WHO Definition of Health

The World Health Organization (WHO) defined health in its broader sense in its 1948 constitution as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."
Health & Wellness Task Group

Motion:

Propose evidence-based criteria to integrate health and wellness into all government facilities programs, drawing from approaches including buildings and health rating systems and biophilic design strategies.

Benefits:

Enhance employee health and performance and support agency mission achievement through the adoption of health focused building design and operations strategies.

Identify a compelling business case for building-owning or managing agencies to adopt such practices.
Summary of Presentations

**Fitwel**
- Liz York & Joel Kimmons from CDC presented on Fitwel’s origins
- Eleni Reed & Denise Funkhouser shared GSA’s experience piloting and using the Fitwel program
- Joanna Frank & Giselle Sebag from the Center for Active Design (CfAD) provided a deeper look at the Fitwel scorecard and certification process

**WELL Building Standard**
- Rachel Gutter from the International WELL Building Institute (IWBI) presented the history and mission of the WELL Building Standard
- Susan Chung & Randy Fiser from the American Society for Interior Designers (ASID) shared their experiences implementing WELL at their new Washington DC headquarters
Fitwel Certified: Stairwells: GSA: Battin CT Billings, MT. Photo courtesy of NBBJ
WELL Certified: Mindful Eating Space: Structure Tone NYC Photo courtesy of IWBI
WELL Certified: Daylight: ASID Headquarters, Washington, DC
Photo courtesy of IWBI
Recommendations
The Committee fully supports the inclusion of health and wellness requirements within the 2016 Federal Guiding Principles and other Federal design guidelines (i.e. GSA’s P-100, VA, DoD Unified Facilities Criteria, etc.). The Committee advises the Federal Government to consistently extend these health and wellness requirements to all Federal buildings where possible and applicable.
The Committee recommends that the Federal government **use the guidance crosswalk developed by the Health and Wellness Task Group** to assist in supporting building project Health and Wellness goals and the Health and Wellness requirements in the current version of the Guiding Principles for Sustainable Federal Buildings.
The Committee advises that Federal building programs expand the existing integrated design process to include additional consideration of health impacts to assist project teams to understand and include the evaluation of human health outcomes alongside more familiar environmental outcomes.
The Committee recommends that GSA support additional research into health and wellness behaviors of workplace occupants in relationship to spaces and systems to improve understanding of the impacts that the built environment has on human health and the productivity of the workforce.
Defined Research Needs

1. Identify links between health outcomes to environmental interventions and subsequent behavioral responses.
2. Identify economic links between built environment capital expenditures and return on investment (ROI) based on health outcomes.
3. Improve definition and measurement of “presenteeism” in relationship to environmental conditions and productivity.
4. Validate the environmental factors and the underlying physiological, cognitive and social mechanisms that are most likely to influence individual and group work effectiveness.
The Committee recommends that GSA **integrate additional health and wellness concepts into the Model Commercial Leasing Provisions previously recommended by the Committee on December 12, 2016.**

1. Tenants and owners evaluate their health and wellness goals and considerations at the onset of leasing a property.
2. Tailor the leasing language to the specific needs of the lessee and the lessor.
3. Some large national real estate companies have formally embraced H&W concepts into standard business practices and policies.
4. With tools, such as Fitwel and WELL reflecting the trend of H&W concepts in the workplace, it is anticipated that in the future the evaluation of leasing language will reflect this trend.
Guidance Crosswalk

1. Health & Wellness Impact Areas
2. Means for Achieving Guiding Principle
3. Guiding Principles for Sustainable Federal Buildings
4. Applicable Guidelines, Standards, and Rating Systems
Health & Wellness Impact Areas

1. General Health & Wellness
2. Diet
3. Exercise
4. Smoking Reduction / Cessation
5. Daylight
6. Improved Indoor Air Quality
7. Views of Nature
8. Control of Temperature
9. Reduce Risk of Radon Exposure
10. Reduce/Eliminate Mold & Mildew Exposure
11. Reduce VOC Exposure
12. IAQ Management during Construction
13. Pest Management
14. Reduce Potential Exposure Risk to Occupants
Means for Achieving Guiding Principle

WELL Certified: Active Work Station: ASID Headquarters, Washington, DC

Photo courtesy of IWBI
GP I. Employ Integrated Design Principles (NC) / Employ Integrated Assessment, Operation, and Management Principles (EB)

1. Integrated Design/ Integrated Assessment, Operation, and Management

GP IV. Enhance Indoor Environmental Quality

11. Ventilation and Thermal Comfort
12. Daylighting and Lighting Controls
13. Indoor Air Quality

14. Occupant Health and Wellness: Promote opportunities for voluntary increased physical movement of building occupants such as making stairwells an option for circulation, active workstations, fitness centers, and bicycle commuter facilities; and support convenient access to healthy dining options, potable water, daylight, plants, and exterior views

GP V. Reduce the Environmental Impact of Materials

15. Material Content and Performance
Applicable Guidelines, Standards, and Rating Systems

**Fitwel**

The WELL Building Standard

DoD Unified Facilities Criteria 1-200-02 (Dec 2016)

GSA PBS-P100 Facilities Standards (April 2017) for Federally Owned Facilities

Green Globes – NC & Green Globes – EB

LEED v4: BD+C: New Construction & LEED v4: EBOM

# Guidance Crosswalk

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WELL Certified: Stairwell: Structure Tone NYC Photo courtesy of IWBI
## Guidance Crosswalk

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WELL Certified: Biophilia – Herb Garden: ASID Headquarters, Washington, DC

Photo courtesy of IWBI
## Guidance Crosswalk

|-------------------------------|--------------------------------------|-------------------------------------------------|---------------------------------------------------|
1. Integrated Design/Integrated Assessment, Operation, and Management |
|                               |                                      |                                                 | Fitwel. No specific requirement. Operational policies & recommendations included in each credit. |
|                               |                                      |                                                 | WELL Building Standard v1: Mind Feature: Precondition 85 Integrative Design |
|                               |                                      |                                                 | DoD Unified Facilities Criteria 1-200-02 (Dec 2016): 
Chapter 2 Building Design & Construction  
2-2 Employ Integrated Design Principles  
Chapter 3 Assessment of Existing Buildings for High Performance and Sustainable Building (HPSB) Compliance  
3.2 Employ Integrated Assessment, Operation, and Management Principles |
|                               |                                      |                                                 | GSA PBS-P100 Facilities Standards (April 2017) 
Appendix Submission Requirements 
Integrated Design Review |
|                               |                                      |                                                 | Green Globes - NC  
3.1 Project Management  
Green Globes - EB  
4.0 Emissions, Effluents, & Pollutant Controls  
4.12.5 Is there a Health & Safety Committee that meets regularly and carries out regular inspections of the property?  
6.1 Environmental Management System |
|                               |                                      |                                                 | LEED v4: BD+C: New Construction (NC)  
Pilot Credit 108: Integrative Process for Health Promotion Credit: Integrative Process |
|                               |                                      |                                                 | ASHRAE/CCIES/USGBC 189.1 
Informative Appendix F: Integrated Design |
Design Intervention & Operational Support: Exercise Example

Design Intervention
Staircase with Signage & Cues

Operational Support
Building Ops provides a smartphone app to measure activity

WELL Certified: Stairwell: Structure Tone NYC
Photo courtesy of IWBI
Business Case Challenges

1. Requires calculating combined effects of multiple changes in design or operations to enhance health.

2. To be useful, business case needs to prioritize investments & identify the changes that have the greatest positive impact on health and for whom.
Making the Link Between the Built Environment & Occupant Health

Built environment

- Passive health features
  - Designed to protect/enhance health regardless of behavior

- Behavior-dependent features
  - Designed to improve health by influencing behavior

Public health conditions
- Some IEQ conditions associated w/ public health impacts (e.g., mold -> respiratory irritation)

Individual health impacts
- Certain behaviors associated w/ public health impacts (e.g., exercise -> heart health)

Challenge: individual health impacts depend on many factors – including the complex interactions of the indoor environment, individual susceptibility and many non-IEQ factors – making it difficult to directly associate designed building features with individual health outcomes.
Making the Link Between Built Environment Investments & ROI

- Costs of best practices: measurable
  - Absenteeism: HR data usually private
  - Presenteeism: hard to calculate

- Cost savings
  - Healthcare costs: distributed across population
  - General cost savings & benefits based on assumptions & estimates

- Other benefits
  - Productivity: challenging to measure with knowledge workers in govt environment
A Way Forward

1. Utilization of Fitwel and WELL provides an opportunity to assess specific EBD and operational practices that influence changes in health outcomes.

2. Federal employees represent an enormous investment and health and wellness can impact their performance.

3. Conditions of the workplace can negatively or positively affect employees’ physical and mental conditions.

4. Therefore, investing in workplaces that promote health and wellness is a valid and reasonable approach, even if an absolute ROI cannot be calculated at this time.
Conclusion

1. By implementing the recommendations provided, GSA and the Federal government could lead the building sector forward in promoting wellness within the workplace to support occupant health.

2. Recommendation to collaborate with health and wellness professionals, researchers, and economists in the Federal government, the commercial sector, throughout the country on integration of health and wellness criteria into building design, construction, and operation.

3. The private sector looks to GSA for sustainability direction and GSA making health and wellness a priority encourages the private sector to follow suit.
Thank you.

QUESTIONS & ANSWERS