St. Francis House
Moving Ahead Program (MAP): Phase II Report

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Executive Summary

This Phase II report provides an evaluation of the existing Moving Ahead Program (MAP) assessment instrument, recommendations for improving that instrument and expanding it into a universal assessment instrument for St. Francis House (SFH), and a plan for developing a systemwide tracking and assessment program (TAP).

MAP Instrument Item-by-Item Analysis

- We identified eight MAP instrument items that had frequently endorsed "other" categories. This report provides specific recommendations for expanding the response options for these items.
- Nineteen MAP instrument items included categories that were endorsed rarely. For some of these items we recommend eliminating the rare options; for others we recommend expanding the option or leaving it as is to provide guests with comprehensive response options.
- Items throughout the MAP instrument were inconsistently gated (e.g., for some guests certain questions were asked only if previous questions were endorsed, whereas for other guests these questions were asked whether the previous questions were endorsed or not). We provide recommendations for gating the instrument consistently and in a way that minimizes response burden on the guests.
- We identified seven items with units that were unclear or inconsistently entered by staff. Computerizing the assessment will eliminate this problem, ensuring the use of consistent units.
- In addition to the above recommendations, we sought to improve question clarity. Computerization will eliminate data entry errors, forcing entered responses to conform to response options and ranges. We also identified ten items for which we recommend specific changes to question wording or response options to improve item clarity.

MAP Instrument Scale Analysis

- Analyses revealed that the current ten work and life skills scales, while useful for conceptualizing skill sets, could be collapsed into fewer scales. Guests tended to score similarly on all of the Adkins skill scales, suggesting a single score would adequately capture skill level on these scales. Guests also scored similarly on life stabilization and networking skills, suggesting these two scales could be collapsed into a single score.
- Though several of the current mental health scales are solid measures of unique symptoms, analyses revealed that some of the scales overlapped considerably. The depression and anxiety scales overlapped, as did the childhood problems and hostility scales. The treatment readiness and self efficacy scales did not have good psychometric properties; we recommend integrating items from these scales into other scales.

- Of the three self esteem measures, the Rosenberg Self Esteem scale had the best psychometric properties. Because of the considerable overlap between the scales, we recommend retaining only the Rosenberg scale.

MAP Instrument Domains

- The domains measured by the current MAP instrument are comprehensive, and we recommend retaining all of these domains.
- In addition to the current domains, the report recommends adding items measuring childhood demographics and experiences, as well as a set of scales to provide a global measure of quality of life.
- Within domains, the report also provides a set of recommendations for additional items.

MAP Instrument Procedures

- The report recommends two major changes to the way in which the MAP insturment is administered. Both will improve the generalizability of the data collected. First, we recommend conducting exit interviews with participants who do not complete MAP (about 50% of enrollees). Second we recommend implementing procedures to conduct follow-up interviews with more MAP participants and to create a more random follow-up sample, if necessary.

Universal Assessment Instrument Recommendations

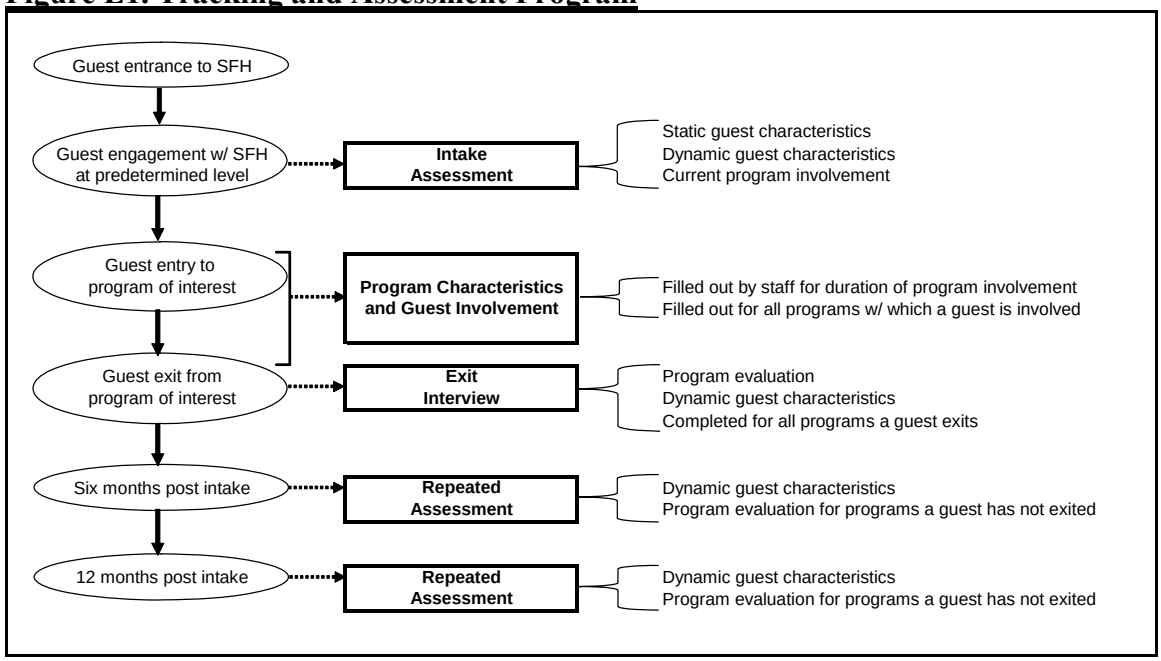
- To create a universal assessment instrument, we recommend expanding the current MAP instrument to include the suggested items, scales, and domains.
- The structure of the universal assessment instrument will include four components: static guest characteristics (i.e., history and past experiences), dynamic guest experiences (i.e., characteristics amenable to change), SFH program involvement, and SFH program experiences.

SFH Tracking and Assessment Program Recommendations

- In this section of the report, we provide recommendations for the implementation and timing of components of the universal assessment instrument. Figure E1 displays a diagram of the proposed system.
- Computers throughout SFH that will run assessment components need to be networked so that assessment information for each guest is accessible and can be updated from each computer.
- All guest information collected through the assessments is best integrated and stored using a relational database. The assessments themselves can be conducted using interviewing software compatible with the relational database.
- Guest assessments ought to occur at a predetermined intake point, upon entry and exit to each program of interest, and at other predetermined time points (e.g., six months after intake). The computer system can be programmed to select the assessment components necessary to administer at each time point.

- A report generator program, compatible with the relational database, will be able to output individualized reports for each guest.
- The development and implement of the assessment and the tracking program will take approximately 12 months. The report provides an outline of the tasks necessary to develop the system.

Figure E1. Tracking and Assessment Program



Acknowledgements

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1 Introduction

1.1 Moving Ahead Program (MAP) Phase I Report

The first phase of the current project involved a detailed description and analysis of the characteristics and experiences of MAP participants, based on ten years of data. The Phase I Report documented MAP participants' demographics, experiences with homelessness, health, mental health, work and life skills, and substance use. The Report also investigated how those variables changed for participants who completed MAP and participated in follow-up.

In addition to demonstrating that participants who completed MAP showed significant improvements in multiple life domains, the Phase I Report revealed that certain aspects of the MAP surveys on which the data were based limited the conclusions that could be drawn from this analysis. This included issues with the questions themselves, as well as the administration of the surveys.

1.2 Original Phase II Plans

Initial plans for Phase II included a question- and scale-level analysis of the MAP surveys to determine the quality of the current questions, possible targets for revision, and areas that needed additional questions. Based on that analysis, the Division on Addictions (DOA) and St. Francis House (SFH) would develop a revised set of MAP instruments incorporating the recommended changes. The DOA would then program these instruments into a Computer Assisted Personal Interview system using Blaise software and assist with implementation of that software at SFH.

1.3 Revised Phase II Plans

Meetings with SFH during Phase I raised the possibility of expanding the current project to include the development of an assessment system that encompasses all of St. Francis House instead of targeting MAP only. Further discussion made it clear that such an assessment system would require not just revising the MAP instrument for universal use, but also developing and implementing a full relational database system at SFH capable of tracking guests' paths through SFH programs, integrating assessment information from multiple programs and times, and generating output at the individual and aggregate level. The purpose of such a system would be to assess how well SFH is providing integrated services, how specific services can be improved, and whether certain services can be targeted to certain guests.

The development of such a system is beyond the scope of the original Phase II project; however, future plans for such a system render some of the original goals of Phase II obsolete. Specifically, efforts to revise and implement an improved MAP instrument would be better focused toward expanding the instrument to serve as a universal SFH assessment. The original plan to program the instrument into Blaise is likely no longer the best technological option. Blaise, though a well-suited program for individual assessment, does not include the capacity to serve as an integrated data management system.

Based on these discussions and realizations, we revised our Phase II plans. Instead of revising the MAP instrument specifically, we have used the existing MAP instrument and our recommendations for its improvement to guide the development of an assessment instrument appropriate for use throughout SFH. This instrument, which focuses on guest characteristics, behaviors, and experiences, can become one of the foundational elements of the proposed SFH assessment system.

Instead of concluding Phase II by programming this instrument into the Blaise software, which would be a pointless endeavor if SFH decides to move forward with a full SFH assessment system, we will conclude Phase II by making detailed recommendations for how best to develop and implement a systemwide assessment framework. This set of recommendations can serve as a proposal for continued collaboration between the DOA and SFH.

1.4 Phase II Report Structure

Given the changes in scope of Phase II, this Phase II report includes the originally proposed analysis of the existing MAP assessment instrument, recommendations for a new St. Francis House assessment instrument, and recommendations for the development and implementation of a St. Francis House Tracking and Assessment Database (SFH TAD).

The MAP instrument analysis includes an item by item assessment, psychometric evaluation of the existing scales, suggestions to improve the questionnaire structure, recommendations for domains and questions to include and exclude, and critique of the current instrument administration procedures.

Based on the MAP instrument analysis, the next section includes recommendations for a universal SFH assessment instrument. These recommendations account for the findings from the MAP instrument analysis, but also consider changes necessary to make the instrument appropriate for systemwide administration.

The final section of this report includes detailed recommendations for the development and implementation of a comprehensive St. Francis House Tracking and Assessment Database (SFH TAD). Though this work is beyond the scope of the current contract, this section serves as a proposal for a future collaboration between SFH and the DOA that would involve the development and implementation of SFH TAD. The recommendations include a description of the general structure of such a system, the necessary technological platform, the integration of assessment and program information components, the development of report and output technology, and steps necessary to implement the system at SFH.

2 MAP Assessment Instrument Analysis

Our work in Phase I of this project uncovered several aspects of the MAP survey instrument and its administration that would benefit from revision and reconsideration. At the item level, these included answer options that were either too restricted or too broad, as well as problems with question gating and answer clarity. At a broader level, our work with the data indicated survey administration procedures that limited the amount of information that could be generated by the data. We supplemented these findings with analyses of the current scales (e.g., depression, work/life skills) and recommended expansions and reductions of certain domains based on the data and SFH needs.

The data used to generate findings and recommendations in this report were the same as those used for Phase I. For both reports, we analyzed data from 668 MAP participants who attended the program between 1999 and 2007.

2.1 Item by Item Analysis

There were several item-level problems that affected multiple items within the MAP survey. First, variance captured by the "other" category for many questions was high enough (e.g., 52.9% of respondents endorsing "other" as their current residential program) to suggest that the question required an expanded list of answer options. Second, for a few questions, some of the answer categories were endorsed so rarely that their inclusion was questionable. Third, many of the questions were gated, but inconsistently. For example, respondents who indicate that they are on probation are subsequently asked whether they have violated their probation; the data indicate that some respondents who *did not* indicate current probation were asked about probation violations, but some were not. Fourth, a few of the questions required that the interviewer provide answers in specific units (e.g., months), but the answer ranges indicated that some answers were entered in other units (e.g., days). Finally, the wording of some questions was unclear or vague, affecting the reliability of the answers.

2.1.1 "Other" Categories Capturing Excessive Variance

There were eleven baseline questions (two of which overlapped with graduation items and six of which overlapped with follow-up items), one unique graduation question, and one unique follow-up question that included a category for "other." The percent of respondents endorsing this category ranged from 0% to 86% across questions and surveys. Table 1 provides a list of the questions that included an "other" category and the endorsement rates of those categories.

Questions for which 10% or more of the sample endorsed the "other" category ought to be expanded to include more specific options. These questions included: 1) "Name of Interviewer"; 2) "Race"; 3) "Referral Source"; 4) "Current Residential Program"; 5) "Reason for Unemployment"; 6) "Major Source of Support"; 7) "Resource Used to Find Post-Graduation Job(s)"; and 8) "Internship Setting".

Table 1. MAP Instrument Questions w/ "Other" Category

Question	Instrument	Domain	Endorsement of "Other" category [N(%)]
Name of Interviewer*	Baseline Graduation Follow-up	Demographics	443 (69.8%) 266 (78.5%) 54 (85.7%)
Sexual Orientation	Baseline	Demographics	2 (0.3%)
Race*	Baseline	Demographics	65 (10.3%)
Referral Source*	Baseline	Demographics	98 (15.4%)
Current Residential Program*	Baseline	Demographics	335 (52.9%)
Previous Living Situation	Baseline	Housing History	26 (4.1%)
Highest Completed Grade	Baseline Follow-up	Education	58 (9.2%) 2 (3.1%)
Reason for Unemployment*	Baseline Follow-up	Employment/Income	123 (33.9%) 9 (50.0%)
Major Source of Support*	Baseline Follow-up	Employment/Income	143 (23.3%) 7 (10.9%)
Resource Used to Find Post-Graduation Job(s)*	Follow-up	Employment/Income	18 (29.0%)
Internship Setting*	Graduation	Internship	122 (37.8%)
Usual Place to Receive Health Care	Baseline Graduation Follow-up	Health	20 (3.2%) 6 (1.7%) 0 (0.0%)
Type of Treatment Program Entered	Baseline Follow-up	Substance Use	31 (5.7%) 0 (0.0%)

*Question for which 10% or more of sample endorsed the "other" category.

We recommend the following course of action for the eight questions that have excessive variance captured by the "other" category:

- **Name of Interviewer:** Given the possible turn-over in interviewers over time, this question ought to use an open response format (i.e., writing or typing interviewer name instead of choosing from options).
- **Race:** Current "Race" options include Alaskan Native, American Indian, Asian/Pacific Islander, Black/African American, Caucasian, and Cape Verdean. (Hispanic ethnicity is captured by another question and does not need to be included here. However, this might be a point of confusion for guests trying to answer the Race question.) This question ought to include one or two additional options, based on staff's knowledge of the St. Francis House population.
- **Referral Source:** This question currently includes many (12) options that appear to be fairly comprehensive. Unless St. Francis House staff are aware of other options not included here, revision of this question might require an interim period of examining the specifics provided by participants who select the "other" category. The question could then be revised accordingly.
- **Current Residential Program:** More than 50% of the sample selected the "other" category for this question. The question might have the same difficulty as the "Name of Interviewer" question due to turn-over and changes in the residential programs with which St. Francis House affiliates. This question should be updated with current

options, but ought to continue to include an open response option with which participants who select "other" can indicate their residential program.

- **Reason for Unemployment:** This question currently includes a range of options that appear to be fairly comprehensive. It might be that, given the large proportion of MAP participants with some legal involvement, there are reasons related to their status as offenders that make finding employment difficult. An option relating to these reasons could be added. Revision of this question might also require an interim period of examining specifics provided by participants who select the "other" category. The question could then be revised accordingly.
- **Major Source of Support:** Almost one quarter of the sample endorsed the "other" category for this question, indicating that at least one additional option ought to be added. Current options include wages, public support, unemployment, and partners, friends, or family. Unless St. Francis House staff are aware of other options not included here, revision of this question might require an interim period of examining the specifics provided by participants who select the "other" category. The question could then be revised accordingly.
- **Resource Used to Find Post-Graduation Job(s):** Options for this question currently include newspaper, MAP contact, employment agency, the Internet, human resources at job site, and personal contact. However, almost 30% of the sample endorsed the "other" option. It is possible that the question needs to include options for other St. Francis House resources. Unless St. Francis House staff are aware of other options not included here, revision of this question might require an interim period of examining the specifics provided by participants who select the "other" category. The question could then be revised accordingly.
- **Internship Setting:** Currently, this question includes options for medical, social service, legal, service, and business settings. Almost 40% of participants endorsed the "other" category, indicating that this question likely needs at least two more options. Possibilities include other non-profit settings, an option encompassing labor or construction, and an option for computer-oriented work. St. Francis House staff might be aware of other possible options.

2.1.2 Unnecessary categories

Many questions included at least one category that was endorsed rarely. These questions (for which at least one category on the baseline survey was endorsed by less than 2% of participants) are included in Table 2. The Table also includes any unique questions from the graduation or follow-up surveys with seldom endorsed options.

In making decisions about whether to eliminate these options, it is important to consider more than just the statistics. Some options, however rarely endorsed, might be important to retain to be inclusive of all guests. For example, few guests were unsure of their sexual orientation, but for those who were it might have been uncomfortable to be forced to choose without that option. This is a decision St. Francis House staff will need to make about each of the questions listed in Table 2.

Table 2. MAP Instrument Questions w/ Seldom Endorsed Options

Question	In-strume	Domain	Category	Endorsement of Category [%]
Name of Interviewer	B,G,F	Demographics	[All Categories]	0.0%-13.3%
Gender	B	Demographics	Transgender	0.6%
Sexual Orientation	B	Demographics	Not sure Other	1.3% 0.3%
Ethnicity	B	Demographics	Don't Know	0.5%
Race	B	Demographics	Alaskan Native American Indian Asian Cape Verdean Unknown	0.5% 1.7% 0.8% 1.0% 0.2%
Referral Source	B	Demographics	Detox Health Care Provider Other Homeless Shelter Social Service Agency Lawyer Community Agency Unknown	0.8% 0.2% 0.9% 1.6% 0.5% 0.5% 0.5%
Current Residential Pro-gram	B	Demographic	Hello House 2 Victory (women) Victory (men)	1.7% 1.1% 0.5%
Living Situation	B,F	Housing His-tory	Psych. Facility D.V Situation	1.3%, 0.0% 0.2%, 0.0%
Marital Status	B,G,F	Family Infor-mation	Living as Married Widowed	1.1%, 2.3%, 0.0% 1.4%, 2.3%, 0.0%
Highest Completed Grade	B,F	Education	None Graduate School	1.6%, 1.6% 1.6%, 1.6%
Restraining Order (on self)	B,G,F	Criminal Hist.	Don't Know	0.8%, 0.8%, 0.0%
Reason for Unemploy-ment	B,F	Employ-ment/Income	Needed at Home Childcare	0.6%, 0.0% 0.8%, 0.0%
Major Source of Support	B,F	Employ./Inc.	Unemployment	1.5%, 3.1%
Resource for Finding Job	F	Employ./Inc.	Internet	0.0%
Internship Setting	G	Internship	Legal Setting	1.5%
Usual Health Care	B,G,F	Health	Alternative Health Care	0.0%, 0.6%, 1.5%
Current Health Problems	B,G,F	Health	Don't Know	1.3%, 3.4%, 1.6%
Substance of Choice	B,F	Substance Use	Inhalants Hallucinogens Street Methadone Other Opiates Other Amphetamines Tranquilizers Barbiturates Other Sedatives	0.0%, 0.0% 0.3%, 0.0% 0.0%, 0.0% 1.7%, 0.0% 0.0%, 0.0% 0.3%, 1.6% 0.9%, 0.0% 1.9%, 0.0%
STD Treatment at MAP	G	Sexual History	Syphilis Chlamydia Genital Warts Genital Herpes	1.7% 0.9% 0.9% 1.4%

Note. B=Baseline; G=Graduation; F=Follow-Up

However, this report can provide some general and specific recommendations based on the findings:

- For "Name of Interviewer," as recommended earlier, the question ought to use an open response format, not limited choices.
- For questions dealing with sensitive subjects (e.g., gender or sexual orientation), seldom endorsed options might be retained to ensure the comfort of all guests responding to the survey.
- Instead of eliminating options, rare options can be combined with more commonly endorsed options. For example, for race, Alaskan Native and American Indian could be combined.
- For questions that also had "other" categories that were commonly endorsed, rare options can be expanded to attempt to move responses from "other" to a specific option. For example, for race, more than 10% endorsed "other," but only 1% endorsed Cape Verdean. The Cape Verdean category could be expanded to include all African nationalities.
- Several questions had "don't know" options that were rarely endorsed. This can be resolved through computerization and gating of the instrument. In this way, "don't know" can be offered as an option for all questions but only if a guest is not able to choose among the more specific options.
- "Substance of choice" had several options that were endorsed by less than 2% of the sample. However, for each of the substances from which guests could choose their "substance of choice" answer, more than 2% of the sample indicated that they had used the substance at some point. For example, though only 0.3% of the baseline sample endorsed tranquilizers as their substance of choice, more than 35% indicated that they had used tranquilizers, and 15% indicated that they used tranquilizers one or more times a week. This suggests that tranquilizers should not be eliminated as a substance use option. However, inhalants, hallucinogens, other amphetamines, and other sedatives were each rarely endorsed as substance of choice, used at any point by less than 10% of the sample, and used weekly or more by less than 3% of the sample. These options potentially could be eliminated or combined into other categories.

2.1.3 Question Gating

Question gating refers to decision points within a survey that allow further questions to be asked of respondents who endorse a certain answer to a given question but not of respondents who do not endorse that answer. For example, in the MAP survey, guests who indicate that they are unemployed are asked for reasons for unemployment. This question does not need to be asked of guests who indicate that they are employed. Question gating can significantly reduce survey time and burden on interviewers and respondents.

Phase I analyses revealed that questions throughout the MAP survey were inconsistently gated. Some interviewers appear to have asked all participants all questions, while others appear to have gated the survey, only asking follow-up questions of participants who indicated a specific answer on the previous question. This was clear because the number of respondents varied from question to question and did not do so in a way that corresponded directly to what one would expect from a gated question. For example, returning to the reasons for unemployment question, 339 participants who completed the baseline

survey indicated that they had not had gainful employment in the past year. However, 363 participants answered the question about reasons for unemployment. For consistency, either the full sample of 638 or the sub-sample of 339 ought to have answered the reasons for unemployment question.

In Table 3, we include both questions that were inconsistently gated and questions that were not gated but ought to be gated. We recommend that inconsistently gated questions be gated by all interviewers to improve data quality. A computerized version of the survey will be able to achieve this automatically.

Table 3. MAP Instrument Inconsistently Gated Questions

Question	Domain	Recommendation
# of Times Homeless → Length of Last Homeless Episode & Age @ 1st Homeless Episode	Housing History	An answer of "0" for # of Times Homeless ought to bypass the two questions that follow about homeless episodes.
Intimate Relationship → Current Marital Status	Family Information	Marital Status ought to precede Intimate Relationship; an answer of "never married," "separated," "divorced," or "widowed" ought to gate into Intimate Relationship; answers of "married" or "living as married" ought to automatically result in a "yes" answer to Intimate Relationships and bypass the question.
Probation → Probation Violation Parole → Parole Violation	Criminal History	For these sequences, the first question asks about current probation or parole and the second about violations in the past 12 months. Therefore, they cannot be consistently gated. Instead, the first question in the sequence ought to ask about current parole/probation, the second ought to ask anyone indicating "no" whether they have been on parole/probation in the past 12 months (and automatically enter a "yes" for those who are currently on parole/probation), and the third ought to ask those who have been on parole/probation in the past 12 months whether they have violated that parole/probation.
Incarceration → # of Days Incarcerated	Criminal History	Only guests who indicate that they have been incarcerated in the past 12 months should be asked the # of days they have been incarcerated.
Gainful Employment → Employment Type & Days Worked & Reasons for Unemployment	Employment/Income	A "yes" response to Gainful Employment ought to gate into Employment Type and Days Worked, whereas a "no" response ought to gate into Reasons for Unemployment.
# of Children → Non-Child Dependents Depending on Financial Support	Family Information & Employment/Income	Answers of >0 for # of children ought to gate into a question about # of children dependent on financial support; after those two questions, all guests should receive the question about non-child dependents depending on financial support.
Health Insurance → Interest in Health Insurance	Health	Responses of "no" ought to gate into Interest questions; others should bypass this question.
Serious Health Problems → Problem List	Health	Responses of "yes" ought to gate into an open response format question asking guests to list their main problems.
Glasses → Need a New Pair	Health	An answer of "no" or "used to but not now" ought to gate guests into a question about whether they need a pair of glasses or contacts; an answer of "yes" ought to gate participants into a similar question that asks whether they think they need a *new* pair.

Table 3. MAP Instrument Inconsistently Gated Questions (continued)

Question	Domain	Recommendation
Alcohol Abuse Treatment & Drug Abuse Treatment → Times Entered Specific Treatments → Times Completed Specific Treatments	Substance Use	Responses of "no" to both drug and alcohol treatment questions ought to bypass question about specific substance abuse treatments. Responses of "0" to Times Entered Treatment question should bypass question about Times Completed Treatment.
Alcohol Use → Days w/out Drinking & Days Binging & Drinks per Day	Substance Use	Answers of "never" to past year alcohol use question should bypass questions about days w/out drinking, days binging, and drinks per day.
Cigarette Use → Cigarettes per Day	Substance Use	An answer of "never" to the cigarette use question ought to bypass the cigarettes per day question.
Injection Drug Use → Dirty Needles & Same Cooker	Substance Use	An answer of "never" to Injection Drug Use ought to bypass the Dirty Needles and Same Cooker questions.
Gambling → Gambling Problems	Substance Use	Currently all guests are asked about gambling problems. Instead, an initial question should ask about frequency of gambling in the past year. Only guests who have gambled in the past year ought to be asked about past year gambling problems.
Sexual Partners → Frequency of Sex → Unprotected Sex & Money or Drugs for Sex	Sexual History	An answer of "0" to Sexual Partners should bypass the Frequency of Sex, Unprotected Sex, and Money or Drugs for Sex questions. An answer of "0" to Frequency of Sex should bypass the Unprotected Sex and Money or Drugs for sex questions.
STDs → # of STD Times & Past 6 Month STDs	Sexual History	An answer of "no" to a given STD should bypass # of Times and Past 6 Month questions.
HIV Test → HIV Test Result	Sexual History	An answer of "0" to HIV Testing should bypass the HIV Test Result question.

In addition to these specific gating recommendations, we have two general gating recommendations:

- As mentioned above, "don't know" should not be offered as an option initially. If a guest indicates that they are not able to answer the question or refuses to endorse other options, "don't know" can then be selected as an option.
- To eliminate missing data, "refuse" should be a secondary option similar to "don't know" (i.e., provided only if guests refuse to select an option). This response option will ensure that all guests have data for all questions other than those into which they are not gated.

2.1.4 Question Units

A few questions within the MAP survey include units that were entered inconsistently or responses for which it was impossible to verify whether units had been entered correctly. Our recommendations for these questions are simple: computerization of the instrument will allow ranges to be set that ensure that the appropriate units are used. The questions for which this is currently unclear are listed in Table 4.

Table 4. MAP Instrument Questions w/ Ambiguous Units

Question	Units	Recommendation
Time at Current Residential Program	Months and Days	Allow only days
Length of Last Homeless Episode	Days	Continue to allow only days
Years of Education	Years	Continue to allow only years
Days Incarcerated	Days	Continue to allow only days
Days Worked	Days	Continue to allow only days
Total Monthly Income	$	Allow whole dollars only
Longest Tenure at One Job Since Graduation	Unclear	Allow only days

2.1.5 Question Clarity and Quality

There are some problems we identified with specific survey questions that do not fit clearly into the earlier categories. We discuss these problems here.

The most general of these problems are questions for which the entered data falls outside the possible response range. Almost all of the questions in the MAP survey have a limited range of acceptable options (e.g., 1-7 for questions with a strongly disagree-strongly agree scale; >17 for age). When computerization of a revised instrument occurs, it ought to include these ranges so that it is impossible to enter numbers outside the specified ranges.

We have recommendations for several specific questions, as well:

- **Ethnicity / Race:** In the current survey, guests are asked first if they are of Hispanic ethnic background, and then asked to identify their race. Because Hispanic descent is considered ethnicity and not race, this option is not included in the race question. However, this might confuse respondents and account for some of the responses of "Other." The Race question ought to indicate that Hispanic descent has been accounted for by the previous Ethnicity question.
- **Highest Completed Grade:** In the current survey, High School and GED are combined as a single option. We recommend splitting these into two options based on their conceptual difference, as well as the high prevalence of participants (i.e., more than 50%) who endorsed this option.
- **# of Days Worked**: It might be hard for guests to estimate the number of days they have worked in the past year. This question ought to include tips for interviewers to help guests remember. These tips could include notes about how the average number of days worked per week translates into days per year (e.g., 2 days a week = ~104 days in a year). This same set of notes could be included for other questions that require estimating the number of days in a program.
- **Times Completed Treatment:** This is a special case of the general recommendation about limiting ranges to valid values. Upon computerization, the values of responses to Times Completed a given treatment should not be allowed to exceed the values of responses to Time Entered that treatment.

- **Trouble Staying Awake:** This item is nested within a set of items comprising several mental health scales (e.g., depression, anxiety). However, the item itself is not listed as a measure of any of those scales. Unless this item captures an important symptom in this population or ought to be considered within one of the larger scales, we recommend its deletion.
- **Type of Treatment Program:** For residential treatment, the question currently asks guests to include their current residential treatment program. However, for guests that are currently in a residential program, this artificially reduces their completion rate since they cannot have completed a program they are currently attending. This question should be modified so that the survey indicates whether one of the Times Entered is current.
- **Substances:** The list of possible substances needs to be evaluated not only for rarely endorsed substances but also for substances not currently listed. For example, non-medical use of prescription drugs not otherwise listed might be a category to consider.
- **Rode w/ Drinking Driver (including self):** We recommend breaking this question into two questions to capture specific DUI behavior as well as riding with a drinking driver. Guests willing to ride with a drinking driver might not be the same guests willing to drive themselves after drinking.
- **Smoking:** In the current survey, past year smoking is assessed both by the Nicotine category in the list of substances as well as by a separate question about smoking, smoking cigars or chewing tobacco. These questions are redundant. Therefore we recommend that the later question be deleted.
- **STD Treatment:** The current graduation survey asks guests only about STD treatment during MAP, not STD occurrence. Given the baseline and follow-up surveys' questions about STD occurrence, we recommend that the graduation survey also ask about occurrence and follow that question up with the question about treatment.

2.2 Scale Analysis

The current MAP survey includes several sets of scales. One set assesses participants' work and life skills. Another set assesses domains related to participants' mental health. A final set includes scales assessing different aspects of self esteem. For each of these scales, we conducted psychometric analyses to determine whether the items measured a single coherent construct (e.g., whether the six items used to measure depression correlate with each other) and whether any items could be deleted from the scale. These analyses can indicate the reliability of the scales (i.e., how well the items hold together) and their dimensionality (i.e., whether they measure a single construct or multiple constructs), but are not able to provide information about the validity of the scales (e.g., whether the scale claiming to measure depression actually measures depression) or their appropriateness compared to other possible measures. These issues are addressed in later sections.

For reliability analyses, we considered a Cronbach's alpha of .70 or higher to indicate adequate reliability, but also investigated item-total correlations to determine whether any items ought to be removed. We also ran principal components analyses on some scales

and scale sets to investigate whether the scales measured a single or multiple constructs. We used the scree plots and rotated factor matrices to determine how many factors were measured by a given scale or set of scales.

2.2.1 Work/Life Skill Scales

To measure work and life skills, the MAP survey includes the Adkins Life Skills measure and a measure of Work-Place Literacy. The Adkins measure includes scales assessing skills related to communication, career exploration, appropriate job behavior, work self-assessment, and basic literacy. The Work-Place Literacy measure includes scales assessing skills related to workplace technology, paperwork, life stabilization, office work, and social networking. Both measures ask respondents to rate both their skill and their interest in the skill on a scale that ranges from 0 (no skill or no interest) to 4 (maximum skill or maximum interest). These scales were included in the baseline, graduation, and follow-up surveys. To use the largest possible sample, these analyses investigated the properties of the scales within responses to the baseline survey, assuming that the scales would operate similarly in the other two surveys. Analyses also focused on skill ratings since ratings of interest were not expected to form the same coherent constructs.

Communication

The Communication Skills scale had acceptable reliability, Cronbach's alpha (α) = 0.79. Investigation of the items comprising this scale revealed that the last item, Ability to Speak in Front of a Group, did not correlate as well as other items with the rest of the scale, but the correlations were not low enough, and the alpha not affected enough, to justify removal of the item.

Table 5. Communication Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Communication Skills	*.79*	--	--
Completing a Successful Job Interview	--	.61	.73
Answering Sensitive Application Questions	--	.59	.74
Ability to Speak to a Supervisor	--	.64	.72
Ability to Speak to a Customer	--	.58	.74
Ability to Speak in Front of a Group	--	.43	.80

Career Exploration

The Career Exploration Skills scale had good reliability, Cronbach's alpha (α) = 0.84. Investigation of the items comprising this scale revealed that the first item, Exploring New Career Possibilities, did not correlate as well as other items with the rest of the scale, but the correlations were not low enough, and the alpha not affected enough, to justify removal of the item.

Table 6. Career Exploration Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Career Exploration Skills	*.84*	--	--
Exploring New Career Possibilities	--	.50	.87
Knowing How to Look for Training Programs	--	.72	.77
Knowing How to Look for Employ. Services	--	.73	.76
Knowing How to Use Employ. Services	--	.73	.76

Appropriate Job Behavior

The Appropriate Job Behavior Skills scale had good reliability, Cronbach's alpha (α) = 0.80. Investigation of the items comprising this scale revealed that the first item, Asking about Job Duties When Confused, did not correlate as well as other items with the rest of the scale, but the correlations were not low enough and the alpha not affected enough to justify removal of the item.

Table 7. Appropriate Job Behavior Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Appropriate Job Behavior Skills	*.80*	--	--
Asking about Job Duties When Confused	--	.52	.86
Knowing Supervisors' Appropriate Behavior	--	.74	.63
Knowing Coworkers' Appropriate Behavior	--	.70	.68

Work Self-Assessment

The Work Self-Assessment Skills scale had only two items. Therefore, the utility of Cronbach's alpha (α), which in this case was equal to 0.74, is questionable. However, the correlation between the items is 0.59, indicating that they hang together well as a two-item scale.

Table 8. Work Self-Assessment Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Work Self-Assessment Skills	*.74*	--	--
Figuring Out Work Interests	--	.59	--
Understanding Work Strengths	--	.59	--

Basic Literacy

The Basic Literacy Skills scale did not have good reliability, Cronbach's alpha (α) = 0.62. Investigation of the items comprising this scale revealed that the last item, Math Skills, did not correlate well with the rest of the scale. Eliminating the Math Skills item would raise the reliability of the scale to an acceptable level.

Table 9. Basic Literacy Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Basic Literacy Skills	*.62*	--	--
Reading	--	.49	.44
Writing	--	.59	.37
Math	--	.23	.72

Workplace Technology

The Workplace Technology Skills scale had very good reliability, Cronbach's alpha (α) = 0.92. Investigation of the items comprising this scale revealed that all of the items correlated well with each other.

Table 10. Workplace Technology Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Workplace Technology Skills	*.92*	--	--
Using the Internet	--	.88	.89
Using Email	--	.81	.91
Using a Word Processor	--	.78	.92
Using the Computer	--	.85	.90

Paperwork

The Paperwork Skills scale had acceptable reliability, Cronbach's alpha (α) = 0.75. Investigation of the items comprising this scale revealed that all of the items correlated well with each other.

Table 11. Paperwork Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Paperwork Skills	*.75*	--	--
How to Fill Out a W-4	--	.59	.65
How to Fill Out an I-9	--	.56	.68
How to Decipher a Benefits Package	--	.58	.66

Life Stabilization

The Life Stabilization Skills scale had acceptable reliability, Cronbach's alpha (α) = 0.79. Investigation of the items comprising this scale revealed that all of the items correlated well with each other.

Table 12. Life Stabilization Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Life Stabilization Skills	*.79*	--	--
How to Make a Business Phone Call	--	.51	.77
How to Resolve Outstanding Legal Issues	--	.53	.76
Looking for Housing	--	.67	.69
Knowing What's Involved to Secure Housing	--	.67	.69

Office

The Office Skills scale had only two items. Therefore, the utility of Cronbach's alpha (α), which in this case was equal to 0.74, is questionable. However, the correlation between the items is 0.59, indicating that they hang together well as a two-item scale.

Table 13. Office Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Office Skills	*.74*	--	--
Using a Copy Machine	--	.59	--
Filing	--	.59	--

Social Networking

The Social Networking Skills scale had acceptable reliability, Cronbach's alpha (α) = 0.74. Investigation of the items comprising this scale revealed that all of the items correlated well with each other.

Table 14. Social Networking Skills Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Social Networking Skills	*.74*	--	--
Recognizing Life Successes	--	.50	.72
Networking to Find Jobs	--	.61	.59
How to Make/Revise a Resume	--	.58	.64

Adkins Life Skills & Workplace Literacy Scale Confirmation

As an additional test of the scales, we ran principal components analyses on all of the Adkins Life Skills items and all of the Workplace Literacy items to confirm the scale structure of these measures. These analyses determine whether the items cluster together into the existing scales or whether different combinations of the items are merited.

The Adkins Life Skills measure includes five scales. However, the principal components analysis indicated that the measure was unidimensional, meaning that all of the items loaded on a single component. This indicates that though the scales (e.g., Communication Skills, Career Exploration) might be a useful way to organize and understand the questions, the skills assessed by the Adkins measure form a single life skills scale – respondents tend to score similarly on all of the items. Examination of the component loadings indicate that all of the items contribute to the measurement of life skills, though the basic literacy items contribute the least. These findings suggest that if any scale were a candidate to measure a unique dimension, it would be the Basic Literacy scale. However, the earlier reliability analyses indicated that Basic Literacy was the one scale for which all items did not correlate well. Therefore, reading and writing appear to comprise a basic literacy scale that is somewhat separate from the other life skills, and math literacy appears to be an item that stands alone.

Table 15. Adkins Life Skills Component Loadings

Item	Component 1 (39.4% of variance)
Knowing How to Use Employ. Services	.75
Knowing How to Look for Employ. Services	.72
Ability to Speak to a Supervisor	.72
Completing a Successful Job Interview	.70
Answering Sensitive Application Questions	.70
Understanding Work Strengths	.70
Knowing How to Look for Training Programs	.69
Asking about Job Duties When Confused	.68
Knowing Supervisors' Appropriate Behavior	.68
Knowing Coworkers' Appropriate Behavior	.62
Exploring New Career Possibilities	.61
Figuring Out Work Interests	.61
Ability to Speak to a Customer	.60
Ability to Speak in Front of a Group	.48
Writing	.44
Math	.42
Reading	.41

The Workplace Literacy measure also includes five scales. The principal components analysis indicated that the measure had multiple dimensions – interpretation of the scree plot and eigenvalues suggested that the measure divides empirically into two scales.

Table 16. Workplace Literacy Component Loadings

Item	Component 1 (28.4% of variance)	Component 2 (25.0% of variance)
How to Make a Business Phone Call	.72	--
Looking for Housing	.72	--
How to Resolve Outstanding Legal Issues	.71	--
Networking to Find Jobs	.68	--
Knowing What's Involved to Secure Housing	.64	--
Recognizing Life Successes	.61	--
How to Decipher a Benefits Package	.59	--
How to Make/Revise a Resume	.62	.39
How to Fill Out a W-4	.55	.33
How to Fill Out an I-9	.42	.30
Filing	.46	.40
Using a Copy Machine	.45	.48
Using the Internet	--	.90
Using Email	--	.86
Using a Word Processor	--	.83
Using the Computer	--	.87

Note. Loadings below .30 not included in Table.

In general, items from the life stabilization, social networking, and paperwork scales loaded on the first component and items from the workplace technology and office skills scales loaded on the second component. However, the first component most clearly represented skills related to networking and life stabilization and the second component most clearly represented skills related to technology; neither the paperwork nor office skills scales loaded cleanly on either component. This indicates that paperwork and office skills might represent more narrow skill sets that don't reliably correlate with technology or networking skills.

Together these analyses suggest that though the current Adkins and Workplace Literacy subscales are useful for conceptualizing skill sets, guests tend to report skills on a more general level: they tend to score similarly on all Adkins skills and similarly on life stabilization and networking skills. Workplace technology, paperwork, and office skills are the only pre-existing scales that potentially capture unique skill sets.

2.2.2 Mental Health Scales

To measure aspects of mental health, the MAP survey includes depression, anxiety, hostility, childhood problems, substance use problem recognition, treatment readiness, social support, and self efficacy scales. Each scale contains between six and 12 items and asks respondents to rate each item from 1 (strongly disagree) to 7 (strongly agree). These scales were included in the baseline, graduation, and follow-up surveys. To use the largest possible sample, these analyses investigated the properties of the scales within responses to the baseline survey, assuming that the scales would operate similarly in the other two surveys.

Depression

The Depression scale did not have good reliability, Cronbach's alpha (α) = 0.69. Investigation of the items comprising this scale revealed that the reverse-scored item, Feel Interested in Life, did not correlate well with the rest of the scale. It might be that in this population, feelings of depression and isolation reflect guests' life situation and do not necessary indicate a loss of interest in or enthusiasm for life. Eliminating the Feel Interested in Life item would raise the reliability of the scale to an acceptable level.

Table 17. Depression Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Depression	*.69*	--	--
Feel Sad/Depressed	--	.61	.59
Thoughts of Suicide	--	.31	.69
Feel Lonely	--	.53	.61
Feel Interested in Life (R)	--	.14	.72
Feel Extra Tired or Run Down	--	.51	.62
Worry or Brood A Lot		.44	.65

Note. (R) indicates that an item was reverse-scored for analysis.

Anxiety

The anxiety scale had good reliability, Cronbach's alpha (α) = 0.81. Investigation of the items comprising this scale revealed that all of the items correlated well with each other.

Table 18. Anxiety Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Anxiety	*.81*	--	--
Trouble Sitting Still	--	.53	.78
Trouble Sleeping	--	.49	.79
Feel Anxious or Nervous	--	.62	.77
Trouble Concentrating	--	.50	.79
Afraid of Certain Things	--	.41	.80
Feel Tense or Keyed Up	--	.69	.76
Feel Tightness in Muscles	--	.56	.78

Hostility

The Hostility scale had acceptable reliability, Cronbach's alpha (α) = 0.78. Investigation of the items comprising this scale revealed that two items, Feel Mistreated and Have Carried Weapons, did not correlate as well as other items with the rest of the scale. Neither of these items directly measures the aspects of anger or temper captured by the rest of the scale. Elimination of these items would allow the scale good reliability (α > 0.80).

Table 19. Hostility Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Hostility	*.78*	--	--
Feel Mistreated	--	.28	.79
Like Others to Feel Afraid	--	.42	.77
Urges to Fight or Hurt Others	--	.51	.76
Have a Hot Temper	--	.64	.73
Temper Causes Fights/Trouble	--	.62	.74
Get Mad at Others Easily	--	.65	.73
Have Carried Weapons	--	.35	.79
Feel a Lot of Anger Inside	--	.54	.75

Childhood Problems

The Childhood Problems scale had acceptable reliability, Cronbach's alpha (α) = 0.73. Investigation of the items comprising this scale revealed that, compared to other scales, the items did not correlate very highly with each other. However, the correlations were not low enough, and the alpha not affected enough, to justify removal of any specific item.

Table 20. Childhood Problems Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Childhood Problems	*.73*	--	--
Skipped School Growing Up	--	.38	.71
Took Others' Things When Young	--	.43	.70
Good Relations with Parents Growing Up	--	.35	.71
Anger/Frustration During Childhood	--	.58	.67
Involved in Fights Growing Up	--	.40	.70
Had Trouble with Authorities as a Teen	--	.40	.70
Good Self Esteem Growing Up (R)	--	.39	.71
Emotionally/Physically Abused During Youth	--	.45	.69

Note. (R) indicates that an item was reverse-scored for analysis.

Substance Use Problem Recognition

The Substance Use Problem Recognition scale had very good reliability, Cronbach's alpha (α) = 0.88. Investigation of the items comprising this scale revealed that all of the items correlated well with each other.

Table 21. Substance Use Problem Recognition Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Substance Use Problem Recognition	*.88*	--	--
Drug/Alc. Use is a Problem	--	.58	.87
Drug/Alc. Use More Trouble Than Worth	--	.49	.88
Drug/Alc. Use Causing Problems w/ Law	--	.56	.88
Drug/Alc. Use Causing Problems Thinking	--	.67	.87
Drug/Alc. Use Causing Family/Friend Probs.	--	.76	.86
Drug/Alc. Use Causing Employ. Problems	--	.72	.86
Drug/Alc. Use Causing Health Problems	--	.60	.87
Drug/Alc. Use Making Life Worse	--	.74	.86
Drug/Alc. Use Will Cause Death	--	.56	.88

Treatment Readiness

The Treatment Readiness scale did not have good reliability, Cronbach's alpha (α) = 0.57. Investigation of the items comprising this scale revealed that the item, Last Chance to Solve Drug/Alcohol Problems, did not correlate well with the rest of the scale. Eliminating this item would raise the reliability of the scale, but not to an acceptable level. All of the correlations between items in this scale were relatively low, suggesting that the items do not measure a single construct in this sample. However, scores on this scale were very high and did not vary much in this sample. This might have created a ceiling effect that artificially affected these correlations.

Table 22. Treatment Readiness Scale

Scale / Item	A	Item-Total Correlation	α if Item Deleted
Treatment Readiness	*.57*	--	--
Too Many Outside Responsibilities (R)	--	.25	.55
Program Seems Too Demanding (R)	--	.32	.53
Last Chance to Solve Drug/Alc. Problem	--	.09	.65
Program Will Not Be Helpful (R)	--	.37	.51
Plan to Stay In Program For Awhile		.37	.52
Someone Made Me Come to Program (R)		.33	.52
Program Can Really Help Me		.40	.51
Want to be in Program		.40	.52

Note. (R) indicates that an item was reverse-scored for analysis.

Social Support

The Social Support scale had acceptable reliability, Cronbach's alpha (α) = 0.72. Investigation of the items comprising this scale revealed that two reverse-scored items, Close People Have Drug/Alcohol Problem and Worked Where Drug/Alcohol Use Common, did not correlate as well as other items with the rest of the scale. These items measure exposure to drugs and alcohol, but do not measure social support in the same way as other items in this scale. Elimination of these items would allow the scale good reliability (α = 0.80).

Table 23. Social Support Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Social Support	*.72*	--	--
Close People Have Drug/Alc. Problem (R)	--	.01	.76
Close People Respect My Efforts	--	.40	.69
Close People Understand Situation/Problems	--	.54	.67
Have Close People Who Can Be Trusted	--	.45	.68
Close People Motivate/Encourage Recovery	--	.61	.67
Close People Expect Me to Change Positively	--	.39	.69
Program Has Improved Relatnshps w/ Others	--	.36	.70
Family Helps Me Resist Drugs/Alcohol	--	.49	.67
Close People Help Develop Confidence	--	.62	.66
Other Students Will Help Recovery	--	.29	.71
Worked Where Drug/Alc. Use Common (R)	--	.03	.75
Have Friends Who Do Not Use Drugs/Alc.	--	.33	.70

Note. (R) indicates that an item was reverse-scored for analysis.

Self Efficacy

The Self Efficacy scale did not have good reliability, Cronbach's alpha (α) = 0.64. Investigation of the items comprising this scale revealed that the item, My Future Depends on Me, did not correlate well with the rest of the scale. Eliminating this item would raise the reliability of the scale, but not to an acceptable level. All of the correlations between

items in this scale were relatively low, suggesting that the items do not measure a single construct in this sample.

Table 24. Self Efficacy Scale

Scale / Item	A	Item-Total Correlation	α if Item Deleted
Self Efficacy	*.64*	--	--
Little Control Over Things that Happen (R)	--	.30	.62
No Way to Solve Some Problems (R)	--	.46	.57
Little I Can Do to Change (R)	--	.46	.56
Feel Helpless Dealing w/ Life Problems (R)	--	.42	.58
Feel I am Being Pushed Around (R)	--	.39	.59
My Future Depends on Me	--	.14	.65
I Can Do Anything I Set My Mind to	--	.26	.62

Note. (R) indicates that an item was reverse-scored for analysis.

Mental Health Scale Confirmation

As an additional test of the scales, we ran principal components analyses on all of the items to confirm the scale structure of these mental health measures. These analyses determine whether the items cluster together into the existing scales or whether different combinations of the items are merited. Because of the large number of items, we used two different techniques. First, we restricted the number of components to equal the current number of scales. This approach tested whether the items clustered into the specified scales. Second, we used the eigenvalues and scree plot to determine the optimal number of components (i.e., scales) into which the items cluster.

Table 25. Mental Health Component Loadings (Set to 8 Components)

	Component							
Item	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Feel Sad/Depressed	.64	--	--	--	--	--	--	--
Thoughts of Suicide	--	--	--	--	--	--	--	--
Feel Lonely	.59	--	--	--	--	--	--	--
Feel Interested in Life	--	--	--	--	.49	--	--	--
Feel Extra Tired or Run Down	.65	--	--	--	--	--	--	--
Worry or Brood A Lot	.64	--	--	--	--	--	--	--
Trouble Sitting Still	.55	--	--	--	--	--	--	--
Trouble Sleeping	.64	--	--	--	--	--	--	--
Feel Anxious or Nervous	.70	--	--	--	--	--	--	--
Trouble Concentrating	.61	--	--	--	--	--	--	--
Afraid of Certain Things	.45	--	--	--	--	--	--	--
Feel Tense or Keyed Up	.75	--	--	--	--	--	--	--
Feel Tightness in Muscles	.66	--	--	--	--	--	--	--
Feel Mistreated	.43	--	--	--	--	--	--	.36
Like Others to Feel Afraid	--	--	--	.49	--	--	--	--
Urges to Fight or Hurt Others	--	--	--	.50	--	--	--	--
Have a Hot Temper	--	--	--	.79	--	--	--	--
Temper Causes Fights/Trouble	--	--	--	.75	--	--	--	--
Get Mad at Others Easily	.39	--	--	.68	--	--	--	--
Have Carried Weapons	--	--	--	.45	--	--	.47	--
Feel a Lot of Anger Inside	.46	--	--	.49	--	--	--	--

Table 25. Mental Health Component Loadings (Set to 8 Components) (continued)

	Component							
Item	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Skipped School Growing Up	--	--	--	--	--	--	.70	--
Took Others' Things When Young	--	--	--	--	--	--	.62	--
Good Relations with Parents Growing Up	--	--	--	--	--	-.69	--	--
Anger/Frustration During Childhood	--	--	--	--	--	.68	--	--
Involved in Fights Growing Up	--	--	--	.55	--	--	.33	--
Had Trouble with Authorities as a Teen	--	--	--	--	--	--	.74	--
Good Self Esteem Growing Up	--	--	--	--	--	-.68	--	--
Emotionally/Physically Abused During Youth	--	--	--	--	--	.71	--	--
Drug/Alc. Use is a Problem	--	.64	--	--	--	--	--	--
Drug/Alc. Use More Trouble Than Worth	--	.56	--	--	--	--	--	--
Drug/Alc. Use Causing Problems w/ Law	--	.63	--	--	--	--	--	--
Drug/Alc. Use Causing Problems Thinking	--	.73	--	--	--	--	--	--
Drug/Alc. Use Causing Family/Friend Probs.	--	.82	--	--	--	--	--	--
Drug/Alc. Use Causing Employ. Problems	--	.80	--	--	--	--	--	--
Drug/Alc. Use Causing Health Problems	--	.69	--	--	--	--	--	--
Drug/Alc. Use Making Life Worse	--	.82	--	--	--	--	--	--
Drug/Alc. Use Will Cause Death	--	.64	--	--	--	--	--	--
Too Many Outside Responsibilities	--	--	--	--	--	--	--	.53
Program Seems Too Demanding	--	--	--	--	-.36	--	--	.39
Last Chance to Solve Drug/Alc. Problem	--	.41	--	--	--	--	--	--
Program Will Not Be Helpful	--	--	--	--	-.50	--	--	--
Plan to Stay In Program For Awhile	--	--	--	--	.60	--	--	--
Someone Made Me Come to Program	--	--	--	--	-.45	--	--	--
Program Can Really Help Me	--	--	--	--	.67	--	--	--
Want to be in Program	--	--	--	--	.61	--	--	--
Close People Have Drug/Alc. Problem	--	--	--	--	--	--	--	--
Close People Respect My Efforts	--	--	.47	--	--	--	--	--
Close People Understand Situation/Problems	--	--	.70	--	--	--	--	--
Have Close People Who Can Be Trusted	--	--	.60	--	--	--	--	--
Close People Motivate/Encourage Recovery	--	--	.74	--	--	--	--	--
Close People Expect Me to Change Positively	--	--	.51	--	--	--	--	--
Program Has Improved Relatnshps w/ Others	--	--	.46	--	.32	--	--	--
Family Helps Me Resist Drugs/Alcohol	--	--	.62	--	--	--	--	--
Close People Help Develop Confidence	--	--	.75	--	--	--	--	--
Other Students Will Help Recovery	--	--	.38	--	--	--	--	--
Worked Where Drug/Alc. Use Common	--	--	--	--	--	--	.43	--
Have Friends Who Do Not Use Drugs/Alc.	--	--	.49	--	--	--	--	--
Little Control Over Things that Happen	--	--	--	--	--	--	--	.53
No Way to Solve Some Problems	--	--	--	--	--	--	--	.61
Little I Can Do to Change	--	--	--	--	--	--	--	.66
Feel Helpless Dealing w/ Life Problems	.48	--	--	--	--	--	--	.31
Feel I am Being Pushed Around	.35	--	--	--	--	--	--	.39
My Future Depends on Me	--	--	--	--	.59	--	--	--
I Can Do Anything I Set My Mind to	--	--	--	--	.48	--	--	--
Trouble Staying Awake	.40	--	--	--	--	--	--	--

Note. Loadings below .30 not included in Table.

The principal components analysis with eight components extracted confirmed several of the pre-existing scales. With the exception of a few stray items, the second component clearly matched the Substance Use Problem Recognition scale, the third component matched the Social Support Scale, the fourth component matched the Hostility scale, the fifth component matched the Treatment Readiness scale, and the eighth component

matched the Self Efficacy scale. Items from both the Anxiety and Depression scales loaded solidly on the first component, and items from the Childhood Problems scale split across the sixth and seventh component.

The second principal components analysis, for which we did not artificially set the number of components, indicated that (according to the interpretation of the scree plot) the items divided empirically into five components.

Table 26. Mental Health Component Loadings (5 Components Extracted)

Item	1	2	3	4	5
Feel Sad/Depressed	.70	--	--	--	--
Thoughts of Suicide	.31	--	--	--	--
Feel Lonely	.62	--	--	--	--
Feel Interested in Life	--	--	--	--	.36
Feel Extra Tired or Run Down	.64	--	--	--	--
Worry or Brood A Lot	.65	--	--	--	--
Trouble Sitting Still	.48	--	--	--	--
Trouble Sleeping	.59	--	--	--	--
Feel Anxious or Nervous	.68	--	--	--	--
Trouble Concentrating	.59	--	--	--	--
Afraid of Certain Things	.49	--	--	--	--
Feel Tense or Keyed Up	.74	--	--	--	--
Feel Tightness in Muscles	.61	--	--	--	--
Feel Mistreated	.53	--	--	--	--
Like Others to Feel Afraid	--	--	.44	--	--
Urges to Fight or Hurt Others	--	--	.42	--	-.32
Have a Hot Temper	--	--	.60	--	--
Temper Causes Fights/Trouble	--	--	.62	--	--
Get Mad at Others Easily	.43	--	.57	--	--
Have Carried Weapons	--	--	.62	--	--
Feel a Lot of Anger Inside	.51	--	.42	--	--
Skipped School Growing Up	--	--	.46	--	--
Took Others' Things When Young	--	--	.55	--	--
Good Relations with Parents Growing Up	--	--	--	.41	--
Anger/Frustration During Childhood	--	--	.47	--	.40
Involved in Fights Growing Up	--	--	.65	--	--
Had Trouble with Authorities as a Teen	--	--	.62	--	--
Good Self Esteem Growing Up	--	--	--	.30	-.46
Emotionally/Physically Abused During Youth	--	--	--	-.32	.36
Drug/Alc. Use is a Problem	--	.64	--	--	--
Drug/Alc. Use More Trouble Than Worth	--	.57	--	--	--
Drug/Alc. Use Causing Problems w/ Law	--	.63	--	--	--
Drug/Alc. Use Causing Problems Thinking	--	.73	--	--	--
Drug/Alc. Use Causing Family/Friend Probs.	--	.82	--	--	--
Drug/Alc. Use Causing Employ. Problems	--	.80	--	--	--
Drug/Alc. Use Causing Health Problems	--	.69	--	--	--
Drug/Alc. Use Making Life Worse	--	.81	--	--	--
Drug/Alc. Use Will Cause Death	--	.64	--	--	--

Table 26. Mental Health Component Loadings (5 Components Extracted) (cont.)

Item	1	2	3	4	5
Too Many Outside Responsibilities	--	--	--	--	-.36
Program Seems Too Demanding	--	--	--	--	-.39
Last Chance to Solve Drug/Alc. Problem	--	.41	--	--	--
Program Will Not Be Helpful	--	--	--	--	-.52
Plan to Stay In Program For Awhile	--	--	--	--	.48
Someone Made Me Come to Program	--	--	--	--	-.46
Program Can Really Help Me	--	--	--	.30	.52
Want to be in Program	--	--	--	--	.47
Close People Have Drug/Alc. Problem	--	--	--	--	--
Close People Respect My Efforts	--	--	--	.45	.32
Close People Understand Situation/Problems	--	--	--	.62	--
Have Close People Who Can Be Trusted	--	--	--	.58	--
Close People Motivate/Encourage Recovery	--	--	--	.70	--
Close People Expect Me to Change Positively	--	--	--	.53	--
Program Has Improved Relatnshps w/ Others	--	--	--	.42	.36
Family Helps Me Resist Drugs/Alcohol	--	--	--	.65	--
Close People Help Develop Confidence	--	--	--	.73	--
Other Students Will Help Recovery	--	--	--	.31	.38
Worked Where Drug/Alc. Use Common	--	--	--	--	--
Have Friends Who Do Not Use Drugs/Alc.	--	--	--	.42	--
Little Control Over Things that Happen	--	--	--	--	--
No Way to Solve Some Problems	.41	--	--	--	--
Little I Can Do to Change	.34	--	--	--	-.35
Feel Helpless Dealing w/ Life Problems	.59	--	--	--	--
Feel I am Being Pushed Around	.49	--	--	--	--
My Future Depends on Me	--	--	--	--	.48
I Can Do Anything I Set My Mind to	--	--	--	.30	.34
Trouble Staying Awake	.38	--	--	--	--

Note. Loadings below .30 not included in Table.

Component 1: The first component, as before, included items from the Depression and Anxiety scales. These items mapped cleanly onto the first component – they did not have high loadings on any other component. Only Feel Interested in Life, an item from the depression scale that reliability analyses suggested was a weak indicator, failed to load on this component. The first component also included the negative items from the Self Efficacy scale (e.g., Feel Helpless, Little I Can Do to Change) and a few items from the Hostility Scale. Overall, this first component appears to measure negative emotion.

Component 2: The second component, as before, included items from the Substance Use Problem Recognition scale. These items mapped cleanly onto the second component – they did not have high loadings on any other component – and the second component included only these items and one item from the Treatment Readiness scale specifically addressing drug and alcohol use.

Component 3: The third component included most of the items from the Hostility scale and five of the eight items from the Childhood Problem scale. Some of the Hostility items also loaded on the first component, but the Childhood Problem items loaded cleanly.

Component 4: The fourth component included most of the items from the Social Support scale, as well as a few stray items from the Childhood Problems scale, the Treat-

ment Readiness scale, and the Self Efficacy scale. The Social Support items mostly loaded cleanly, though a few loaded on the fifth component, as well.

Component 5: The fifth component included most of the items from the Treatment Readiness scale, as well as stray items from almost every other scale. The Treatment Readiness items loaded cleanly on this component, but the other items tended to have higher loadings on other components.

Together these reliability and principal component analyses suggest that several of the existing mental health scales are solid measures of unique symptoms. In particular, the Substance Use Problem Recognition scale and Social Support scale had good reliability and also emerged as unique components in both sets of principal component analyses. The Hostility scale also had good reliability and measured unique symptoms, though the second principal component analysis indicated that it overlapped somewhat with the Childhood Problems scale. Though the Anxiety and Depression scales have acceptable reliability, the symptoms they measure tend to correlate with each other, indicating that the scales are not measuring unique aspects of mental health and could be combined. The Childhood Problems scale had adequate reliability, but did not load cleanly on a single component, suggesting it might be combined with the Hostility scale. Neither the Treatment Readiness scale nor the Self Efficacy scale had acceptable reliability. The Treatment Readiness scale represented a unique component in each principal component analysis and, as mentioned earlier, its low reliability might have been a byproduct of the sample's high scores and low variability on the measure. However, this interpretation still calls the usefulness of the scale in this population into question. Self Efficacy, though it loaded on a single component in the first principal component analysis, overlapped with Depression and Anxiety items and Treatment Readiness items in the second analysis. The negative items on the Self Efficacy scale ought to be combined with other negative emotion items, and the positive items could be added to the Treatment Readiness scale.

2.2.3 Self Esteem Scales

The MAP survey includes several different instruments to measure self esteem: a Self Regard measure, an Appearance Self Esteem measure, and the Rosenberg Self Esteem measure. These measures had different response scales: 1-10 for the Self Regard scale, 1-5 for the Appearance Self esteem scale, and 1-4 for the Rosenberg Self Esteem measure. These scales were included in the baseline, graduation, and follow-up surveys. To use the largest possible sample, these analyses investigated the properties of the scales within responses to the baseline survey, assuming that the scales would operate similarly in the other two surveys.

Self Regard

The Self Regard scale had acceptable reliability, Cronbach's alpha (α) = 0.77. Investigation of the items comprising this scale revealed that the item, Sense of Fatigue, did not correlate as well as the other items with the rest of the scale, but the correlations were not low enough, and the alpha not affected enough, to justify removal of the item.

Table 27. Self Regard Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Self Regard	*.77*	--	--
Sense of Facial Appearance	--	.53	.73
Sense of (Lack of) Fatigue	--	.40	.78
Sense of Healthy Body	--	.64	.69
Sense of Healthy Mind	--	.61	.71
Sense of Whole Person/Identity	--	.54	.73

Appearance Self Esteem

The Appearance Self Esteem scale had acceptable reliability, Cronbach's alpha (α) = 0.71. Investigation of the items comprising this scale revealed that, compared to other scales, some of the items did not correlate very highly with each other. However, the correlations were not low enough, and the alpha not affected enough, to justify removal of any specific item.

Table 28. Appearance Self Esteem Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Appearance Self Esteem	*.71*	--	--
How Often Do you Feel Unattractive	--	.61	.62
When Dressed, Pleased w/ Appearance (R)	--	.46	.67
How Often Dissatisfied w/ Way You Look	--	.59	.63
How Often Feel Attractive as Others (R)	--	.34	.70
How Much Worry About Appearance	--	.38	.69
How Much Worry About Weight	--	.35	.71

Note. (R) indicates that an item was reverse-scored for analysis.

Rosenberg Self Esteem

The Rosenberg Self Esteem scale had good reliability, Cronbach's alpha (α) = 0.84.

Table 29. Rosenberg Self Esteem Scale

Scale / Item	α	Item-Total Correlation	α if Item Deleted
Rosenberg Self Esteem	*.84*	--	--
Overall Satisfied w/ Self	--	.56	.82
Sometimes Think I'm No Good At All (R)	--	.54	.82
Feel That I Have a Number of Good Qualities	--	.49	.83
I Am Able to Do Things Well	--	.36	.84
I Do Not Have Much to Be Proud Of (R)	--	.52	.82
Feel Useless At Times (R)	--	.62	.81
I Am a Person of Worth	--	.47	.83
Wish I Had More Respect for Self (R)	--	.44	.83
I Am a Failure (R)	--	.66	.81
Positive Attitude Toward Self	--	.64	.81

Note. (R) indicates that an item was reverse-scored for analysis.

Investigation of the items comprising this scale revealed that the item, I Am Able to Do Things Well, did not correlate as well as other items with the rest of the scale, but the correlations were not low enough, and the alpha not affected enough, to justify removal of the item.

These analyses indicate that the Rosenberg Self Esteem scale has the best psychometric properties. Given the conceptual overlap between these scales, we recommend retaining only the Rosenberg Self Esteem scale.

2.3 Questionnaire Domains

These analyses have provided information about the psychometric properties of specific items and scales. However, they do not inform the selection of domains. The MAP survey currently includes the following domains:

- Demographics
- Housing History
- Family Information
- Education
- Criminal History
- Employment/Income
- Health
- Mental Health
- Substance Use / Gambling
- Sexual History
- Violent Situations
- Work/Life Skills
- Self Esteem

2.3.1 What to Keep

None of the current domains appear to be superfluous. The item and scale analyses have indicated specific items or scales that could be cut (e.g., redundant self esteem scales), but the domains themselves all appear to provide information pertinent to guests' experiences and needs. If trimming is necessary, we recommend eliminating items within domains as opposed to entire domains. In addition, the graduation and follow-up surveys could both be shortened significantly. Much of the information within the graduation survey is difficult to compare to information in the baseline survey because it occurs over a 14-week time period, in contrast to the 12 months queried in the baseline survey. We recommend that the graduation survey include domains unique to MAP (e.g., internship) and domains one would expect to change as a result of MAP within a short period of time (e.g., work/life skills). The follow-up survey can be more comprehensive, as it is currently, but if it needs to be shortened, the domains thought to be affected directly by MAP (or SFH in general) ought to be retained above others.

2.3.2 What to Add

The current MAP survey has a comprehensive set of domains that appear to do a good job of capturing the experiences and life history of MAP participants. There are only two

domains that appear both absent and potentially relevant to the life experiences of SFH guests. One of these is childhood demographics and experiences (e.g., family transitions, parent SES). The other is a global assessment of quality of life. Though both of these are captured by a few items within other domains (e.g., housing history, health), they might merit a more comprehensive set of items. A global assessment of quality of life, which we will discuss later in Section 3, can provide a brief measure of how a guest is doing overall that can be compared from baseline to graduation to follow-up.

Within domains, there are several places at which the information collected could be more comprehensive or captured through better measures. For example, to measure mental health, the survey could use standardized DSM-based measures. This would allow comparison not just across time, but to other general and specific populations. These options will also be discussed further below in Section 3.

2.4 Questionnaire Procedures

Despite the comprehensiveness and acceptable psychometric properties of the MAP survey, many of the procedures governing its use detract from the interpretability of the data. The primary among these are those surrounding the administration of the graduation and follow-up versions of the survey.

2.4.1 Exit Interview for non-Graduates

Currently, MAP participants complete a baseline survey upon entry to MAP and complete the graduation survey upon completion of MAP. In the sample we used for the Phase I report, 638 MAP participants completed a baseline survey, but only 333 (52%) of those completed a graduation survey. This limits any comparisons of pre- and post MAP variables to half of the sample, and more importantly, restricts any conclusions that can be made about changes effected by MAP to participants who completed the full program. This is problematic. Consider a treatment program whose graduates evidence large gains in multiple areas targeted by the program. This information leads one to believe such a program is highly successful. Then consider that only 5% of enrollees ever complete the program, and that those who do not complete the program evidence declines in the areas targeted by the program. Information about these non-completers is just as, if not more, important than information about program graduates. Program success measured by the success of graduates is only informative if the majority of participants graduate. Otherwise, it is important to know how drop-outs fare and why those participants drop out.

We recommend that SFH implement an exit interview with all MAP participants. For those who graduate, this can occur at graduation as it does now. For those who do not, it might be necessary to use an SFH-wide tracking system to locate them as close to drop-out as possible and implement an exit survey. This survey could parallel the graduation survey but also include questions about why the participant chose not to complete MAP. To implement this procedure, the graduation survey might also need to be modified to include gates into the non-completer questions and into the internship questions.

2.4.2 Follow-up Procedures / Attrition

The follow-up survey suffers from the same procedural problems as the graduation surveys, but magnified. In the sample we used for the Phase I report, only 64 participants –

10% of those who enrolled in MAP and 19% of those who graduated – completed a follow-up survey. In addition, follow-up procedures did not ensure that the 64 who completed the follow-up survey were a random sample of the original 638. It is likely that these 64 were the easiest to contact and assess, and thus not representative of the population of MAP participants. This level of attrition, combined with the convenience sample, do not allow for any strong conclusions about the well-being of MAP participants after graduation.

There are two procedural changes that could improve the quality of the information collected through the follow-up survey. Ideally, better tracking throughout SFH would allow for six month follow-up with a greater proportion of MAP participants. However, one might still expect significant attrition in this population. Given that, a more systematic sampling procedure for the follow-up survey is merited. Instead of contacting only the easiest to reach, attempts should be made to contact all participants. Collecting more detailed contact information from MAP participants at baseline might assist with this tracking.

2.4.3 ID #s and Tracking

Though most of the cases within the sample we used for the Phase I report had consistent ID#s, there were several who were identified only by name or by an ID# that did not resemble other ID#s (e.g., 1001). We recommend implementing a consistent ID# tracking system throughout SFH and using those numbers for all surveys and assessments. To ensure confidentiality, safeguards can be put in place that keep contact information separate from assessment information and restrict access to contact information.

2.5 Conclusions

The MAP survey is a comprehensive instrument for assessing the life experiences and current situation of MAP participants. Though we have recommended several minor changes to the instrument, the domains and items do a good job of providing a thorough assessment of this population. The primary concern with the instrument is that the current procedures surrounding its administration, particularly at graduation and follow-up, limit the utility of the collected data.

This concern leads to a recommendation for improved tracking and systematic survey administration. However, these goals might be better served by implementing a universal assessment instrument throughout SFH that can be administered at set time points and make use of a facility-wide tracking system. This instrument could include most of the pre-existing domains in the MAP survey, and also be expanded to include modules for different programs within SFH.

3 Recommendations for a Universal Assessment Instrument

3.1 Rationale

The current MAP instrument serves at least two purposes. First, it provides a snapshot of the characteristics and experiences of MAP participants upon entry to MAP. This snapshot provides valuable information about the needs of these participants and how best to address these needs during MAP participation. Second, the instrument can be used to assess the effect of MAP on the experiences and skills of its participants. By including similar items at two or more assessment points, as the MAP survey does, changes in those variables targeted by the MAP program from pre- to post- participation can be assessed and the efficacy of MAP evaluated.

The first purpose served by the MAP instrument, to provide a thorough assessment at intake to the program, is as pertinent to other programs within SFH as it is to MAP. The second, to provide the information necessary to evaluate the success of MAP, is not only pertinent to other programs, but would be accomplished more easily if the survey were part of a SFH-wide assessment and tracking system.

By expanding the MAP survey to become a universal assessment instrument used throughout SFH, we can begin to evaluate how well SFH is meeting its goal of providing integrated services to its guests and improve its programs to better meet the needs of those guests.

3.2 Core Components of a Universal Assessment Instrument

A universal assessment instrument needs to include several key components. The first is a history of each guest's experiences prior to entering SFH; the second is an assessment of each guest's current situation, health, skills, and needs; the third is a mapping of the SFH services with which each guest is involved; and the fourth is information about each guest's program experiences at SFH.

3.2.1 Guest Characteristics: History and Experiences

Stable guest characteristics, those that represent the demographics, life experiences, and psychosocial histories guests bring with them to SFH, can be evaluated at intake to SFH (or intake to a given level of services at SFH). This evaluation will provide a guest profile that can be used for service and treatment recommendations and inform the providers of those services and treatments.

3.2.2 Guest Characteristics: Those Amenable to Change

SFH's services and programs strive to meet the needs of their guests and improve the skills, health, and/or life experiences of those guests. To evaluate the effectiveness of these services, both overall and separately, it is crucial to assess these service and program targets at multiple time points.

3.2.3 SFH Services & Program Characteristics

Unlike the MAP survey, a universal assessment instrument needs to include a menu of

the services and programs offered by SFH. This menu should record information about the services and programs with which the guest has been involved, the level of involvement, and when that involvement occurred.

3.2.4 Program Experiences

In the MAP survey, MAP participants provided information about their internship, satisfaction with that internship, and later, success obtaining a job after their internship. This type of information needs to be collected for all programs and services with which a guest is involved to assess their program experiences. A general section on SFH experiences would also be a useful addition.

3.3 Expanding the MAP instrument

The domains included in the current MAP survey are listed on page 27. They include both guest history and experiences (e.g., housing history, substance use history), as well as guest characteristics amenable to change (e.g., work and life skills, current mental health). The graduation and follow-up versions of this survey also include questions about program experiences specific to MAP.

Therefore, expanding the MAP survey to become the foundation of a universal assessment instrument will require minor changes to MAP domains assessing client characteristics. Furthermore, this expansion will require creation of question sets about involvement and experiences for each service and program offered by SFH.

3.3.1 Changes to Items in Current MAP Survey Domains

Section 2 of this report includes specific recommendations for changes to items and scales within pre-existing MAP survey domains. All of these domains and changes within these domains apply to the universal assessment instrument, as well.

The most major change within a domain that we recommend is to replace some of the mental health scales with more comprehensive standardized DSM-based mental health measures. These measures include those for depression, generalized anxiety, and conduct disorder to replace the current depression, anxiety, hostility, and childhood problems scales. We also recommend adding a module to assess post-traumatic stress disorder because of its potentially elevated prevalence in this population. The substance use items currently in the survey could also be supplemented or replaced with a DSM-based substance use disorder scale.

3.3.2 New Domains

Within the core assessment components assessing guest characteristics, we recommend the addition of two domains to those within the current MAP survey – one assessing childhood demographics, and one assessing global quality of life. The first adds a domain to the core component of guest history and experiences; the second adds a domain to the core component of guest characteristics amenable to change.

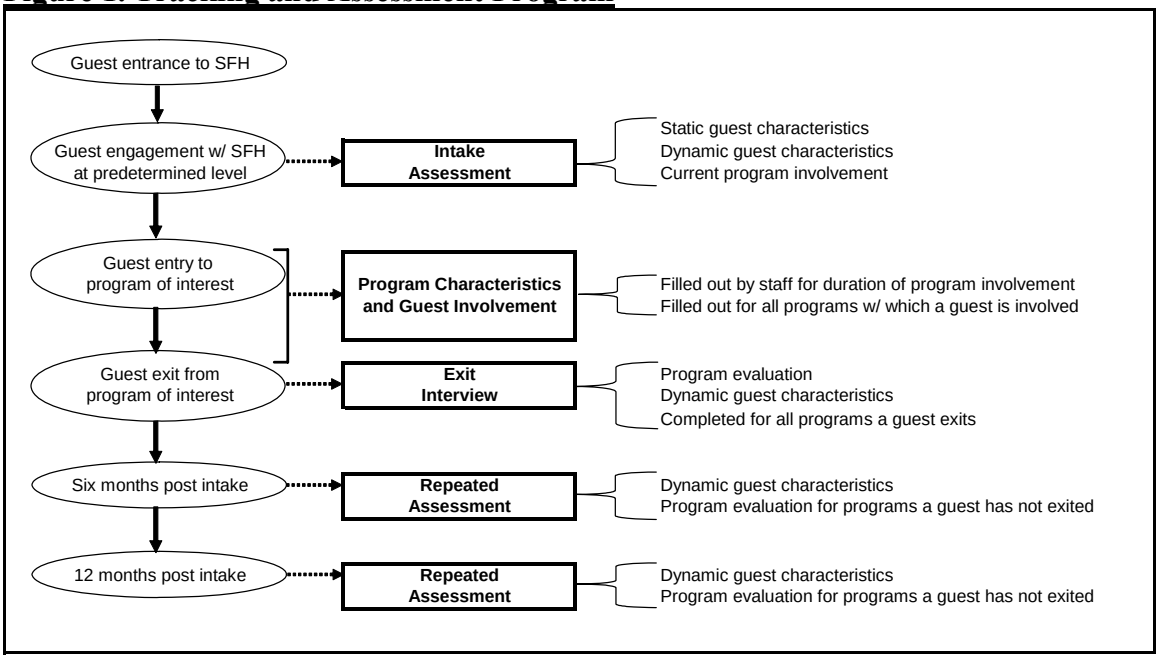
The other two core components, Program Characteristics and Program Experiences will need to be developed for each program that SFH seeks to include and evaluate.

4 Recommendations for St. Francis House Tracking and Assessment Program (TAP)

4.1 General Structure

The foundation of an assessment system for SFH will be the universal assessment instrument described in Section 3 and based on the current MAP instrument. One component of the assessment will assess guest characteristics – both static life experiences and history that can be assessed at a set intake point, as well as dynamic skills, experiences, and health that can be repeatedly assessed throughout a guest's involvement with SFH. A second component of the assessment will include information about the programs guests attend, as well as their experiences with those programs. Figure 1 displays a diagram of the assessment components and their timing.

Figure 1. Tracking and Assessment Program



4.1.1 Guest Characteristics: Static and Dynamic

The guest characteristics component of the assessment measures what guests bring to the program, providing a detailed history on which to base program decisions and needs assessments. The measures of static factors serve as the intake section of the assessment. They might include the following domains from the current MAP survey -- demographics, housing history, family information, education history, criminal history, employment/income history, health history, mental health history, substance use/gambling history, sexual history, violent situations -- as well as childhood demographics, a domain proposed in Section 3.

Most of these domains also measure dynamic factors; thus the initial intake assessment ought to include measures of both lifetime history for the domains above and current status for those domains that include behaviors, health, and experiences that can change.

Dynamic guest characteristics, those that can change during a guest's involvement with SFH, ought to be measured at intake and then at predetermined time points or events during and after the guest's SFH involvement. These include questions measuring current status within the following domains: housing, criminal involvement, employment/income, health, mental health, substance use/gambling, sexual involvement, violent situations, work/life skills, self esteem, and quality of life. If programs at SFH target other dynamic guest characteristics, these domains need to be developed and included in the repeated assessment. The dynamic characteristics measured in the repeated assessment serve as measures of program outcomes at SFH.

4.1.2 Program Characteristics and Involvement

The program component of the assessment provides information about the programs attended by guests, their involvement with those programs, and their evaluation of those programs. For each program of interest at SFH, the assessment needs to include a module for that program with information on a guest's level of involvement (e.g., attendance, completion) as well as each guest's evaluation of the program (e.g., satisfaction with the program).

4.2 Tracking System

To link the different components of the universal assessment instruments, it is important to develop a system that tracks guests' movement through SFH and its programs. This tracking system will integrate information from the different assessment components for each guest, as well as provide a timeline for program involvement and repeated assessments.

The tracking system will link information using a SFH ID number unique to each guest that can be input during the initial intake section of the assessment. As a guest moves through SFH services, staff will enter information about his or her engagement with different programs into the system. The system, in turn, will activate assessment modules depending on the programs into which the guest enters and his or her length of involvement with SFH. For example, a guest might complete all intake information, using a computerized interview with staff, upon a predetermined level of involvement with SFH. If that guest then enters MAP, staff will be prompted to add that information to the guest's computer file. Upon completion or extended absence from MAP, the guest will complete an exit interview with staff, again prompted by the tracking system. Six months (or some other prompted time) after the guest's initial intake interview, the system might prompt staff to complete a repeated assessment if the client can be found. If the client completed MAP, that repeated assessment would include MAP-specific outcomes. Figure 1 provides a diagram of the system.

There are two issues that arise with such a tracking system. One is confidentiality, and the other is ability to find guests who have left SFH. There might be sections of a guest's assessment information that ought to only be accessible to some staff and not others. Se-

curity measures will need to be developed to assure this confidentiality. More generally, guests need to have assurance that their data, if used for research, will not be linked to their names and contact information. Physical and computerized separation of data from contact information can accomplish this.

To find guests who have left SFH to conduct further assessments, it is important to collect contact information during the intake assessment. This should include any information about friends and relatives with whom the guest might stay, as well as permissions from the client to contact these friends and relatives or any other previous residences and programs.

4.3 Assessment Timing

SFH will need to decide how best to time assessments. As currently described, the universal assessment instrument includes an intake section that ought to be administered at a predetermined entry point to SFH. This could be upon engagement with any SFH service, or at a specific level of involvement. Next, upon entry to any program for which SFH wishes to collect data, information about client involvement with that program needs to be collected. Upon completion or absence from that program, an exit assessment should occur. In addition to these event-specific assessments, SFH ought to administer repeated assessments at specific time points (e.g., every six months). These repeated assessments can be tailored by computer to assess the services with which a guest has engaged.

4.4 Reports

All of the information collected for each guest will be stored in a computer database. To make this information accessible to SFH staff, the assessment system will include a reporting function. Based on SFH needs, the system will be able to generate user-friendly individualized reports from the assessments and the program tracking information for each guest. Generating these reports will involve clicking a few buttons on the computer. If DSM-based mental health measures are included in the assessment, the report can include basic descriptions of any disorder for which a guest qualifies – information that can be shared with the guests. The reports can also include personalized referral information for each guest based on his or her assessments. If desired, the report system can also be developed to produce aggregated reports for specific groups of guests delineated by time or program involvement.

4.5 Technology Platform

As discussed in Section 1, to operate a systemwide tracking and assessment program at SFH, the software we originally envisioned for running the MAP assessment, Blaise, is not appropriate. Instead, the system will need to use a customer relationship management (CRM) database solution for storing and linking data. The assessments themselves can be programmed into web-based user-friendly interviewing interfaces that are compatible with the database.

To operate the system, all computers at SFH on which data will be collected (i.e., interviews and program-level information) need to be networked and able to connect to the Internet. In addition, the computers should be equipped with a web browser, such as Microsoft Internet Explorer.

4.6 System Development

The development of a tracking and assessment program (TAP) for SFH is a significant endeavor that will require a 12 month continuation of the collaboration between the DOA and SFH. The remaining sections in this report briefly outline the tasks involved in developing and implementing such a program. At the end of Section 4.7, we have included a timeline plotting these tasks.

4.6.1 Tracking System Development

- As a first step, we will need to research and select a customer relation management system database for data integration and storage.
- Next, we will need to develop and implement the assessment instruments on the CRM system.
- We will visit SFH to assess computer hardware, software, network connectivity, and security. We will develop and implement any components of the system that are not yet in place. This development will include, if possible, system components that can alert users when assessments are needed (e.g., six months post-intake), and a security system that allows different levels of access to assessment information.

4.6.2 Assessment Components Development

- Based on the recommendations in this report, and discussions with SFH staff, we will develop the universal assessment instrument.
- Once developed, we will program the assessment components into the selected software.

4.6.3 Report Development

- We have developed a preliminary report generator using Microsoft Access software. We will first research this program's compatibility with the database software we implement at SFH, and if necessary, switch the software we use for the program.
- We will modify and expand the report generator to output individualized guest information from the assessments, as well as referral suggestions. If desired by SFH, we will also develop a component that can output aggregated reports.

4.7 System Implementation

Once developed, the full tracking and assessment program (TAP) will be unrolled at SFH. This task will require pilot testing the assessment components and the database software, developing training and protocol manuals, training staff in use of the system, and implementing consent protocols.

Figure 2. Tracking and Assessment Program Development Timeline

TASK	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Tracking System Development												
1. Research and select relational database and interviewing software												
2. If necessary, modify interviewing interface												
3. Assess SFH hardware, software, networking, and security												
4. Modify database software for use at SFH												
5. Develop any additional system components (i.e., security)												
Assessment Components Development												
1. Discuss assessment tool with SFH staff												
2. Develop assessment tool based on Phase II report and SFH input												
3. Program assessment tool into interviewing software												
Report Development												
1. Research compatibility of current report generator with database												
2. Discuss report output needs with SFH staff												
3. Modify and expand report generator to meet SFH needs												
4. (If possible) Add aggregate report component												
System Implementation												
1. Pilot test tracking and assessment program												
2. Develop training and protocol manuals and consent procedures												
3. Install tracking and assessment program at SFH												
4. Train SFH staff												
5. Implement training and assessment program												

4.8 System and Data Management

Once TAP is implemented at SFH, there will be continuing tasks necessary to maintain the system and the integrity of the data. The protocol manuals developed during the system implementation phase of this project will guide system maintenance. In addition, for guests who agree to have their data used for research purposes, we will implement protocols to transfer data securely to the DOA on a continuing basis.