Evaluation Plan for
The Alliance of Hispanic Serving Institutions

June, 2006
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INTRODUCTION

The Alliance of Hispanic-Serving Institutions (the Alliance) is a partnership of eight higher education institutions and the Hispanic Association of Colleges and Universities, funded for three years (March 2006 to March 2009) through NSF’s Broadening Participation in Computing program. The mission of the Alliance is to increase the numbers of Hispanics pursuing higher education and careers in the computing fields by implementing a series of interventions which address the key causes for under-representation of Hispanics in computing (e.g., lack of mentoring, research experiences, funding, role models, etc). These interventions support the recruitment, retention, and advancement of Hispanic undergraduate and graduate students and faculty in the computing, information sciences, and engineering (CISE) areas, and are integrated across three critical educational transitions: high school to college; undergraduate to graduate study; and graduate study to the professoriate. Its eight higher education institutions are:

- California State University at Domingo Hills (CSU-DH)
- Florida International University (FIU)
- New Mexico State University (NMSU)
- Texas A&M University at Corpus Christi (TAMU-CC)
- University of Puerto Rico at Mayaguez (UPR-M)
- University of Puerto Rico at Rio Piedras (UPR-RP)
- University of Houston-Downtown (UHD)
- University of Texas at El Paso (UTEP)

This evaluation plan, developed by Torres Consulting Group for the Alliance, is based upon:

- information provided in the Alliance’s NSF proposal and work statements which describe responsibilities and target dates for each institution
- extended conversations with the Alliance PI
- participation in NSF’s PI and evaluators’ meeting (March 9, 2006)
- extensive input solicited from representatives of the Alliance institutions (“institution leads”) at its May 22-23 planning meeting held at UHD

In the eight main sections which follow the evaluation plan:

- briefly describes the Alliance and its interventions
- presents the purpose, approach, and stakeholders for the evaluation
- provides the evaluation design, including evaluation questions and data collection methods
• describes how evaluation communication and reporting will take place
• gives the evaluation budget
THE ALLIANCE INTERVENTIONS

The interventions of the Alliance are fully described in its proposal submitted to NSF for funding. Briefly, the Alliance’s four main interventions are:

- **CS0 (Student Preparation)** is a three-unit non-credit course in introduction to computer programming and concepts designed to better prepare students for success in computer science (CS). Students with no prior background in computing enroll in the course, and they are provided with the opportunity to learn the basics of programming concepts and develop problem solving and systemic reasoning skills while becoming familiar with a programming environment. Implementation of this intervention is expected to result in increased student motivation to take and successful completion of introductory CS courses, and increased numbers of students majoring in and receiving degrees in CS. As shown in the Table 1, the CS0 lead and co-lead institutions are CSU-DH and UHD. NMSU and TAMU-CC will adopt CS0 in Years 1 and 2, respectively.

Table 1. Alliance Interventions by Institution Lead/CoLead and Year of Adoption

<table>
<thead>
<tr>
<th>INTERVENTION</th>
<th>LEAD</th>
<th>CO-LEAD</th>
<th>Institutions by Year of Adoption</th>
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<tr>
<td></td>
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<td>Year 1</td>
</tr>
<tr>
<td>I–1 CS0 (Student Preparation)</td>
<td>CSU-DH</td>
<td>UHD</td>
<td>NMSU</td>
</tr>
<tr>
<td>I–2 Peer-Lead Team Learning (PLTL)</td>
<td>NMSU</td>
<td>UHD</td>
<td>UTEP</td>
</tr>
<tr>
<td>I–3 ARG (Affinity Research Groups)</td>
<td>UTEP</td>
<td>UPR-M</td>
<td>NMSU</td>
</tr>
<tr>
<td>(UG Research Development)</td>
<td></td>
<td></td>
<td>UHD</td>
</tr>
<tr>
<td>I–4 Development Workshops</td>
<td>UPR-M</td>
<td>N/A</td>
<td>All</td>
</tr>
<tr>
<td>I–5 Mentoring</td>
<td>UTEP</td>
<td>N/A</td>
<td>All informal</td>
</tr>
<tr>
<td>I–6 On-line Resources</td>
<td>FIU</td>
<td>UPR-M</td>
<td>CSU-DH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NMSU</td>
<td>NMSU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UTEP</td>
<td>TAMU-CC</td>
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• **PLTL** (Peer Lead Team Learning) provides academic and social support to CS students in gatekeeper courses. As a part of PLTL, student driven focus groups are a mechanism for providing timely assistance to students in the course concepts that the students have identified as unclear or difficult. The process requires the instructor to adjust lectures accordingly and the peer leader to conduct a session to address the concerns. Peer tutoring is faculty-supervised, one-on-one tutoring by students who have successfully completed and excelled in the course. Peer tutors provide direct assistance with the course concepts, programming and other assignments in a manner accessible to the student. Students having difficulties are provided meaningful, timely assistance without the intimidation of asking for help from the instructor or teaching assistant. The PLTL lead and co-lead institutions are NMSU and UHD. UTEP and CSU-DH will adopt PLTL in Year 1; and TAMU-CC will adopt it in Year 2 (see Table 1).

• **ARG** (Affinity Research Groups/Undergraduate Research Development) is a model for undergraduate research development which provides both undergraduate and graduate students with opportunities to learn, use, and integrate the knowledge and skills that are required for research with those required for cooperative work. The includes an annual orientation that reviews the philosophy and goals of an affinity research group and activities that introduce students to research and teamwork; project management; process improvement methodologies; regular group meetings in which students present technical work and practice communication and team skills; and structured activities that work on higher level thinking skills and essential attributes that are critical for success in research. Implementation of ARG is expected to result in an enhanced undergraduate research culture; and increased research skills, and knowledge about and motivation to attend and successfully complete graduate school in CS. The ARG model was developed at UTEP, which is this intervention’s lead institution. UPR-M, co-lead, will develop an undergraduate research course which has an ARG component or research module. NMSU will adopt ARG in Year 1; followed by TAMU-CC, UHD, and CSU-DH in Year 2 (see Table 1).

• **Development workshops** are designed to provide students and faculty with effective skills to succeed in their careers and studies. Development workshops provide opportunities: (a) to disseminate information about “survival in graduate school and academe,” (b) for discussion of critical issues, (c) for creating
mentoring communities, and (d) for establishing cohorts of students and faculty with common goals. The workshops will build cohorts for two different audiences: graduate students and faculty at HSIs who are preparing for tenure and promotion. Specifically, participation in development workshops is intended to increase retention and the successful completion of graduate school; and to directly support successful planning, management, and support of careers for junior faculty. UPR-M is the institutional lead for Development Workshops which will be implemented at the annual meetings of the Alliance in Years 2 and 3 (see Table 1).

Telephone interviews conducted with the four intervention leads in April and May, 2006 helped the evaluators understand the work of each intervention and provided information used to draft logic models for each. Logic models, typically presented in a graphic illustration, describe the relationship between project activities, and short- and long-term outcomes. They are useful for achieving conceptual clarity and a shared understanding of how program activities are expected to lead to intended outcomes, as a tool for supporting project management, and as a framework for establishing evaluation questions and priorities, as well as communicating evaluation findings. Logic models are best viewed as working drafts which are regularly revised to reflect developing understanding of how interventions work, programmatic decision making which defines particular components of an intervention, and improvements and changes made based on evaluation feedback over time.

The draft logic models were presented to Alliance members at their May 2006 planning meeting at which time they were revised based on input and discussion with small groups formed for each intervention. Preliminary versions of the revised logic models were then presented to the whole group to continue building a shared understanding of the different interventions.

The logic models for each of the Alliance’s four main interventions presented in Appendix A are current as of June 6, 2006. They reflect revisions made in early June based on another round of review by individuals, and discussion during a monthly Alliance teleconference. More information about the use of the logic models for developing this evaluation plan is presented in the evaluation design section.

PURPOSE OF THE EVALUATION

The purpose of the evaluation is five-fold: (a) to inform the ongoing work of the Alliance so that improvements can be made from year-to-year which will support the development of model programs for adoption by other higher education institutions,
(b) to determine the extent to which the short and long-term goals of the Alliance’s four main interventions have been achieved, (c) to put in place means for tracking longer-term outcomes beyond the years of NSF funding, (d) to provide an evaluation model which can be used by other institutions who adopt these interventions in the future, and (e) to support the success of the Alliance as a partnership. An important feature of this evaluation is that it will track student and faculty participation in the Alliance interventions through their engagement with subsequent activities and decision making related to successful graduate study and career development in computing fields. In this way the evaluation will definitely address questions about the effectiveness of the interventions.

EVALUATION APPROACH

Torres Consulting Group (TCG) practices a learning approach to evaluation which is designed to maximize use of formative and summative evaluation findings.\(^1\) We view evaluation as a tool for improvement, not paper work required for funding. As such, our approach is highly participatory and collaborative, driven by a mutually shared spirit of inquiry, and more continuous than episodic. Over time new learning afforded by the evaluation: (a) is based upon and feeds back to inform old learning, and (b) feeds forward to set the conditions for future learning. To maximize the evaluation’s meaningfulness and utility, TCG will create readily comprehensible presentations and reports which enable the assimilation of complex information; and facilitate working sessions with Alliance members to review and interpret findings, and support action planning.

EVALUATION STAKEHOLDERS

The primary stakeholders for this evaluation are the Alliance institution representatives, the Alliance institutions (students, faculty, administration), the National Science Foundation, and the Alliance business and industry partners. Other stakeholders who are expected to benefit from this evaluation effort are prospective adopters of the Alliance interventions and their constituents, and other organizations/initiatives which share the mission of the Alliance.

EVALUATION DESIGN

This evaluation addresses five distinct components of the Alliance:

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The following sections describe: how the evaluation questions and methods were
developed for this evaluation plan, what general evaluation methods are being used,
and the specific evaluation questions and methods for each of the four main
interventions and the Alliance partnership.

In addition to the development of logic models for the interventions, collaborative
evaluation design completed at the Alliance’s May 2006 planning meeting included
development of evaluation questions and the identification of appropriate data
collection methods for each question. The activities, short-term outcomes, and long-
term outcomes of each intervention’s logic model (see Appendix A) provided the
guiding framework for reaching consensus on and prioritizing the evaluation questions.
Then, methods which could reliably and validly answer each question were identified.
In many cases multiple methods will be used to address individual evaluation
questions. In general, the methods fall into four broad categories: interviews; document
reviews; surveys; and (database) tracking of activities (by institution) and short- and
long-term outcomes by participants (undergraduates, graduate students, faculty).

Whenever available, existing instruments (e.g., student interview about ARG
participation/benefits) will be revised and adapted. Input from Alliance members will
be sought to create initial drafts of interview schedules and surveys. Drafts will be
refined based on member feedback. TCG has provided a draft field structure for each
intervention database in Appendix B. TCG will work with the intervention leads to
refine the structure of each database. FIU will build and maintain the database on line.
TCG will work with the intervention leads and FIU to create a database manual with
instructions for entry into each field. Institutions are responsible for entering their own
data. TCG will work with institutional personnel to resolve questions about data entry,
and conduct periodic checks to assure quality control in the data.

The following sections provide the specific evaluation questions and methods for each
intervention and the Alliance partnership.

**CS0 Evaluation Questions and Methods**
CS0 ACTIVITIES

CS0 Course Development:
(1) How was the current CSU-DH/UHD CS0 course refined?
(2) What materials did NMSU receive to develop CS0 course?

CS0 Course Offering at each institution:
(3) What type of students are recruited/targeted for CS0?
(4) How does CS0 fit into the curriculum?
(5) How are students recruited for CS0?
(6) How many students enroll in CS0?
(7) How effective are the recruitment practices?
(8) How beneficial is the CS0 course for enrollees?
(9) How have the recruitment practices and the CS0 course been revised to be more effective?
(10) How many students successfully complete CS0?

CS0 SHORT-TERM OUTCOMES at each institution:
(11) How many CS0 students matriculate into CS1?
(12) How many CS0 students successfully complete CS1 and matriculate into CS2? How many CS0 students successfully complete CS1, but do not matriculate to CS2? Why?
(13) How many CS0 students successfully complete CS2?
(14) How many CS0 students decide to major in CS? When did they make this decision? What aspects of CS0, if any, influenced them to major in CS?

CS0 LONG-TERM OUTCOMES at each institution:
(15) Has there been an overall increase in the number of students completing CS1 and CS2?
(16) Has there been an overall increase in the number of students majoring in CS?
(17) Has there been an overall increase the number of students receiving degrees in CS?

Interviews. Telephone interviews with the UHD, CSU-DH, and NMSU intervention leads will be conducted in Summer 2006 to address evaluation questions 1 and 2 regarding the initial CS0 course development and provision of course materials to NMSU. Telephone interviews with also be conducted each summer with all institution leads (as appropriate, depending on when they begin offering CS0) to determine how students are being recruited, the success of these efforts, how CS0 fits into the curriculum; and finally, in the second and third summers the interviews will address
how recruitment practices and the CS0 course are being revised to be more effective (evaluation questions 3, 4, 5, 7, 9).

Document Reviews. Documents describing the initial version of the CS0 course, student recruitment, the CS curriculum, and course revisions will be collected, reviewed and analyzed to address evaluation questions 1-5, 9.

Written Surveys. At the end of each CS0 course students will be asked to complete a web survey about how they became aware of and enrolled in the course, how beneficial the course has been for them, and their current plans for continuing study in CS. Of these students, those who enroll in CS1 and CS2 will also be tracked and asked to complete a web survey at the end of each course which asks them to reassess the benefits of the CS0 course and describe their current plans for continuing study in CS. (See evaluation questions 7, 8, 12, 14.)

Database. TCG will work with FIU and each CS0 institution to implement a database which will track CS0 students through their enrollment in CS0 to CS1 and CS2. It will capture information about grades in CS0, CS1, and CS2; retention; decisions to major in CS0; and graduation. This information will be compared with institutional data on overall completion rates in CS1 and CS2, numbers of CS majors, and numbers of CS degrees. (See evaluation questions 6, 10-17.) Appendix B contains a draft field structure for the CS0 database.

PLTL Evaluation Questions and Methods

PLTL ACTIVITIES

Materials:
(1) Were PLTL materials developed and revised and final version produced?

Train the Trainers Workshop:
(2) Was the workshop piloted and revised? How many workshops were delivered each year?
(3) How many university PLTL supervisors attended training workshops?
(4) How effective is the training?
(5) In what ways was the training revised?

PLTL Leader Training:
(6) How many peer leaders were trained?
(7) How effective is the peer leader training?

PLTLs:
(8) How many universities established PLTL components for introductory CS courses?
(9) How many students at each university participate in PLTL?
(10) What types of academic and social support do students receive?
(11) How beneficial is this support for students?
(12) To what extent do peer leaders communicate with peer leaders from other institutions?
(13) How do peer leaders benefit from their work?

PLTL SHORT-TERM OUTCOMES
(14) To what extent has there been greater retention in gate-keeper courses providing PLTL?
(15) To what extent is there a cultural shift at the university to support PLTL?
(16) How many Peer Leaders decide to pursue graduate studies?
PLTL LONG-TERM OUTCOMES

(17) Have PLTL training materials and a problem bank been made available online for use by wider community?
(18) Have PLTL practices been included on NCWIT database of on-line resources?
(19) To what extent do students who receive PLTL demonstrate improved performance in CS compared with students in prior years?

Interviews. Telephone interviews with intervention leads at each institution will be conducted in the Summer of Years 1 and 2 to determine if and how the PLTL materials and workshops were developed and revised; and how many supervisor workshops were delivered each year (evaluation questions 1, 2, 5). Interviews with institution leads in the Fall of Year 1 will help identify the types of academic and social support students are receiving (evaluation question 10). In the final semester of the project, intervention leads will also be interviewed about the on-line availability of PLTL materials and problem bank (evaluation questions 17, 18).

To determine any cultural shift in lead and adopting institutions toward supporting PLTL, interviews with PLTL will be conducted each semester beginning in the Fall of Year 1. In Year 3 department deans and chairs will also be interviewed about this topic. (See evaluation question 15.)

Document Reviews. Documents describing the PLTL materials, and supervisor and leader workshops will be collected, reviewed and analyzed to address evaluation questions 1-2, 4-5, and 7. On-line documentation of PLTL training materials and practices will be collected, reviewed and analyzed to address evaluation questions 17 and 18.

Written Surveys. Following the workshops in which they are participant PLTL supervisors and leaders will be asked to complete evaluation forms to address evaluation questions 4 and 7. Beginning in Fall 2006 PLTL supervisors, leaders, students, and course instructors will be asked to complete a web survey about academic and social support provided to PLTL students, benefits to students and leaders, and cross-institution communication among leaders. Additionally, in Fall 2008 all peer leaders who have participated over the prior two and one-half years will be surveyed about benefits they have realized from being peer leaders and any plans they have for pursuing graduate work. (See evaluation questions 10-12, 16).

Database. TCG will work with FIU and each PLTL institution to implement a database which will track supervisor and peer leader participation in workshops and
implementation of the PLTLs at each institution (evaluation questions 3, 6, 8). The
database will also track student participation in PLTL through their enrollment in CS1
to CS2 and CS3. It will capture information about retention and grades in CS1, CS2, and
CS3. For peer leaders the database will track semesters of participation, taking of the
GRE exam, and decisions to pursue graduate school. Database information will be
compared with institutional data on overall completion rates and grades in CS1, CS2
and CS3 for students who do not participate in PLTL. (See evaluation questions 10, 14,
16, and 19.) Appendix B contains a draft field structure for the PLTL database.

ARG Evaluation Questions and Methods

ARG ACTIVITIES

Handbook:
(1) Was the ARG handbook revised and final version produced?
(2) To what extent is the handbook used and how effective is it?

Workshop:
(3) Was the workshop piloted and revised?
(4) How many universities were provided the workshop?
(5) How many faculty and students attended?
(6) How effective were the workshops?

ARGs:
(7) How many universities established ARGs?
(8) How many faculty and students were involved?
(9) In what ways were faculty and students involved?
(10) How beneficial were the ARGs for students and faculty
(11) What factors support/impede faculty in establishing ARGs?
(12) What factors support/impede undergraduate participation?
(13) What adaptations to the basic ARG model were made at different
universities? Why?

Research Courses w/ ARG component:
(14) How many universities established research course modules?
(15) How many faculty and students were involved?
(16) In what ways were faculty and students involved?

ARG SHORT-TERM OUTCOMES at each institution:
(17) To what extent does a research culture exist?
(18) To what extent have research skills for undergraduate participants
improved?
(19) To what extent has there been an increase in undergrads successfully participating in research?
(20) To what extent has undergrads participants’ knowledge about grad school as education/career path increased?
(21) To what extent has there been an increase in undergraduate participants’ motivation to attend grad school?

ARG LONG-TERM OUTCOMES at each institution:

(22) What percent of undergraduate participants enter graduate school?
(23) Has there been an overall increase in the number of undergraduates entering graduate school?
(24) What percent of undergraduate participants complete graduate school?
(25) Has there been an overall increase in the number of undergraduates completing graduate school?
(26) Do the research course modules exist as an online resource?

**Interviews.** Each semester telephone interviews will be conducted with the institution leads to determine how the ARGs and/or the research course modules are being established (including changes to the basic ARG model), and factors which support/impede undergraduate participation (evaluation questions 7, 9, 12, 13, and 14). Interviews will also be conducted with ARG faculty on factors which support/impede undergraduate participation and how the research course module is integrated with the CS curriculum (evaluation questions 12, 27).

**Document Reviews.** Documents describing the ARG handbook, the ARG workshops, each institution’s ARG, each institution’s research course modules and their documentation on-line will be collected, reviewed and analyzed to address evaluation questions 1, 3, 7, 13, 14, and 22.

**Written Surveys.** In the semester following their participation in an ARG workshop (original and follow-up), faculty and students who attended will be surveyed regarding the effectiveness of the workshops and the ARG handbook (evaluation question 2). Findings about the workshops will supplement the evaluation forms completed at each workshop to address evaluation question 6. Secondly, ARG faculty will be surveyed each semester about how both faculty and students have been involved in the ARGs, how beneficial this involvement is for both, and the factors which support/impede faculty in establishing ARGs (see evaluation questions 9-11). Thirdly, ARG faculty will be surveyed each semester, beginning the semester following the one when an ARG is first established at their institution, regarding the existence of a research culture among undergraduates, their perceptions of any improvements in
undergraduate research skills, and about undergraduates’ participation in research (evaluation questions 17-19).

Each semester of their participation, ARG students and students in course with research modules will be asked to complete a web survey about their involvement in the intervention, how beneficial it is, and factors which support/impede undergraduate participation (evaluation questions 9, 10, 12). Additionally, in the semesters following the first one when their ARG or research course module is established, they will be asked about the existence of a research culture among undergraduates (evaluation question 17). Finally, upon graduation ARG and research course module participants will be surveyed about their knowledge about graduate school as an education/career path, and their motivation and plans (if any) to attend graduate school (evaluation questions 20-21).

Database. TCG will work with FIU and each ARG and research course module institution to implement a database which will track faculty and student participation in workshops to develop each intervention and implementation of the interventions at each institution (evaluation questions 4-5, 7-8, 15). The database will also track ARG and research course module participants’ entry into and completion of graduate school (evaluation questions 23, 25). This information will ultimately be compared with institutional data on overall graduate school entry and completion rates (evaluation questions 24, 26). Appendix B contains a draft field structure for the ARG database.

Development Workshops Evaluation Questions and Methods

Development Workshop ACTIVITIES
(1) What development workshops were created and delivered? What were their objectives/topics? What speakers, if any, were invited to the workshops?
(2) Where were the workshops delivered?
(3) How many faculty and students (by type) attended each workshop?
(4) How effective were the workshops?

Development Workshop SHORT-TERM OUTCOMES
(5) To what extent have workshop participants taken advantage of career building opportunities generated through workshops and mentoring communities?

Development Workshop LONG-TERM OUTCOMES at each institution:
(6) How have these opportunities contributed to career development for junior faculty?
(7) How have these opportunities contributed to graduate school success for graduate students?
(8) What is the retention status of junior faculty participants?
(9) What is the status/progress of graduate student participants in their degree completion? How many earn M.S. degrees? How many earn Ph.D. degrees?

**Interviews.** Telephone interviews with the intervention lead and any adopting institution leads will be conducted each semester beginning in Fall 2007 to determine what Development Workshops are being planned, which have been delivered, impressions of their effectiveness (evaluation questions 1, 2, and 4); and also to gather information necessary for developing surveys of workshop participants (evaluation questions 5-9).

**Document Reviews.** Documents describing the Development Workshops held at the annual meeting as well as any which take place at adopting institutions will be collected, reviewed and analyzed to address evaluation question 1.

**Written Surveys.** Participants in the Development Workshops will be asked to complete evaluation forms to address evaluation question 4. In Spring 2008, as a follow-up, participants in the December 2007 Development Workshop will be asked to complete a web survey about the any benefits they have realized which can be attributed to the opportunities and learning provided by the workshops. They will be surveyed again in October of 2008 and April of 2009 in order to track the development of opportunities (in whole or in part) afforded by the workshops, as well as participants’ educational (graduate students) or professional (junior faculty) status. A sample of these participants will also be interviewed to gain an in-depth understanding of how the workshops have contributed to educational and professional growth for them. An abbreviated cycle of surveys and interviews (once in Spring 2009) will be repeated for participants in the December 2008 workshop. (See evaluation questions 5-9.)

**Database.** TCG will work with FIU and the Development Workshops lead institution to implement a database which will track which Alliance-wide workshops are held (i.e., at the 2007 and 2008 annual workshops) and any workshops held by adopting institutions (evaluation questions 1 and 2). The database will also track the educational and career status of graduate student and faculty participants (evaluation questions 8 and 9). Appendix B contains a draft field structure for the Development Workshops database.

**Alliance Partnership Evaluation Questions and Methods**
(1) What types of communication strategies are used by the Alliance to support and maintain the partnership?
(2) What mechanisms are used to support and encourage the exchange of best practices among Alliance institutions?
(3) Is the Alliance able to effectively resolve inevitable managerial or operational issues and challenges which arise in a partnership of this size and duration? If so, how?
(4) What other mechanisms need to be in place to foster building of an effective partnership?

*Participant-observation in monthly teleconferences.* To address these questions, the senior evaluator will participate in the monthly teleconferences held by the Alliance both as a participant (to report on and address questions and issues about the progress of the evaluation activities) and observer (to track how communication about operation of the Alliance and implementation of various interventions takes place, how issues are resolved and decision making takes place, etc.). Up to three times annually during these calls, time will be devoted to dialog facilitated by the evaluator on member perceptions of how the partnership is operating. This will provide not only an opportunity for “data collection,” but also for developing strategies as necessary to improve the effectiveness of communication and decision-making processes.

*Participant-observation at annual meetings.* Similarly, the senior and associate evaluator will attend the annual meetings both as participants (to present evaluation findings and facilitate working sessions to interpret and use findings) and as observers (to again track how communication about operation of the Alliance and implementation of various interventions takes place, how issues are resolved and decision making takes place, etc.).

Thus, the evaluation work related to the Alliance partnership will be focused more heavily on formative purposes (providing ongoing feedback and facilitating improvement) than on summative purposes (devoting resources to independently documenting how the partnership is operating). At the same time, each annual report will describe successes and lessons learned about the operation of the Alliance as a partnership. A summation and descriptive analysis of this information will be provided in the final report at the end of Year 3.

**DATA ANALYSIS PROCEDURES**
Quantitative and qualitative data analysis methods will be used as appropriate to different types of instrumentation. Frequencies and descriptive statistics will be used to aggregate quantitative survey responses and the quantitative (sometimes categorical) data compiled in the intervention databases. Tests of statistical significance as appropriate will be used to determine improvements in desired outcomes over time, and comparisons with the performance of groups who had not had the opportunity to participate in the Alliance interventions. Coding schemes will be developed to analyze open-ended survey questions and interview data.

COMMUNICATING AND REPORTING PLAN

Evaluation communication and reporting will take place as follows:

• During monthly teleconferences – to report on and address questions and issues about the progress of the evaluation activities

• Via email as needed to manage and implement the evaluation

• With annual reports which will coincide with the NSF annual reporting date (November of 2006, 2007, and 2008)

• At working sessions during the December annual meetings to review and interpret findings and develop action plans

• With interim evaluation reports provided each summer (2007, 2008)

• With a final, three-year evaluation report to be provided by July 31, 2009.

TCG will explore the possibility of providing the interim evaluation findings via a means of synchronous electronic communication that will allow the Alliance members and evaluators to interact in real time from different geographical locations.

TIMELINE

The time line for this evaluation is August 1, 2006 through July 31, 2009, with each year of the evaluation work defined as follows:

Year 1: 8/1/06 through 7/31/07
Year 2: 8/1/07 through 7/31/08
Year 3: 8/1/08 through 7/31/09
The budget for this evaluation is summarized by Alliance component and year in Table 2. It totals $295,000 over the three years.

### Table 2. Alliance Evaluation Budget Summary by Year and Component

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<th>Alliance Component</th>
<th>Year 1</th>
<th>Year 2</th>
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Tables 3 through 7 provide a detailed breakdown of the days required and costs for each intervention and the Alliance partnership. The days of personnel time are presented by data collection method (interviews, document review, surveys, database tracking) and position [senior evaluator (Rosalie T. Torres), associate evaluator, and administrative support staff]. This time includes instrument design, data collection, analysis, and reporting work for each method. The daily rates shown cover overhead costs, and increase by approximately 3% each year.

Web hosting for the administration of on-line surveys is estimated to be $4800 per year. (Use of on-line surveys eliminates costs that would normally be associated with survey administration and data entry.) This cost is shared across each of the applicable interventions for each year (see Tables 3 – 6). It is estimated to increase by 3% per year.

Costs for report production and dissemination are not included in this budget, but are expected to be minimal considering use of electronic files for transmission of reports and written documents. Document reproduction and the cost of materials (e.g., flip charts) needed for evaluation activities at the annual meetings are expected to be covered as part of meeting costs borne by the Alliance. Travel costs to attend the annual meetings are detailed in Table 7.
<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
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<th></th>
<th>Year 3</th>
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Table 4. CS0 Evaluation Budget by Year and Personnel Type

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<th>Personnel Time in 8-Hour Days</th>
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<th>Year 2</th>
<th>Year 3</th>
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<tbody>
<tr>
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<td>Associate Evaluator</td>
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<td>2.50</td>
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<td>Database</td>
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<td>Totals by Personnel Category and Year</td>
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Table 5. ARG Evaluation Budget by Year and Personnel Type

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<th>Personnel Time in 8-Hour Days</th>
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<th>Year 3</th>
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<tbody>
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<td>Associate Evaluator</td>
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<tr>
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<tr>
<td>Document Review</td>
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<tr>
<td>Surveys</td>
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<td>Database</td>
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<tr>
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<td>Personnel Time in 8-Hour Days</td>
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<td><strong>Year 1</strong></td>
<td><strong>Year 2</strong></td>
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<td>Grand Total</td>
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Table 7. Alliance Partnership Evaluation Budget by Year and Personnel Type

<table>
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<td>670</td>
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*Travel Costs per person per year to attend annual meeting

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<td>Transportation to/from airport in originating city</td>
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<tr>
<td>Transportation from/to airport in destination city</td>
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<tr>
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<tr>
<td>Hotel internet charges (if applicable) @ $10/day for 3 days</td>
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<tr>
<td>Meals @ $50/day for 3 days</td>
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