20 percent and 45 percent of salary costs.
- Enter the sum of the salary total and fringe benefit costs in the “Total compensation” row, again verifying that the sum of the “Administration” and “Total program” amounts equal the amount entered in the “Total org.” column.

***Step 2b. Assign Nonpersonnel Costs to Each Program and to Administration***

- Next you will add values in the “Nonpersonnel Costs” form (table 11).
- First, review part 3, Step 2b: Assign Nonpersonnel Costs to Each Program and to Administration.
- As before, enter the name of your service program or programs in the top row in place of “Program 1,” “Program 2,” and “Program 3.” If you have more than three programs, use additional sheets, as needed.
- Enter your organization’s nonpersonnel expense items in the column “2b. Nonpersonnel items.” You may find it easier to use the same line item categories that your organization uses for budgeting and reporting and to consolidate the line items in such broad categories as facilities costs, insurance, supplies, equipment, professional fees, communications, and miscellaneous. On the other hand, you may find it easier to use more line items, in which case you may need to use multiple forms.
- Use the “Prop.” (proportion) column to indicate when you are allocating particular expenses on a proportionate basis, such as proportion of square footage or proportion of FTEs. Leave the “Prop.” items blank when you are not assigning expenses according to a proportionate basis.



**Step 2e. Add the Personnel and Nonpersonnel Costs To Arrive at Direct Program Costs**

- In the “Direct Program Costs” form (table 12), add the total compensation and nonpersonnel costs to arrive at the direct program costs.

**Table 12. Determining Direct Program Costs**

	Total		Program 1		Program 2		Program 3		Total program		Administration	
	Expenses	FTEs	Expenses	FTEs	Expenses	FTEs	Expenses	FTEs	Expenses	FTEs	Expenses	FTEs
Total compensation												
Total nonpersonnel												
Program direct costs												

Review (in part 3) Step 3: Allocate Administrative Expenses to Direct Program Costs.

You will first need to calculate the proportion of administrative expenses that you will allocate to each of your service programs. If you elect to allocate administrative expenses according to the proportion of FTEs in each service program, please complete the calculations in table 13. If you elect to allocate administrative costs according to service-program expenditures, please skip down to table 14.

**Step 3. Allocation of Administration**

**Step 3a. Allocation of Administration by FTE Calculation**

- Complete table 13. In the row labeled “Calculation,” insert the “Total program FTEs” to the right of the division sign for each of the service programs. (Take care to enter the total of service-program FTEs—excluding administration FTEs.)
- In the same row, insert the number of FTEs in each program to the left of the division sign.
- Complete the operations and insert the resulting proportions in the bottom row. These are the proportions of administrative costs that will be allocated to each service program, using the “proportion of FTEs” method of allocation.

**Table 13. FTEs Method of Allocating Administrative Costs**

	Program 1: FTEs ÷ total program FTEs = proportion	Program 2: FTEs ÷ total program FTEs = proportion	Program 3: FTEs ÷ total program FTEs = proportion
Calculation	÷	÷	÷
Resulting proportion			

**Step 3b. Allocation of Administration by Expenses Calculation**

- Complete table 14. In the row labeled “Calculation,” insert the “Total program expenses” to the right of the division sign for each of the service programs. (Take care to enter the total of all service-program expenses—excluding administrative expenses.)
- In the same row, insert the amount of expenses in each program to the left of the division sign.
- Complete the calculations and insert the resulting proportions in the bottom row. (Note: The proportions should add up to 1.) These are the proportions of administrative costs that will be allocated to each service program, using the “proportion of program expenses” method of allocation.

**Table 14. Program Expenses Method of Allocating Administrative Costs**

	Program 1: Expenses ÷ total program expenses = proportion	Program 2: Expenses ÷ total program expenses = proportion	Program 3: Expenses ÷ total program expenses = proportion
Calculation	÷	÷	÷
Resulting proportion			

Now that you have calculated the proportion of administrative expenses, you can calculate the dollar amount of administrative expenses allocated to each service program.

- Fill in the values below and complete the calculation.

Program 1's administrative proportion	×	Administrative expenses	=	Program 1's allocation of administrative expenses
Program 2's administrative proportion	×	Administrative expenses	=	Program 2's allocation of administrative expenses
Program 3's administrative proportion	×	Administrative expenses	=	Program 3's allocation of administrative expenses

You are now ready to add the administration allocations to each program. In table 15

- Insert the "Program direct costs" row from table 12.
- In the second row insert the "Allocation of administrative expenses" products from the above calculations.
- Add each column to arrive at the "Total program costs" for each service program.

Note that the "Administration" column always is zeroed out because the costs of administration are allocated to the service programs. Also, note that the "Total program" costs are equal to the organization's total costs once administration is added to the programs.

**Table 15. Total Program Costs: Direct Program Costs Plus Allocated Administrative Costs**

	Program 1	Program 2	Program 3	Total program	Administration
Program direct costs					
Allocated admin. costs					
Total program costs					\$0

**Step 4. Divide the Costs by the Number of Service Units**

You are now ready to calculate your service-unit cost.

- Insert the costs and number of service units for each program in table 16. For each program, divide the total program costs by the total number of service units to obtain your cost per service unit for each program.

**Table 16. Calculating Your Cost Per Service Unit**

	Total program costs ÷	Number of service units =	Cost per service unit
Program 1			
Program 2			
Program 3			

**Congratulations!!! We wish you much success in negotiating rates and providing RSS services through the ATR program!**

## Appendix G. Example of Service-Unit Cost Calculations

Services for the Homeless is a church-related nonprofit organization providing recovery housing and recovery mentoring services. The organization is an ATR provider for both of these services. As part of its annual planning process, the organization is projecting its service-unit costs.

### Steps in Service-Unit Cost Calculations

#### Step 1. Identify the Service Programs While Treating Administration as if It Were a Separate Program

The organization provides two service programs: recovery housing and recovery mentoring.

#### Step 2a. Assign Personnel Costs

The director and administrative assistant divide their activities between administration and direct services (see the following “personnel budget” table), and the organization assigns its FTE staff number (1 in each case) and costs according to the proportion of time each devotes to administration and the programs. Likewise, the recovery mentor provides support in the housing program, in addition to recovery mentoring services, and this staff member’s FTE number (1) and costs are also assigned by the proportion of time in each activity.

The organization calculates the cost of both benefits and salary for each staff member as “Total compensation.” Consequently, there is no need to add benefits as a separate line item.

**Table 1: Services for the Homeless: Personnel Budget**

Personnel	Total organization		Recovery mentoring		Housing		Total program		Administration	
	Total compensation	Total FTEs	Compensation	FTEs	Compensation	FTEs	Salaries	FTEs	Salaries	FTEs
Director	\$42,000	1			\$28,140	0.67	\$28,140	0.67	\$13,860	0.33
Recovery mentor	\$23,000	1	\$7,590	0.33	\$15,410	0.67	\$23,000	1		
Live-in house manager	\$32,000	1			\$32,000	1	\$32,000	1		
Evening/weekend staff	\$27,000	1.5			\$27,000	1.5	\$27,000	1.5		
Admin. assistant	\$22,000	1	\$2,200	0.1	\$11,000	0.5	\$13,200	0.6	\$8,800	0.4
<b>Total comp. and FTEs</b>	<b>\$146,000</b>	<b>5.5</b>	<b>\$9,790</b>	<b>0.43</b>	<b>\$113,550</b>	<b>4.34</b>	<b>\$123,340</b>	<b>4.77</b>	<b>\$22,660</b>	<b>0.73</b>

Note: FTEs = full-time equivalent staff members.

**Step 2b. Assign Nonpersonnel Costs to Each Program and to Administration**

For step 2b, please refer to the following table, titled “Services for the Homeless: Budget for Nonpersonnel Expenses.” The organization has a single location that is the site for administration, housing, and the recovery mentoring services. The organization assigns all facility costs according to the portion of square feet occupied by each program and administration, and budgets staff development according to the portion of FTEs in each program. All other expenses are based on last year’s expenditures.

**Step 2c. Add the Costs of Donated Goods, Space, and Services**

The organization projects that it will continue to receive a substantial number of donated services, including accounting services, some volunteer evening and weekend coverage, maintenance, and dietitian services. The costs of these services are based on their market costs and projected use for the year. The organization also projects that it will continue to receive substantial donations of food, kitchen supplies, and client supplies. The organization includes these projections as costs.

**Step 2d. Recognize Depreciation as a Cost of Doing Business**

The organization adds modest amounts for building and equipment depreciation, according to the schedule developed by the accountant.

**Table 2: Services for the Homeless: Budget for Nonpersonnel Expenses**

Nonpersonnel items	Total organization		Recovery mentoring		Housing		Total program		Administration	
	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.
<b>Donated services</b>										
Volunteer house coverage	\$22,000				\$22,000		\$22,000			
Accounting	\$3,000								\$3,000	
Maintenance	\$5,000		\$400	0.08	\$3,950	0.79	\$4,350	0.87	\$650	0.13
Dietitian	\$1,500				\$1,500		\$1,500			
Volunteer services subtotal	<b>\$31,500</b>		<b>\$400</b>		<b>\$27,450</b>		<b>\$27,850</b>		<b>\$3,650</b>	
<b>Facility</b>										
Building insurance	\$1,125		\$90	0.08	\$889	0.79	\$979	0.87	\$146	0.13
Utilities	\$9,000		\$720	0.08	\$7,110	0.79	\$7,830	0.87	\$1,170	0.13
Housekeeping supplies	\$1,200		\$96	0.08	\$948	0.79	\$1,044	0.87	\$156	0.13
Maintenance supplies	\$2,500		\$200	0.08	\$1,975	0.79	\$2,175	0.87	\$325	0.13
Depreciation (build/)	\$1,500		\$120	0.08	\$1,185	0.79	\$1,305	0.87	\$195	0.13

Compilation of Technical Assistance Reports on Rate Setting Procedures

Nonpersonnel items	Total organization		Recovery mentoring		Housing		Total program		Administration	
	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.	Expenses	Prop.
Facility subtotal	\$15,325		\$1,226	0.08	\$12,107	0.79	\$13,333	0.87	\$1,992	0.13
<b>Supplies/equipment</b>										
Office supplies	\$1,800		\$100		\$200		\$300		\$1,500	
Program supplies	\$1,100		\$100		\$1,000		\$1,100			
Donated client supplies	\$4,000				\$4,000		\$4,000			
Computer/office equipment	\$400								\$400	
Equipment depreciation	\$290								\$290	
Supplies/equipment subtotal	\$7,590		\$200		\$5,200		\$5,400		\$2,190	
<b>Food preparation</b>										
Food	\$18,900				\$18,900		\$18,900			
Kitchen supplies	\$500				\$500		\$500			
Donated food	\$42,000				\$42,000		\$42,000			
Donated kitchen supplies	\$2,000				\$2,000		\$2,000			
Food preparation subtotal	\$63,400				\$63,400		\$63,400			
<b>Other</b>										
Client transportation	\$1,000		\$100		\$900		\$1,000			
Staff development	\$1,100	5.50	\$86	0.43	\$868	4.34	\$954	4.77	\$146	0.73
Publications	\$250		\$50		\$150		\$200		\$50	
Staff travel/mileage	\$2,000		\$1,250		\$350		\$1,600		\$400	
Public information	\$400		\$100		\$100		\$200		\$200	
Profess. liability insurance	\$1,500		\$250		\$1,000		\$1,250		\$250	
Telephone/mobile/Web	\$2,400		\$400		\$1,500		\$1,900		\$500	
Postage	\$400		\$15		\$210		\$225		\$175	
Miscellaneous	\$1,000		\$100		\$800		\$900		\$100	
<b>Other subtotal</b>	\$10,050		\$2,351		\$5,878		\$8,229		\$1,821	
<b>Total nonpersonnel costs</b>	\$127,865		\$4,177		\$114,035		\$118,212		\$9,653	

Note: Prop. = proportion.

**Step 2e. Add the Personnel and Nonpersonnel Costs To Arrive at Direct Program Costs**

This is simply a matter of adding the total personnel and nonpersonnel budgets, with the sum of this calculation being the projected direct program costs.

**Table 3: Services for the Homeless: Budgeted Direct Program Costs**

	Total organization	Recovery mentoring	Housing	Total program	Administration
Personnel projected expenses	\$146,000	\$9,790	\$113,550	\$123,340	\$22,660
Nonpersonnel projected expenses	\$127,865	\$4,177	\$114,035	\$118,212	\$9,653
Total direct program projected expenses	<b>\$273,865</b>	<b>\$13,967</b>	<b>\$227,585</b>	<b>\$241,552</b>	<b>\$32,313</b>

**Step 3. Add the Cost of Administration to the Direct Program Costs**

The organization decides to assign administrative costs to recovery mentoring service and housing according to the proportionate expenses of each program.

	Recovery mentoring expenses ÷ total program expenses = proportion	Housing expenses ÷ total program expenses = proportion
Calculation	$\$13,967 \div \$241,552 = 0.0578$	$\$227,585 \div \$241,552 = 0.9422$

Next the organization multiplies the proportion times the projected administrative expenses to obtain the allocation of administration to both programs.

Recovery mentoring administrative proportion	×	Administrative expenses	=	Recovery mentoring’s allocation of administrative expenses
0.0578		\$32,313		\$1,868
Housing administrative proportion	×	Administrative expenses	=	Housing’s allocation of administrative expenses
0.9422		\$32,313		\$30,445

The final step in allocating administrative costs is to add the allocated proportion of administration as shown in the following table.

**Table 4: Services for the Homeless: Allocation of Administrative Costs to Program**

	Recovery mentoring	Recovery housing	Total program	Administration
Program direct costs	\$13,967	\$227,585	\$241,552	\$32,313
Allocated admin. costs	\$1,868	\$30,445	\$32,313	-\$32,313
Total program costs	\$15,835	\$258,030	\$273,865	\$0

**Step 4. Divide the Costs by the Number of Service Units**

The organization projects 500 hours of recovery mentoring during the next year. Dividing the projected cost of \$15,835 by 500 hours of recovery mentoring services equals a service-unit cost for recovery mentoring of \$31.67 per service hour.

The organization projects 6,500 bed days of recovery housing services. Dividing the projected cost of \$258,030 by 6,500 bed days equals a service-unit cost per day for recovery housing services of \$39.70.

Note: While both of these amounts are somewhat higher than many ATR rates, the organization projected \$79,500 in donated goods and services for the fiscal year. This amount represented 29 percent of all the organization’s expenses. Consequently, the organization would need to calculate its costs *without* donated goods and services before it could assess the impact of an ATR rate on the

organization's financial health. On the other hand, the organization would do well to highlight the value of its capacity to generate private support if it had occasion to negotiate its ATR rate.