



**Report of Findings  
Public Relations Committee  
Structural Engineers of New Hampshire  
September 26, 2007**

## **INTRODUCTION**

The Structural Engineers of New Hampshire (SENH) established the special Public Relations Committee (hereinafter referred to as the Committee) to investigate potential means and methods of raising the public's awareness of Structural Engineers, Structural Engineering and SENH. As stated in SENH's mission, one goal of the organization is to "to serve as a spokesperson to the public on matters of structural engineering."

SENH has, to date, provided valuable services to the public, such as the development of detailed snow load maps for the entire state, and the distribution of literature to educate the public and municipal officials to the requirements of State Building Code required Special Inspections. These efforts have been successful in providing the public with usable information for these specific topics, but have not necessarily made SENH a "household" name in the community.

The SENH Board of Directors appointed four (4) members and a liaison to the Board to discuss ways in which SENH can become more of a household name in the engineering and general communities and report back to the Board of Directors with ideas for further discussion and possible implementation.

## **COMMITTEE DISCUSSIONS**

The Committee held several meetings to brainstorm different methods and means to increase and improve the recognition of SENH and structural engineers and the services that we provide. A representative list of ideas that were generated is as follows:

1. Add to and enhance the features of the SENH website and promote its' use by students, municipal officials, engineers, architects and others.
2. Advertise the organization on National Public Radio (NPR), similar to what is done by other professional organizations such as AIA-NH.
3. Administer educational programs, such as pre-developed presentations, scholarships, contests, etc. Some activities could be thought of as being similar to the West Point Bridge Building Contest, Mathcounts, ASCE scholarship program, NHSPE scholarship program, or the NHSPE Math and Science Teachers Awards program.
4. High School Industrial Arts Program Presentations
5. Seacoast School of Technology
6. Manchester School of Technology

Each member of the committee provided additional input on the above listed general topics of discussion and presented information to the committee as to the feasibility of implementation.

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### Website

The SENH website was developed several years ago as a means to serve our members. At the time of development and launching of the website, the goal was to provide content that would be useful to our members, such as professional links to code organizations and other societies, meeting notices, meeting minutes, officer information etc. The website was not developed with the intent that people other than our own SENH members would be routinely visiting the site. As such, there is very little information that is useful to those who are not SENH members, or structural engineers at the least. As a clearing house for SENH matters, the website has been a successful tool, in some instances reducing administrative paper usage and mailing costs.

The SENH website was seen by the committee as a vital tool in achieving the goals of raising public understanding of the practice of structural engineering and increasing the name recognition of SENH. Whether advertisements are placed in newspapers, college break rooms, or broadcast on NPR, SENH needs to provide a website that the public can be "sent to" as a follow-up to the initial introduction of the organization. Until implementation of a more comprehensive, user friendly website is complete, other advertising or promotion may be somewhat futile.

The committee generally agreed that given the current availability of access to the internet and the assumption that internet usage will only increase as time passes; upgrading the website to provide useful tools to non-structural engineers could be a cost-effective means of providing information about SENH and structural engineering to others. The committee canvassed websites of other organizations, such as other NCSEA organizations across the country, AIA, AIA-NH, and others. Although there may not have been a particular website that was felt to encompass all aspects of data that may be necessary to include a wide variety of users, certain portions of numerous websites were seen to provide information that was similar to what the committee thought may be applicable to our situation. For instance, some websites provide sections that are for students or engineers-in-training, describing what the profession is about, providing links to test preparation materials, links to accredited engineering school websites and descriptions of some projects that were relative to the profession. Following is a brief outline of content that may be important to have included in the website as we reach out toward other groups of the populations:

- i) **Home Page:** (similar to Structural Engineers Association of Illinois)
    - (1) Feature the color SENH Logo.
    - (2) Compliment the color SENH Logo with the Structural Engineers of New Hampshire name.
    - (3) Short, Easy to Read Quote, also state the Purpose of SENH Organization. (Similar to the SEAOG quote of purpose). "The house in which you live, the roads and bridges you travel, the building in which you work. . . . Houses of worship to petrochemical refineries to skyscrapers. . . . **A STRUCTURAL ENGINEER MAKES IT POSSIBLE**
    - (4) Links to all sub-pages with easy to find and use buttons. Buttons should be available on every page.
    - (5) Calendar of upcoming events and meetings updated monthly.
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ii) **General Public Sub-Page:**

- (1) Search Engine Feature to locate a structural engineer by location and type of engineering services. (Similar to the AIA Maine website that uses check box filters to locate matches based on service and location)
  - (a) Derive a form for corporate members to submit valid criteria their firm wishes to be listed for when searched on this website (possible revenue available for corporate listings).
- (2) Purpose of our organization.
- (3) Information about Structural Engineers.
  - (a) Definition of a Structural Engineer.
  - (b) Why acquire the Services of a Structural Engineer? Including information about hiring a structural engineer.
  - (c) Value of a structural engineer.
  - (d) Common questions to ask your structural engineer (FAQ – AIA has a good example of this.)
  - (e) Selecting a Structural Engineer? Include a link to the NH QBS at nhqbs.org.
  - (f) Engineering Canon of Ethics (from ASCE and NSPE).
  - (g) Common reasons for calling a Structural Engineer. Tasks of a Structural Engineer - Typical Structural Engineering Services Provided (examples of local project submitted by members)
  - (h) Special Inspections.
  - (i) Awards – National and Local.
- (4) Sponsor Sub-page.

iii) **SENH Members Sub-Page:**

- (1) **General**
    - (a) Membership Application (link to PDF document for printing)
    - (b) Dues Renewal Forms (link to PDF document for printing) (member log-in and online renewal)
    - (c) History including past organization officers.
    - (d) Purpose of our Organization.
    - (e) President's Message. (This should be kept current.)
    - (f) SENH Office Location and Contact Information.
    - (g) Committees. (Descriptions and members should be included.)
    - (h) Directors\Officers.
    - (i) By-Laws.
    - (j) Limited Membership Directory – Members, Associate Members, and Student Members.
    - (k) Newsletters and NCSEA, Structural Moments Newsletters
    - (l) Meetings.
    - (m) Past Speakers.
    - (n) Links to NH PE, SE renewals
    - (o) Employment Opportunities – (advertising fees noted)
    - (p) News.
      - (i) Legislative – National and Local.
    - (q) Educational Supplies such as canned programs to present to elementary / middle / high schools or colleges
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- (2) **Professional Tools and Quick Links:**
  - (a) Code Organizations.
  - (b) Professional Boards, Associations, and Societies.
  - (c) NCSEA and Member Organizations.
  - (d) Building Code FAQ
    - (i) NH State Amendments (Current Code etc.)
  - (e) Publications (get these linked to NHTI library, T<sup>2</sup> library etc.)
    - (i) Ground Snow loads
    - (ii) Special Inspections
- (3) **Calendar:**
  - (a) SENH Meetings and / or SENH sponsored programs
  - (b) Link to NHSPE Engineering Calendar
- iv) **Student Sub-Page:**
  - (1) Scholarships
    - (a) Information and qualifications.
    - (b) Application Forms (link to PDF document for printing)
  - (2) Educational opportunities for students
    - (a) West Point Programs
    - (b) FIRST Programs - Robotics
    - (c) Links to engineering education activities and programs.
    - (d) Links to ABET Accredited Universities websites
  - (3) Links to Scholarships and Loan Programs
  - (4) Definition of a Structural Engineer
  - (5) Tasks of a Structural Engineer - Typical Structural Engineering Services Provided (examples of local project submitted by members)
  - (6) NH EIT, PE requirements for structural engineers.
    - (a) Links to NH PE Board for eligibility, testing schedule, test references, and types of calculators allowable.
    - (b) Links to NCEES, study materials.
  - (7) Phone Number or Email Address if a student wishes to talk to a structural engineer.
- v) **Sponsor Page:**
  - (1) Links to trade and service Advertisements.
  - (2) Advertising rates, specifications, and instructions for placing an ad on the SENH website. (link to a PDF document for printing)(similar to AIANH website)
  - (3) E-Week Award
  - (4) Projects by Local Firms with Thumbnail Links for fee \$\$\$\$ . A suggested rate may be \$100/year with a goal of attracting 10 firms to post projects.

The committee contacted several website development consultants to obtain a preliminary estimate of the cost that may be incurred to develop a website with the content listed above. Based upon our research, we believe the initial development cost would be in the range of \$5,000 to \$10,000. Updating and periodic revisions on a monthly basis would cost approximately \$50 per month.

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### Educational Programs

The structural engineers of tomorrow are in our local classrooms systems today. The committee discussed ways to reach these students and determined that there are several methods that may be necessary depending upon the age or grade level of the target audience. Some research suggests that students lose interest in math and science in the middle school years and then never regain the interest, thus, they move into professions other than engineering. It will be important to the future of the structural engineering profession to grab the attention of the middle school students, and keep them interested as they proceed through math and science curriculums of secondary and post-secondary education. The committee developed a list of potential educational programs:

- 1) Pre-developed presentations – NCSEA has developed a draft of a structural engineering presentation that can be utilized by members who are requested to provide brief presentations at local schools. It happens quite often that an engineer is requested by an acquaintance or teacher to come into a classroom and explain what they do and why it is a good career or why it is interesting. Developing canned presentations that could be available to our members would make it easy to accept these invitations and opportunities to shape young minds. It may be necessary to have a few slightly different presentations that are geared towards elementary, middle and high school age students.
- 2) Scholarship programs – Scholarships are a method of increasing public exposure and name recognition of an organization. Several local engineering organizations provide engineering scholarships to NH engineering students, such as ASCE-NH, and NHSPE. The scholarship amount and number provided do not have to be large, as both ASCE-NH and NHSPE provide scholarships in the order of \$1,000. NHSPE is providing four (4) such scholarships this year selected from a group of approximately sixty (60) applicants.

This past February, at the Engineers Week Banquet, SENH presented two (2) \$500 merit-based scholarships students enrolled in the Civil Engineering program at the University of New Hampshire (UNH) who will be entering their senior year of studies in the fall of 2007 and have identified their focus of study to be in the discipline of structural engineering. The awarding of the scholarships was coordinated with the Civil Engineering Department at UNH, most notably Associate Dean of the College of Engineering and Physical Sciences (CEPS) Robert Henry. The scholarships were awarded by as follows:

- A scholarship application was developed by the committee (see the appendix)
  - Associate Dean Henry promoted the scholarship within certain junior level classes in the Civil Engineering Department
  - Four (4) applications were received, reviewed and ranked by several committee members
  - The committee forwarded our cumulative ranking and recommendation of scholarship recipients to Associate Dean Henry
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- UNH concurred with our recommendations and the scholarship recipients were announced at the Engineers Week Banquet by SENH President Linda McNair-Perry
- Funding was forwarded from SENH to UNH for deposit in the students accounts to offset course registration costs

SENH and UNH are now beginning to develop a Memorandum of Understanding (MOU) to establish the scholarship program further and define the criteria for selection, process, timing etc. Development of the MOU language will be the responsibility of the committee and UNH, and ultimately will need to be executed by the SENH Board of Directors.

- 3) Engineering Related Contests or Exhibits– Engineering related contests can capture the attention of students. These contests raise the understanding of what Structural Engineers do as well inspire students to pursue structural engineering as a profession later.

A number of these contests (primarily bridge building contests) are already being held in schools with and without the involvement of structural engineers. To provide recognition for SENH, we could prepare our own unique structural engineering competition or at the very least, serve as a clearinghouse providing practicing Structural Engineers to assist with school organized competitions. Having a practicing engineer involved in the competition provides a “face” for the profession.

1. Attendance at College Career Fairs – this is an opportunity for college level students, who will soon be entering the work force, to meet structural engineers, discuss aspects of the career, discuss possible internships etc. SENH attended the career fair at UNH in October, 2006 at no cost and found it to be worthwhile for promotion of the organization.

**Advertising**

The Committee investigated several advertising options which may, for a fee, increase the exposure or recognition of SENH in the general public. The following list, which is far from all inclusive, is representative of options which may be available:

<b>Media</b>	<b>Approximate Cost</b>
Local Government Center (LGC) Municipal Officials Directory	1/8 page to full page - \$150 to 600/yr
New Hampshire Magazine	1/6 page to full page B/W - \$530 to \$2,435/mo.
Business NH Magazine	1/6 page to pull page color - \$990 to \$2,295/mo.
Plan NH - AIA	¼ page - \$225 / mo.
NE Real Estate Journal	1/8 page to full page B/W - \$195 to \$795 / mo.
NH Public Radio	4 Times / week for 26 weeks \$124 / week
Manchester Union Leader	Engineers Week – free as a public service
Fosters Daily Democrat	Engineers Week – free as a public service



Development of a comprehensive, general public oriented section of the website is a prerequisite for any of the advertising listed above.

### Funding

There are several methods for developing a funding base to implement the programs or ideas discussed herein. It is important to note that the programs vary with regard to required funding:

- Some programs require initial one-time startup costs and then on-going funding (i.e. website development, website maintenance)
- others require little in one-time costs but have on-going funding requirements (scholarship program, educational programs etc.)
- and others require no funding (media coordination with WMUR etc., canned presentations).

The Committee discussed several options for generating the necessary funding for implementation of new programs:

- Mandatory dues increases (\$5 or \$10). This could potentially generate \$1000 to \$2000 per year.
- Adding a stipend amount (perhaps \$1 or \$2) to dinner meeting charges. This could potentially generate \$300 per year.
- Voluntary dues contributions (this method was used to collect money for the initial scholarship awards of February 2007 and generated approximately \$350.)
- Raffles or prize giveaways. These could be done at every dinner meeting or cumulatively for a larger prize at the annual meeting. Another idea is a 50/50 type raffle at each dinner meeting. Prizes could be donated by meeting sponsors and vendors.
- Sponsorship of SENH Newsletters.
- Sponsorship of SENH Website.
- Sponsorship of SENH meetings and annual meeting.
- One time "assessment" to dues renewals to pay for certain large expenditures, such as website redevelopment.
- Create and host an annual benefit event, such as a Comedy Show, Octoberfest.
- Solicit donations for scholarship funding. This may have varied success as there are numerous organizations competing for money for various similar activities.
- Solicit corporate donations through sponsorship or project spotlights.

Generating funding and maintaining consistent levels of funding will be necessary for the successful implementation and on-going success of any of the programs discussed.

### RECOMMENDATIONS

As a result of our meetings, discussions and research, the Committee recommends that several action items be implemented. These recommendations include the following:

- Set up a special Website Committee to further explore the ideas for website redevelopment, and enlist the expertise of a website development consultant to
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estimate initial costs and on-going maintenance costs. Develop a timeline for new website implementation. Coordinate website efforts with other PR activities for promotion of new content on the website. Also, begin preparing content for use by web developer. Solicit web development amongst SENH members. This item is considered the first and foremost important PR activity as it provides the basis for other activities. One goal would be to roll out the new website and advertising in unison with engineer's week activities.

- Set up a committee, or subgroup of the PR Committee to manage and further develop the scholarship program. Assign the responsibilities of scholarship fundraising to this committee. Also responsible for coordination with UNH.
- Set up a committee to develop "canned" educational programs that can be presented to elementary, middle, and high school aged children, as well as college level students. Committee could edit NCSEA template for an SENH specific presentation that could be available to all members.
- Assign the responsibility of coordination with local media outlets, such as WMUR or the Union Leader, to the Chairperson of the SENH PR Committee. Develop this role with the SENH board with regards to what SENH's position should be on typical subjects and develop a standard response and outlet for media (such as the website).
- Assign the PR Committee to generate at least one article per year for the Engineers Week supplement of the Union Leader and Fosters Daily Democrat newspapers, and others if applicable. Such articles could include past SENH publications like OEM, Snow Loadings, and Special Inspections.
- Continue to offer a voluntary scholarship contribution election on members dues renewal forms.

Respectfully submitted,

SENH Public Relations Committee

Matthew J. Low, P.E., Chairperson  
Steve W. Johnson, P.E., Board Liaison  
Fred S. Emanuel, P.E.  
Kyle E. Roy, P.E.  
Peter H Steffensen, P.E.

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**APPENDIX A**  
**SCHOLARSHIP APPLICATION FORM**



**Structural Engineering Courses taken to date:**

<u>Course Description</u>	<u>Grade</u>
1. SAMPLE - Structural Steel Design	A-
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____
8.	_____

**Anticipated date (Month/Year) of Graduation:** \_\_\_\_\_

**Structural Engineering Courses Anticipated to be taken in Future Semesters:**

Course Description

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

**C. OTHER ACTIVITIES:**

**VOLUNTEER/EXTRACURRICULAR:**

*List on/off campus extracurricular activities including any position held, such as President, Secretary, etc. Use additional sheet, if necessary*

Month/Year to Month/Year (most recent first)	Activity	Significant Contributions



**WORK EXPERIENCE:**      *List employment during school and/or summer break. Use additional sheet, if necessary*

Month/Year to Month/Year (most recent first)	Place of Employment Name of Supervisor/Tel. No.	Responsibilities/Hours Worked

**HONORS AND SCHOLARSHIPS:**      *May or may not be academic-related. Use additional sheet, if necessary.*

Month/Year	Name of Award	Reason for Receipt of Award

**D.      STATEMENT:** Provide a brief statement presenting your interest in structural engineering and the occupation you would pursue upon graduation. The statement may also include any other brief information that is relevant to your career plans. (No more than 500 words, double-spaced. Provide your name, address, and telephone number at the top of the page.)

**E.      ASSEMBLE THE APPLICATION IN THE FOLLOWING ORDER, STAPLED:**

1. Application
2. Statement (maximum 500 words)
3. Supplemental Pages

NOTE: SENH may contact the UNH Civil Engineering Department to discuss application.

**F.      REQUIRED SIGNATURES**      *Applications without required signatures will be disqualified.*

**Scholarship Applicant:**

I authorize UNH CEPS officials to provide information about my academic records to SENH.

Yes  No

To the best of my knowledge, the information presented on this application is complete and true.

\_\_\_\_\_

(Applicant's Signature)

\_\_\_\_\_

(Date)

**Selection of scholarship recipients will be based upon the information contained herein.**

**This application with original signatures must be completed by the date indicated on page 1 of this form and submitted to the CEPS Student Affairs Office.**

