# 2012 Annual Report

## North American Spine Society

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I look back at 2012 with great satisfaction. To have been privileged to serve as president of this very special society was a wonderful honor. I am pleased to report that the society has grown, and has continued to focus on our primary goals as detailed in our mission statement:

NASS is a multidisciplinary medical organization dedicated to fostering the highest quality, evidence-based and ethical spine care by promoting education, research and advocacy.

This year, we welcomed 1,398 new members, representing several different medical specialties, and finished the year with 7,684 members. The contributions of our growing international segment in all phases of the society’s activities have enriched and broadened us.

Our policies for ethics and professionalism—which include scrupulous disclosure of financial conflicts of interest—have been fully implemented, and are beginning to be emulated by other societies. It is a matter of pride for me that NASS was the groundbreaking innovator among professional medical associations. While it has worked well for NASS, the remarkable step of financial conflict divestiture by the NASS leadership has not been widely adopted (yet) by other medical societies. In understanding the importance of these issues, the Ethics Committee was expanded and rechristened the “Committee on Ethics and Professionalism” to better serve the society leadership and the membership.

NASS-sponsored courses and meetings were successfully presented in a busy schedule at our state-of-the-art Spine Education and Research Center (SERC) in Burr Ridge. NASS also sponsored and participated in numerous meetings throughout the United States and abroad, including Spine Across the Sea in Hawaii and Spineweek 2012 in Amsterdam. I offer my sincere and heartfelt thanks to the NASS program chairs and staff for a wonderfully successful Annual Meeting in Dallas.

Advocacy activities increased notably in 2012, which saw NASS volunteers and staffers very active in Washington advocating for our patients and our profession. The Research Council awarded four research grants that concerned the basic science of spinal disorders, as well as a financial study of spine care in an accountable care organization. Competition for these grants continues to grow.

The Health Policy Council continued the difficult work of providing guidance and experience to the coding and reimbursement issues that occur with the CPT and RUC process, as well as the insurance industry. As always, these hardworking NASS volunteers continue to make the case for fair and evidence-based care, as well as appropriate reimbursement.

2012 saw SpineLine increase in size, circulation and quality (doubtless hampered somewhat by my “Presidential essay” feature). This member benefit continues to inform our membership on many topics. Similarly, our social media presence is large and growing, with thousands of members getting timely news on Facebook, Twitter and LinkedIn.

Our most popular member benefit, The Spine Journal, which is published online continuously and printed monthly by Elsevier, Inc., continued to grow in circulation and prestige in 2012. The impact factor of The Spine Journal increased to 3.290, keeping it the top-rated spine journal and making it the third-ranked orthopedic journal in the world. All NASS members can take pride in this spectacular achievement.

All of the wide and worthwhile activities of the society are under sound management. The bond (mortgage) on the NASS headquarters building, which houses both the administrative offices as well as SERC, is being paid down ahead of schedule and the society continues to enjoy good financial health.

An annual report may not be the best place for me to share these last thoughts, but I must personally thank every NASS staff member, every Board of Directors member and every committee member with whom I have worked last year (and every year since my first NASS meeting in 1990). The honor and the absolute pleasure that I have enjoyed as president of this wonderful and unique society has been a very special joy for me. I hope that I have given the society a fraction of what the society has given to me. I thank you for this wonderful experience.

Michael Heggeness, MD, PhD
<table>
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<tr>
<th>Position</th>
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<tr>
<td>President</td>
<td>Michael H. Heggeness, MD, PhD</td>
</tr>
<tr>
<td>First Vice President</td>
<td>Charles A. Mick, MD</td>
</tr>
<tr>
<td>Second Vice President</td>
<td>William C. Watters III, MD</td>
</tr>
<tr>
<td>Secretary</td>
<td>Heidi Prather, DO</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Christopher M. Bono, MD</td>
</tr>
<tr>
<td>Past President</td>
<td>Gregory J. Przybylski, MD</td>
</tr>
<tr>
<td>Administration and Development Council Director</td>
<td>F. Todd Wetzel, MD</td>
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<tr>
<td>Advocacy Chair</td>
<td>John G. Finkenberg, MD</td>
</tr>
<tr>
<td>Clinical Research Development Chair</td>
<td>Zoher Ghogawala, MD</td>
</tr>
<tr>
<td>Continuing Medical Education Chair</td>
<td>Raj Rao, MD</td>
</tr>
<tr>
<td>Education Council Director</td>
<td>Jeffrey C. Wang, MD</td>
</tr>
<tr>
<td>Education Publishing Chair</td>
<td>David R. O’Brien, Jr., MD</td>
</tr>
<tr>
<td>Ethics and Professionalism Chair</td>
<td>Jerome Schofferman, MD</td>
</tr>
<tr>
<td>Evidence Compilation and Analysis Chair</td>
<td>Charles Reitman, MD</td>
</tr>
<tr>
<td>Governance Committee Chair</td>
<td>Mitchel Harris, MD, FACS</td>
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<tr>
<td>Health Policy Council Co-Director</td>
<td>William Mitchell, MD</td>
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<tr>
<td>Health Policy Council Co-Director</td>
<td>Christopher Standaert, MD</td>
</tr>
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<td>Professional, Economic and Regulatory Committee Chair</td>
<td>Christopher P. Kauffman, MD</td>
</tr>
<tr>
<td>Research Council Director</td>
<td>Daniel K. Resnick, MD, MS</td>
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<tr>
<td>Section Development Chair</td>
<td>Eeric Truumees, MD</td>
</tr>
<tr>
<td>NASS Ethicist</td>
<td>David Rothman, PhD</td>
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<tr>
<td>Executive Director</td>
<td>Eric J. Muehlbauer, MJ, CAE</td>
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</table>
It is through the continuing support and contribution of our members that NASS continues to thrive and achieve a tangible and positive impact on spine care around the world. Our worldwide recruitment initiatives over the past year have allowed the organization to welcome 1,398 new members in 2012. NASS ended the year with a total of 7,684 members.

The NASS bylaws were revised to allow all members to participate in committees and to allow members from outside of North America to become Active members.
The 2012 CME calendar began with a **Basic Lumbar Spinal Injections** course February 3-4 in Phoenix at the Science Care Training Lab with 41 attendees.

NASS assumed the management of the **Evidence & Technology Spine Summit** in 2012 and it was held February 23-25 at the Canyons in Park City, UT. We offered joint medical-surgical sessions as well as case presentations and debates. The conference concluded with an “open mic” session that addressed questions and discussed controversies facing NASS and the future of medicine. Panellists included conference course directors and NASS board members. The Summit also included medical workshops, ePosters and a technical exhibition, and drew 142 attendees, including 34 faculty members. Thirty-four states were represented along with Colombia, Japan and South Korea.

Winter **Coding Update 2012: Essentials and Controversies of Spine Care Coding** was held February 24-25 at Canyons Resort, Park City, UT, in conjunction with the Evidence & Technology Spine Summit. There were 34 attendees.

The **Evaluation and Treatment of Adult Spinal Deformity: Skull to Sacrum** course took place March 16-17 and sold out with 41 attendees and 10 stations. Six companies participated with lab equipment for the course including: Medtronic, DePuy, Zimmer, Globus, NuVasive and Synthes. Lawrence Lenke, MD, course chairman, repeated this course due to popular demand.

The **Advanced Lumbar Spinal Injections** course was held March 30-31 at SERC. Chaired by Matthew Smuck, MD, the course drew 33 attendees with eight faculty members. Twenty states were represented along with Brazil, Israel, Panama, Switzerland and Turkey.

The **Section on Rehabilitation, Interventional and Medical Spine Care: Cervical and Thoracic Pain: Diagnosis and Treatment** course was held April 27-28 at SERC. Jerome Schofferman, MD, chaired the course which drew 26 attendees. Fourteen states and two countries (Denmark and Turkey) were represented.

The **Lumbar Spinal Injections** course took place May 4-5 at SERC and was very successful. Kevin Sullivan, MD, chaired the course which sold out at 40 attendees and eight faculty.

The **Diagnosis and Treatments in Cervical Spine Surgery** course took place May 18-19 with 28 attendees, 10 stations and five companies supporting the lab stations: Medtronic, DePuy, Globus, Zimmer and NuVasive. K. Daniel Riew, MD, course chairman, revamped the agenda from previous years and added more lab time, with live demo feeds to the auditorium.

NASS participated in **SpineWeek 2012** May 28-June 1 in Amsterdam. NASS held abstract sessions on two days, for a total of 40 abstracts and 39 ePosters. NASS hosted a dinner in conjunction with SILACO.

Summer **Coding Update 2012: Essentials and Controversies of Spine Care Coding** was held July 13-14 at the Liaison Capitol Hill Hotel in Washington, DC. R. Dale Blasier, MD, FRCS(C) and William Sullivan, MD chaired the course which drew 78 attendees and seven faculty members.

Jointly sponsored by NASS and the Japanese Society for Spine Surgery and Related Research, **Spine Across the Sea** was held at the Kauai Marriott in Lihue, Kauai. The attendance jumped by 25% over the 2009 meeting. The majority of the abstracts were presented by JSSR members.

**27th Annual Meeting**

**October 24-27, 2012, Dallas, Texas**

The Annual Meeting continues to offer an outstanding educational experience and provide high-quality continuing medical education for its members. More than 1,000 abstracts were submitted for consideration. Additional concurrent sessions were added to accommodate the increased volume of abstracts and to provide more educational opportunities. A total of 197 podium presentations and 146 ePosters were featured over the three and a half-day period. Program Chairs were: Joseph S. Cheng, MD, MS; Thomas E. Dreisinger, PhD, FACSM; Heidi Prather, DO and Jeffrey C. Wang, MD.
## 2012 Annual Meeting Abstract Analysis

<table>
<thead>
<tr>
<th>Abstract Categories</th>
<th>Total Submitted</th>
<th>Total Accepted</th>
<th>% Accepted Compared to Total Submitted</th>
<th>Total Accepted</th>
<th>% Accepted Compared to Total Submitted</th>
<th>Total Accepted</th>
<th>% Accepted Compared to Total Submitted</th>
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<tbody>
<tr>
<td>Basic Science/Biologics</td>
<td>97</td>
<td>40</td>
<td>41%</td>
<td>25</td>
<td>26%</td>
<td>15</td>
<td>15%</td>
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<tr>
<td>Biomechanics</td>
<td>76</td>
<td>15</td>
<td>20%</td>
<td>5</td>
<td>7%</td>
<td>10</td>
<td>13%</td>
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<tr>
<td>Complications</td>
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<td>36</td>
<td>37%</td>
<td>20</td>
<td>20%</td>
<td>16</td>
<td>16%</td>
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<td>Diagnostics/Imaging</td>
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<td>42%</td>
<td>14</td>
<td>19%</td>
<td>17</td>
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<tr>
<td>Epidemiology/Etiology</td>
<td>30</td>
<td>15</td>
<td>50%</td>
<td>9</td>
<td>30%</td>
<td>6</td>
<td>20%</td>
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<tr>
<td>Exercise Therapies/Functional Restoration</td>
<td>8</td>
<td>1</td>
<td>13%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>13%</td>
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<tr>
<td>Injections/Interventions</td>
<td>25</td>
<td>13</td>
<td>52%</td>
<td>9</td>
<td>36%</td>
<td>4</td>
<td>16%</td>
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<td>Motion Preservation</td>
<td>39</td>
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<td>51%</td>
<td>13</td>
<td>33%</td>
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<td>18%</td>
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<tr>
<td>Socio-Economics/Industrial/Ergonomics</td>
<td>40</td>
<td>19</td>
<td>48%</td>
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<tr>
<td>Spinal Deformity</td>
<td>160</td>
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<td>Surgery—Cervical</td>
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<td>43%</td>
<td>23</td>
<td>31%</td>
<td>9</td>
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<td>Surgery—Thoracolumbar</td>
<td>234</td>
<td>68</td>
<td>29%</td>
<td>34</td>
<td>15%</td>
<td>34</td>
<td>15%</td>
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<tr>
<td>Trauma</td>
<td>48</td>
<td>23</td>
<td>48%</td>
<td>16</td>
<td>33%</td>
<td>7</td>
<td>15%</td>
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<tr>
<td><strong>Total</strong></td>
<td>1,003</td>
<td>343</td>
<td><strong>34%</strong></td>
<td>197</td>
<td><strong>20%</strong></td>
<td>146</td>
<td><strong>15%</strong></td>
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**Nonoperative**

- 349
- 134
- 38%

**Operative**

- 654
- 209
- 32%

### Abstracts by Category: Percentage of Program

<table>
<thead>
<tr>
<th>Category</th>
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<tr>
<td>Basic Science/Biologics</td>
<td>12% (40)</td>
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<tr>
<td>Biomechanics</td>
<td>4% (15)</td>
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<tr>
<td>Complications</td>
<td>10% (36)</td>
</tr>
<tr>
<td>Diagnostics/Imaging</td>
<td>9% (31)</td>
</tr>
<tr>
<td>Epidemiology/Etiology</td>
<td>4% (15)</td>
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<tr>
<td>Exercise Therapies/Functional Restoration</td>
<td>0% (1)</td>
</tr>
<tr>
<td>Injections/Interventions</td>
<td>4% (13)</td>
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<tr>
<td>Motion Preservation</td>
<td>6% (20)</td>
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<tr>
<td>Socio-Economics/Industrial/Ergonomics</td>
<td>6% (19)</td>
</tr>
<tr>
<td>Spinal Deformity</td>
<td>9% (30)</td>
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<tr>
<td>Surgery—Cervical</td>
<td>9% (32)</td>
</tr>
<tr>
<td>Surgery—Thoracolumbar</td>
<td>20% (68)</td>
</tr>
<tr>
<td>Trauma</td>
<td>7% (23)</td>
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</table>
In 2012, the Advocacy Committee and NASS staff pursued initiatives aimed at collecting information on key federal and state health policy issues. They apprised NASS members of the potential impact on their profession and their patients, related the needs and concerns of spine specialists to the appropriate policymakers and identified and supported political candidates who champion NASS’ legislative agenda.

**Key Accomplishments:**

- Ensured that key NASS principles on Medicare physician reimbursement reform were included into H.R. 2810: The Medicare Patient Access and Quality Improvement Act of 2013. Healthcare committees in the House and Senate asked NASS for comments on the SGR repeal proposal as it evolved. NASS requested that the following provisions be included in the final bill:
  - Eliminating the sustainable growth rate (SGR) formula
  - Five-year period of transitional stability with positive updates
  - Positive incentives for physicians who report positively on quality measures
  - Liability protection for participating in quality improvement programs
- NASS was successful in raising awareness about the hardships Quality Measure programs (PQRS, EHR e-prescribe, Value Based Modifier) unnecessarily place on physicians.
- NASS joined the In-Office Ancillary Services Exemption (IOASE) Coalition, a group of medical societies working together to preserve the Stark exemptions for self-referrals.
- NASS continued to advocate in support of legislation that calls for greater oversight of Medicare’s Recovery Audit Contractors (RACs) program.
- NASS developed and distributed advocacy communication resources on topics affecting specialists and to update members on advocacy efforts. To date, several advocacy videos and podcasts have been produced and sent to membership, including:
  » A Conversation with Rep. Tom Price, MD (R-GA)
  » Spine on the Hill (DC Fly-In) trailer and documentary.
  » Hosting a Site Visit with your Elected Officials—To be completed in 2013.
- NASS staff conducted 120 Capitol Hill meetings with Members of Congress and their staff this year.
- NASS staff participated in 61 fundraising events for Members of Congress this year.

**Medical Professionalism & Innovation**

2012 brought the creation of a new NASS division. The Ethics and Section Development Department matured into the “Medical Professionalism and Innovation Division.” To create original marketing and educational content for NASS, this division created an in-house video production team. Two videographers were added with editing and animation graphics expertise, providing high-quality marketing videos for NASS' numerous offerings and events.
• Informed consent from members was collected to empower NASS to publically list disclosures starting in 2013.

• A symposium and discussion were held on the importance of medical professionalism and conflict of interest (COI) in both the practice and business of medicine at the North American Spine Society 27th Annual Meeting in Dallas entitled: “Medical Professionalism and Ownership.”

• A new task force was created and populated to determine the need for a NASS investigative body that would ensure compliance with our ethics policies.

• A major revision of Leadership Policy on Conflicts of Interest was completed to include: the omission of Level III, clarification of the rules for Level I volunteers’ attendance at industry courses, the divestiture timing requirement for program chairs, and changes to the semantics of the “allowable relationships” category.

• NASS cooperated with the AAOS to help guide their ethics efforts and disclosure system, supporting NASS’ mission to universally raise the bar for quality, ethical spine care.

• The Committee contributed several articles to SpineLine and The Spine Journal:
  » Medical Transparency on the Internet: Harris, C. & Jallo, J. (SpineLine, Jan/Feb 2012)
  » Conflicts of Interest: Biological & Psychological Mechanism of Bias: Schofferman, J. (SpineLine, Mar/Apr 2012)
  » Conflicts of Interest Aren’t Inherently Negative: Matz, P. (SpineLine, Jul/Aug 2012)

Two cases were reviewed and hearings held at the 2012 annual meeting, resulting in recommendations for each case prepared for Board of Directors’ approval. One case was dismissed upon receipt of formal apology from the respondent to the complainant.

Conflict of Interest Review Panel
In addition to the annual review of the Board of Directors’ disclosures, approximately 15 reviews were completed (self-referred, vetting of new leadership members, etc.).

Section Development Committee

Distinction Task Force
NASS staff planned and began the phased implementation of a new program to recognize members for diligence in improving health care outcomes, with the express purpose of improving quality care for spine patients.
NASS Research Council

Dedicated to the science of spine on behalf of the NASS membership and the spine field.

In 2012, the Research Council was directed by Daniel Resnick, MD, MS; Charles Reitman, MD and Zoher Ghogawala, MD, FACS. The Council works to integrate evidence-based medicine into NASS projects and the spine field where possible. It analyzes evidence and helps provide relevant and current scientific spine care information and recommendations to NASS members as well as regulatory and policy bodies. The Council conducts regular surveillance of the spine field, including information from various government, quality and regulatory sources for issues of relevance, as well as from the American Medical Association and other specialty medicine-related groups. The Council provides evidence-based medicine training, literature searches and article retrieval for the society at large. Council activities in 2012 included:

• Advocacy and Health Policy Collaboration. The Research Council collaborates with NASS Advocacy and Health Policy efforts, providing scientific input to NASS and the Alliance for Specialty Medicine. Issues include comparative effectiveness research, performance measurement, regulation, health care and health care reform issues related to quality. Efforts in 2012 included participation in development of a Capitol Hill leave-behind document in conjunction with the Alliance that showed participating organizations’ quality improvement, health information technology efforts and signing on to various Alliance group letters.

• Government and Other Comments to Support Spine. The NASS Research Council and its committees support spine care through various projects and comments submitted to government. These comments can be viewed on the NASS website at http://www.spine.org/Pages/PracticePolicy/ClinicalCare/ScientificPolicyComments/Default.aspx.

The Council specifically performed the following reviews and provided commentary:

» Council of Medical Specialty Societies—Principles for the Development of Specialty Society Clinical Guidelines

» American Medical Association—Guidelines for Reporting Physician Data

» Centers for Medicare and Medicaid Services—2013 Medicare Physician Fee Schedule Proposed Rule

» Draft Comparative Effectiveness Review: Spinal Fusion for Treating Painful Lumbar Degenerated Discs or Joints

» American Society of Neuromonitoring—Intraoperative Neurophysical Monitoring Practice Guidelines for Supervising Professionals

• Food and Drug Administration (FDA). The Research Council, in conjunction with the Health Policy Council, is responsible for oversight and surveillance of FDA-related issues. Dr. Bernard Pfeifer, MD was NASS’ FDA Liaison, and NASS staff provided surveillance and support for these efforts. In 2012, NASS submitted a letter to the FDA supporting the Orthopaedic Surgical Manufacturers Association’s petition to reclassify pedicle and lateral mass screws for cervical spine use from unclassified status to Class II.
Performance Measurement

NASS is a member of the AMA-convened Physicians’ Consortium for Performance Improvement (PCPI), the primary physician body developing performance measures for physicians. In this forum, NASS voices its position on issues related to performance measures and value-based purchasing that may affect spine care providers. Staff and NASS’ representatives to the Consortium, David Wong, MD, MSc, FRCS(C) and Christopher Kauffman, MD represented NASS at PCPI. An educational document was also created to update members on the 2012 Physician Quality Reporting System (PQRS) and to identify measures in that program that apply to spine.

Evidence-Based Medicine Training

NASS’ online, self-directed evidence-based medicine (EBM) and evidence analysis training program is available to members in conjunction with the University of Alberta’s Centre for Health Evidence (CHE). This program is based on content from the Users’ Guides to the Medical Literature. CHE has consolidated this material into a customized resource for NASS. Users receive continuing medical education credit for completion of the program. Training is available to all NASS members free of charge and to non-members for a fee. In addition, a one-day EBM course was held April 29 in Burr Ridge and an additional course was held as a regular adjunct to the annual meeting, both of which fulfill the EBM training requirement for the committees where this is requisite. Instructional course participants also receive continuing medical education credit.

Patient Safety

The Patient Safety Committee continues to administer the NASS Spine Safety Alert Program, monitoring a variety of government resources for patient safety-related notices that may be useful to NASS members, and distributing them via e-mail and member publications. In 2012, the committee issued 28 notices relevant to spine care and its providers. [http://www.spine.org/Pages/PracticePolicy/ClinicalCare/SpineSafetyAlerts/Default.aspx](http://www.spine.org/Pages/PracticePolicy/ClinicalCare/SpineSafetyAlerts/Default.aspx). Tom Mari, MD and David A. Wong, MD, MSc, FRCS(C) also attended the 2012 AAOS Orthopaedic Safety and Quality Summit on behalf of NASS and helped to coordinate plans for joint revision of the Sign, Mark & X-ray program. In addition, the issue of Methicillin-resistant Staphylococcus aureus (MRSA) and MRSA screening was sent to the Patient Safety Committee for consideration and development of an educational document.

NASS Spine Registry

After approval for a pilot in 2011, NASS began designing a diagnosis-based, multidisciplinary registry. Pilot sites were identified, measures were drafted and an IRB exemption was obtained. The pilot is planned for 15 sites and 1,000 patients.
Research Grants
Each year, NASS awards research grants to applicants with the highest-quality spine-related submissions. Funding is available for general research grants, young investigators and nontraditional, nonsurgical treatment. The 2012 research grant application solicitation netted 194 letters of proposal resulting in 10 invitations to submit full grant applications. Ultimately, four grants and two fellowships were funded for a total of $217,740.

- Stem Cell Based Intervertebral Disc Regeneration-Evaluation in Organ Culture
  Primary Investigator: Mauro Alini, PhD
  Amount: $50,000 (Second year of funding for a two-year grant)

- Mechanistic Determination of Notochordal Cell-Induced Anti-Apoptotic Signaling in Human Nucleus Pulposus Cells
  Primary Investigator: K. Arne Mehrkens, MD
  Amount: $49,221 (one-year grant)

- Does Diabetes Cause Intervertebral Disc Degeneration?
  Primary Investigator: Jeffrey C. Lotz, PhD
  Amount: $55,069 (one-year grant)

- A Prospective Clinical Audit Measuring the Impact of Shared Decision Making Aids on Cost Variation for the Diagnosis and Treatment of Degenerative Lumbar Spinal Stenosis Within a Pioneer Accountable Care Organization (ACO) Model
  Primary Investigator: Thomas D. Cha, MD, MBA
  Amount: $49,450 (one-year grant)

- Two Research Traveling Fellowships:
  Fabrizio Russo, MD
  University of Pittsburgh, Pittsburgh, PA
  Amount: $7,000
  Giuseppe Esposito, PhD
  Beth Israel Deaconess Medical Center, Boston, MA
  Amount: $7,000
The Health Policy Council and Coding Committee continued to work closely with other specialties in the development, modification and valuation of CPT codes. NASS participated in surveying three codes (63047-63048 for laminectomy and 77003 for fluoroscopic guidance for spine injection procedures) to provide recommended values to the American Medical Association Relative Value Update Committee (RUC).

The Coding Committee responded to approximately 100 member coding questions in 2012.

NASS provided expert comments on the proposed and final rules for the Medicare physician fee schedule.

The NASS Board approved the formation of a Coverage Task Force to proactively review and develop coverage policies. The task force appointments have been finalized and Christopher Bono, MD will chair this task force. Topics for drafting coverage policies have been selected and they have been assigned to various reviewers. We anticipate that a total of 27 coverage policies will be drafted by this task force.

Christopher Kauffman, MD chaired the Professional, Economic and Regulatory Committee (PERC). The committee reviewed a total of 17 draft coverage policies/ proposed coverage decisions for nearly 10 insurance companies.

David A. Wong, MD, MSc, FRCS(C) served as the Value Committee chair. NASS granted three Value Abstract Awards:

» Blood Salvage Produces Higher Total Blood Product Costs in Single-Level Lumbar Spinal Surgery by Leah Y. Carreon, MD, MSc
» Accurately Measuring the Quality and Effectiveness of Lumbar Surgery in Registry Efforts: Determining the Most Valid and Responsive Instruments by Saniya S. Godil, MD
» Gastrointestinal Preparation Reduces Length of Stay of Lumbar Fusion Patients by Joe S. Robinson, MD

The NASS Exercise Committee hosted “Exercise-Based Management of Lumbar Spine Pain: An Algorithm Approach to Decision-Making,” a popular booth at the 2012 Annual Meeting. There, physical therapists educated attendees on a new algorithm that the committee developed.
The Governance Committee ensures that NASS has an effective governing board. The Committee identifies future leaders of the society and strives to engage them in NASS activities. In addition, the Governance Committee educates new board and committee members about their duties, roles and responsibilities, and oversees new member orientation. The Committee is responsible for recognizing NASS members for their efforts in the spine care field and ensures conditions are favorable for participation in NASS activities.

- NASS hosted its first Leadership Development Program Course at the Annual Meeting. The course attracted more than 50 people and was very well received.

- NASS hosted the 4th Spine Summit Meeting, which drew 40 attendees from 10 spine societies. The Spine Summit Meeting is a collaborative meeting among several medical associations to act as an educational forum on each society and address common challenges in the spine care field.

Spine Education & Research Center

The Spine Education & Research Center in Burr Ridge, IL is home to a technologically-advanced bio-skills lab and auditorium/classroom that hosts hundreds of spine care specialists and professionals who seek to enhance their knowledge and skills.

2012 was another record year for inquiries, courses and revenue for SERC. It received 156 inquiries during the year, which represented an increase of 35.6% from 2011. SERC held 64 external courses, which was a 33.3% increase from 2011. And finally, SERC’s 2012 revenue of $952,026 was an increase of 17.6% from 2011.
To help its members learn and practice the highest quality, evidence-based and ethical spine care, NASS publishes a distinguished collection of periodicals, serials, publications and online resources.

**The Spine Journal**

Thanks to readers, authors, reviewers and editors, The Spine Journal (TSJ) continued expanding its influence and value to spine care providers and researchers. In 2012, TSJ had the highest Impact Factor among peer-reviewed spine publications and ranked third in the full field of orthopedic journals. The Journal also increased its print and electronic pages in 2012, and saw a circulation increase—particularly among NASS members who consistently identify TSJ as the top benefit of membership in NASS.

The Spine Journal published a powerful focus issue (September) on Casualties of War devoted to combat injuries, spinal disorders and their lasting effects. The issue revealed new findings on massive traumatic injuries, the effects of body and vehicle armor on injury patterns as well as the resuscitation and transport of those casualties. Some of the findings, however, are lessons relearned. "Perhaps more importantly," said Editor in Chief, Eugene Carragee, MD, "we find that as terrible as the signature blast injuries of this war may be, there have been 10 times as many long-term spinal pain casualties unrelated to the physical injuries of battle."

**SpineLine**

- SpineLine published six print and digital editions of timely, relevant content in 2012. Highlights include review articles on Mechanical Diagnosis and Therapy, Genetics in Degenerative Disc Disease, Sacral Stress Fractures in Athletes and practical Imaging Corner and Value in Spine Care features. The publication also kept members informed of important socioeconomic and advocacy issues affecting their practice, as well as major NASS initiatives and news.

  - The September/October issue included a special feature section on medical mission projects with profiles and images from several projects undertaken by NASS members around the world. The issue also included web extras in the online edition of SpineLine at: www.spineline-digital.org.

  - After six years, Medical Editor Eric Truumees, MD, rotated out of the SpineLine Editor position. The editorial board welcomed incoming editor, Tom Mroz, MD, who transitioned into his role at the end of 2012 to ready his first issue for January/February 2013.

**NASS Channels**

- NASS continued growing its social media presence with increased followers on LinkedIn, Twitter and Facebook. Each platform had more than 1,000 followers for information disseminated through social media.

- The NASS Blog served as an additional forum for the society to disperse information to members, such as advocacy updates from our team in Washington, DC and links to spine care-related news articles.
**Patient Education Committee**

- The Patient Education Committee expanded its outreach to all NASS discipline areas for their expertise in contributing and reviewing patient-oriented content to our KnowYourBack.org site. In 2012, NASS’ Rehab and Interventional Medical Specialists (RIMS) section completed a thorough review and offered substantive comments for improvement.

- The Committee achieved a major goal in 2012 of adding animations of spinal conditions and treatments to knowyourback.org. Response was impressive, judging from site traffic analytics. Most visited animations are Lumbar Epidural Steroid Injections, Cervical Radiculopathy and Lumbar Spinal Fusion.

- The Committee expanded the NASS library of patient education brochures (print and digital) and began offering Spanish language editions.

**Public Affairs Committee**

- In 2012, NASS issued 10 press releases on topics such as new NASS products, position statements, awards and research. The Spine Journal issued three press releases and one statement to educate the public and spine professionals about studies in the journal and awards. In 2012, NASS was specifically mentioned in more than 2,300 news stories, reaching an estimated audience of more than 1.9 billion people. During that same time period, The Spine Journal was featured in more than 700 stories, reaching more than 900 million people.

- After conducting a member survey on back pain myths, the Public Affairs Committee developed a simple public awareness campaign, “9 for Spine.” This campaign was designed to educate patients about the Top “9 Myths of Back Pain” and offer “9 Back to Basics Tips.” In 2013, the committee will work with NASS’ in-house video production team to develop simple videos our members can use in their waiting rooms and web sites.

- The Public Affairs Committee raised funds for the Texas Scottish Rite Hospital for Children in Dallas. The check was presented during the 2012 Annual Meeting.
Recognition Awards
Each year, awards are presented at the NASS Annual Meeting to individuals who were nominated by their peers for their outstanding contributions to NASS and the field of spine care. These awards are named for founding members of NASS who not only made outstanding contributions to the field of spine care and research, but also played key roles in the early success of NASS.

The Leon Wiltse Award, to recognize excellence in leadership and/or clinical research in spine care, was awarded to Helen Gruber, PhD, Senior Scientist and Director, Orthopaedic Research Biology Department of Orthopaedic Surgery, University of North Carolina at Charlotte.

The David Selby Award, to recognize a member who contributed greatly to the art and science of spinal disorder management through service to NASS, was awarded to Thomas Faciszewski, MD, of the Marshfield Clinic in Wisconsin. Dr. Faciszewski served as NASS President from 2007-2008.

The Henry Farfan Award, to recognize outstanding contributions in spine-related basic science research, was awarded to Marcel F. Dvorak, MD, FRCSC, Professor and Head of the Academic Division of Spine, Department of Orthopaedics, at the University of British Columbia. He is also Medical Director of the Combined Neurosurgical and Orthopaedic Spine Program (CNOSP) at the Vancouver General Hospital.

Outstanding Paper Awards
NASS and The Spine Journal created the OPAs in 1989 to recognize excellence in unpublished research in spine care. This year’s award winners are:

Outstanding Paper: Surgical Science
Symptomatic Adjacent Segment Disease Following Cervical Total Disc Replacement: Re-examining the Clinical and Radiological Evidence with Established Criteria
Pierce D. Nunley, MD; Ajay Jawahar, MD, MS; David A. Cavanaugh, MD; Charles Gordon, MD; Eubulus J. Kerr III, MD; and Phillip A. Utter, MD

Outstanding Paper: Basic Science
The Effects of Local Insulin Application to Lumbar Spinal Fusions in a Rat Model
John D. Koerner, MD; Praveen Yalamanchili, MD; William Munoz, MD; Linda Uko; Saad Chaudhary, MD, MBA; Sheldon S. Lin, MD; and Michael J. Vives, MD

Outstanding Paper: Value
An Economic Evaluation of Perioperative Adverse Events Associated with Spinal Surgery
Erik Hellsten, BA; Michelle Hanbridge; Aspasia Manos, BS; Stephen Lewis, MD, FRCSC; Eric Massicotte, MD, FRCSC; Michael Fehlings, MD, PhD, FRCSC; Peter Coyte, PhD; and Raja Rampersaud, MD, FRCSC

Editors’ Choice Award
Reduced Surgical Site Infections in Patients Undergoing Posterior Spinal Stabilization of Traumatic Injuries Using Vancomycin Powder
Kevin R. O’Neill, MD, Jason G. Smith, BS, Amir M. Abtahi, BS, Kristin R. Archer, PhD, DPT, Dan M. Spengler, MD, Matthew J. McGirt, MD; and Clinton J. Devin, MD
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<td>John D. Miles, MD</td>
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<td>Tammy Miller</td>
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<td>Jeffrey J. Miller, DO</td>
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<td>Horace L. Mitchell, MD</td>
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<td>Antonio Carlos Montanaro, MD</td>
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<tr>
<td>James A. Moody, MD</td>
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</tbody>
</table>
Donor Recognition

North American Spine Society | 25

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David R. Lange, MD
Sandro LaRocca, MD
Kevin J. Lawson, MD
Daniel Lee, MD
Adam Craig Lipson, MD
Harry Lockstadt, MD
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<tr>
<th>Name</th>
<th>Name</th>
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<tr>
<td>Phillip R. Lucas, MD</td>
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<tr>
<td>Scott G. Tromanhauser, MD</td>
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## Consolidated Statements of Financial Position

### Assets

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<tr>
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<th>2012</th>
<th>2011</th>
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<tr>
<td><strong>Current Assets</strong></td>
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<tr>
<td>Cash and cash equivalents</td>
<td>$ 9,736,853</td>
<td>$ 9,225,036</td>
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<tr>
<td>Investments—unrestricted</td>
<td>4,284,859</td>
<td>3,529,263</td>
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<td>Accounts receivable</td>
<td>111,467</td>
<td>147,153</td>
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<td>Pledges receivable—net</td>
<td>61,051</td>
<td>133,304</td>
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<td>Other receivables</td>
<td>97,953</td>
<td>97,953</td>
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<td>Prepaid expenses</td>
<td>182,962</td>
<td>260,117</td>
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<td>Inventory</td>
<td>226,972</td>
<td>58,532</td>
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<td><strong>Total Current Assets</strong></td>
<td>$14,685,116</td>
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<td>Long-term prepaid expenses</td>
<td>80,024</td>
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<td>Long-term pledges receivable—net of discount</td>
<td>–</td>
<td>61,051</td>
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<tr>
<td>Net property and equipment</td>
<td>11,430,525</td>
<td>12,177,652</td>
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<td>Bond issue costs—net of amortization</td>
<td>159,232</td>
<td>170,004</td>
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<td>Notes receivable</td>
<td>–</td>
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<tr>
<td>Investments—permanently restricted</td>
<td>1,775,552</td>
<td>1,773,052</td>
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<tr>
<td><strong>Total Assets</strong></td>
<td>$28,159,904</td>
<td>$27,633,117</td>
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### Liabilities and Net Assets

#### Current Liabilities

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<th>2011</th>
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<tr>
<td>Accounts payable</td>
<td>$ 352,815</td>
<td>$ 171,271</td>
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<td>Accrued expenses</td>
<td>508,570</td>
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<td>Deferred revenue</td>
<td>2,226,074</td>
<td>1,945,121</td>
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<td>Current portion of bonds payable</td>
<td>560,000</td>
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<td><strong>Total Current Liabilities</strong></td>
<td>3,647,459</td>
<td>3,182,146</td>
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#### Long-Term Debt

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<td>Bonds payable</td>
<td>8,860,000</td>
<td>10,540,000</td>
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<td>Interest rate swap agreement liability</td>
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<td>58,696</td>
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<td><strong>Total Liabilities</strong></td>
<td>12,507,459</td>
<td>13,780,842</td>
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### Net Assets

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<td>Unrestricted</td>
<td>12,835,465</td>
<td>11,093,004</td>
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<tr>
<td>Temporarily restricted</td>
<td>1,041,428</td>
<td>986,219</td>
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<td>Permanently restricted</td>
<td>1,775,552</td>
<td>1,773,052</td>
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<td><strong>Total Net Assets</strong></td>
<td>15,652,445</td>
<td>13,852,275</td>
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<tbody>
<tr>
<td><strong>Total Liabilities and Net Assets</strong></td>
<td>$28,159,904</td>
<td>$27,633,117</td>
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## Consolidated Statements of Activities

<table>
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<th>Activities</th>
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<th>Permanently Restricted</th>
<th>Total</th>
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<tr>
<td><strong>Income</strong></td>
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<tr>
<td>Dues and fees</td>
<td>$ 2,691,769</td>
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<td>$ 2,691,769</td>
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<td>Sales of publications and advertising</td>
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<td>Contributions and sponsorships</td>
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<td>120,353</td>
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<td>Investment income</td>
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<td>Rental income</td>
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<td>Royalties</td>
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<td>Miscellaneous</td>
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<td>Loss on sale of assets</td>
<td>(6,890)</td>
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<td>Net assets released from restrictions—satisfaction of program restrictions</td>
<td>274,192</td>
<td>(274,192)</td>
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<tr>
<td><strong>Total Income</strong></td>
<td>13,832,043</td>
<td>55,209</td>
<td>2,500</td>
<td>13,889,752</td>
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| **Operating Expenses**                        |              |                        |                        |        |

### Program services

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<td>Grants and awards</td>
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<td>Research and scientific affairs</td>
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<td>Spine Education &amp; Research Center</td>
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<td>Management and general</td>
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<td>1,847,408</td>
</tr>
<tr>
<td>Fundraising and development</td>
<td>192,094</td>
<td></td>
<td></td>
<td>192,094</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>12,148,278</td>
<td></td>
<td></td>
<td>12,148,278</td>
</tr>
</tbody>
</table>

| **Operating income**           | 1,683,765    | 55,209                 | 2,500                  | 1,741,474 |

| Unrealized gain on interest rate swap agreement | 58,696 |                        |                        | 58,696 |

| Change in net assets           | 1,742,461    | 55,209                 | 2,500                  | 1,800,170 |

| Net assets, beginning of year  | 11,093,004   | 986,219                | 1,773,052              | 13,852,275 |
| Net assets, end of year        | 12,835,465   | 1,041,428              | 1,775,552              | 15,652,445 |
### Consolidated Statements of Cash Flows

#### 2012 | 2011
---|---
**Cash flows from operating activities** | | 
Change in net assets | $1,800,170 | $1,926,968 |
Adjustments to reconcile change in net assets to net cash provided by operating activities: | | 
Depreciation and amortization | 1,098,775 | 999,554 |
Unrealized (gain) loss on investments | (373,634) | 166,621 |
Gain on Swap interest rate | (58,696) | (420,099) |
Loss on disposal of assets | 6,890 | – |
Decrease (increase) in assets | | |
Receivables | 83,981 | 271,898 |
Prepaid expenses | (46,879) | (85,041) |
Inventory | (22,420) | 44,334 |
Increase (decrease) in liabilities | | |
Accounts payable | 181,544 | (43,943) |
Accrued expenses | 2,816 | (323,148) |
Deferred revenue | 280,953 | 335,830 |
**Net cash provided by operating activities** | 2,953,500 | 2,872,974 |

#### Cash flows from investing activities

| | 2012 | 2011 |
---|---|---|
Proceeds from sale of investments | 2,066,654 | 2,014,246 |
Purchase of investments | (2,451,116) | (2,200,538) |
Purchase of property and equipment | (347,766) | (198,786) |
Notes receivable issued | (29,455) | |
**Net cash used by investing activities** | (761,683) | (385,078) |

#### Cash flows from financing activities

| | 2012 | 2011 |
---|---|---|
Payment on bonds | (1,680,000) | (700,000) |
**Net cash used by financing activities** | (1,680,000) | (700,000) |

#### Net increase in cash and cash equivalents

| | 2012 | 2011 |
---|---|---|
Net increase in cash and cash equivalents | 511,817 | 1,787,896 |
Cash and cash equivalents, beginning of year | 9,225,036 | 7,437,140 |
Cash and cash equivalents, end of year | 9,736,853 | 9,225,036 |

#### Supplemental Information

| | 2012 | 2011 |
---|---|---|
Unrelated business income taxes paid | 7,000 | 5,000 |
Interest paid | 254,586 | $681,612 |