### Part 1: Acknowledgements

On behalf of the Conference Hosts and Organizing Committee, we would like to acknowledge the confidence and fantastic support we received to assemble and deliver the 27<sup>th</sup> International Conference of the System Dynamics Society, held in Albuquerque, New Mexico, USA.

Thank you to the Society Policy Council for approving our proposal in 2006, under the presidency of our friend Mike Radzicki. A special thank you goes to Roberta Spencer, Jim Lyneis, and Andreas Größler, as members of the Meetings Committee, for their help in advising the preparation of our proposal and guidance throughout the organizing/hosting process. We also acknowledge the generous and helpful suggestions made by esteemed members of the System Dynamics community, such as Bob Eberlein, John Sterman and David Andersen, to name only a few.

With our deepest gratitude, we thank Andy Ford for agreeing, early on, to be our program chair. Andy was very receptive to our ideas and suggestions to align the program with our goals and objectives, while maintaining the independence and integrity of the submissions review process, and the quality-based decisions of the thread chairs. Andy invited two highly-qualified collaborators to aid him in the shaping of the program, and together with Dave Ford and Ed Andersen, they formed an excellent program committee.

We thank our co-hosts and sponsors for their commitment of labor and financial resources. In partnership with Ed Andersen, Ignacio Martinez-Moyano formed a successful new program thread in Challenges of Terrorism/Insurgencies. Silvia Ulli-Beer helped co-chair the Energy and Resources thread. Spearheaded by Paul Newton, our friends at Boeing partnered with a substantial financial contribution, and also organized workshops focusing on STEM (Science, Technology, Engineering and Math).

Partnering with Ozge Pala, Paul also participated in the Special Evening Plenary that entailed a conversation with Peter Senge. Thank you, Peter, for attending our conference and sharing your wisdom and experience with our guests, particularly the many new first-time attendees from the K-12 community. We acknowledge the support of the Waters Foundation in providing training in systems thinking to our school teachers and administrators preceding the conference. Thank you to Tracy Benson and Anne LaVigne, for working closely with Lees Stunts, Diana Fisher, and George Richardson, in putting together a fabulous string of events catering to and featuring the work of enthused K-12 teachers and students. Thank you, also, to Deb and Jim Lyneis for their numerous suggestions in preparing locally for these events. Special thanks goes to our generous financial sponsor Bruce McClure, manager at Sandia National Laboratories, drawing upon education-outreach funding provided by Lockheed Martin, and to the System Dynamics Society, for making Silent Auction funds available to subsidize attendance by K-12 teachers and students.

Another special thank you goes to Jacob Jacobson for his commitment and collaboration, and for the generous financial support of the Idaho National Laboratory. Thank you also to Charles Hutchings and the Department of Homeland Security for their critical financial sponsorship. To our friends and colleagues at Sandia National Laboratories, we offer our deepest gratitude for their support and understanding. At every stage of the process, we could count on management, administrative support and the technical staff to pull this off. Thank you to our senior managers, John Mitchiner, John Mercer, and Pablo Garcia. Without their interventions, our dedication and the financial sponsorship of Sandia National Laboratories would not have been possible. Thank you to our immediate managers, Lillian Snyder, Ray Finley, and Dan Horschel, for their systematic support and championing of this event within and outside of the Labs. A special thanks to Roberta Spencer and George Backus for helping to bring Boeing on board. Thanks, George, for hosting our special guest, Dennis Meadows. Thank you, Dennis, for generously sharing your precious time, delivering two talks at the Labs, one presentation to the PhD Colloquium, and another during the Opening Plenary.

We greatly appreciate the continuous interest and encouragement of our colleagues in the Sandia Labs System Dynamics Guild, including their monetary contributions which helped host a wonderful and lively welcome reception at the Albuquerque Art Museum. Thank you to Steve Conrad and Tom Corbet for co-hosting this conference in the background.

All of these contributors and the work that we did for this conference rests in the foundation and pillars provided by the dedicated and professional staff of the Society Office. Working as a harmonious team, holding the torch of a true learning organization, Roberta Spencer, Jen Rowe, Erin Sheehan, Robin Langer, Joan Yanni, Navid Ghaffarzadegan perform an excellent, courteous and timely service, nearly optimizing every resource that is made available to them, to maximize the quality of services to the membership, and to refine organizational and operations procedures associated with running our annual conferences. We express our gratitude to the multitude of financial sponsors and volunteers recruited by Roberta and her team. Without them, it would have been impossible to organize a successful conference. Thank you, also, for the unwavering support of our 2009 President, Erling Moxnes.

Len Malczynski and Aldo Zagonel (January 14, 2010)

### Part 2: Reflections for the purpose of improvement and refinement

### From the program chair:

#### **Three Conference Co-Chairs**

Dave Ford, Ed Anderson and I were a three-person program team. Looking back, I'm glad we had a team with a diversity of interests. It was helpful to get multiple points of view on the controversial papers. It also made it easier to keep pace with the required timing of decisions to allow Roberta to keep the entire conference system on schedule.

### The Calendar

This was my first experience as one of the conference chairs, and I found the long lead times to be most challenging. Roberta's calendar stretches out over several years, and it sometimes calls for the chairs to reach decisions in advance of our ability to do so. As an example, recruiting high profile speakers far in advance allows us to feed interesting news into the announcements that Roberta sends out far in advance. But high profile speakers are often working on a shorter term calendar. In many cases, we were simply not able to provide information that Roberta would have wanted to make the announcements more interesting.

#### Quality – The Topic of most discussion

There was considerable Email discussion on the topic of quality. The program chairs benefited from many points of view on the importance of selecting high quality presentations. We considered all the Email suggestions in light of the objectives of the 2009 conference, and delivered the following Email device to the thread chairs:

David Ford, Ed Andersen and I are contacting all of the thread chairs to share our perspective on the submissions and goals for the SD'2009 in Albuquerque.

<u>Preface</u>—Advice to Chairs of Established Threads: We want thread chairs to serve as the main quality control check-point for the conference. As the Society grows, we are shifting our goals somewhat. In the past, we may have accepted a very high fraction of the submissions in the spirit of inclusiveness. These days, a greater attention to quality is warranted. As a general guideline to the established chairs, we suggested an aggregate rejection rate between 15-20% for SD'2009. This guideline was based on many discussions of quality. It is also based on the total submissions to SD'2009 and the capacity in Albuquerque. We asked the thread chairs to think about the best mix of papers and posters, and we suggested a 60/40 split between papers/posters. This will lead to a good mix of papers/posters for the facilities in Albuquerque; it will also add to the quality of the papers presented in the parallel sessions.

Advice to New Thread Chairs: We are looking to you to bring new ideas and energy to Albuquerque. Many of the submissions in your threads have probably been recruited, so you will be looking at papers with greater quality and greater relevance for SD'2009. We do not expect the general targets for rejection rates and paper/poster mix to apply to your threads. It would be fine if you judge that all of your submissions are to be accepted. And perhaps all of them should be assigned to parallel sessions, with some of them suitable for presentation in discussant-type parallel sessions. That said, we are still looking to you to fulfill the same roles as the established thread chairs – you are the main quality control check-point in your area.

#### **Threads and Thread Chairs**

The 2009 Conference spent considerable time on the creation of new threads. There were many proposals, lots of networking, a formal nomination process, some excellent nominations, and a selection of some new threads with new thread chairs. Some proved quite successful; others did not. There was a healthy discussion of future threads (and their chairs) at the concluding debriefing meeting. Ed Anderson, David Ford and I then made recommendations based on the discussion. We called for two of the new threads to be dropped (Infrastructure Dynamics and Resiliency, and Gender Issues), and for three threads to be merged into one (Challenges of Terrorism/Insurgencies, Military Applications, and Security). My sense is that the new thread on Participatory Approaches to Modeling and Simulation should be continued. There was a lot of enthusiasm about this thread in 2009.

Andy Ford (January 9, 2010)

### From the organizing chair:

I would like to draw a parallel between Jay Forrester's proposition that the most important contribution to a good flight is not the pilot and crew, but the design of the aircraft. These reflections are intended for improvement and refinement of the planning and design of the annual conferences. Under the current design, I think everyone performed superbly, beyond the call of duty.

The areas for improvement in organizing and hosting conferences, particularly when this work is done jointly by the Society Office and a "local" hosting/organizing team are:

- Clarification of roles, prerogatives and responsibilities
- Clarification of expectations for all roles concerned
- Redefinition of alignment of revenue sources with expense items
- Adequate funding of the work performed by the Society Office via an increase in the "budgeted conference surplus"
- "Fair" assessment of the conference fee
- Rules for dealing with uncertainty, particularly in funding (revenues)

Len's reflections, below, begin to tease these problems. Our proposal for organizing and handling the conference finances, at the end, help address some of these areas for improvement. This document is intended as a first step in this conversation. If it is deemed useful to the Meetings Committee in specific and Policy Council in general, we would like to be able to elaborate our proposal and clarify or further substantiate all of these points.

#### In addition:

- We recommend the incorporation of the carbon neutral initiative into the conference registration process, as articulated in a specific proposal submitted to the Policy Council;
- We recommend the adoption of regular programs thread for Challenges of Terrorism/Insurgencies, and for Participatory Approaches to Model Building and Use;
- We recommend the continuation of the discussion-type sessions organized by the thread chairs, all held in one AM or PM parallel sessions slot, exclusively, with only two papers each, and with an assigned discussant charged with providing in-depth feedback to the authors and encouraging consequential discussion of the works;
- We recommend holding special events targeted to the K-12 community at least every other year, when the Creative Learning Exchange does not hold its own conference;
- We recommend the adoption of mechanisms that assure close collaboration between program chairs and local hosts, particularly in light of the newly adopted process by which program chairs are chosen separate from conference hosts;

These reflections and recommendations are offered in the spirit of improving the quality of the annual conferences to all attendees, strengthening the Society Office with resources, and enhancing the experience of hosting a conference, while promoting innovation, discretion, responsibility, flexibility and accountability.

Aldo Zagonel (January 4, 2010)

#### From the conference host:

My intent during the period of fundraising was to collect approximately \$45K. I assumed that \$25K of this would meet the Society requirement for the conference generated surplus (i.e. money that helps to support Society operations, over and above all conference expenses).

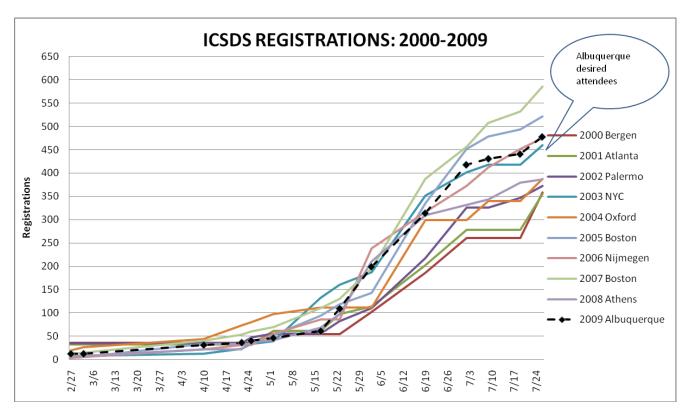
We raised approximately \$35K (this does not count the contribution from Sandia National Laboratories of laptops and projectors) and assumed that the \$10K remaining would be used to add local flavor to the Albuquerque conference. We planned to use souvenir satchels and hold a Welcome Reception at the Albuquerque Museum, featuring the art of the Southwest.

As the conference date approached, I tracked registrations, getting reports from the Society office at least twice per week. I carefully compared the data to previous conference activity and made many projections. The local conference team had set a goal of 450 attendees (we actually had 478). Conference budgeting was then done on a 450 person basis. As the conference approached we had to make decisions on the satchels and the reception. A souvenir satchel was made a priority and was ordered. The welcome reception was much more difficult as there were costs associated with the museum that would not be incurred were we to stay at the Hotel Albuquerque. In addition the caterers needed time to plan as did the museum. I was stubborn in insisting that the reception be held at the museum since it seemed that we had collected enough money to meet the \$25K surplus.

I believe that the Society office was being conservative on expenses, understandable after the financial loss incurred at the previous conference. There were some surprises to us hosts, especially the cost of the poster luncheon (this event was unknown when we submitted our original proposal). I was surprised that we did not have the discretion to spend the funds remaining after the \$25K surplus was met. This to me was a large part of the motivation for holding the conference in Albuquerque. I feel that the local team can be motivated by this opportunity, individually and as a representative of the host institution. Albuquerque is my home town, I truly felt that the attendees were coming to my home and I should treat them as well as I could. My goal was to have each attendee wonder when the conference would again be held in Albuquerque. <sup>1</sup>

These ideas and fund allocations created some tension between the local team and the Society. It seems to me that the hosting and planning process can be improved by taking a close look at the conference planning process and stating more clearly the rules, desires and expectations.

Len Malczynski (January 6, 2010)



Page | 5

<sup>&</sup>lt;sup>1</sup> Just a wish, not a promise, at least not until after retirement!

# Part 3: Proposed schema to organize and handle conference finances (Refer to Figure on p. 8)

### A. Expenses with "necessary" items (N:Exp)

These should be all expense items without which the conference cannot be held. The conference registration fee should be set to raise enough revenue to cover these expenses in full. This is a "fair" price and should be adopted regardless of the recruitment effort.

Instruments other than a generally-low conference fee can be used to entice targeted participants to attend. For the Albuquerque Conference, we used subsidies, covered by sponsorships offered by SDS (silent auction revenue fund), and Sandia National Laboratories/Lockheed Martin Corporation, to attract attendance of K-12 school teachers and administrators.

### B. Budgeted conference surplus (S:Exp)

Every conference is expected to generate a surplus —which serves as a source of revenue to the SDS. A fraction of this cost (X%) should be offset via financial sponsorships obtained by the SDS Office. The remainder (100-X%) should be raised via financial sponsorship obtained by the conference hosts and organizing committee.

We should increase the value of the budgeted surplus according to inflation and/or strategic goals set by the SDS. The additional revenue will be used to expand the services currently provided by the Society Office. It can be argued that, currently, the Society Office is overworked and understaffed. Therefore, we propose that the current minimum of \$25K be adjusted to a targeted value of \$50K. This seems feasible. With a registration fee of \$450/person, the Albuquerque Conference raised a surplus of approximately \$30K – and this was a first-time hosting site/committee without tradition or previous experience (at what now is being considered as a remote location). Had the registration fee been \$500/person instead, we probably would have raised an additional \$20K (even with a small decline in attendance). We do not have the accurate numbers to know for sure, but we suspect that if we followed the rule set forth in item "A," the registration fee WOULD be higher than \$450. (We would like to work with the SDS Office to perform these calculations, before we finalize this proposal.)

#### C. Expenses with "desired" items (D:Exp)

These are non-essential items that are highly desirable from the Society's perspective or that conference attendees have come to expect. They are not necessarily associated with the specific host or site. A prime example is the main social event, the conference banquet. It is not necessary to fulfill the conference program, but it is a good way to supplement it. Another example is the relatively new Poster Symposium and Buffet, which is a very popular event involving the cost of meals and beverages.

The revenue to cover these expenses should come from the usual conference sponsors, or via new fundraising efforts pursued by the SDS Office.

### D. "Idiosyncratic" expenses (I:Exp)

It is to be expected that the conference hosts and organizing committee will desire to carry out activities that fall beyond the scope of items A and C. At the Albuquerque Conference, we wished to offer a Welcome Reception, and to distribute the conference materials in souvenir satchels. These expense items (special activities) will vary and may never become a regular feature of the conferences.

The revenue to cover these expenses should come from the fundraising efforts pursued by the conference hosts and organizing committee.

### E. Net gains/losses (NG:NL, types 1, 2 and 3)

Net gains/losses will be calculated in three ways. Type "1" indicates the balance between revenues from registration fees (item F) versus "necessary" expenses (item A). Type "2" indicates the balance between funding from general sponsorship obtained by the SDS Office (item G), and "desired" expense items (item C). Type "3" indicates the balance between funding from idiosyncratic sponsorship obtained by the conference hosts and organizing committee (item H), and "idiosyncratic" expenses (item D).

The sponsorship revenue raised by the SDS Office and by the conference hosts/organizing committee must first be allocated to cover their respective shares of the budgeted conference surplus (item B). Only the remaining portions shall be used to cover conference expenses associated with items C and D, respectively.

The sum of NG:NL, types 1, 2 and 3 results in an overall net gain or net loss. This result already accounts for the budgeted conference surplus. Therefore, a net gain adds to the budgeted surplus, whereas a net loss subtracts from it.

#### F. Conference registration revenue

As previously stated, the cost of registration should be set to cover the "necessary" expenses described in item "A." There are currently three categories of fees (member, non-member, and student). It is customary for non-member fees to be higher than member fees, and for student fees to be lower. These values should be set such as that the expected attendance under each category, multiplied by the fees set for each category, add up to the total for item "A."

The conference may result in a gain of type 1 if actual overall attendance is higher than expected, or more attendees pay a higher fee (whether by category or due to late registration). Alternatively, the opposite may result in a financial loss of type 1.

### G. General sponsorship raised by the Society Office

The SDS Society Office works diligently to raise funds from general sponsors for the annual conferences. This pool of sponsors often contributes annually, to showcase their products, obtain complimentary registrations and other benefits, or simply contribute to the field with financial support.

This revenue should be used first to cover the SDS Society's share of the budgeted conference surplus (X% of \$\$\$). Amounts in excess shall be used to pay for the "desired" expense items (C).

The conference may result in a gain of type 2 if actual sponsorship revenue raised by the Society Office is higher than estimated or actual expenses associated with "desired" items are lower than originally expected. Alternatively, the opposite may result in a financial loss of type 2.

### H. Idiosyncratic sponsorship raised by the organizing committee/hosts

Conference hosts shall commit to a certain level of financial sponsorship when proposing to host a conference. This amount should preferably exceed (100-X%) of the budgeted conference surplus. If so, the hosts will be able to promote special activities which generate idiosyncratic expenses (e.g., a welcome reception).

To the extent that the conference hosts and organizing committee have surpassed their financial obligation towards the budgeted surplus, they will have full discretion as to how these resources are used –following reasonable ethical guidelines for appropriate spending.

The conference may result in a gain of type 3 if actual sponsorship revenue raised by the conference hosts/organizing committee is higher than estimated or actual expenses associated with "desired" items are lower than expected. Alternatively, the opposite may result in a financial loss of type 2.

### Therefore:

- Differences between A and F are computed as a net gain/loss type 1; this difference is due to imbalance between budgeted essential expenses and forecasted registrations revenue, versus actual \$\$\$
- It is up to the Society Office to make decisions that adjust expenses associated with items C, to make sure its share of item B (X%) is covered; differences here are computed as net gain/loss type 2; this difference is due primarily to the success of the SDS Office fundraising effort, vis-à-vis the actual expenses with things participants have come to expect but that are not considered essential
- It is up to the organizing committee/hosts to make decisions that adjust expenses associated with items D, to make sure its share of item B (100-X%) is covered; differences here are computed as net gain/loss type 3; this difference is due primarily to the success of the organizing committee/host's fundraising effort, vis-à-vis the actual expenses with "new" things close to the heart of the conference organizing committee/hosts

Aldo Zagonel and Len Malczynski (January 4, 2010)

			Expense sources (	Ехр)			
Necessary items (N:Exp)	N	\$\$\$	budgeted Surplus set at (S:Exp)		\$25,000		
	A				15		
Audio-visual equipment and services	1.1	\$	Share of S:Exp covered by		-	=X%*\$25,000	
Communications (phone, internet)		\$	Share of S:Exp covered by IS:Rev (\$)		=(100-X)%*\$25,000		
Conference proceedings		\$					
Financial fees (banking, credit cards)		\$	Desired items (D:Exp)		\$\$\$	Idiosyncratic expenses (I:Exp)	\$\$\$
Informational brochures		\$			No.	2000 CONTROL OF THE PROPERTY O	
Mailing/shipping		\$	Awards		\$	Off-site insurance	\$
liscellaneous (organization, program, etc.)		\$	Coffee breaks		\$	Satchel	\$
Photocopying		\$	Evening banquet		\$	Welcome reception	\$
SDS Office labor charges		\$	Informal gathering		\$		\$
Site insurance		\$	Poster-symposium buffet		\$		
Supplies		\$	Survey		\$		
\$400		\$			\$		
		50.0		9		MSA	
			Revenue sources				
Registration fees (R:Rev)		\$\$\$	Net general-sponsorship (NetGS:Rev)	=GS:F	Rev - X%*\$25,000	Net idiosyncratic-sponsorship (NetIS:Rev)	=IS:Rev - (100-X)%*\$25,00
Revenue from members		4			2007		4400 1404
		\$	Share of S:Exp covered by GS:Rev (%)	C	X%	Share of S:Exp covered by IS:Rev (%)	(100-X)%
Revenue from non-members		\$	Lance and Lance and Lance and	9			H
Revenue from full-time students		\$	General Sponsors (GS:Rev)			Idiosyncratic Sponsors (IS:Rev)	
Other registration revenue		Ş					
		2000	E.g., Amber Blocks		\$	E.g., Department of Homeland Security	Ş
Member early-registration fee set at		\$450			Ş	<u></u>	Ş
			h				2
<del></del>			oss (NG:NL)			=Type 1 + Type 2 + Type 3	
Type 1 (R:Rev - N:Exp)		F - A	Type 2 (NetGS:Rev - D:Exp)		G - C	Type 3 (NetIS:Rev - I:Exp)	H-D
Actual Conference Surplus	¢as or	0 + NG:NL	<b>-</b> □ - E.				
Actual Conference Surplus	72J,U	O I NO.INL					

This is a sample of the spreadsheet capturing the proposal to reorganize the handling of conference finances:

(Proposed by Aldo Zagonel and Len Malczynski, January 4, 2010)

<sup>&</sup>quot;A" refers to "necessary" expense items without which the conference cannot be held

<sup>&</sup>quot;B" refers to the "budgeted" conference surplus

<sup>&</sup>quot;C" refers to the "desired" expense items which are things that conference attendees have come to expect, in addition to the necessary expense items

<sup>&</sup>quot;D" refers to activities that are new or unique to the conference at hand, desired and promoted by the conference hosts/organizing committee

<sup>&</sup>quot;E" captures three types of net gains/losses, and the overall net gain/loss, which already accounts for the budgeted conference surplus

<sup>&</sup>quot;F" refers to the conference revenues from the registration fees (should cover expense items "A")

<sup>&</sup>quot;G" refers to the financial sponsorship obtained via the efforts of the SDS Office (should cover X% of the budgeted surplus and all of expense items "C")

<sup>&</sup>quot;H" refers to the financial sponsorship obtained via the efforts to the conference hosts/organizing committee (should cover 100-X% of the budgeted surplus and all of expense items "D")

Type "1" net gain reflects a surplus between "F" and "A"

Type "2" net gain reflects a surplus between "G" and "C"; should first account for X% share of budgeted conference surplus

Type "3" net gain reflects a surplus between "H" and "D"; should first account for 100-X% share of budgeted conference surplus