Project Descriptive Title:
Stretch & Flex: A Multimedia Intervention to Reduce Work-Related Musculoskeletal Injuries in the Construction Industry
Assigned SHIP grant #2008XC00084
Funding Period: January 1, 2009 - June 30, 2009

Project Contact Person: John Carlson
Email address: jcarlson@integritysafety.com

Applicant Organization/Partners/Collaborators:
Integrity Safety Services, Inc.
Performance Ergonomics, LLC.
AGC of Washington

December 30, 2009

Author of report:
John Carlson
Suzanne Carlson

Funding and support for this project has been provided by the State of Washington, Department of Labor & Industries, Safety & Health Investment Projects.

[Grantee] is solely responsible for the content of and views expressed in this report and related materials unless they have been formally endorsed by the Washington State Department of Labor and Industries.
**PART I**

**Final Report Narrative**

<table>
<thead>
<tr>
<th><strong>Organization Profile</strong></th>
<th>For awarded organizations, to include partners and collaborators, provide a brief description of each organization. Mission, vision, and purpose of the organizations may be valuable to include.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrity Safety Services</strong>: A full service safety company that targets all industries. Integrity Safety Services provides accident prevention plans, citation resolution assistance, accident investigations, risk management &amp; loss control advocacy, corporate &amp; site specific safety plan development, worker compensation management, job hazard analysis, back to work program development, industrial hygiene training &amp; monitoring. Safety training in confined space, fall protection, ladder &amp; scaffold safety, first aid/CPR, OSHA 10 &amp; 30, flagger, powered industrial vehicles and ergonomics awareness are also available. Integrity creates custom safety training &amp; orientation videos to emphasize individual company’s policies &amp; procedures. <strong>Performance Ergonomics, LLC.</strong> A full service ergonomics company that specializes in ergonomic education &amp; training. The services include all types of ergonomics work. Work is done in all industry types. Performance Ergonomics, LLC developed the Soft Tissue Injury Prevention program for the Associated General Contractors of Washington as well as ergonomics programs for large biotech firms, aerospace firms and technology companies. <strong>Associated General Contractors of WA</strong> is an association of construction contractors that represent some of the largest construction companies in the State of Washington. Through the support and programs developed by the AGC of WA (Safety Team, Soft Tissue Injury Prevention etc) contractor members have experience and accident rates at least 20% less on average than non AGC members. AGC’s goal of Skill, Integrity and Responsibility are core values that are represented in what they do.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Abstract</strong></th>
<th>Present a short overview of the nature and scope of the project and major findings (less than half a page)</th>
</tr>
</thead>
</table>

The project was created to provide a user friendly complete stretching program targeted for the construction industry. The project consists of four training modules. They are a management module to provide the data to show the back ground information on strain and sprain injuries and the benefits of instituting a jobsite stretching program, a supervisor module that explains the benefits of stretching at work and how to overcome obstacles, and employee module that explains the importance of a stretching program to increase the quality of life at home and at work and a stretching module designed to show how to properly complete the stretches in the workplace. Major findings showed that there was significant enthusiasm from those participating in the program. Employees felt that this program will benefit them and that it sets the bar for a higher standard while at work. |

<table>
<thead>
<tr>
<th><strong>Purpose of Project</strong></th>
<th>Describe what the project was intended to accomplish.</th>
</tr>
</thead>
</table>

The Stretch & Flex video addresses the problem of work-related musculoskeletal disorders and the worker's compensation claims arising from soft tissue injuries in the construction industry. |
**Statement of the Results**

Provide a clear statement of the results of the project include major findings and outcomes

The results of the project have shown that the information when presented to managers or owners show the cost benefit of instituting a stretching program. They also saw the benefits of how the employees would perceive the company and the commitment to employee safety and health by doing the program. They also realized that while doing the program employees would be interacting with one another about the day’s activities. Supervisors saw very little in the way of potential resistance to the program and are finding that employees are more focused on what they are doing and paying greater attention of their surroundings.

The thought is that while the stretching provides direct benefits to reducing strain and sprain injuries it also raises the awareness of the day’s activities by having open communication of all crew members. The belief is that this increased communication may result in fewer near miss and potential accidents.

**Evidence of the results**

Demonstrate evidence of how well the results met or fulfilled the intended objectives of the project.

It will take more time to directly be able to track the programs direct injury reduction. Two contractors that participated with us have been doing the program for years and have seen strain and sprain injuries events reduced to almost zero. Companies that have instituted these programs are seeing a greater level of accident awareness as companies use the stretching time to communicate daily job activities and plan job hazard activities for the day.

The initial results of the program on the awareness side have been tremendous. At all levels of the organizations there has been immediate buy in with the above mentioned discussion of the multiple benefits. It also has the added benefits of increasing employee morale and awareness that the company actually does care for the employees. Companies that are involved have made the time spent before the start of the shift as part of the actual work day where employees are paid to do the stretching routine. Not only is the program done in the morning but many of the companies are using it after the lunch break as well. After the stretching routine has been completed most employees and supervisors agree they feel better and more prepared for work.

Two companies have agreed to participate in a stretching study for 2010. The results will be tracked and updated at the end of the year.

**Project’s promotion of prevention**

Explain how the results or outcomes of this project promote the prevention of workplace injuries, illnesses, and fatalities?

Employee participation and enthusiasm has been the greatest promotion to date. Every company to receive the training points to companies they see onsite doing the stretching routine at the start of shift. The impression given is companies that do this type of routine are a cut above and better than those that don’t do the program. Many of the people trained have stated that they have had injuries in the past and that stretching has become an important part of reducing injuries not only at work but at home and during recreational activities. This idea promotes the idea of complete health not just being healthy at work. Among the supervisors and workers trained there was no dissention or push back about the intended benefits of the program.
### Relevant processes

Specify all relevant processes, impact or other evaluation information which would be useful to others seeking to replicate, implement, or build on previous work.

The management and supervisor piece of the program are crucial to implementation of the program. The concerns that spending 5 or 10 minutes at the start of the shift was too costly had to be overcome. We found that this was best done with testimonials and hard accident reduction data. Using personnel or companies in the local region assist in this process. Significant time was also spent in discussing the side benefits of the program besides direct sprain and sprain reduction. The increased communication of the work crew was seen as almost an equal benefit to the program that would actually increase productivity as well. Workers were also encouraged to speak of helpful information to enhance the program they may have learned as well through sports or recreational activities and how this was a positive benefit.

### Lessons Learned

Provide information on lessons learned through the implementation of your project. Include both positive and negative lessons. This may be helpful to other organizations interested in implementing a similar project.

*Lessons outlined should not relate to SHIP grant processes.*

One lesson learned was that economic times greatly affect how to deliver the message and to encourage companies to participate. Once companies were at the table many saw the benefit of implementation. More time was spent on marketing the program than originally planned. We also traveled more to get the message out as many companies that had planned on participating just did not feel they had the workload to justify doing it. Because of this, more time was spent on the cost benefit side of the program due to the fact of the significant reduction in the workload. Having companies that have instituted a program in the group was very beneficial to increasing participation as they spoke to the ongoing and continuing benefit of using the program instead of eliminating it due to cost considerations. While it appeared that this may be a negative it showed that once people viewed the program and heard the testimonials they were onboard to implement.

We also stressed the importance of being flexible with the program. That the stretches included in the program were chosen to have as much benefit as possible given the constraints of a jobsite. We did not promote it as this was the only thing that would reduce the injuries; rather it was a targeted tool to assist in their ongoing accident prevention program.

We also saw that many employees were eager to participate. The message conveyed by the employees was that they wanted the opportunity in being able to control their health and wellness and the stretching program showed the employers were serious in their commitment to employees. Employers did not push the program as just a cost reducer to benefit the company but rather a program to increase the health and safety of the employee.

Each level of the workforce needs a specific targeted message to ensure the success of the program. If the program is seen as leaning to heavily towards the employee or employer then we saw a reluctance to implement.
**Measures to judge success**

If relevant, state what measures or procedures were taken to judge whether/how well the objectives were met and whether the project or some other qualified outside specialist conducted an evaluation.

No outside specialist was consulted. We saw over 30 companies take the “Train the Trainer” training. During this training we took a short survey of participants to see who was using a stretching program and who was planning on implementing a program. We also asked for study participants. Of the people that came to the training, 10 companies were currently participating in some kind of stretching program and found it to be useful. 15 of the companies were interested in using the program presented and 5 companies were undecided. 2 companies agreed to participate in a 12 month study to see what reduction in injuries may be attributed to the stretching program. At the 2 companies who are participating we did companywide training of supervisors and employees, training 110 additional people. All who were trained saw direct value in using a stretching program and many commented on the fact that it would be easier to implement given the fact that they would not have to purchase a program.

Additionally 500 DVD’s of the program were produced and 480 have been distributed to date to various companies. We used the Contractors Training Day, the Governor’s Safety and Health Conference, the AGC Safety Team Golf Tournament and our website as some of the venues to get the message out. At all locations it has been received with great interest and enthusiasm as a valuable no cost program that is ready to use. As information is tracked on the 2 study companies we will update the information.

**Uses**

How might the products of your project be used within the target industry at the end of your project?

Is there potential for the products of the project to be used in other industries or with different target audiences?

The product is user friendly and designed to be used by anyone immediately. Because of the targeted modules and the supporting materials that include wallet reference cards, posters and PowerPoint this program can be used for years to come. It can be easily and cost effectively updated in future years as needed. It could easily be modified to be used in any occupational setting such as manufacturing, retail, office or public sector employees. We are considering applying for a future grant to modify this program to be used in all industries.
## Product Dissemination
Outline of how the products of the project have been shared or made transferrable.

500 DVD’s of the program were produced and 480 have been distributed to date to various companies. We used the Contractors Training Day, the Governor’s Safety and Health Conference, the AGC Safety Team Golf Tournament and our website as some of the venues to the information. 150 of the above number were distributed to the Department of Labor and Industries. We have provided electronic copies of all the materials produced to be placed on L&I’s website for downloading purposes. We will also make it available on Integrity Safety’s website in January 2010 for free downloads.

## Feedback
Provide feedback from relevant professionals, stakeholder groups, participants, and/or independent evaluator on the project.

We have received positive feedback from the AGC of Washington as well as students attending the OSHA Ergonomics training at the UW taught by Steve Davis of Performance Ergonomics as well as L&I staff that have viewed the product. Testimonials have been used in the DVD from both BNBuilders and EC Company.

Some of the companies that have received the training and see it as positive and beneficial are:
- GLY
- BNBuilders
- Sellen Construction
- Foushee & Associates
- Turner Construction
- Absher Construction
- John Korsmo Construction
- Woodworth & Company
- Andgar Corporation

---

Signature: [Signature]

Date: 31Dec 2009
# SAFETY AND HEALTH INVESTMENT PROJECTS

## SHIP Final Expenditure Report Budget Summary

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Title:</strong></td>
<td>Stretch &amp; Flex: A Multimedia Intervention to Reduce Work-Related Musculoskeletal Injuries in the Construction Industry</td>
<td></td>
</tr>
<tr>
<td><strong>Project #</strong></td>
<td>2008XC00084</td>
<td></td>
</tr>
<tr>
<td><strong>Report Date:</strong></td>
<td>Dec 30, 2009</td>
<td></td>
</tr>
<tr>
<td><strong>Contact Person:</strong></td>
<td>John Carlson</td>
<td></td>
</tr>
<tr>
<td><strong>Contact #</strong></td>
<td>(360) 574-6071</td>
<td></td>
</tr>
<tr>
<td><strong>Start Date:</strong></td>
<td>January 2009</td>
<td></td>
</tr>
<tr>
<td><strong>Project Completion Date:</strong></td>
<td>December 2009</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Total budget for the project</td>
<td>$ 80,371.00</td>
</tr>
<tr>
<td><strong>2.</strong> Total SHIP Grant Award</td>
<td>$ 80,371.00</td>
</tr>
<tr>
<td><strong>3.</strong> Total of SHIP Funds Used</td>
<td>$ 80,371.00</td>
</tr>
<tr>
<td><strong>4.</strong> Budget Modifications (if applicable)</td>
<td>$ 0.00</td>
</tr>
<tr>
<td><strong>5.</strong> Total In-kind contributions</td>
<td>$ 38,000.00</td>
</tr>
<tr>
<td><strong>6.</strong> Total Expenditures (Lines 3 + 4 + 5)</td>
<td>$ 118,371.00</td>
</tr>
</tbody>
</table>

### Instructions:

1. Complete the Supplemental Schedule (Budget) form first (on the next page).
2. The final report must include all expenditures from date of completion of interim report through termination date of grant.
3. Indicate period covered by report by specifying the inclusive dates.
4. Report and itemize all expenditures during specified reporting period per the attached supplemental schedules.
5. Forms must be signed by authorized persons (see last page).
6. Forward one copy of the report to (Name), SHIP Project Manager, and P O Box 44612, Olympia, WA 98504-4612.
## SAFETY AND HEALTH INVESTMENT PROJECTS
**SHIP Final Expenditure Report Budget Summary**

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Stretch &amp; Flex: A Multimedia Intervention to Reduce Work-Related Musculoskeletal Injuries in the Construction Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project #</td>
<td>2008XC00084</td>
</tr>
<tr>
<td>Report Date</td>
<td>Dec 30, 2009</td>
</tr>
<tr>
<td>Contact Person</td>
<td>John Carlson</td>
</tr>
<tr>
<td>Contact #</td>
<td>(360) 574-6071</td>
</tr>
<tr>
<td>Start Date</td>
<td>January 2009</td>
</tr>
<tr>
<td>Project Completion Date</td>
<td>December 2009</td>
</tr>
</tbody>
</table>

### ITEMIZED BUDGET
How were SHIP award funds used to achieve the purpose or your project?

- **Budgeted for Project:** $ 39,100.00
- **Amount Paid Out:** $ 40,970.00
- **Difference:** -$ 1,870.00

**A. PERSONNEL**
Project Manager, Video Production, Accounting and Support Staff

- Explanation for Difference and other relevant information:
  - Added accounting & editing activities

- **Budgeted for Project:** $ 22,450.00
- **Amount Paid Out:** $ 22,546.50
- **Difference:** -$ 96.50

**B. SUBCONTRACTOR**
Ergonomist, physical therapist, trainer, audio engineer, voice over artist, studio musicians and cinematographer.

- Explanation for Difference and other relevant information:
  - Costs of scripting development and filming went slightly over budget. Not enough to become a major issue.
Budgeted for Project: $ 6,571.00
Amount Paid Out: $ 6,383.49
Difference: $ 187.61

C. TRAVEL
Evaluation of project with sub-contractor, team meetings, scouting locations, filming on location, on-site training of partner companies, train-the-trainer classes and follow-up evaluations.

Explanation for Difference and other relevant information:
Travel expenses were less than expected.

Budgeted for Project: $ 3,750.00
Amount Paid Out: $ 3,721.89
Difference: $ 28.11

D. SUPPLIES
Leasing of camera, sachtler tripod, Panasonic P2 cards, and boom Mic Kit. Purchase of PVC pipes, felt for backdrop, and general office supplies.

Explanation for Difference and other relevant information:
The cost of supplies was less than we needed for this project.

Budgeted for Project: $ 8,500.00
Amount Paid Out: $ 8,500.01
Difference: -$ 0.01

E. PUBLICATIONS
DVD reproduction, booklets, wallet cards, postage and shipping of product,

Explanation for Difference and other relevant information:
We stayed on budget for publications.
Budgeted for Project: $ 80,371.00
Amount Paid Out: $ 82,121.89
Difference: -$1,750.89

**TOTAL DIRECT COSTS**

Budgeted for Project: $ 0.00
Amount Paid Out: $ 0.00
Difference: $ 0.00

**INDIRECT COSTS**

Budgeted for Project: $ 80,371.00
Amount Paid Out: $ 82,121.89
Difference: -$1,750.89

**TOTAL SHIP BUDGET**

Budgeted for Project: $ 38,000.00
Amount Paid Out: $ 38,000.00
Difference: $0.00

**F. IN-KIND**
Camera, Manfrotto tripod, editing bay and 10% of operating expenses for 6 months.

Explanation for Difference:
None
PART III

Attachments:

Provide resources such as written material, training packages, or video/audio tapes, curriculum information, etc produced under the grant.

Also include copies of publications, papers given at conferences, etc.

This information should also be provided on a CD or DVD for inclusion in the file.

REMINDER!!: All products produced, whether by the grantee or a subcontractor to the grantee, as a result of a SHIP grant are in the public domain and can not be copyrighted, patented, claimed as trade secrets, or otherwise restricted in any way.