# SIS Board of Visitors Meeting Report November 15-16, 2010

#### Board members present included:

Gary D. Byrd J. Roger Glunt David H. Holtzman
William Isler Robert Kahn Clifford Lynch
Michael Macedonia James Matarazzo Alfred L. Moyé, Chair
Keith Schaefer Barbara Spiegelman Robert J. Strauss

Patrick E. White James F. Williams, II

Juan Manfredi, representing the Provost's Office

# **Introduction**

The School of Information Sciences' Board of Visitors met on November 15-16, 2010. Materials supporting the meeting are available at <a href="http://www.sis.pitt.edu/~sisbov">http://www.sis.pitt.edu/~sisbov</a>. The web site has a user-id (sisbov) and password (sisbov) to prevent it from being harvested by search engines. The Board meeting opened at noon on November 15 with a poster session featuring work of SIS PhD students, followed by introductions of and presentations by new faculty and staff members. This was held as an open house for all SIS students, faculty, and Board members.

# **Provost's Charge**

Over dinner Monday evening, the Provost met with SIS representatives and members of the Board of Visitors to discuss trends in higher education in light of the current economic situation and the recent elections. The election of Governor Tom Corbett is viewed favorably for his annunciated commitment to and support for higher education. The Provost touched on a number of topics, including:

- Enrollment (applications and student quality continue to grow)
- Retention (retention of first-time students now exceeds 93%)
- Infrastructure investment in libraries & IT (e.g., expanding access to digital resources)
- Interdisciplinary initiatives (e.g., energy and sustainability)
- Building competitive advantage internationally (e.g., establishing a physical presence in Beijing)

Pitt faces challenges, but this institution is better positioned than many of our peer institutions in other states.

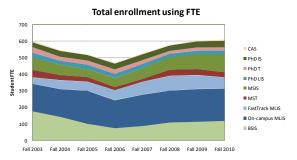
The Provost then proceeded to issue the charge to the Board for this meeting:

- How effective does the BOV consider the assessment activities SIS is engaged in, both within the School and in support of University goals?
- How successful has SIS been in integrating its academic programs?
- Is the School effectively incorporating assessment into its plans and the execution of those plans?

#### Chair's Welcome

The Board reconvened the morning of Tuesday, November 16, 2010. Al Moyé, Chair of the Board of Visitors, welcomed members of the Board to the annual meeting. He repeated the Provost's charge and reflected on the materials prepared for the Board. He introduced Dean Ronald Larsen, inviting him to review the prepared materials (provided online at <a href="http://www.sis.pitt.edu/~sisbov/">http://www.sis.pitt.edu/~sisbov/</a> and in a notebook available to each attending Board member). A summary of the Board's discussion of the introductory materials follows.

# **Board Discussion of SIS Summary Data**



Board members expressed interest in the acceptance rate of Master's students, particularly those applying to the MLIS program. Mary Kay Biagini (LIS program chair) indicated that the LIS faculty establishes the criteria for acceptance and these criteria are published on the web site, informing all potential applicants. Of those students meeting the expressed admissions criteria, approximately 50% matriculate. She also expressed a goal of admitting a greater proportion of students from out-of-state, since they provide geographic diversity in addition to producing greater tuition revenue. Dr. Biagini noted that availability of financial aid resources continues to constrain the School's ability to attract some of the best students.

The Board inquired as to the optimal enrollment for each program, and the degree to which this has been achieved. Enrollment levels directly impact teaching loads and research productivity, in addition to providing operating revenue. Given the current infrastructure, what is the School's optimum enrollment? Dean Larsen observed that this is a topic of current discussion, around which there exists a diversity of opinions. The LIS faculty is currently wrestling with the balance between teaching loads and research emphasis in the MLIS program. Across the School, it appears the PhD

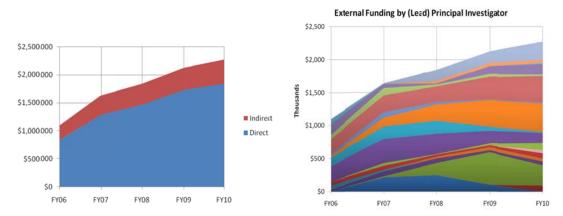
programs are sized about right. The TeleNet program has enhanced its undergraduate track in BSIS, but would still welcome growth at the Masters level. The MSIS is approaching its preferred size. Board members also inquired as to whether Masters-level teaching targets the upper level of students or lower. Given the wide educational diversity of students, particularly in the MLIS program, the introductory courses are viewed as critical to the preparation of all students, irrespective of any sense of "level." Following the introductory level, different courses target different levels of student preparation.

Richard Cox, leader of the Archives, Preservation, and Records Management (APRM) program, reported unusually high levels of interest and (hence) enrollment in a specialization he described as having relatively limited capacity for absorbing new hires. He reported subsequent student frustration and difficult teaching circumstances exacerbated by the economic down-turn and loss of professional entry level positions. As a result, a series of steps is now in place to filter applicants more carefully, including more emphasis on an applicant's personal statement, a requirement of one year of relevant professional experience, and limiting the incoming class size to 40. He also mentioned a proposal to create a separate Masters degree in archives, intended to raise the level of the program and the courses offered. Dr. Cox expressed his personal assessment that the educational market for new entrants to MLIS programs could collapse in the next few years as a result of the job market. He further considered it unlikely that lost positions would be restored in organizations where exceptional job cuts have been made, even as the economy improves. The Board advised developing plans for managing such a likely downturn.

Board members asked how undergraduate applicants to the program are assessed for admission. Bob Perkoski (undergraduate program chair) responded that undergraduate students transfer to SIS after completing 55 credit hours, so they have already passed Pitt's rigorous admissions criteria. Nonetheless, each student is evaluated holistically, considering both their experience and academic performance. While not a formal criterion, the practical minimum GPA to the BSIS program is 3.25. Board members expressed a continuing interest in understanding the admissions parameters, including how many students apply, how many are admitted, how many accept an admissions offer, and how many graduate. Board members are seeking a means of understanding how the SIS undergraduate program compares to programs at other iSchools.

The Board inquired about the recruitment of veterans returning from Iraq and Afghanistan, many of whom are likely to have some experience in information technology as a result of their military training and experience. Whereas Pitt recruits returning veterans, SIS has no distinct, parallel initiative to recruit those accepting Pitt admission to the iSchool. Given that veteran enrollment has doubled, Sandra Brandon (Chief of Staff, under whom student recruitment is conducted) indicated the School would incorporate veteran recruiting into its student recruitment processes. (Ann

Rairigh directs Pitt's Office of Veterans Services, providing the liaison to returning veterans.)

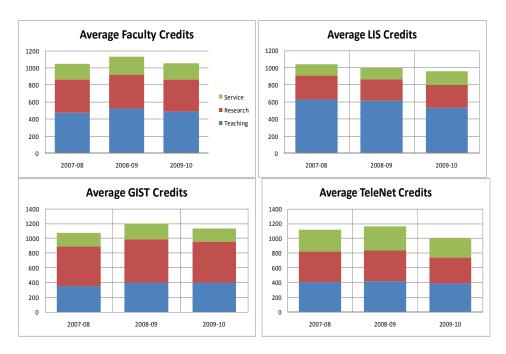


The School has placed a priority on expanding interdisciplinary research collaboration among faculty within the School, and between SIS faculty and researchers outside the School. Funded research has doubled over the past five years and engaged 50% more faculty. While collaboration among faculty within the School has increased, a more marked affect has been the collaboration between SIS faculty and those outside the School, including researchers in the Medical School, Engineering, Public Health, and History. During the first day of the Board meeting, 24 PhD students presented posters addressing their research, much of which is interdisciplinary in scope. Particularly striking were the presentations to the Board by new faculty in the TeleNet program (Konstantinos Pelechrinis) and the LIS program (Cory Knobel), and a new post-doc hired to foster interdisciplinary research (Mohd Anwar). A common theme emerged among all of their presentations around the topic of social network analysis. Board members responded favorably to the growth in collaboration across the School and with disciplines outside the School, exhorting efforts to continue and expand these activities, both at the faculty and graduate student levels. In addition to the social networking theme, Cyberinfrastructure and data curation were mentioned as being indicators of important funding and environmental trends.

Exploring further the nature of collaboration, Board members inquired about corporate support for research. In a wide ranging discussion regarding relationships among faculty and external constituencies, the names of two prior SIS faculty emerged as exemplars. Jim Williams was particularly effective at developing corporate relationships. E. J. Josey was noted for his passionate recruitment of African American students to SIS. In each case, a strategic priority was relegated to the passions of an individual. Board members identified the need to institutionalize such activities, so that they are not dependent on individuals' interests, expertise, and passions, but are expressions of School priorities that are supported as such.

While acknowledging the complexities of dealing effectively with intellectual property rights at a major research university such as Pitt, Board members noted that other

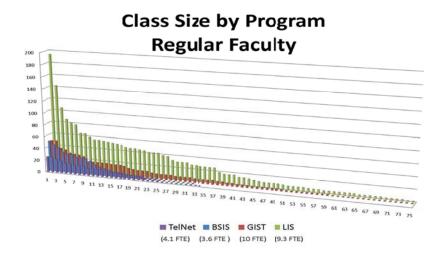
institutions (Stanford and MIT were held up as exemplars) navigate these waters more effectively. While the issues go beyond SIS, they directly affect the interest and ability of SIS faculty to conduct collaborative research with industry. The Board encouraged Pitt (and SIS) to revisit historic attempts at corporate sponsorship of research activities (including both those that were successful and those that foundered), as a means of illuminating potential steps the University can consider to increase corporate sponsorship of research and technology transfer from faculty. Al Moyé volunteered to bring the issue (properly informed) to the attention of the Board of Trustees.



Dean Larsen briefly described a parametric model he introduced five years ago, designed to record faculty activities. The model is intended to both measure an individual's relative workload among the academic responsibilities of teaching, research, and service, as well as to provide faculty members a means of maximizing their personal productivity by moving to their individual strengths. (He noted that the traditional research university model of 40/40/20 as proportions of effort dedicated to research, teaching and service are goals he seeks at a school level rather than at an individual level.) The model demonstrates that the LIS teaching load is inordinately high, negatively impacting faculty members' ability to conduct research. The TeleNet and GIST balances are about right (the 2009-10 dip in TeleNet is an artifact of faculty rollover). The Dean would like to decrease the teaching load in the LIS program over the next few years, with an expectation of increasing the capacity for research.

Board members reflected on the impacts of limited federal research funds and concomitant increases in proposals (nationally), resulting in low award rates (often less than 10% for NSF CISE). They asked what SIS faculty members were experiencing. While we are doing better than the national average, a downturn in acceptance rates of grant proposals was generally acknowledged.

Research outcomes were noted as more significant barometers of the vitality of SIS research (including journal articles, books, and conference papers than the amount of funding (although funding is widely regarded as correlated with output). Likewise, teaching loads are affected by more than purely the number of courses. Important differentiators include online vs. on-campus, number of students, etc. Class size for LIS courses is much larger than the other programs, while the total number of faculty is similar, presenting a proportional inequity compared to other programs.



#### **Board Discussion of SIS Leaders' Observations**

The Dean, Associate Dean, SIS Council Chair, and Program Chairs each provided written observations and reflections regarding their assessment of the state of the School. These documents are available on the SIS BOV website. The following is a summary of the Board's discussion.

#### Dean

Dean Larsen alluded to a potential measure of the School's long term progress toward greater integration of its component disciplines, noting that the focus could shift from an emphasis on the specific degrees received (MLIS, MSIS, or MST) to the professional positions acquired. Disciplinary course compression resulting from the current 36 credit hour structures may need to be revisited (the TeleNet program is currently 37). Expansion of the Masters programs beyond 36 hours might better enable interdisciplinary experiences among SIS students.

# **Associate Dean**

Associate Dean Weiss reflected on some of the risks that the School currently faces, including enrollment, shifts in job markets, and imbalances in teaching loads. If new

faculty members who have ambitious research agendas are inhibited from conducting their research due to excessive teaching loads, they will become frustrated and leave. He noted that this applies to research-active tenured faculty, as well. A Board member inquired as to the current culture for employment of TAs, GSAs, and GSRs in the school. Dr. Weiss responded that a portion of financial aid is directed specifically to PhD students who demonstrate the capacity to function as TAs and TFs. GSRs are largely dependent on faculty research funding from grants. Dr. Biagini indicated that in the LIS program, each tenure stream faculty member is assigned a 10 hour/week TA to assist with teaching and research. Some funding is directed to PhD students as TAs or TFs. Last year, the LIS program instituted a monthly series of "Talking about Teaching" sessions to help new faculty learn about teaching in a blended environment.

Inquiring how the 40/40/20 model works for junior faculty, the Dean responded that this is an area of particular attention. The performance of untenured, tenure stream faculty members is reviewed annually to assess their relative workloads, encouraging them to stay close to a 40/40/20 balance, in order to improve their likelihood of receiving promotion with tenure.

#### **SIS Council Chair**

Richard Cox, chair of the SIS Council, identified the Council as the mechanism designed to advance the primary agenda of the School to unify. Five years in existence, the Council has adapted to this role and become more comfortable with it, learning to focus on School-wide issues. Reflecting on his other role as leader of the APRM specialization, Prof. Cox noted that SIS is among eight schools that have founded the Archival Education and Research Institute (AERI) that is designing the education components for the next generation of APRM faculty.

#### **Undergraduate Program Chair**

Bob Perkoski (undergraduate program chair) provided his assessment of the BSIS program. From a low of 90 students following the dot-com bust, enrollment is now about 140, with a target of 150. Sustaining this level of enrollment is getting more difficult as iSchools increase their marketing and new programs (particularly at Penn State) expand alternatives available to prospective students. The SIS marketing campaign has focused on jobs and has been fairly successful. Our marketing emphasizes the attractiveness of Pittsburgh and the BSIS curriculum. A capstone experience (internship, Independent study, or a course) is a recent addition to the program. The curriculum is becoming more project-based (emphasizing teamwork and developing leadership experience). Recent changes in the TeleNet program have increased collaboration with that program. This year a national standardized test (Collegiate Assessment of Academic Proficiency, or "CAAP") was introduced to assess students' facility in critical thinking. Results provided a baseline that is considered a positive

reflection on BSIS students. 86% of BSIS students exceeded the 50% national percentile. Placement rate for recent graduates is around 90%.

#### **GIST Program Chair**

Paul Munro (GIST program chair) reviewed the graduate program in information science and technology. The tracks instituted several years ago have been largely successful and have helped clarify the curriculum to prospective students. The new specializations (Database and Web Systems; Information Security; Geoinformatics; and Telecommunications and Distributed Systems) now appear explicitly on the transcript. While it remains to be seen how employers will respond, it is clear that students like it. Dr. Munro noted a significant increase in international students (mostly from China). He expressed concern over such a large flow of students from any one country, preferring, instead, a more balanced increase in the student pool from the US and a wider variety of countries. He also identified continuing faculty deficiencies in the systems area (considered central to the IS program). The systems part of the curriculum is dependent on a few full-time faculty and adjuncts, where he expressed a preference for core areas to be supported by full-time faculty.

# **TeleNet Program Chair**

David Tipper (chair of the TeleNet program) reflected on progress in that program, much of which has been the result of prior Board recommendations. He noted a large number of significant changes over the past seven years resulting from various assessments. The Masters program has been de-emphasized, with increased emphasis on the PhD program and the undergraduate specialization in BSIS. He noted that when the University restructured its Career Services office, SIS downsized seemingly redundant activities. In retrospect, these steps produced mixed results, since Career Services didn't really handle some key activities, such as internships, which are critical to successful job placements in the Telecommunications industry.

A Board member inquired about competition from community colleges and for-profit educational institutions. Dr. Tipper indicated that a study he conducted two years ago revealed little demand for online education in the telecommunications and networking area. In a follow-up question, he was asked what the TeleNet Masters students do when they graduate. David identified Alcatel, Lucent, and a new (and growing) array of end user organizations as the most recent employers of TeleNet graduates. They are increasingly finding employment with organizations designing, deploying and operating wireless networks and wireless sensor networks. Graduates are also employed in cybersecurity. One impediment to corporate support of internships was identified: corporate support for internships does not qualify as a gift to the university, but instead is considered a work for hire. As a result, the sponsor cannot deduct the contribution on taxes.

Board members identified the need to assure that graduates placed in industry recognize their key role as conduits to corporate contributions. The increasing demand for industrial cybersecurity positions suggests that potential employers may be candidates to sponsor tuition scholarships for US students (not unlike the federal Scholarship for Service program).

# **LIS Program Chair**

Mary Kay Biagini (chair of the LIS program) provided her perspective on the state of the Library and Information Sciences program, noting that with regard to the Board's interest in assessment, the ALA Committee on Accreditation (COA) imposes routine and rigorous assessment and reporting requirements, rendering the LIS program under a constant state of assessment.

She noted the (prior) Provost's historic resistance to using financial aid to attract students to a professional Masters program, observing that this places SIS at a disadvantage to aspirational peers with more generous financial aid policies (citing the University of Michigan, in particular, as one that offers full tuition scholarships to highly qualified Master's students). LIS financial aid resources have been increasingly directed toward PhD students over the past two years, and, in particular, to those students who have demonstrated capacity to become teaching fellows (TFs). This strategy has a two-fold justification: it increases our teaching capacity while providing our doctoral students a strategic advantage in subsequent applications for faculty positions (many of our peer institutions do not provide similar teaching experiences for their doctoral students).

Dr. Biagini also discussed the LIS faculty's IT infrastructure and support needs. Board member David Holtzman noted that other schools have sought to gain economies of scale by eliminating small-scale operations in preference to University-wide systems. He noted the increasing shift to virtualization as an indicator of this broader trend.

The School is currently directing infrastructural resources toward refurbishing space for interactive teaching and learning. The 8<sup>th</sup> floor laboratory renovation is \$150,000 short of its \$1M goal, and a proposal has been submitted to the Provost to close this gap. The space will be available to all programs to support an array of uses in teaching and experiential student activities. Board interest in IT infrastructure was evident, and the complexity of issues spanning program, school, and university strategies suggests that this may be a topic deserving future, focused deliberation by the Board.

The Board inquired about the size of the alumni pool and their capacity for giving to the School. SIS alumni number about 11,000. LIS graduates, however, rarely go into high paying positions, so relatively few of them have the resources for a major gift to the School. The TeleNet and IS graduates, while potentially more affluent, are demographically younger, not yet to the typical age of most donors. The proportion of

SIS alumni who have sufficient resources for large gifts is small. Nonetheless, all graduates should be encouraged to contribute to the School, regardless of the size of their gifts. Board member Roger Glunt also observed that many of the School's graduates are employed by firms that have the capacity to make significant gifts, and that graduates can serve as conduits to such giving. Faculty can also play a significant role in alumni relations by contacting alumni when they travel and encouraging alumni to participate in alumni and development activities.

Board members inquired as to how the LIS distance education program relates to the University's growing interest in such programs. They noted that LIS has been on the leading edge with respect to the rest of the University. The BOV has suggested in past reports that the University consider SIS's FastTrack program as a successful laboratory for informing other distance education initiatives. Since the goal of the Provost is to add two new programs per year in distance education, using SIS as a model would appear to be supportive of the University goal. Board members noted an apparent divergence of university strategy from SIS's distance education delivery model, suggesting that this is a strategic planning issue that deserves attention.

## **Summary of closed session with the Provost**

Provost Beeson joined the Board meeting for the Tuesday afternoon session.

The Provost asked the Board whether the Pitt iSchool is positioned well and on the right track to achieve its goal of developing a more holistic, integrated program of education and research to prepare the next generation of information professionals for leadership positions. Board members responded favorably to this question, noting the significant progress that has been made over the past five years, and acknowledging that this is a long term, ongoing activity.

In particular, Board members observed that SIS is doing a great job attracting exceptional faculty. This year and last, each new faculty member introduced themselves and their work to the Board. It is evident that those joining SIS in recent years are of the highest quality and understand their role as new faculty in the iSchool. Each of them demonstrates interest and proficiency in the interdisciplinary work that is increasingly dominating iSchool research.

Board members also responded very favorably to the PhD students' posters (Monday afternoon). The dialogue among Board members and PhD students was animated and energizing. The students' work was broadly assessed as impressive.

Reflecting on research progress, Board members observed that the past five years has been marked by significant increases in research funding (doubling), but expressed a concern that intellectual property (IP) issues are an impediment to technology transfer

and collaborative research with industry. Based on a faculty member's reported experience, Board member Pat White (now a venture capitalist) opined that it is sometimes the case that university offices of technology commercialization don't understand the venture capitalists' culture of investment, leading to a failure in attracting investment. It may be time for a university-level survey of exemplar university policies and procedures for collaborative engagement with industry, followed by a review of Pitt's technology transfer policies and procedures.

Commenting on progress across the SIS programs and disciplines, Board members observed that while much remains to be done, substantial progress is evident. They suggested that inter-program cooperation benefits all graduates, noting, in particular, that engagement with LIS would position non-LIS graduates more favorably in the job market, differentiating them from others with a purely technological education. Board members wondered whether SIS could be perceived to be at a competitive disadvantage to schools like Michigan and Berkeley that are widely recognized for fostering interdisciplinary education, and questioned whether this is a qualitative difference or merely a marketing deficiency.

They also noted that SIS has a historic pattern of attracting diverse students and in fostering corporate relations that were strongly dependent on the interests and passions of individual faculty. Two past faculty members were mentioned. E.J. Josey was exceptionally successful in attracting African American students, and Jim Williams was instrumental in establishing strong corporate relations. The Board encourages SIS to find ways to institutionalize priority areas such as these, so they are no longer dependent on individuals and their personal interests.

The Board has exhibited a long-standing interest in fund raising and the role of Institutional Advancement in helping SIS attract contributions from alumni, foundations, and corporations. They have repeatedly expressed concern over the instability apparent in the IA / DCR position, encouraging IA to assure that development personnel assigned to SIS remain in those positions long enough to make an impact. They also suggested IA and SIS place greater emphasis on raising funds for student scholarships.

#### **Board calls for vision statement**

SIS has made notable and quantifiable progress related to key indicators such as enrollment and external funding. It has made parallel progress in improving collegial and collaborative interdisciplinary work among the faculty and the School's programs. Its next objective should be developing a stronger and more coherent sense of how the School identifies itself nationally, establishing its reputation around clearly stated signature strengths. Such an identity should express the outlook and philosophy of the school with respect to national trends that profoundly affect the future of information use and management (e.g., social networking and health-related information technology). In a rhetorical flourish, a Board member asked, "What are the

extraordinary things that would make faculty and students want to come to Pitt and to SIS?" Board members called for a clear explication of "that extraordinary thing" that distinguishes SIS (beyond the quantitative measures). SIS should provide a better definition of its "stretch goals" and from these, articulate its long-term vision. Enhanced by such a vision and identity, the School's existing depth and breadth of research should make the School more attractive to industry and potential industrial research sponsors.

#### Board recommends raising the bar

The combined progress to date and recommended next steps should enable SIS to continue to raise the bar for quality and competitiveness. The Board recommends that the School take steps to become more selective in student admissions and to explore the feasibility and implications of increasing the credit hour requirements for each of the Masters programs. The 48-hour credit requirements of several aspirational peers (e.g., Michigan, UNC, and Berkeley) were noted. They also noted that any such steps will require concomitant improvements to laboratory facilities and central support services.

Given the competition for high-performing students, the Board recommended that SIS routinely track its graduate placements 1, 5, and 10 years out, and use this information both for program assessment and recruitment of new students.

While applauding SIS progress in fostering greater interdisciplinary curricula and research, the Board urged the School to continue to aggressively break down silos wherever they are found or emerge. They encouraged SIS to expand interdisciplinary programs with other units on campus and to similarly increase the number of joint appointments with other Pitt schools.

# Board advises near term tactics supporting long term strategies

In concluding its discussions with the Provost, Vice Provost, and Dean, Board members confirmed that the organizational structure put in place five years ago has served to support the unification of the School and the development of a coherent vision, but recognized that such transformations in higher education tend to be lengthy evolutions, often extending a decade or more, and punctuated by multiple discrete organizational changes. SIS has developed a reputation as a School exhibiting dynamic change targeting greater integration, and the SIS Council explicitly supports this transformation. While the reorganization has created an environment conducive to collaboration, wide spread participation and greater program integration remain as challenges. Not all faculty accept the goal of integration and unification, and in terms of students' coursework, it remains the case that there is relatively little cross-program blending. The Board suggested that SIS may be approaching another inflection point, requiring further organizational adaptation to sustain the pace of progress achieved thus far.

# **Board adjourns**

The meeting adjourned at 4:30 pm on Tuesday, November 16, 2010. Feedback from Board members suggest two considerations for next year's Board meeting:

- Make sure the Board has at least 2 hours of private time prior to meeting with the Provost.
- Provide brief bios of each Board member to the PhD students presenting posters so that they can have a more informed conversation with Board members.