



Executive Summary/Index

he General Services Administration's (GSA) Office of Real Property has formed strategic alliances and partnerships with a number of leading national and international organizations to study the Federal workplace. Among the numerous alliances that the office participates in are:



Advanced Building Systems
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Many initiatives and projects in the Office of Real Property owe their beginnings to, or have received support from, the partnerships and alliances with these organizations. GSA has been able to leverage the expertise and resources of these groups and its members to gather the latest information and data in the following areas:



The Office of Real Property has applied the research and knowledge gained through these groups to its own initiatives, as well as sharing the information with the Federal real estate sector with the goal of providing a better workplace for the Federal employee. This report will summarize each of these groups and provide a summary of

the research, knowledge, and information gained from the partnership. The Office of Real Property encourages you to review the lessons learned summarized below and contact a member of our office or the association directly for more detailed information on how these lessons may be applied in your organization.

BSIC is a Carnegie Mellon University (CMU)-led research consortium created under the auspices of the National Science Foundation, to facilitate cross-industry/agency collaboration in the field of advanced building design and systems integration. CMU's Center for Building Performance Diagnostics (CBPD) leads this effort. Research and products being developed include: the Building Investment Decision Support (BIDS) tool, Guidelines for High Performance Workplaces, Building as Power Plant (BAPP) and development of a Productivity

Protocol on the Nature of Work. A synopsis of each initiative follows:

The BIDS tool is a rich database of nearly 140 building case studies that overlay ten cost-benefit indices. Web-based and interactive, it tracks "what if" variables for decision-makers to evaluate when making real property investment considerations of the economic impact of building performance on individual and organizational productivity, health, and satisfaction. After searching thousands of as-built facility studies, only about 1-in-100 were employable.



Users can tailor the key variables shown below:

BIDS on-line availability is currently limited to ABSIC members and invested sponsors. ABSIC will soon make the tool available across

- First Cost/Mortgage Savings via Quality Packages charts integrated systems savings
 over individual systems components; quality/modularity with just-in-time purchasing over
 redundancy
- 2. Facilities Management Cost Savings factors energy/utilities, maintenance, and repair dollars
- 3. Individual Productivity Cost Savings evaluates "personnel" speed, accuracy, effectiveness, creativity, impairment, and absenteeism
- Organizational Productivity Cost Savings compares time-to-market, profit, and company value (present and future)
- Attraction/Retention Cost Savings focuses on (hiring) time, quality attracted, training costs, and retention rates
- 6. Tax/Code/Insurance/Litigation Cost Savings assesses tax depreciation, code compliance, insurance and litigation influences and their value justifications
- 7. **Health Cost Savings** considers health insurance, medical, litigation, workman's compensation, environmental evaluation, and remediation costs
- 8. Renewability Cost Savings: Organizational covers facility reconfigurability plus churn drivers and values to individual, team, and company-wide effectiveness
- Renewability Cost Savings: Technological engages technological "turn" costs of ergonomic and environmental accommodations from inflexible infrastructures
- 10. Salvage/Waste Cost Savings weighs organizational, technological, environmental modifications, aging and wear, obsolescence, and salvage values

government and the private sector. To preserve its ability to grow, with more and better case studies, a fee-based subscription service is under consideration. ABSIC sponsor participants include:

Industrial ABSIC Members

Armstrong World Industries

BricsNet

BP Solar

Consolidated Edison of New York, Inc.

Electricité de France

LTG Aktiengesellschaft

Siemens Energy and Automation, Inc.

Steelcase, Inc.

Technion, Inc.

Thyssen Krupp

TYCO Electronics, Inc.

United Technologies Research/Carrier

Zumtobel Staff Lighting, Inc.

Government Members

U.S. National Science Foundation Industry University Cooperative Research Center Program

U.S. Department of Defense

U.S. Department of Energy

U.S. Department of State

U.S. Environmental Protection Agency

U.S. General Services Administration

The Netherlands Government Buildings Agency

Public Works and Government Services
Canada

University Member

Carnegie Mellon University

The ABSIC Guidelines for High Performance Workplaces are based on CMU/CBPD research findings for commercial building systems:

- Enclosures
- HVAC
- Structures
- Lighting
- Interiors
- Controls
- Connectivity

The 50 guidelines are also categorized by four organizational goals as facilitated by seven individual goals. ABSIC/CMU believes that buildings should enhance worker effectiveness, communication, comfort, and productivity. Providing this requires high-performance buildings that deliver appropriate physical, environmental, and organizational settings to accommodate changing technologies and workplace activities.

These ABSIC guidelines should be used in the design of new and retrofit workplaces or for the evaluation of workplaces that organizations may lease or purchase.

Excerpted Guidelines for High Performance Workplaces (partial list)

The 50 Guidelines are organized by building system and may also be viewed according to the organizational and individual goals outlined by CBPD.

System goals

- Structure: Material Conservation Select structural system components and materials considering their service lives and material cycles.
- 2. **Enclosure: Natural Environment** Maximize individual access to the natural environment.
- HVAC: Ventilation Deliver breathing air independent of thermal conditioning (heating and cooling).
- Lighting: Daylighting Use daylight as a dominant light source.
- Interior: Collaboration Provide "layers of collaboration" by ensuring neighborhood clarity and flexibility.
- 6. Connectivity: Distributed Services
 Engineer distributed communicating systems
 for data, power, environmental, fire protection
 services, and security.

Organizational goals

- Organizational Flexibility: Provide a
 reconfigurable community of workplaces to
 facilitate collaboration, regrouping and
 sharing in order to increase organizational
 productivity, creativity and innovation.
 Accomplish this through goals for:
- System Integration (HVAC)
- Thermal Zones (HVAC)
- Infrastructure (Interior)
- Mobility (Interior)
- Ownership (Interior)
- Collaboration (Interior)
- Lighting Zones (Lighting)
- Flexibility (Lighting)
- System Integration (Structure)
- Plenum Design (Structure)
- Modularity (Structure)

Organizational goals (continued)

- 2. Individual Productivity and Comfort:
 - Provide "plug and play" interior systems and engineering infrastructures to ensure that furniture and space reconfigurations are immediately matched by technology and environment reconfigurations for comfort, health, and corresponding productivity.

 Satisfy this through goals for:
- Grids of Service (Connectivity)
- Natural Environment (Enclosure)
- Task Conditioning (HVAC)
- Mixed-Mode Conditioning (HVAC)
- Ventilation (HVAC)
- Natural Environment (Interior)
- Indoor Environmental Quality (Interior)
- Ergonomics (Interior)
- Personalization (Interior)
- Privacy (Interior)
- Task Lighting (Lighting)
- Daylighting (Lighting)

- 3. Technological Adaptability: Provide accessible and open pathways (vertical and horizontal) for connectivity for both the interior systems as well as the engineering infrastructure to support techno-change for horizontal and vertical work surfaces, lighting, acoustics, thermal conditioning, ergonomics and group spaces. Enable this via goals for:
- Management (Connectivity)
- Maintainability (Connectivity)
- Flexibility (Connectivity)
- Horizontal Distribution (Connectivity)
- Tech Rooms (Connectivity)
- Vertical Distribution (Connectivity)
- Distributed Services (Connectivity)
- Controls (HVAC)
- Controls (Lighting)

- 4. Environmental Sustainability: Provide effective uses of energy and materials in accordance with life-cycle data through concepts such as system efficacy, user controls, micro-zoning for flex-time, just-in-time delivery of infrastructures, environmentally sustainable and healthy materials, and natural conditioning. These should all be demonstrated and compared to standard practice by measurements for:
- Energy and Material Conservation (Connectivity)
- Systems Integration (Enclosure)
- Material Conservation (Enclosure)
- Solar Assistance (Enclosure)
- Load Balancing (Enclosure)

- Solar Control (Enclosure)
- Heat Loss/Gain (Enclosure)
- Natural Ventilation (Enclosure)
- Daylighting (Enclosure)
- Maintenance Access (HVAC)
- Energy and Material Conservation (HVAC)
- Load Reduction (HVAC)
- Load Balancing (HVAC)
- Energy and Material Conservation (Interior)
- Energy and Material Conservation (Lighting)
- Luminaire Selection (Lighting)
- Enclosure Interface (Structure)
- Material Conservation (Structure)

Individual goals

- Fresh Air for each individual: Provide fresh air and its control to each individual to allow local responses to variable loads. This can be achieved through a dedicated separate ventilation system, as well as operable windows.
- 2. Temperature Control for each individual:

 Provide smaller zone sizes for workgroups (up to 4-6 people) as well as some level of individual control. This can be achieved through the control of various thermal comfort parameters: air temperature, humidity, meanradiant conditions and air velocity.
- 3. Access to Daylight and View for each individual: Provide access to daylight and a view of the outdoors from every workstation (people, trees, community life) to critically maintain a sense of time and season. Increase building periphery as needed so that each workstation is guaranteed a view.

- 4. Lighting Control for each individual:
 - Provide low-level ambient lighting with additional task lights at each workstation to achieve proper light levels. The task lighting should be user-relocatable to match work surface configuration/use. They should have adjustable arm/directional control, and there should be occupancy sensors for automatic shutdown when the workstation is unoccupied. Split task and ambient systems should have daylight response for the ambient lighting, and user control of task light location, density, and on/off switching.
- 5. Teaming, Privacy, and Quiet Work Areas: Provide combinations of closed and open spaces, micro workstations, mobile workstations, and project rooms to support collective work processes and more productive individual or concentrated work for dynamic, multi-disciplinary teams (reconfigurable group workspaces on a project-by-project basis) and visually protected workstations for individual work.

- 6. Network Access (Data/Voice/Power) for each individual: Starting at the desk, provide multiple data/voice/power outlets with sound variations in density and functionality. Use modular floor or furniture boxes with interchangeable outlets to allow infrastructure reconfiguration without waste. Connect modular outlet boxes directly to individual workstations and distribute to satellite closets.
- 7. Ergonomic Furniture: Provide ergonomic chairs, adjustable keyboard supports, screen and copy stands, variable height work surfaces, task lights, and integrated cable management. Allocate space, size, and furniture by task or function to satisfy the range of tasks and effective work styles in the overall determination of workplace size and furniture options.

Currently, these guidelines are in digital media to support diverse searches by professionals, as well as to support the ongoing development of the definitions of high performance building systems and their integration. They include illustrations with case studies and product examples, as well as linked specifics on LEEDTM metrics and BIDSTM life cycle benefit data sets. The guidelines are currently available on-line to ABSIC members and invested sponsors.

Individual goals (continued)

The Productivity Protocols on the Nature of Work is based on a GSA initiative, which included the Naval Facilities Engineering Command, National Institutes of Health, and Public Works and Government Services Canada. This work is guided by Vivian Loftness, Head of the School of Architecture at CMU and Judi Heerwagen, Independent Consultant on Workplace Behavioral Sciences. This development effort begins the foundation of workplace evaluation protocols linking environmental, technical and spatial qualities to individual and organizational effectiveness across five Nature of Work goals including:

- More effective organizational performance
- 2) Greater collaboration and social integration
- 3) More effective individual work
- 4) Greater worker health
- 5) More effective resource use (energy and churn/materials)

Despite a growing widespread interest in workforce productivity and performance metrics, there exists little sustained or coordinated research to inform planning/design decision makers of new ways and places on the changing nature of work and the correlated effect on workplace and occupants.

The protocols group has identified 25 productivity research scenarios that combine key building attributes, key economic indices, and techniques and measures of productivity and performance with "the role of workplace in Federal real estate." Useful productivity scenarios developed to date fall into eight nature-of-work value sets:

- 1) Drivers and values of churn
- 2) Drivers and values of collaboration
- Importance of individual space ergonomics
- 4) Importance of individual environmental control
- Importance of individual and group technology
- Drivers and values of individual focus/human attention
- Definitions and values of building quality differences
- 8) Importance of building delivery processes

PBS, in collaboration with OGP, is preparing an omnibus contract to solicit specific research studies on these 25 hypotheses. This research seeks to validate what the group asserts about the following business imperatives:

The relationship between space and productivity.

- User customization of the workspace will increase individual productivity, health, and satisfaction.
- Workstations of less than 64 square feet and without alternative work settings decrease health, individual productivity, collaboration, and organizational effectiveness.
- High occupancy densities in buildings increase collaboration but decrease individual productivity and health.
- Eliminating ownership of workstations increases work organization and multidisciplinary collaboration but decreases individual and group productivity (i.e. time wasted).
- Building amenities increase individual productivity (i.e. time/distraction savings) and health as well as organizational performance through attraction, retention and collaboration.
- A new definition of quality buildings will correlate with more effective organizational performance/ internal processes, greater health of worker, and more effective resource use.

The relationship between space and overall organizational effectiveness.

- Innovative workplace design affects social network and situational awareness, which impacts organizational performance.
- Greater availability and diversity of teaming spaces increases social networks and situational awareness, which impacts organizational performance.
- The provision of dedicated project rooms that can be owned by the "team" for a period of time (for working and meetings) will improve team/organizational productivity.

The relationship between characteristics of space and longer-term costs/value of space.

- Adequate individual technology and physical and environmental accommodations for that technology will increase individual and organizational productivity.
- Adequate, flexible connectivity will increase individual and organizational productivity and decrease churn costs.
- The best buildings support high organizational churn at low cost and low waste.
- The best buildings support high technological churn at low cost and low waste.

New Buildings Management Practices.

- Access to windows, views, daylight, and natural ventilation will increase individual productivity, health, and satisfaction and decrease energy use.
- Deep section, sealed buildings have higher energy and health costs than thinner section buildings with operable windows.
- Move-in during construction leads to greater health costs and Sick Building Syndrome symptoms.

Building Materials Innovations.

- Well-controlled acoustics in the workplace will increase individual and organizational productivity.
- Level of workspace enclosure (or individual control of closure) impacts individual's productivity with complex tasks.
- Flextime and telecommuting increase individual productivity, well-being and comfort, but can reduce collaboration and organizational connectivity.
- The elimination of cognitive overload (detractors) and the addition of cognitive attractors will increase individual and organizational productivity.

Technology, Organizational, and Demographic trends/influences on the future planning, design, delivery and management of space at PBS.

 The best buildings support high technological churn at low cost and low waste.

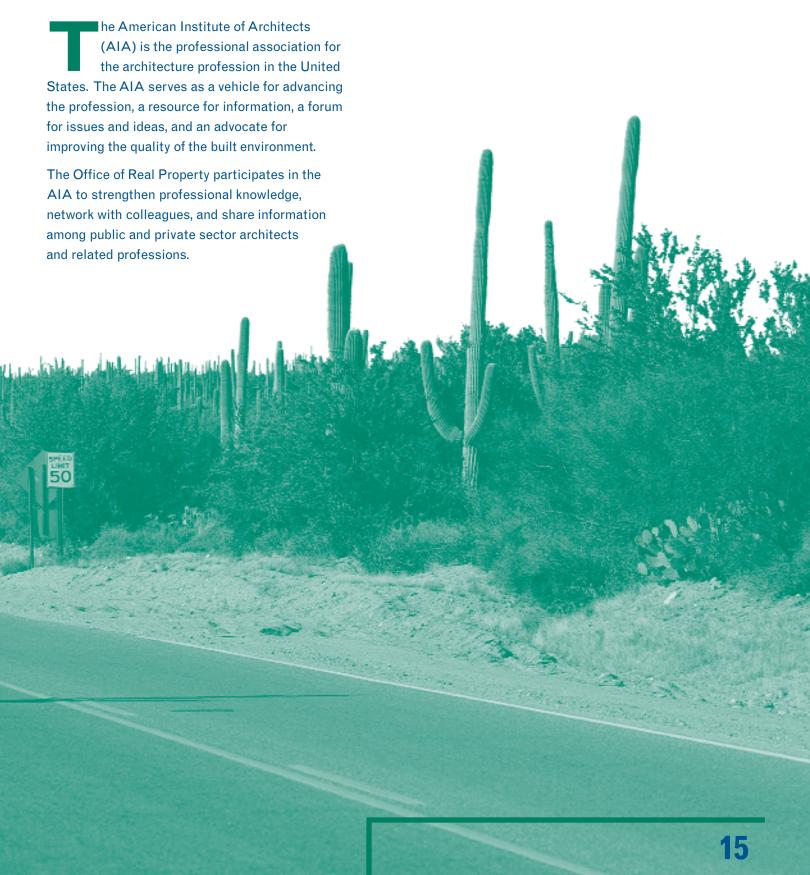
White papers on churn, environmental control, ergonomics (and others) will be published along with the Protocol "framework" to inform research partners on direction and expected baseline content for all Productivity studies. GSA, PWGSC, Naval Facilities Engineering Command, the National Institutes of Health, and CMU have agreed to use the protocol in ensuing research and share their research results.

Building as Power Plant (BAPP) is planned as both a conceptual and physical extension of the CMU Intelligent Workplace. The BAPP initiative seeks to integrate advanced energy-efficient building technologies (ascending strategies) with innovative distributed energy generation systems (cascading strategies), thus demonstrating that a building's energy needs for heating, cooling, ventilating and lighting can be met on-site while maximizing the use of renewable energies.

BAPP is designed as a six-story addition (about 64,000 square feet) housing classrooms, studios, labs, and offices for the College of Fine Arts and School of Computer Science. The building is designed to rely on a 250 kilowatt Solid Oxide Fuel Cell, steam turbine, and leveraged absorption chiller/boiler technologies. The building also contains advanced photovoltaic, solar, hot water, and geo-thermal systems as its energy generation system, decentralized and configured to add energy back into the utility grid when the building is performing efficiently.

Workshops on ascending and cascading strategies, floor-by-floor systems, interior systems, and HVAC were held over the past year to hear suggestions and ideas from the design, engineering, and vendor communities for efficient leveraging of all BAPP systems. Besides ABSIC support, funding for the project is currently being considered in current legislation. Demonstrating such innovative energy systems is a step towards broad use of buildings for power generation in industry and government.

For more information on ABSIC, please contact Mike Atkinson at 202-219-0843 or via e-mail at michael.atkinson@gsa.gov.



Participation in AIA activities includes:

- Attending the AIA national convention, including new products, seminars, and tours that offer new information on the built environment and the profession, including sustainable issues, federal government activities, professional practice issues, and the workplace. Seminars attended in past years have been used for research and case studies for the Integrated Workplace and Sustainable Development programs. Past seminars have included:
 - 1. Attracting and retaining qualified workers
 - Removing barriers to high-performance design – an integrated design case study of the University of Texas School of Nursing
 - 3. Value-based design
 - 4. Site visit to sustainable facility for Catawba College Center for the Environment

Daylight and productivity: Lighting Design Lab, Seattle, WA

Studies show that daylighting has major benefits:

- Improved health of occupants
- Improved productivity of occupants
- Reduced energy consumption

More information on this study may be found at **www.lightingdesignlab.com**

The Office of Real Property is also a member of the Public Architects
Professional Interest Area (PIA), which brings together architects working across local, state, and federal governments to discuss issues, present projects, and learn from each other's experience.

The mission of the Public Architects PIA is to improve the quality of public architecture and promote the value of the public architect as an essential element in the planning, design, construction, and management of public facilities.

The Goals of the AIA Public Architects PIA are:

- To generate and disseminate information on quality public architecture and the associated role of the public architect
- 2. To focus on effective project delivery, team building, collaboration, project management, financial management, communications skills, management skills, and cutting-edge design issues for architects providing the diversified services associated with public-sector architecture
- To advocate leadership roles in public architecture development by architects employed within federal, state, and local government agencies
- 4. To assist Public Architects in assuming significant roles in the development and implementation of policy for public facilities and to seek to establish the role of the architect as essential to the development of quality public environments

5. To facilitate the creation of networks whereby the Public Architect and others involved in the planning, design, construction, and management of public facilities can achieve the highest levels of quality and success

Events and features of the Public Architects PIA include:

- Annual one-day workshop at the convention.
 Past workshops have provided information on:
 - Sustainable design aspects of the U. S.
 Fish and Wildlife Service's National
 Conservation Center, Shepherdstown,
 WV, including low life-cycle costs and use of local vernacular
 - Sustainable design for the State of South Carolina
 - Public art and architecture in South Carolina
 - Design and its relationship to public policy

- Publication of the "Cornerstone" newsletter.Current articles include:
 - Our National Parks and Homeland Security
 - National Capital Planning Commission: Urban Design and Security Plan for the Nation's Capital
 - Terrorist Scenario Exercise Improves Ideas for Infrastructure Security
 - Links to resources, conferences, and agency events

http://www.aia.org/pia/gateway/
PA-Newsletters/0902/default.asp

3. Public Architects web site has links to agencies, articles and other sites, including information on creating better urban spaces shown below. The web site is located at:

http://www.aia.org/pia/gateway/ PIA_Home_pages/PublicArchs.asp

The AIA Public Architects Web Site includes a link to information developed by the Project for Public Spaces (PPS), a nonprofit technical assistance, research and educational urban planning organization, in partnership with the GSA Public Buildings Service and other partners, that shows the benefits of good public spaces and how they can be achieved. Excerpts are provided below. For more information and guidance, visit their web site at:

http://www.pps.org/buildings.

Ten Benefits of Creating Good Public Spaces

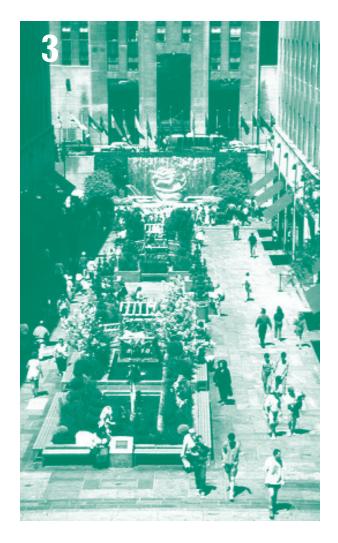
Excerpts from information published by the Project for Public Spaces (PPS), a nonprofit technical assistance, research and educational urban planning organization:

http://pps.org/topics/gps/gr_place_feat



- 1. Support local economies: The River Market in Little Rock, Arkansas, a \$4.4 million project that opened in 1996, has been a catalyst for over \$500 million in new and proposed construction, including the Clinton Presidential Library. The market has doubled in size in three years, and is given credit for the downtown's renaissance. PPS has been closely involved in the project.
- 2. Attract business investments: In downtown Oak Park, Illinois, a failed pedestrian mall was replaced with the original street. Even before the changes were fully implemented, there was a 100% increase in enquiries from potential tenants, and the vacancy rate eventually decreased from 30% to 5%.









- 3. Attract tourism: After extensive user studies design improvements were made to the Channel Gardens at the Rockefeller Center. The changes, including increased seating, have allowed the gardens and world famous skating rink to become one of the most popular spaces in New York City and encouraged The Today Show, and other attractions, to locate there.
- 4. Provide cultural opportunities: San Rafael, California, a city with a large Italian population, created a vision for a neglected city park. The residents raised money to install bocce courts, which are managed by a local nonprofit. The park has since become a major source of civic pride: families come nightly from all over San Rafael, while media attention has attracted bocce enthusiasts from across the U.S. and Europe.
- 5. Encourage volunteerism: In Corpus Christi, Texas, 1500 adults and children helped to make ceramic tiles decorating the benches, light poles, columns and central archway of Staples Street Station, a bus transfer center.

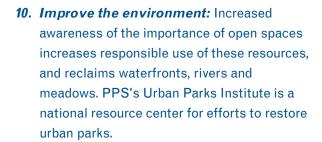


- 6. Reduce crime: In the early 1980s, seven-acre Bryant Park in New York City was over-run by drug dealers office employees and tourists didn't dare venture in. With the changes, the park now attracts 10,000 people on a sunny day, and presents a popular film festival on summer evenings.
- 7. Improve pedestrian safety: An experimental diagonal parking initiative in San Bernardino, California resulted in 50% more pedestrians along the street while increasing parking spaces by 25%.



- 8. Increase use of public transportation: The successful renovation of the Netherwood train station in Plainfield, New Jersey has resulted in a 40% increase in ridership.
- 9. Improve public health: Research shows that in neighborhoods where people walk less, people are more likely to be overweight. In the last year, PPS has trained 600 New Jersey transportation professionals in Context Sensitive Design a design process that responds to local needs and helps create more walkable neighborhoods.









Eleven Principles for Creating Great Public Spaces

by Project for Public Spaces (PPS), a nonprofit technical assistance, research and educational urban planning organization.

Adapted from PPS publication "How to Turn a Place Around."

Effective public spaces are extremely difficult to accomplish, because their complexity is rarely understood. As William (Holly) Whyte said, "It's hard to design a space that will not attract people. What is remarkable is how often this has been accomplished."

PPS has identified 11 key elements in transforming public spaces into vibrant community places, whether they're parks, plazas, public squares, streets, sidewalks or the myriad of other outdoor and indoor spaces that have public uses in common.

I. The Community Is The Expert. The important starting point in developing a concept for any public space is to identify the talents and assets within the community. In any community there are people who can provide an historical perspective, valuable insights into how the area functions, and an understanding of the critical issues and what is meaningful to people. Tapping this information at the beginning of the process will help to create a sense of community ownership in the project that can be of great benefit to both the project sponsor and the community.

II. Create a Place, Not a Design. If your goal is to create a place (which we think it should be), a design will not be enough. To make an underperforming space into a vital "place," physical elements must be introduced that would make people welcome and comfortable, such as seating and new landscaping, and also through "management" changes in the pedestrian circulation pattern and by developing more effective relationships between the surrounding retail and the activities going on in the public spaces. The goal is to create a place that has both a strong sense of community and a comfortable image, as well as a setting, activities, and uses that collectively add up to something more than the sum of its often simple parts. This is easy to say, but difficult to accomplish.

III. Look for Partners. Partners are critical to the future success and image of a public space improvement project. Whether you want partners at the beginning to plan for the project or you want to brainstorm and develop scenarios with a dozen partners who might participate in the future, they are invaluable in providing support and getting a project off the ground. They can be local institutions, museums, schools and others.

IV. You Can See a Lot Just By Observing.

We can all learn a great deal from others' successes and failures. By looking at how people are using (or not using) public spaces and finding out what they like and don't like about them, it is possible to assess what makes them work or not work. Through these observations, it will be clear what kinds of activities are missing and what

might be incorporated. When the spaces are built, continuing to observe them will teach even more about how to evolve and manage them over time.

V. Have a Vision. The vision needs to come out of each individual community. However, essential to a vision for any public space is an idea of what kinds of activities might be happening in the space, a view that the space should be comfortable and have a good image, and that it should be an important place where people want to be. It should infuse a sense of pride in the people who live and work in the surrounding area.

VI. Start with the Petunias: Experiment...

Experiment... Experiment. The complexity of public spaces is such that you cannot expect to do everything right initially. The best spaces experiment

with short-term improvements that can be tested and refined over many years! Elements such as seating, outdoor cafes, public art, striping of crosswalks and pedestrian havens, community gardens and murals are examples of improvements that can be accomplished in a short time.

VII. Triangulate. "Triangulation is the process by which some external stimulus provides a linkage between people and prompts strangers to talk to other strangers as if they knew each other." (Holly Whyte). In a public space, the choice and arrangement of different elements in relation to each other can put the

triangulation process in motion (or not). For example, if a bench, a wastebasket and a telephone are placed with no connection to each other, each may receive a very limited use, but when they are arranged together along with other amenities such as a coffee cart, they will naturally bring people together (or triangulate!). On a broader level, if a children's reading room in a new library is located so that it is next to a children's playground in a park and a food kiosk is added, more activity will occur than if these facilities were located separately.

VIII. They always say, "It can't be done."

One of Yogi Berra's
great sayings
is "If
they
say it

can't be done, it doesn't always work out that way," and we have found it to be appropriate for our work as well. Creating good public spaces is inevitably about encountering obstacles, because no one in either the public or private sectors has the job or responsibility to "create places." For example, professionals such as traffic engineers, transit operators, urban planners and architects all have narrow definitions of their job - facilitating traffic or making trains run on time or creating long term schemes for building cities or designing buildings. Their job, evident in most cities, is not to create "places."

Starting with small-scale community-nurturing improvements can demonstrate the importance of "places" and help to overcome obstacles.

IX. Form Supports Function. The input from the community and potential partners, the understanding of how other spaces function, the experimentation, and overcoming the obstacles and naysayers provides the concept for the space. Although design is important, these other elements tell you what "form" you need to accomplish the future vision for the space.

A. Money is not the issue. This statement can apply in a number of ways. For example, once you've put in the basic infrastructure of the public spaces, the elements that are added that will make it work (e.g., vendors, cafes, flowers and seating) will not be expensive. In addition, if the community and other partners are involved in programming and other activities, this can also reduce costs. More important is that by following these steps people will have so much enthusiasm for the project that the cost is viewed much more broadly and consequently as insignificant when compared with the benefits.

XI. You Are Never Finished. By nature good public spaces that respond to the needs, the

opinions and the ongoing changes of the community require attention. Amenities wear out, needs change and other things happen in an urban environment. Being open to the need for change and having the management flexibility to enact that change is what builds great public spaces and great cities and towns.

For more information on how GSA's Public Buildings Service is applying these principles to improve federal public spaces for their clients and communities, contact Frank Giblin, Director, Urban Development/Good Neighbor Program, at 202-501-1856, or visit the program web site:

www.gsa.gov/goodneighbor

For more information on the Project for Public Spaces, call 212-620-5660, send e-mail to pps@pps.org, or visit their web site:

www.pps.org

For more information on the American Institute of Architects Public Architects PIA, send e-mail to publicarchtects@aia.org.

For more information on the Office of Real Property and their AIA participation, contact Rob Obenreder at 202-208-1824 or via e-mail at robert.obenreder@gsa.gov.



Participation in the APA and FPD has provided an excellent opportunity for an exchange of information between GSA and other Federal, state and local planners. Our contacts with other planners have provided valuable information for our outreach efforts, and operation of programs such as the Governmentwide Real Property Information Sharing program, sustainability, the integrated workplace, etc. For example, when the Army FPD representative became aware of our annual Innovation Awards program, he was able to publicize that information on the Army's website and in their newsletter. Likewise, the Army was a winner of GSA's Real Property Innovation Award in 2001 for their sustainability program, and that information has been shared throughout the government.

The U.S. Department of the Army received the award for developing and implementing a landmark policy to create Sustainable Army Communities. These communities will improve the mission capabilities and quality of life for a worldwide network of over 180 Army bases, serving a population of over one million soldiers, civilians and family members. The seminal Army Sustainable Army Communities Policy directs that the principles of Sustainable Design and Development be incorporated into all actions and decisions affecting Army bases, environmental planning, community operation and infrastructure projects. The Sustainable Army Communities initiative will ensure that there is a systematic consideration of current and future impacts of an activity, product or life cycle decision on the environment, energy uses, natural resources, the economy and quality of life of Army bases.

The goal of the Army Sustainable Communities

Policy is to integrate sustainable design and development concepts into installation planning and throughout the project planning, programming, design, construction, operation, and maintenance process. The Army has a leadership and stewardship role in constructing and operating sustainable environmentally responsible, cost efficient Army communities.

For more information, please contact Mr. John J. Krajewski at (703) 428-6170 or by email at john.krajewski@hqda.army.mil.

APA and FPD hold annual conferences to provide information and educational opportunities. Technical information, such as security, sustainability, environmental information, and public private partnerships are topics that have been covered at both conferences. The Office of Real Property has gained insight into what other government agencies are involved in and approaches they use in resolving issues. For example, at the 2002 FPD conference, the National Capital Planning Commission (NCPC) led a session on security issues and design. At the 2003 FPD conference, the NCPC received the Outstanding Federal Project Award for The National Capital Urban Design and Security Plan. Research and findings by the Interagency Task Force provided the Office of Real Property with information on creating a comprehensive urban design plan that also incorporates security features. Their publication "Designing for Security in the Nation's Capital" is a good resource for implementing security measures without compromising design. Their publication and findings will be shared with the Federal Real Property Council Security Working Group and with other Federal agencies.

Their key findings and recommendations for security in the nation's capital include:

- Keep Pennsylvania Avenue closed to normal city traffic
- Traffic congestion resulting from the above closure can be improved through transportation system management initiatives, such as traffic signal synchronization, intersection improvements, and greater enforcement of parking regulations
- Construct a landscaped, civic space along Pennsylvania Avenue in front of the White House that respects and enhances the historic setting and views of the White House
- Implement a new transit service called a "Circulator," which would permit limited use of Pennsylvania Avenue to allow for controlled and secure vehicular traffic in front of the White House

- Consider construction of a tunnel within the Pennsylvania Avenue or E Street corridors, combined with a Circulator and wider application of transportation system management initiatives
- Street closures should not be relied upon as a primary security measure
- NCPC should prepare an integrated Urban Design and Security Plan for Washington's entire Monumental Core
- The planning and concept design of streetscape, landscape, and security for Pennsylvania Avenue and the Monumental Core should be undertaken by NCPC with one or more nationally recognized urban designers. Project design and construction would be done by an appropriate agency, such as GSA, the National Park Service, or District of Columbia government.

A copy of NCPC's "Designing for Security in the Nation's Capital" can be found on their website at **www.ncpc.gov** as well as additional information.



APA publishes a monthly magazine, Planning, which can be downloaded from www.planning.org and FPD publishes a newsletter, the Network, available at fedplan.org. These are valuable resources for current information on planning and real property issues. For example, information on state and local land use issues provides a useful context prior to Governmentwide Real Property Information Sharing site visits. The Network has had articles on sustainability, which have proven useful to GSA and other Federal agencies. Both APA and FPD maintain web sites that have up to date information, including legislative issues and resources.

Another benefit of our involvement with these organizations is continuance of our liaisons with the organizations, individuals, and political entities directly involved in or affected by federal planning activities. For example, the Office of Real Property has been able to match up people and projects, which has enhanced our role as a Federal information clearinghouse.

For more information on the APA and FPD, please contact Andrea Wohlfeld Kuhn at 202-208-1237 or via e-mail at andrea.kuhn@gsa.gov.

Building Owners and Managers Association (BOMA) International

he Buildings Owners and Managers real property senior and mid-level managers. OGP Association (BOMA) is a non-profit has expanded that relationship by initiating a series international federal of approximately 104 of meetings three times a year with BOMA's top local associations. These associations comprises professional staff and by taking a seat on BOMA's about 18,500 members that own and manage more National Advisory Council. than 9 billion square feet of commercial real property **BOMA's Experience and Exchange** in North America and abroad. BOMA's mission is Report serves as to "Advance the performance of commercial real an effective estate through advocacy, professional competency, industry standards, and research." For more than 20 years, benchmark for GSA has enjoyed a professional collaborative agencies relationship with BOMA. Most noteworthy have been GSA's and BOMA's joint efforts that resulted in the development and implementation of specialized professional training for federal

Building Owners and Managers Association (BOMA) International

governmentwide and the private sector by enabling real property managers and professionals to compare and track operating costs for buildings and facilities to their commercial counterparts. The annual publication is distributed worldwide and promoted within the Federal government as a best practice to highlight the need for, and to identify the specific area of real property operations that demands efficient and effective management. This report also reinforces the growing need to establish, monitor and maintain a creditable and comprehensive real property performance measurement system to help improve the strategic planning and asset management for government and private sector property.

BOMA creates customized and tailored professional training modules for federal agencies and the commercial sector. Training topics and courses can be mixed or matched. An example of customized training is found in BOMA's Boot Camp training. The program is designed for real property professionals, as well as newcomers to the industry. This training opportunity is open to both the public and private sector, and offers the participants professional enrichment in subjects such as: property and building management, leasing and marketing, asset management, and facilities management. The training can be done in-house, and the organization only pays for the specific training that it needs and when it needs it. Course materials are approved for CEU, and are used towards RPA, FMA, CPM, ARM, and SIOR professional designations. BOMA is also testing other forms of training to better support and broaden access to training by public and private sector realty professionals. This is being accomplished through e-seminars and audio

conferences. E-seminars will allow participants to be taught via the Internet in streaming video and graphics (including downloadable workbooks). Participants have one year to complete the course at their convenience. Audio conferences are training sessions provided over an organization's teleconferencing facilities. BOMA can reach an unlimited number of people using real time communication coupled with participant feedback. For those that prefer traveling, BOMA continues to offer to the public and private sector its annual conventions. These are now more oriented to providing educational "best practice" courses in open forum settings. This allows speakers to spend more time addressing and responding to attendees' questions.

BOMA is very effective as a "sounding board" for concepts and ideas presented by both the public and private sector. For example, GSA has worked with BOMA to flush out reform measures to improve the stewardship of government real property. BOMA has strongly supported such legislation and has testified before Congress to urge its passage. In addition, the government and the private sector have an ongoing collaboration with BOMA concerning issues that impact the health and safety of government owned and leased buildings. Examples of the issues discussed include: improving indoor air quality and reducing mold in buildings, prohibiting force access to buildings by telecommunication providers, deregulating electric utilities, prohibiting smoking in and around buildings, and installing and using automated external defibrillators.

For more information on BOMA contact Ron Whitley at 202-501-1505 or via e-mail at ronald.whitley@gsa.gov.

oreNet Global, formed in 2002 from the and add value within their enterprises. merger of the International Development Membership is also open to government agencies. Research Council (IDRC) and the The CoreNet Global membership base is also National Association of Corporate Real Estate comprised of service providers and economic developers, who work in strategic Executives (NACORE), is the world's major partnership with the end-user members. association for corporate real estate executives and related professionals. CoreNet's nearly 3,000 GSA's OGP, end-user members make it the world's largest Office of Real group for corporate real estate executives, or Property, occupiers, who typically run the real estate and began related support functions for companies whose participating primary business is not real estate. They in IDRC in are predominantly senior-level, leading-1997, and has edge practitioners who provide continued leadership and develop since the resources to drive innovation

merger to form CoreNet Global. The Office of Real Property was a finalist for IDRC's global innovation award and made several presentations to its World Congresses. GSA has been even more active since the merger, with Deputy Administrator David Bibb having recently been named as Special Government Advisor to the Board of Directors of CoreNet. The Office of Real Property, in partnership with PBS, has hosted two IDRC Discovery Forums and a CoreNet Discovery Forum in Washington in November 2003. The Discovery Forums are facilitated, case-based discussions attended by senior industry leaders, that explore the major challenges facing corporations and government agencies and how executives and service providers are responding to those challenges.

The Office of Real Property is a "corporate sponsor" of CoreNet Learning, and has joined with PBS to serve as a sponsor and as a major special end user for Corporate Real Estate (CRE) 2010. Launched in the summer of 2003, CRE 2010 is already being recognized as the most ambitious, value-added research initiative ever conducted on behalf of the corporate real estate profession.

In addition to all the leading service providers and GSA, a quality network of North American firms and multinationals have already joined the initiative, including:

Ae	tna
Вое	eing
Cad	dence Design
Cap	oital One Systems
Cis	co Systems
Ern	st & Young
Exx	onMobil
Fide	elity
For	d
Gei	neral Motors
Her	rman Miller
Inte	el
Ma	nulife
Mc	Kesson
Mic	crosoft
Noi	rtel Networks
Ora	acle
St.	Paul Companies
Sur	n Microsystems
SB	C Communications
The	e Hartford
US	AA
Ver	izon
We	Ils Fargo

A short description of CRE 2010 follows:

In the early 1990's, Corporate Real Estate 2000 created a powerful new vision for the corporate real estate industry. Now, almost a decade later, a new vision is emerging. In 2010, the network is the enterprise. It will be flat and will have the capability to tap new resources, develop new products, and deliver services faster and more efficiently than before. The networked enterprise will expand, contract, and leverage its resources in ways that have not been practical in the past, while providing decision-makers with better visibility over their extended operations. At the core of the enterprise will be new ways to think about how and where people work, as traditional boundaries become far less relevant. The Corporate Real Estate 2010 Research and Leadership Development Program seeks to guide organizations and mentor leaders through this transformation.

Already, several of the initiatives in the Office of Real Property owe their existence to information gained from CoreNet and its IDRC predecessor. Among these initiatives are The Integrated Workplace and eReal Estate. The following topics represent just some of the learning that GSA has gained from its participation. All of this information is available on CoreNet's website:

www.corenetglobal.org

Integrated Corporate Infrastructure Management

Interest in this topic began to surface in the late 1990's as progressive firms began to explore new and different ways to improve the efficiency of the workplace and productivity of the workforce.

Today, the term, coined at an IDRC brainstorming session in 1997 in which the Office of Real Property participated, still means different things to different people. But the overall goal is to improve the delivery of services by looking beyond real estate to the nature of work and how and where work is performed. Even though it can take on many forms, integrated infrastructure management typically requires the crossfunctional integration of services such as:

- Information Technology
- Human Resources
- Corporate Real Estate
- Other Corporate Services depending on the structure of the firm and other factors

Based on a number of discussions with leading corporations it is clear that there is a trend toward higher levels of integration in many companies. But it takes on different forms in different companies due to different business needs, management structures, business processes and cultures. In some companies it is delivered though a shared services organization, in others it

is managed by separate corporate infrastructure department, and in others it is managed through a workplace resource function. In the beginning, this was viewed as an organizational issue. Today, most firms view it in terms of cross-functional integration and integrated process management. Compaq Corporation, at a Discovery Forum in Dallas, made one of the most sophisticated presentations on the topic. The magnitude of integration envisioned by Compaq is evident in the description of their desired state that includes:

- Integrated strategic planning
- Integrated business planning
- Integrated capital budgeting
- Integrated infrastructure delivery
- Integrated infrastructure management
- Close physical proximity of corporate teams
- Cross training between support organizations

Disney is already applying this concept to assist them in supporting their studio operations; and Sun's iWork program, Cigna's eWork program and JP MorganChase's Integrated Infrastructure Program are all variations on a common theme that is motivated by a business need to:

 Develop and deliver products and services faster

- Achieve higher levels of productivity and efficiency
- Reduce costs
- Achieve higher levels of customer satisfaction

Corporate Real Estate Technology and the Web

Not too many years ago, web-enabled CRE management was a novelty. While some industry leaders were quick to adopt the web to enable new ways of working, not all firms accepted the concept and many were slow to adopt.

Today, there is little debate about the benefits of web-enabled real estate management and almost all companies are leveraging the web and other technologies to improve their processes and achieve higher levels of efficiency. In fact, web-enabled CRE management has now become an expected competence and a key part of the strategy of most progressive firms -- with specific applications ranging from project management to highly integrated enterprise-wide infrastructure solutions that link actions planned and taken to financial, HR, and higher level performance management systems.

In fact, there is hardly an area within corporate real estate that has not been web enabled but, of course, even the leading firms are not using all the technology that is available today.

Some of the most frequently cited uses of the web include:

- Accessing and analyzing market data
- Accounting and financial management
- Billing and chargebacks
- Conference room scheduling

- Design
- Document and workflow management
- Employee self-service of all types
- Facilities management
- Food and catering
- Lease administration

- Legal
- Portfolio management
- Procurement
- Project management
- Security
- Site selection

Project Prioritization and Justification

Because all firms and CRE departments have limited budgets, most go through some form of prioritization process, carefully selecting where to focus scarce resources. Some of the factors to consider in developing the business case include:

- Cost effectiveness through the elimination of unnecessary steps and low value adding work, often resulting in headcount reduction
- Increased productivity by allowing remaining employees to focus on higher value adding work
- Eliminating redundant databases and processes resulting in better accuracy and fewer errors – resulting in less rework and faster time/speed-to-market
- Reduced liability that can be translated into reduced cost

- Increased speed to market
- Customer satisfaction
- Creating options to do more or execute new capabilities that would not have been possible without the investment to become net ready
- Competitive advantage (or competitive disadvantage of failing to act)
- Alignment with corporate strategy and linkage to specific objectives
- Practical suggestions for thinking about which areas to attack first include:
 - Asset/Portfolio management
 - Conference Room Scheduling
 - Consolidating Databases
 - Construction/Project Management

- Management Reporting
- Planning Initiatives
- Points of Customer Interface -- Service Centers, Help Desks, etc.
- Procurement
- Space Planning and Reconfiguration
- Transactions/Lease Management

Guidelines for successfully launching and implementing major web-enabling initiatives include:

- Secure top management support
- Select strong leader with decision-making authority
- Select dedicated team members (including members from different functions if necessary)
- Identify critical business needs that drive key processes
- Identify key processes and develop standard definitions

As we move into the next generation of webenabled CRE management, the focus now is shifting from implementing specific applications to implementing more integrated solutions that can add even more value to the department and enterprise. The revolution of web has also had a major impact on service providers. In some cases

firms are turning to their service provider partners or other Application Service Providers (ASPs) for assistance, while other companies are requiring their providers to use their systems. But before the CRE industry can achieve the full benefits of the web and related technologies, more work must be done on the development of process and data standards for the industry.

Trends in Outsourcing and Service Delivery

Over the years there has been considerable debate about the pros and cons of outsourcing and the limits of this model. Today, it is clear that there are still mixed opinions on this issue – and the size of the real estate function varies from a single part-time position to departments that have hundreds of full-time employees.

Based on many discussions with corporations around the world it is clear that there are many factors that drive the decision about what and how much to outsource – and there are different types and levels of outsourcing. Clearly cost is a major part of the decision, but even that is debatable. Some of the other factors that are frequently mentioned include:

- Quality
- Consistency
- Scalability of service
- Opportunity cost

- Ability to balance fixed versus variable needs
- Access to a broader range of best practices
- Organizational flexibility

At one extreme, firms, such as PerkinElmer, have one fulltime person managing their entire real estate portfolio though a global alliance with a single strategic partner -- while other corporations, such as Nortel, maintain a small internal staff and manage their assets through relationships with a small number of strategic partners. At the other extreme, some corporations outsource very little and do most of the work internally or acquire what they need through "arms length" arrangements with vendors. And even though SBC maintains a relatively large real estate department to support their 183,000 employees, they in-source the management and budget responsibilities for real estate and out-task almost everything else.

Although there are a range of views on this topic,

most agree that the following activities should be kept in:

- Strategy
- Interface with top management and liaison with key customers
- Financial management
- Process management
- Marketing and communication
- Critical information on the company including its customers, suppliers and employees

Activities that are often outsourced include:

- Interior design
- · Project management
- · Facility management
- Transactions
- Other activities that have a variable component to them

Impact of 9/11 on Workplace Security and Business Continuity Planning

Indeed, these attacks, along with other terrorist activities around the world, have had an enormous impact on business and the role and expectations

of the corporate real estate department. For most corporations, planning and managing for such disasters usually falls within the category of Business Continuity Planning (BCP) but the implications of terrorism are broad as indicated by its impact on the design and

location of facilities, information technology, communication systems, controlled access, security systems, employee training, lease terms, insurance and many other factors.

As stated by one participant at a Discovery Forum in New York, the challenge is how to make employees and facilities safe and secure without interrupting business-as-usual. Although each company is dealing with this differently, Bank of America has been described as a good example of the "next generation" in Business Continuity

Planning. The reason they have been given this title is because they have moved well beyond planning for their critical systems and facilities and have extended their planning to the survival of the enterprise.

"The attacks on the World Trade Center and the Pentagon changed everything –and have created immediate and intense visibility for Corporate Real Estate"

> Cathy Guilbeault Workplace Resource Director Sun Microsystems Inc.

Bank of America, for example, has:

- A clearly defined mission and vision for their BCP activities
- A well defined governance structure that is responsible for developing an enterprise strategy for readiness and crisis management
- Fully functional recovery centers at various locations throughout the Untied States
- Local and regional support teams to provide a first line of support in the event of an emergency

Other lessons learned suggest that:

- Corporations and communities can and must work together in time of crisis
- It is important to have good emergency response plans and training in place for all employees
- Pre-planning for disasters must be institutionalized
- These plans should be flexible enough to respond to all forms of disaster

- Emergency response plans should include:
 - A security committee for buildings with plans for each building
 - Plans for coordinating and communicating with the local fire, police, and other emergency response and disaster relief agencies
 - Plans for locating and communicating with employees – leveraging technology and other resources as necessary, but not being too dependent on any single form of technology
 - Lists of key people and contact information
 - Prioritized list of who is in charge and authorized to make decisions
 - Strategy for centralized mobilization of resources
 - Checklists that are readily available for all personnel
 - Plans for communicating with landlords
 - Clearly defined role for service providers if appropriate

Plans for Continuing Business Operations should include:

- Back-up space in city or region – including the possibility of sharing space with other corporations
- Back-up data and IT capabilities
- Back-up plans for remote work and telecommuting

Related topics that deserve more long-term attention include:

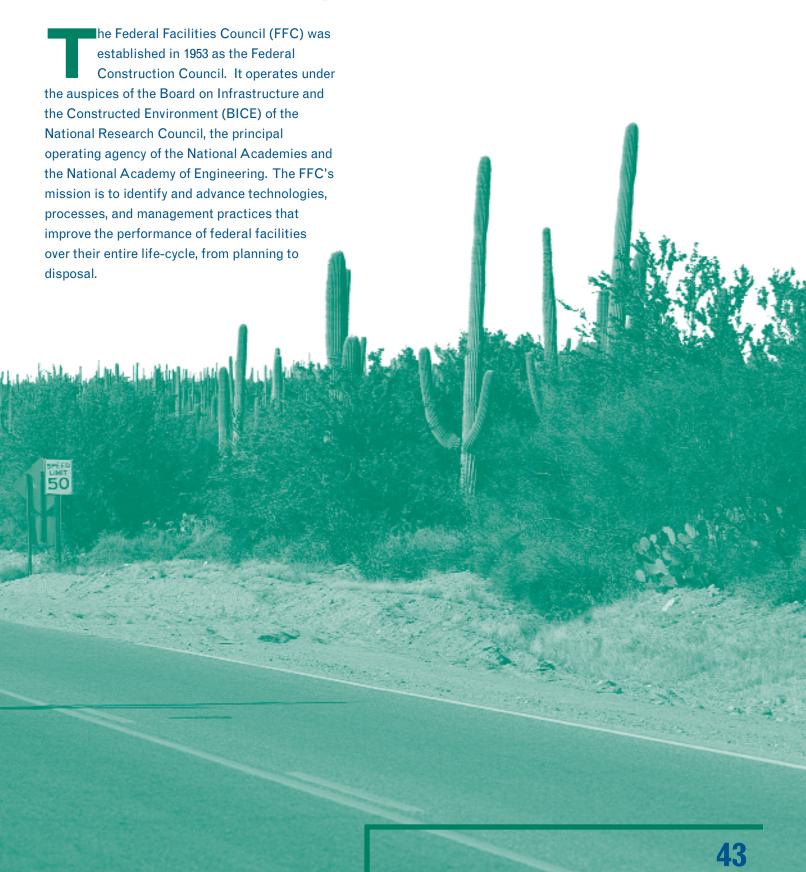
- Building and Workplace Design
 - High rises
 - Icon buildings
 - Lobby design
 - Designs for evacuation including location and design of stairwells, etc.
 - Location of executive offices
 - Parking strategies

- controlled access, i.e. greater use of technology and other techniques to increase security and control access
 - People hands, fingers, faces, eyes
 - Physical goods including mail delivery, handling
 - Electronic actions that can destroy databases, disrupt communications, access financial systems

- Telecommuting and Remote Work
 - Mobile work
 - Multiple workplace options
 - Emergency power, access to water and other utilities

For more information on CoreNet Global, please contact the Office of Real Property at 202-501-0856 or visit the CoreNet Global web site:

www.corenetglobal.org



To achieve its mission, the FFC:

- Develops and disseminates facilities-related information through networking, conferences, workshops, and studies
- Provides a forum to identify government-wide issues regarding facility planning, design, construction, operation, maintenance, and management
- Convenes standing committee meetings to promote networking and information sharing among sponsor agencies
- Deploys its findings through its reports published by the National Academy Press

The FFC is a cooperative association of 24 federal agencies with interests and responsibilities related to all aspects of facility design, acquisition, management, maintenance, and evaluation.

Federal agencies that sponsor the FCC include:

Department of the Air Force

Department of the Army

U.S. Army Corps of Engineers

Department of Commerce

Department of Defense

Department of Energy

Department of Homeland Security

Immigration and Naturalization Service

Department of the Interior

Department of the Navy

Department of State

Department of Veterans Affairs

General Services Administration

Natl. Aeronautics and Space Administration

National Institutes of Health

Natl. Institute of Standards and Technology

National Science Foundation

Smithsonian Institution

U.S. Coast Guard

U.S. Postal Service

Through its affiliation with the National Academies and the National Research Council, the FFC provides a unique forum for federal agency staff to work with their counterparts in other agencies to identify and resolve facilities-related issues of mutual concern. FFC sponsorship also provides access to:

- The full range of resources of the National Academies and the National Academy of Engineering
- Outside expertise through guest speakers and symposia
- Private sector experience and expertise through industry and professional society liaisons

Standing committees and ad hoc task groups composed of architects, engineers, other technical specialists, and facilities program managers from the sponsoring federal agencies perform much of the FFC's work. FFC standing committees may also include liaisons from private industry trade associations, professional societies, and standards organizations with an interest in facilities engineering and management. Committee Chairs and Vice Chairs are elected annually by the committee members and may serve multiple terms.

The six current standing committees are:

- Design and Construction
- Operations & Maintenance
- Organizational Performance & Metrics
- Project & Acquisition Management Committee
- Emerging Technologies
- Physical Security and Hazard Mitigation

Each standing committee is responsible to:

- Plan and organize symposia, workshops, conferences, briefings, and lectures
- Assemble information on the policies, practices, and experiences of the participating agencies
- Maintain contacts with private sector organizations to effect regular interchanges of information and views on matters of common interest.
- Recommend studies and projects to be conducted by the FFC.

Stan Kaczmarczyk from the Office of Real Property is the current Chair of the FCC Standing Committee on Organizational Performance & Metrics. This committee addresses policies and issues related to the organizational structure and administration of federal facilities management agencies and their programs with the objective of improving effectiveness.

Stanley Langfeld from the Office of Real Property is a member of the FCC Standing Committee on Emerging Technologies. This committee addresses policies, issues, and concepts related to state-of-the-art technologies for the various aspects of Federal real property asset management. The goal of the Committee is to work with Federal agencies and their programs to improve the productivity and effectiveness of Federal real property inventory.

Through its sponsorship, GSA has participated in numerous research efforts with the FFC. Federal Facilities Beyond the 1990's published in 1997 by the FFC focuses on the need for quality facilities to allow agencies to meet their missions in an era of ever dwindling resources. The book summarizes a FFC symposium with speakers from the public sector, the private sector and academia sharing their experiences in reshaping their organizations to provide quality services despite fewer resources.

The report Capital Asset Management: Tools and Strategies for Decision Makers summarizes the proceedings of a conference held in September 2000. The purpose of the conference was to highlight strategies and ideas for capital asset

management so that federal and other public agencies can improve decision making for facilities investment.

Emerging Information Technologies for Facilities
Owners: Research and Practical Applications
summarizes the proceedings of a symposium held
in October 2000. Building industry stakeholders
from government, the private sector, and academia
helped to identify information technology trends,
initiatives, research needs, and opportunities for
collaboration.

Sustainable Federal Facilities: A Guide to Integrating Value Engineering, Life-Cycle Costing, and Sustainable Development demonstrates how federal agencies can use value engineering with life-cycle cost analysis to support sustainable design for federal facilities. The framework is organized around the sustainable design objectives of Executive Order 13123, Greening the Government Through Efficient Energy Management.

For more information on the Federal Facilities Council, please contact the Office of Real Property at 202-501-0856 or visit the FFC web site:

http://www7.nationalacademies.org/ffc

he Federal Real Property Association tries to achieve mutual education, (FRPA) was created in 1985, based on encouragement, and cooperation for a better recommendations of the Real Property understanding between the public and private Task Force of the President's Cabinet Council on sectors regarding the management of Federal Management and Administration. Deputy real property. It is an inter-department Administrator David Bibb was a member of the and inter-agency network of people steering committee that formed the FRPA. The interested in FRPA was considered necessary to promote the effective and efficient professionalism, expertise, and interaction among real property professionals in both the public and management of Federal real private sectors. property, a The FRPA is designed to create, develop, network that and implement improvements to the unites the management of Federal real public and property as a national asset. Moreover, this organization

private sector while retaining its non-profit status.

The purpose of the FRPA is to improve management of real property, promote the highest standards of ethics, facilitate the exchange of ideas among members, identify educational needs and opportunities, make objective analysis and evaluations of real property issues, and foster professional management practices. Luncheon meetings with a guest speaker discussing issues important to members, building tours and committee meetings are scheduled throughout the year.

An FRPA training conference is held annually to educate and train members in the latest developments in the real estate industry and to provide networking opportunities for both the federal government and private sectors. A recent conference theme was "Building for the Future" and participants had the opportunity to tour the progress of the Pentagon building renovations that began before September 11, 2001. As with the rebuilding of the Pentagon, individuals were able to build on their educational skills, gather information on new technology, and network with the many professionals who attend the annual conference.

The Architect of the Capitol spoke about some of the issues it is facing. Heavy equipment has been moved in, preliminary site work is under way, and the Architect of the Capitol has awarded a construction contract for the foundation of the 580,000 square-foot visitor's center, which will require a 60-foot-deep excavation of the plaza on the Capitol's east front.

As the nation has grown in size and complexity, the Capitol has responded with architectural additions and technological advances. The Capitol itself has been built and rebuilt, extended and domed, re-domed and extended again. From the conversion of gas to electric lighting in the 1890's, to the implementation of modern computer technology, the Capitol has attempted to keep pace. The Architect of the Capitol is helping to answer the need by planning the stages of the new Capitol Visitor Center that will be built over the next three years. Since its inception, the design for the Visitor Center has been and will be guided by four fundamental goals:

- Security
- Visitor Education
- Visitor Comfort
- Functional Improvements

When completed, the Visitor Center will welcome millions of visitors in a secure, educational, accessible and convenient environment, yet will respect the past by highlighting the Capitol and revitalizing its historic setting.

Another one of the topics discussed was Facility

Security Assessments. Some of the lessons learned are top security threats and management issues facing corporate America. The top 10 security concerns, based on a list from Fortune 1000, are:

- Workplace Violence
- Business Interruption/Disaster Recovery
- Terrorism (Global and Domestic)
- Internet/Intranet Security
- Employee Selection/Screening Concerns
- Fraud-White-Collar Crime
- Unethical Business Conduct
- General Employee Theft
- Property Crime (vandalism)
- Drugs/Alcohol in Workplace

To help deter many of these issues it is important to have a collegial environment and security. Focus on performance and protection, have easy access and control for individual safety and security and business continuity. Ensure the continuity of business operations, improve risk mitigation, protect people, and raise personnel security confidence. It is important to complete an assessment and set goals, and have an aesthetically pleasing and deterrence atmosphere.

Below are some additional presentations from the

last training conference:

- Build Green
- Buying Green Products
- Cooperative Administrative Support Units (CASU)
- E-Real Estate
- Facilities Infrastructure
- Geographic Information System in the Private Sector
- Greening Your Leased and Federal Buildings When You Have No Money
- GSA Real Property Legislation Proposal to Reform the Federal Property and Administrative Services Act of 1949
- Innovative Workplace
- Legal Issues on Leasing
- Managing Real Property or Asset Management
- Market-to-Market, Overview of Re-structuring and Re-packaging Loans
- Mission Readiness Through Innovative Facility Management Practices
- Regulatory Program and Worldwide Inventory
- Smart Growth and Federal Real Property
 Management

- Technologies for Facilities Management
- Telework Resource Center and Bike to Work
- The Business Case for Sustainability

Both the federal government and the private and public sectors may also choose to acquire exhibit space at the conference. Below are Exhibitors that participated at the 2002 conference:

- BearingPoint (formerly KPMG Consulting) and Hansen InformationTechnologies
- General Services Administration, Office of Business Operations
- General Services Administration, Office of Real Property
- PEPCO Energy Services
- Spaulding and Slye
- Vanderweil Engineers

Organizations share new initiatives, best practices, and collaborate with each other. Many values of participating and belonging to the Federal Real Property Association, will help associates whether private, public, or government associates continue to:

- Network
- Facilitate discussions of mutual problems and an exchange of ideas and experiences
- Participate in the annual conferences
- Foster cooperation, support and friendship among members and other federal agencies and the private sector

Those interested in joining the Federal Real Property Association can visit the website and access and download the membership form:

www.frpa.us

For additional information on FRPA contact Rebekah Pearson on 202-208-1850 or via e-mail at rebekah.pearson@gsa.gov.

he MIT/Gartner Group Consortium on
The Evolving Workplace Industry and Its
Impact on Real Property concluded its
work in December 2001. This GovernmentUniversity-Industry study explored and analyzed
five key issues and attempted to integrate them
as effective new business models. Issues
targeted for consideration were:

- E-Business implications for workplace making (business model and overall IT impact)
- Workplace space and cyberspace design (customer needs)
- New service offerings and outsourcing (services)

- Organizational trends (supply)
- Business metrics (performance)

The Central Behavioural Theme emerged as agility at work in communities of self-selecting organizational units based on



something in common exhibit these key traits:

- Individually self-selecting (idea aligned)
- Self-emerging leaders (without being appointed)
- Thought leaders (versus managers)
- Team inclusive (to attract new people with ideas)
- Network efficient (as news, knowledge, and information travels very fast)

The Agile Workplace has its focus on the work itself – not on the technology, the buildings, or the organizational chart. This new environment can be highly motivating for people but only if executives engage it properly. The study calls for "Leaders, not Managers" as forces at work in agile workplaces are usurping the organizational chart (corporate structure and employee position). A new workforce understands the benefits of agility (telecommuting, task forces, instant-anywhere communications) but the company-wide view of this new social order is still emerging in the new workplace.

The Agile Workplace was issued on March 18, 2002, and is available for purchase on-line from the Gartner Group (*www.gartner.com*) or by contacting Row Selman at MIT by e-mail at rowsel@mit.edu or phone on 617-253-7494. The key findings note that "change" is a recurring feature in developments in the business economy,

new technologies, and new attitudes about what can be accomplished by workplace development. All suggest significant change in the workplace industry in the years ahead. The five-year forecast includes twelve emerging practices of infrastructure management likely to be mainstreamed (excerpted from the complete report).

1. Say goodbye to the corner office.

Traditional notions of the workplace as a fixed workstation in a fixed office, at a fixed address, will be transcended. Work will move to wherever it can best be accomplished, regardless of who "owns" the space or its supporting infrastructure. The ability to work in cyber- and physical space will be critical to successful work.

2. Workplace infrastructure must be agile.

Workplace agility will be the highest priority of infrastructure design. Design will aim for workplaces that are capable of responding quickly to mission changes, external and internal events, and organizational learning.

3. Workplaces will become more "people centric."

Workplace-making will move beyond an alignment with business strategy and become intertwined with the continuous improvement of work. Work and the workplace will be co-invented with the goal of accommodating the diverse needs of individuals and teams.

4. The network will define the workplace.

The workplace portfolio will transform itself from a collection of properties to a network of places and electronic connections. Organizations will draw on an increasing range of funding and servicing options as they acquire, manage and service their real estate.

5. Total cost of ownership will be discovered.

Corporations will take a holistic view of the total cost of occupancy (or ownership). They will rely on total cost calculations to reveal the true cost of provisioning workers — irrespective of funding source — and to make space, technology and outsourcing decisions.

6. Infrastructure will be designed collaboratively.

Infrastructure design and management will become the responsibility of multidisciplinary groups. Separate areas of expertise will continue to exist, but they will be drawn out of their silos and harnessed to collaborative efforts.

7. Outsourcing will widen.

A growing number of transactional and tactical functions will be outsourced, freeing infrastructure managers to direct their energies toward workplace strategies. Partnerships and alliances based on transparent service levels will

become the norm as partners work together to innovate and add value-based features.

8. Best-in-class workplace suppliers will emerge.

Enterprises will work with a handful of preferred workplace suppliers, each representing best-inclass service in particular categories. Corporate clients will expect these chosen vendors to collaborate and share information. Corporate clients or service providers will package facilities management, asset management and IT services.

9. The workplace learns risk management.

Decisions regarding workplace portfolio structure and outsourcing service arrangements will be based on an analysis of financial, property and business risks. Sophisticated tools and processes will be used to determine which risks should be transferred and which can best be managed by the organization itself.

10. The web meets enterprise resource planning.

Web-based tools that integrate HR, IT, facilities management and asset management will mesh with enterprise resource planning, customer relationship management and supply chain management systems. These tools will be used by enterprises to manage information flow between groups, and will underpin service provider and corporate activities.

11. Service providers will drive change.

Service providers will help drive improvements in corporate infrastructure capabilities and strategy. New workplace products will help enterprises merge cyber- and physical spaces in ways that enable work to move seamlessly between different domains. Many of these products will become as commonplace as the Web and cell phones.

12. Leaders will harness the power of the workplace.

Corporate leaders will recognize the power of an infrastructure strategy to enable continuous work improvement. They will work with infrastructure managers to review and re-balance their portfolios to meet changing business needs and to address issues of capital allocation and risk management.

These emerging practices are neither radical nor

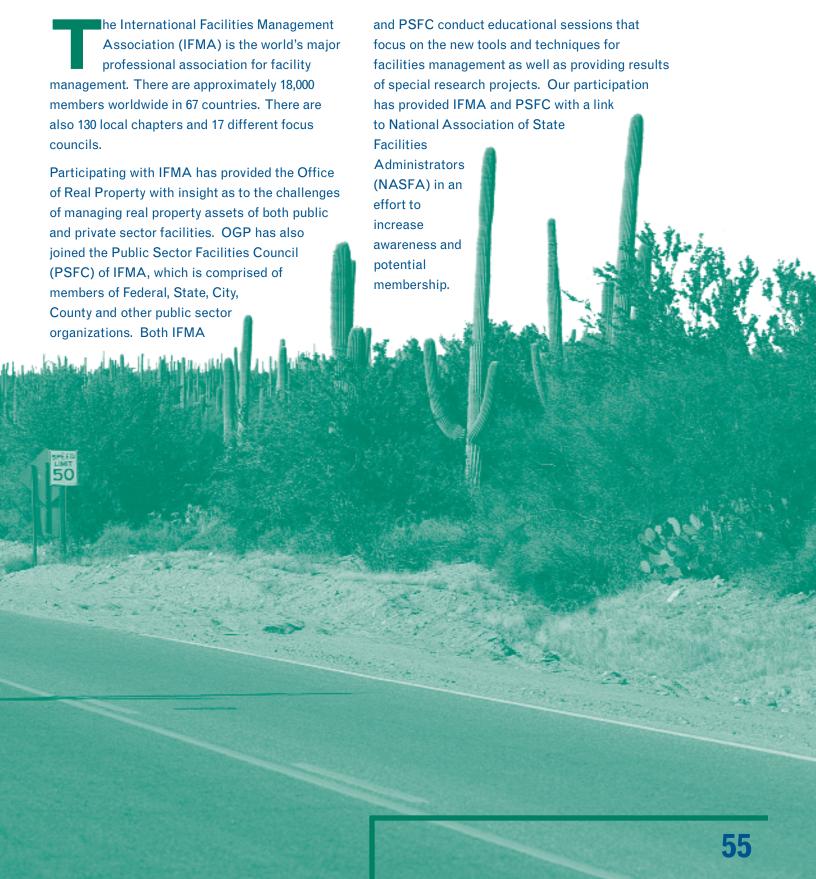
entirely new. Nevertheless, few enterprises have adopted all or even many of them. However, this will change in the near-term for the compelling reason that they serve basic corporate needs: for maximum asset utilization, for work enhancement and for agility. The challenge of adopting these practices will fall equally on the managers of physical and IT assets, and the many people who design, direct and do the work of the enterprise. Which of these groups will lead will be less important than having each of the three groups involved. Working together, they will build and operate more productive and agile workplaces.

Twenty-two companies and GSA joined the project bringing rich IT and corporate real estate backgrounds to the investigation to test views about current developments, understand factors that make organizations change-ready, and to speculate on how the future of the workplace might unfold in coming years.

This collaboration included industry sponsor partners Sun Microsystems, Cisco Systems, Hewlett Packard, British Telecomm Group, AT&T Wireless, Jamcracker, Capital One, Cigna, Cushman and Wakefield, CoStar Group, Interior Architects, Johnson Controls, Procter and Gamble, Liberty Property Trust, Peregrine Systems, Regus, Teknion, Trillium, Buro Happold, Urban Media Communications, eRoom Technology, Takenaka Corporation and the General Services Administration.

For more information on The Gartner Group/MIT Consortium, please contact Mike Atkinson at 202-219-0843 or via e-mail at michael.atkinson@gsa.gov. ■

International Facilities Management Association



International Facilities Management Association

Our association with IFMA and PSFC has enabled the Office of Real Property to identify agency contacts to assist in the Governmentwide Real Property Information Sharing Program (GRPIS) program to establish liaison relationships with representatives from state and local government real property organizations.

Additionally, we have been able to effect information exchanges and provide results of OGP studies in the areas of Federal warehousing/ storage trends, Innovative Workplace,
Sustainability, wireless antenna placement on public lands, best practices, and other initiatives of the Office of Real Property. OGP is an active participant in the PSFC as a representative of the Strategic Planning Committee both during conference calls and meetings. In the past, OGP has partnered with a representative of the Canadian government to present a program on innovative workplace alternatives.

Based on the Office of Real Property's recommendation, a representative of Mantech Technologies presented a free training session on

Fraud in Building Construction Materials at the Spring meeting of the International Facilities Management Association's Public Sector Facilities Council in April 2003.

Membership in the PSFC's Strategic Planning Committee will help focus the role and future goals of the Council. We are working closely with the PSFC President to target professionally based real property related publications that have been identified as "must reads" (via a real property management survey) to increase participation and membership in the organization.

The PSFC is nearing completion of its Good Practices website to which OGP has provided many examples; i.e. Best Practices Special Edition of Policysite and many of the Best Practices identified during GRPIS site visits. The findings of the Best Practices in State Government's report will be included.

For more information on IFMA or PSFC, please contact Sheldon Greenberg at 202-501-0629 or via e-mail at sheldon.greenberg@gsa.gov.



The following Federal agencies are also corporate ITAC members:

- Department of Agriculture
- Department of Defense
- Department of Education
- Department of Interior
- Department of Justice
- Department of Labor
- Department of Treasury
- General Services Administration

Wendell Joice and Billy Michael from the Office of Real Property serve on the ITAC Board of Directors, which provides oversight and long range planning for the organization. The President of ITAC is Tim Kane, whose e-mail address is tim.kane@kineticworkplace.com. The ITAC website is:

www.workingfromanywhere.org

Participation in ITAC has provided the opportunity to assist in planning and implementing all of the council's activities and preparing much of the information shared with the global public. International; Federal, state and local government affiliates; officials in academia; and the business community consider GSA a preeminent leader in the teleworking field. GSA and ITAC promote a holistic approach to

workforce and workplace planning that combines teleworking, sustainability, and integrated workplace principles throughout the world.

During the past several years ITAC has sponsored educational activities in Seattle, New Orleans, Kansas City, and New York City. Key topics that were addressed during these conferences included:

- Technology Tools, Security, and Solution for Telework
- Federal Agency Case Studies/Lessons Learned
- OPM/GSA Perspectives, Visions, and Answers to Questions.

ITAC has partnered with the International Facility Managers Association (IFMA) to conduct several conferences of global scope in most of the cities listed above. Thousands of persons from around the world have been educated about teleworking policies, practices, and processes by the council.

ITAC and the Metropolitan Washington Work/Life Coalition sponsored the Metropolitan Washington Work/Life Coalition Conference in December 2002. The keynote speaker was the Editor-in-Chief of Working Mother Magazine, which annually recognizes the 100 Best Companies offering model worklife/family-friendly programs, practices, and policies. A complete list of the winners may be found at:

http://www.workingmother.com/list.shtml

Telework Resources: www.workingfromanywhere.org

ITAC's first Agency Special Interest Committee (ASPIC) webinar was conducted via simultaneous audio and visual (net) broadcast technology in January 2003. Twenty-two Federal, state, and local agency representatives attended this meeting to learn more about free consulting and telework start-up or expansion training services available for employers in the Phoenix and Denver areas. Agency representatives learned about various public and private sector telework studies, and received tips on how to market telework programs to top and mid-level managers.

ITAC Agency Special Interest Committee

ASPIC members had the opportunity to hear about programs to assist organizations on both coasts. "East to West Side Stories: Making Telework Happen from Coast to Coast" featured Barbara Bonnem, Telework Program Specialist from Oregon's Office of Energy and James Lush, Project Manager from Telecommute Connecticut. Bonnem spoke about the state agency telework mandate in Oregon, the Business EnergyTax Credit for telework. Lush discussed the statewide initiative assisting Connecticut employers with a full menu of free telework consulting services.

Managing Telework

An Organizational Guide to Telecommuting - George
M. Piskurich / Paperback / Published 1998

The Distance Manager: A Hands On Guide to
Managing Off-Site Employees and Virtual Teams by
Kimball and Maureen Fisher (McGraw-Hill, 2000)

Managing Telework: Strategies for Managing the Virtual Workforce (Wiley/Upside Series) - Jack M. Nilles / Published 1998

Managing the Home-Based Worker: How to Hire, Motivate and Monitor Employees Who Work at Home - Phillip E. Mahfood / Published 1992

Work Naked: Eight Essential Principles for Peak
Performance in the Virtual Workplace by Cynthia
Froggatt (John Wiley and Sons, Inc. 2001)

Virtual Office and Mobile Working

Free Agent Nation: How America's New Independent Workers Are Transforming the Way We Live by Daniel H. Pink (Hardcover - May 2001) Warner Books

Home Office Know-How by Jeffery D. Zbar, (June 1998) Upstart Pub Co

The Home Office Solution: How to Balance Your Professional and Personal Lives While Working at Home - Alice Bredin, Kirsten M. Lagatree / Paperback / Published 1998

New Workplaces for New Workstyles by Marilyn Zelinsky (McGraw-Hill, 1998)

Safe @ Home: Seven Keys to Home Office Security, Jeffery D. Zbar (Paperback) May 31, 2001) First Publish LLC

Additional Telework Related Information

The U.S. Office of Personnel Management (OPM) offers guidance on "Official Duty Station for Location-Based Pay Purposes"

See: http://www.opm.gov/oca/pay/HTML/Official_Duty_Station.asp

The Equal Employment Opportunity Commission (EEOC) offers guidance on Work At Home/Telework as a Reasonable Accommodation"

See: http://www.eeoc.gov/facts/telework.html

OPM offers guidance on Dismissal or Closure Procedures for Teleworkers

See: http://www.opm.gov/oca/compmemo/dismissal.asp

"May Employees Earn Credit Hours During Excused Absence, Such as Hours when they are Excused from Work because of a Weather Emergency?"

See: http://www.opm.gov/oca/WORKSCH/HTML/Cred_hrs.htm#Excused%20absence

OSHA provides guidance on Home-Based Worksites.

See: http://www.osha.gov (Search on Telework.)

"Telecommuting Requires Topnotch Performance Management"-by OPM:

See: http://www.opm.gov/perform/articles/2001/win01-1.htm

Interagency Governmentwide Policy Review on Telework and Telework-Related Issues" by the Interagency Telework Issues Working Group, Co-led by the GSA and OPM:

See: *http://www.gsa.gov/telework* (Select *Telework Program*, then go to the right sidebar and select *Interagency Telework Issues Working Group Report* under *Publications*.)

"Final Report on Technology Barriers to Home Based-Telework" prepared for GSA by Booz, Allen and Hamilton

See: http://www.telework.gov/IT_Report/index.asp

For more information on ITAC contact Billy Michael at 202-273-4663 or e-mail to william.michael@gsa.gov.



MATAC's *Business Continuity Through Telework and Virtual Officing* symposium was held in April 2002. The following presentations were made during this event:

Pentagon Facilities Crisis: Terrorist Attack and Operational Recovery

This presentation focused on how the Pentagon responded to continue operations after the terrorist attack of September 11. The presentation detailed how alternative work environments, work at home and telecenters, were used to get the Department of Defense offices functioning after the crisis. The presentation also provided issues that were addressed and the possibility of using telework to respond to future crises. Some suggestions for maintaining continuity of operations during emergencies from the presentation include:

- Pre-arrange backup sites, alternative workplaces, collection/storage sites, or capabilities to assure critical functions can be carried out.
- Routinely rotate mid-level managers and employees to telework centers outside a designated perimeter to practice for immediate resumption of duties.
- Determine what environments are feasible for employees to travel to alternative sites during chemical, biological, or radiological attacks.
- Prepare large scale and small scale plans to support regional and national disasters. These
 plans should include the use of mobile, home-based, and telework center capabilities for
 employees who cannot travel to crisis centers.
- Pre-arrange back-up contracts with GSA and others for alternative security, telephones/computer connectivity, transportation, and other general services.
- Invest in the maintenance of all resources needed for continued operations during emergencies.

The Department of Defense noted that five percent of the displaced employees have continued to telework successfully on an ad hoc basis.

Washington Metropolitan Telework Centers

The presentation gave an overview of the telework centers in the Washington, DC metro area. The presentation covered the typical set up of a workstation at the telework center, as well as profiles from current users.

Technology Barriers and Solutions to Federal Home-Base Telework report was presented at the MATAC meeting in May 2002. OGP and Booz, Allen, Hamilton prepared the report. Data was collected from 10 agencies, about 2,400 teleworkers and 900 managers. Case studies were collected from 8 locations throughout the country. The overall findings suggest that technology alone does not present a barrier to telework. However, the task of obtaining funds to properly equip teleworkers, the volatility of the security, the lack of coordination between information technology professionals and telework coordinators, and network connectivity issues are major challenges.

The final report recommended the following:

- Telework must be endorsed by Senior Management to be successful.
- Information Technology organizations must be fully engaged during the early stages of telework planning.
- As telework expands there will be increased need for higher capacity broadband residential services.
- Information security assessments must be conducted during the early stages of telework planning.
- The most successful telework programs place great emphasis and investment on manager and employee teleworker training.

The final report is available at website - www.telework.gov or www.gsa.gov/telework.

MATAC held a seminar entitled **Using Telecommunications Tools to Effectively Manage Telework** with presentations from EEOC, Cisco and Citrix. The highlight of the EEOC presentation was their cost model showing that frequent telework could save millions in real estate costs. The EEOC Office of Inspector General (OIG) reviewed potential costs and benefits of frequent telework at four EEOC field offices and determined the following:

- Real estate (GSA rent) is the largest infrastructure component (\$30 million) and 10% of the EEOC budget
- Isolated work tasks of most attorneys and investigators were well suited for telework
- Distinct and thorough training modules for managers and employees were doable and inexpensive
- Portable laptops, docking stations, internet access, and long distance service were available/accessible and less expensive than real estate
- Implementation of telework at four field offices is projected to save (\$1 million) during the first five years of implementation

The *Cisco and Citrix presentations* centered around the availability of many state of-the-art devices, work stations, hardware and software that provide flexible application access to customers on demand. They showed smart card applications to improve and simplify security challenges that may be necessary in environments where passwords alone are not enough. Each company exhibited products that propose to do the following:

- Quickly integrate new and acquired offices.
- Provide seamless, reliable, and secure access applications over any type of connection.
- Give users real time access to information.
- Ensure centralized control of processes and locations.

Security Ramifications of Telework – Key topics of discussion were the impact of telework on IT infrastructure security, assessing infrastructure, people and virtual security inside and outside the organization, and security challenges posed by remote access and the solutions that can help secure teleworkers' sensitive communications and data.

The discussions about asset, data, and personal security focused on practical measures to deter theft and the recommended use of personal computer memory cards. One of the interesting questions raised was, "Where is the #1 place laptops are stolen?" Surprisingly, most laptops are stolen from men's rest rooms. Most of the common sense measures, such as, never check laptops as luggage, label all components and keep serial numbers in a separate location from equipment should be incorporated into agency policies and training modules.

Telework coordinators should request that CIO's make threat, risk, funding, and help desk assessments during the early stages of telework planning. Some of the additional security ramification recommendations were:

- Use government owned systems, standardized hardware, software, and connectivity to reduce security risks.
- Use VPN, standardized firewalls, and assessment tools.
- Help desk should be provided at home and central office.
- Office and home access capabilities should be identical.
- All data should have backup storage capability.

The discussions emphasized that although security is a major challenge there are a multitude of solutions currently available to teleworkers.

For more information on MATAC, you may contact the MATAC President, PamTucker at 410-252-5782. The MATAC website is *www.dctelecommute.org*. You can also contact Glenn Woodley at 202-273-4667 or e-mail to glenn.woodley@gsa.gov.

National Association of State Facilities Administrators



National Association of State Facilities Administrators

Participating with NASFA has provided the Office of Real Property with insight as to the challenges of managing the real property assets of the state governments. NASFA's weekly newsletters contain articles that are of interest and both relate and are transferable to Federal programs. For example, a recent newsletter had articles entitled "Real Estate Industry and Federal Homeland Security Officials Announce Formal Partnership" relating to a public-private partnership to help protect U.S. real estate assets against potential terrorist attacks.

Our association with NASFA has enabled OGP to identify several leading state real property organizations for interviews during our

retooling efforts for the Federal Real Property
Profile project. Interviews with representatives
from the States of New York and California were
instrumental in identifying pertinent data elements
for the new Federal real property composite.

In addition, the Office of Real Property has taken the opportunity to establish liaison relationships with state representatives that support a wide array of OGP programs. This has permitted the Office of Real Property the opportunity to promote OGP's programs and initiatives and disseminate pertinent reports and studies to state level real property professionals. The Office of Real Property assisted the Washington State Department of General

Services with indoor air quality issues. The
Office of Real Property has developed
other liaisons in Georgia,
Washington, New Mexico

National Association of State Facilities Administrators

and Texas and will expand our sphere of influence as the opportunities present themselves.

Our association with NASFA was critical in developing GSA's Best Practices in Real Property Management in State Governments report. NASFA provided input into our identification of best practices at the state level. The Office of Real Property hopes that these best practices will inspire managers at all levels of government to take a new look at their asset management practices and enhance or perhaps develop new management approaches.

The study was presented as a panel discussion at the annual NASFA conference in Overland Park, KS, in June 2003. State representatives from Utah and Missouri were part of the panel discussion, and representatives from all states participated in a roundtable discussion.

The report is available on the GSA website:

http://www.gsa.gov/statesrpbp

Any questions concerning the study or requests for hard copies should be directed to Andrea Wohlfeld Kuhn at (202) 208-1237 or andrea.kuhn@gsa.gov.

The following states were chosen as exemplars in the following study areas:

- Acquisition and Construction (Maryland, Minnesota, Utah)
- Operations and Maintenance (Michigan, Missouri, Utah)
- Web-Enabled Software
 (Texas, Washington)
- Public-Private Partnerships (Arizona, Washington)

National Association of State Facilities Administrators

At the NASFA Conference and Trade Show there was a presentation by Mantech Technologies on counterfeit building construction materials that are being used throughout the construction industry.

After the presentation, the Office of Real Property discussed the mission of the Office of Real Property and some of our efforts in the enhancement of the Federal government's real property assets and programs. As a result, Mantech Technologies agreed to provide cost free training on fraud in

building construction materials to the
Governmentwide Real Property Information Sharing
(GRPIS) Front Range Forum and the New Mexico
Property Councils. Mantech Technologies also
presented at the Spring meeting of the International
Facilities Management Association's Public Sector
Facilities Council in April 2003

For more information on NASFA, please contact Sheldon Greenberg at 202-501-0629 or via e-mail at sheldon.greenberg@gsa.gov.

he WorkPlace Consortium (WPC) is a of the workplace in the productivity of group of corporate real estate executives organizations. Recently, a WPC member company from various Fortune 500 companies. was creating a new mission statement for its Member companies represent the financial, corporate real estate organization. The company technology, retail, and research sectors. GSA and quickly polled the other WPC members Public Works and Government Services Canada for their corporate real estate are the only public sector members of the WPC. organization's mission and The group pools the resources and knowledge of vision. managers and researchers to investigate the role

The results of this quick survey revealed that the real estate organizations in most of the companies are shifting focus from providing a workspace at the lowest cost to a work environment that:

- Increases the productivity of the worker, thus improving the competitive advantage of the company as a whole
- Incorporates technological advances into the workplace
- Promotes innovative and alternative work environments

Most of the companies have gone through the process of squeezing down the size of the cubicle as much as possible. They realized that after a certain point the employee productivity lost surpasses any reductions in the real estate costs. They are also incorporating innovative work arrangements, such as telework and hotelling. The reasons for implementing these arrangements vary from reducing the size of the inventory to balancing the employee's work life situation. Companies are also implementing the latest technology in telecommunications and information technology to allow their workers to be more productive and work anywhere at any time.

Another recent survey asked if companies had surveyed the percentage of unoccupied workstations on an average day. Several companies responded with a range of 20 to 50 percent of the workstations assigned to an

individual were unoccupied at any given time. Most companies responded with 30 percent of workstations unoccupied. While most companies conducted walkthroughs of the space to determine the figure, one company developed an "electronic bed check" where it could determine if someone was in the cubicle based on keystrokes or computer mouse movements throughout the day.

No company had taken the next step to break out the unoccupied workstation statistic to determine what portion of the employees were teleworking, on travel, or in a meeting away from the workstation.

Other ad hoc surveys from WPC members have included:

- Policies on:
 - Executive dining rooms
 - Maternity nursing rooms
 - Pets in the workplace
- Computer aided facility management and real property information systems
- Strategic planning for field office operations and locations
- Data warehousing
- Methods to determine space utilization
- Development of leadership/learning/training centers
- Flexible work environments

The WPC has quarterly symposia that are hosted by one of the member companies. There are a series of presentations that are centered on a common theme. This past year the symposium presentations have included such topics as e-real estate, performance measurement, and collaboration between the real estate, information technology, and human resources organizations in a company. Several WPC members discussed a partnership with CoreNet to develop a set of web enabled real estate management tools. The project is unique in that the group has participation from consultants, end user companies, service providers, and suppliers and vendors. The group hopes to establish a common set of standards to guide the development of the e-real estate tools in the future.

Each year the WPC conducts a benchmark survey of its 24 member organizations. In addition to the usual financial and space standard sections, the WPC benchmark survey queries its members on such cutting edge topics as:

- Collaboration in the workplace
- Information technology tools in the workplace
- Alternative work environments
- Amenities and concierge services in the workplace

While the individual responses are considered proprietary intellectual property of the WPC, there are some interesting trends that can be shared.

Telework

81 percent of the WPC felt that double overhead (providing two workstations for a teleworker) was not a barrier to telework.

40 percent have experienced cost savings due to telework, while 30 percent had not. The remaining **30 percent** stated cost savings were not applicable to their arrangement.

40 percent favored home based telework, while only five percent favored a telework center.25 percent had no preference.

Two companies have their entire sales and field staff teleworking

The three top features

for implementing telework are:

- Increased productivity
- Cost savings
- Employee retention and attraction

Amenities/Concierge Services

83 percent of the WPC provide vending machines and a cafeteria for employees

70 percent provide a convenience store

87 percent have an on site ATM machine

21 percent provide child care facilities

38 percent provide outsourced child care

54 percent provide a child care locator service

13 percent provide a tax free dependent care account

79 percent provide free parking

9 percent provide parking for carpoolers

67 percent provide bicycle racks

25 percent provide personal and health care

29 percent provide personal financial planning and travel services

Miscellaneous

74 percent of the WPC track seat utilization. They use various methods, such as Computer Aided Facility Management (CAFM) information systems, walk through of space, and other internal information systems.

50 percent of the WPC plan to expand the use of wireless technology in the workplace over the next year.

The *four features* that most impact collaboration

- Open plan layout
- Proximity of related units
- Conference rooms
- Informal break and conference rooms

Teleconferencing rooms and e-mail are the *two information technology features* that most impact collaboration

Videoconferencing and portable computers are the *two information technology*features that most companies will be upgrading over the next year

At a symposium hosted by Public Works and Government Services Canada (PWGSC), the group learned about the Canadian Asset Planning System (CAPS). This web based asset management tool allows the Canadian government to have an integrated tool to track the state of its inventory. The information and data are collected from a building condition report, such as the condition of building mechanical systems and the cost and schedule for repair and/or replacement. The information is fed into CAPS and allows the user to see a schedule for these repairs over the 25-year planning cycle of the building. The unique feature about CAPS is that the tool can break this analysis down to the component level of a particular building system. For instance in the HVAC system, the tool can detail the cost and schedule for the air handler, boiler, chiller, and other HVAC components separately.

The tool will then roll up the cost of these buildings repairs and replacements to allow PWGSC to forecast the requirements and costs of maintaining its real property inventory.

While the Canadians first developed this tool to track their real estate inventory, they plan on using the tool to track all types of capital inventory (vehicles, planes, computer systems).

One of the past facilitators of the WPC was Joe Ouye, who is currently a consultant with Gensler in the Bay area of California. In 1999, Joe published

Competitive Workplace with Jean Ballas from SPACE. The book introduces the concept of the workplace as a competitive tool, instead of just another required overhead entry in the accounting ledger. It integrates the structure and processes of the organization, information technology, and the physical systems, comprised of the architecture, furniture, and equipment, to support the corporate business goals and objectives. The process of transforming the workplace involves a commitment from the organization to plan and design the workplace to support the business goals and objectives of the company.

There are 9 steps to creating a Competitive Workplace:

- 1. Take the lead
- 2. Define the problem
- Define the desired organizational goals and outputs
- 4. Benchmark with best practices
- Assess the existing organization and workplace
- 6. Identify obstacles to improved performance
- 7. Develop, evaluate, and select workplace change options
- 8. Implement the planned changes
- 9. Evaluate the results

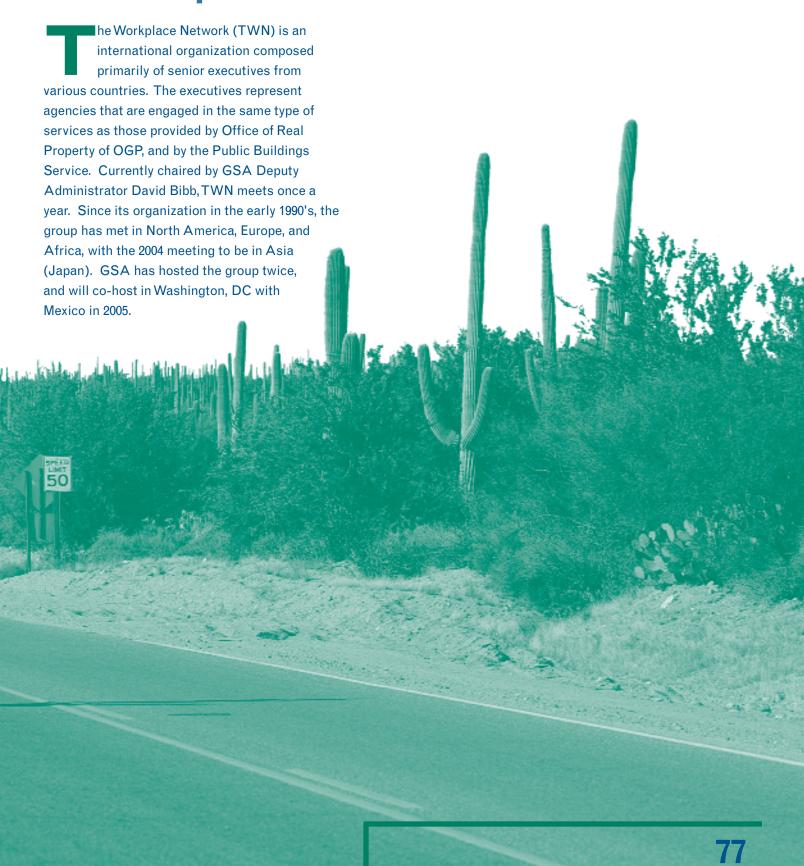
Creating the Competitive Workplace can lead to:

- Reduced occupancy costs, which in some organizations are 30 percent of a company's overhead
- Improved knowledge worker productivity through supporting better individual and group performance
- Enhanced customer services by designing the workplace to maximize sales time with customers
- Positively reinforced corporate culture by communicating expected behaviors and providing environments that support them.

The book also provides six case studies where various companies put the concept of the Competitive Workplace to use and the results they achieved.

For more information on the Competitive Workplace, you may contact the co-author Joe Ouye at 415-627-3636 or via e-mail at joe_ouye@gensler.com.

For more information on the WPC, please contact Chris Coneeney at 202-208-2956 or via e-mail at chris.coneeney@gsa.gov.





Nations that have regularly participated include:

Australia

Canada

Denmark

Finland

France

Germany

Ireland

Japan

Mexico

Norway

South Africa

Sweden

The Netherlands

United Kingdom

United States

Membership is open to other U.S. Government agencies if they so desire, with the U.S. Postal Service and the Tennessee Valley Authority participating in past years.

In addition, state and provincial governments have attended. too, including:

Alberta

British Columbia

California

Queensland

Some of the key information that has been garnered over the years by GSA's participation in TWN has focused on the organization and the workplace.

Organization

There are a number of different models among the various members. The Netherlands, Canada, and Norway are examples of nations that have chosen to provide services to many customer agencies through a central agency, such as GSA. Typically, most of those services are provided through contract. On the other extreme is Australia. which has simply sold virtually all of its federal properties and allows each department to lease whatever it needs in the way of buildings. Another approach is used in the UK, where authority to acquire space has been totally devolved to the various agencies. Some have chosen to operate those inventories, while some have sold all of their holdings to the private sector, which provides housing back to the departments on a contract basis.

Through TWN sponsorship and input, two books have been published that provide a detailed comparison of the real estate organizations from the American, British, Dutch, and Canadian governments. The first book is **Public Real** Estate Management Challenges for **Governments**, published in 2002 by Pity van der Schaaf. The second book is **Public Real Estate**.

published in 2002 by Frans Evers, Pity van der Schaaf, and Geert Dewulf. Both books have concluded that no one system is "best," but they all represent, in many ways, the values of the respective nations, the political climate, and fiscal realities.

Workplace

Many of the ideas that have generated OGP's thinking on the workplace have come from discussions/presentations atTWN and by on-site visits to a wide range of facilities in the host countries.

For example, at the meeting in The Netherlands, members heard from John Worthington of DEGW plc, Architects and Consultants. DEGW is one of the world's leading practitioners of smart workplace thinking. Among Mr. Worthington's comments:

- We are now managers of space and time
- Accenture has formed partnerships with a coffee chain to provide "drop-in" spaces that allow the Accenture employees to do their work there if they so desire
- A pattern is emerging among leading companies: 30% of employees in core workplaces; 40% in flexispace, such as homebased teleworking; 30% in "on demand" space, such as "drop-in" space

- We must think of new approaches to using property. For example a Holiday Inn and a Shell Learning Center have entered into a partnership in which a property is used during the week by Shell and becomes a Holiday Inn over the weekend. On the weekends, the learning center auditorium becomes a cabaret theater. During the height of the tourist season, the entire facility is used as a Holiday Inn full-time. Of course, this corresponds with the time that many Shell employees are on vacation, so their learning center shuts down for that period.
- Workplaces must be built to support the business of the client
- There is a fine balance between the "interests of the agency" and the "interests of the building." Under the first, the thrust is upon keeping options open until the last minute; in the latter, the thrust is upon freezing requirements very early in the process.
 DEGW believes that the former is far preferable and calls for very flexible space, much like a stage set that can be rearranged quickly and inexpensively.

Corporate Real Estate Past	Corporate Real Estate Future
Low interest from top management	Space recognized as business resource
Reactive	Proactive
"Blame" culture	"Learning" culture
Limited improvement from feedback	Continuous evaluation and feedback
Fire-fighting	Space as part of business plan
Real estate oriented	Managing space and time
Administering space	Space + IT+HR

Attendees at the meeting also saw first-hand the Dutch emphasis upon environmental sustainability, employee control of the working environment, use of daylighting, and urban redevelopment/reuse mixes. Examples included a former church converted into a records center, a hospital converted to an office facility, and the Maastricht provincial buildings, where the meetings were held that led to the Maastrict Agreements and the formation of the European Union.

Alternative Financing

Agencies in virtually every country in TWN, with the exception of the United States, have a wide range of financing tools available to them, including public-private partnerships, borrowing authority, retention of sales proceeds, etc.

Networking

Through TWN, real estate/workplace government leaders from around the world often pick up the phone to talk about issues that they are facing and possible solutions. Exchange programs are beginning to emerge, as an associate from GSA's OGP spent several months with Deutsche Post in Germany.

Sponsorship of W4

TWN is the sponsor organization for the Worldwide Workplace Web (W4). Formed only a few years ago, W4 gives key associates just below the executive level the opportunity to network and work on joint projects with colleagues around the world.

For more information on the TWN, please contact the Office of Real Property at 202-501-0856.

Worldwide Workplace Web (W4)

he WorldWide Workplace Web (W4) is an international forum of public sector real property professionals. The W4 provides a unique learning environment for the next generation of executives in public sector organizations by facilitating collaboration, sharing best practices and discussing issues of common concern.

In addition to offering great networking opportunities, the W4's annual conferences introduce participants to speakers from around the globe, many of them leaders in the diverse fields of real property. Between conferences, participants can use the network to seek help in resolving problems, share

research initiatives and find partners for collaborative ventures. Sponsoring organizations benefit through development of their future executives and access to a wealth of new ideas.

Worldwide Workplace Web (W4)

The members of W4 represent government agencies from around the world whose mission is to provide workplaces, and associated solutions and services, for other government organizations. A key component of W4 is the formation of Learning Partnerships. W4 partnerships were initiated in 2000 to create an international forum for innovation and the exchange of real estate knowledge and experience. Among the goals for the partnerships are:

- Maximizing learning opportunities and bringing greater coherence to learning
- Helping to produce innovative solutions to meet broad needs
- Working to remove barriers
- Considering how linkages and synergies could be improved

At the second W4 conference in Vancouver in June 2001, a number of small groups were formed. The members of these Learning Partnerships agreed to continue working on their selected topics via electronic mail and conference calls over the course of the coming year. The Learning Partnerships would develop research papers or other products over the course of the year, then present findings at the meeting of the W4. The Learning Partnerships, if successful and productive, would differentiate W4 and keep the annual meeting from being "just another conference."

Key benefits to Office of Real Property from the W4

Having the lead role in the performance measurement learning partnership enables the Office of Real Property to continue to push the performance measurement paradigm from measuring facilities towards measuring workplace, and to collect benchmark data from international partners.

Its leadership role in setting the agenda, particularly for the 2004 conference in Washington DC, allows it to focus on workplace issues of importance to the Office of Real Property.

Lessons learned overall include:

- Privatization of government real estate in other countries driven by factors that do not really apply to U.S (and to a great extent Canada)
- Need to raise cash quickly (Sweden)
- Political policy decision to privatize for the sake of privatizing (UK)
- Services primarily delivered by local governments enabling a thin federal government infrastructure (Australia)
- At the 2003 W4 meeting in Germany: innovative workplaces were more widely adopted in private sector, business case exists

Worldwide Workplace Web (W4)

- At the 2002 W4 meeting in UK: greater
 flexibility in the use of office space itself, but
 flexibility in the sense of alternative work
 environments (telework) not as widespread,
 and economic case for justifying
 sale/leaseback of most government buildings
 still being developed post hoc
- At the 2001 W4 meeting in Canada: sustainability more the norm in Canada and Western Europe than in US
- At the 2000 W4 meeting in Netherlands: older societies/cultures value urban planning, environment, transportation issues much more than US, which still acts/builds/operates/spends like there is no tomorrow

For more information on the W4, please contact Stan Kaczmarczyk at 202-501-2306 or via e-mail at stan.kaczmarczyk@gsa.gov.

Notes





