



PBS  
Denver, CO



*Local break areas and focus rooms are just two of the new types of spaces created.*



*The skylight café encourages impromptu collaboration*



*The anti-stress place – The Pit – has an exercise room, a pool table and lounge furnishings*

***"I'm totally amazed by the transformation of the space and its impact on our people"***

*- Paul Prouty*

## **Can workplace design reduce stress?**

A small leadership group at the GSA's regional office in Denver is using the design of their office as a catalyst for social change. They have found that an environmental upgrade to their office has influenced the attitudes and behaviors of the people working there, and is reducing levels of stress in the workplace.

### **Goals**

The project intended to provide a better environment for associates and to attract and retain new young workers. As commitment to the project further developed, the organization became more interested in understanding how they worked together. They wanted to improve internal relationships so as to better service their clients especially through cross group communication and collaboration. They wanted to use the workplace as a showcase for the PBS as a thought leader in workplace design. And they wanted to reduce workplace stress and increase the overall quality of life for associates.

### **Obstacles**

The project was not an easy one. The building is a WWII armaments factory that was converted to a two story office facility in the 1950's. PBS lived through the renovation. Funding restriction mean the project is being completed in numerous phases over a 4-5 year schedule.

### **Innovations**

Having moved from a variety of enclosed offices to a new 8'x8' workstation standard, the group also added several very popular shared spaces. Open spaces at central nodes are provided for spontaneous meetings. The main reception from a daylit entrance takes advantage of a sky-lit atrium and links to a suite of conference rooms. New spaces are designed to better support staff: the "skylight café" is an informal coffee area with furniture for brief, ad hoc meetings. A new 'Ambassador desk' provides a concierge type function that improves security and supports visitors and staff with conference rooms, catering or travel plans. The PIT (People Interacting Together) is a lounge "de-stress" area built on a shoestring and funded by employee efforts. All the equipment, such as weight-training, ping-pong, pool table and TV/VCR was funded through bake sales and car washes.

The success of the project is being measured through surveys of staff perceptions of community, morale and communications – scores are higher than two other GSA sites. A social network analysis shows high connectedness between the groups and higher levels of face to face rather than virtual interaction. The staff are being assessed as to whether their stress has reduced in the new workplace compared to the old.



Discovery / Analysis Methods & Measures	Environmental Issues Themes & Solutions	Organizational Issues & Solutions
<p><b>Interviews &amp; Focus Groups</b> A Board Leadership Council (BLC) maintained detailed involvement through all phases, expediting decisions. Communications to focus groups with the support of the ARA supported change management.</p> <p><b>Surveys of users</b> In collaboration with CBE a survey was administered before and after the project completion. The staff survey measured sense of community, morale and communication and showed higher social outcome scores than two other GSA projects.</p> <p>The National Institutes of Health is studying the impacts of environment on employees' perceptions of stress. Using special instruments, volunteer participants are monitoring their own levels of stress over a 24 hour period. During the workday in the office they are recording subjective information on their psychological and emotional state. The data are linked to where they are located in the office.</p> <p><b>Social Network Analysis</b> Using a sample of 50 employees, Pacific Northwest National Laboratory has shown a high degree of interconnectedness of staff, with higher face to face than virtual communications. Staff who are less centrally located are less integrated.</p>	<p><b>Daylight and Views</b> By reducing the number of enclosed offices, all staff benefit from new skylights which were made part of the project. Anecdotal evidence suggests reductions in staff attrition and improved work quality.</p> <p><b>Spaces for Interaction</b> Open spaces at nodes provide for spontaneous meetings; café space; de-stress lounge with games and exercise equipment.</p> <p><b>Centralized Support Services and Spaces</b> A new library function improves information management. Meeting room management is improved with the Ambassador desk and the availability of informal spaces for meetings. The new reception area and Ambassador desk solve a number of previous issues with unannounced visitors. Card key access has been revised to further improve security.</p>	<p><b>Cross Functional Learning</b> The CBE survey measures social outcomes of the project through such questions as scoring 'I know what is going on'; 'people share information'; 'people help each other'.</p> <p><b>Research Roles</b> <b>Center for Building Diagnostics and Performance, Carnegie Mellon</b> Physical Measurement <b>Center for Built Environment, California Berkeley</b> Workplace Performance Survey (WPS) <b>CMU &amp; Charles Salter Associates</b> Environmental Quality Report (EQR) <b>Gensler – Washington D.C.</b> Visioning Session, Interviews, Focus Groups <b>Georgia Tech University - Zimring, Rashid</b> Space Syntax Study <b>Judi Heerwagen Associates</b> POE Report preparation, Research contact <b>Kevin Powell</b> Research contact <b>National Institute of Health (NIH)</b> Stress Management <b>Pacific Northwest Lab</b> Social Network Analysis</p>