

Note: This presentation represents the deliberations of a task group to an independent advisory committee, and as such, may not be consistent with current GSA or other Federal agency policy.

Health and Wellness Task Group Update

JUNE 7, 2017

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

Guiding Principles Background

New Federal Guiding Principle (GP):

- 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.

Adds to other relevant GPs:

- Enhance Indoor Environmental Quality: Ventilation and Thermal Controls / Daylighting and Lighting Controls / Indoor Air Quality
- Reduce the Environmental Impact of Materials: Material Content and Performance
- Employ Integrated Design Principles: Integrated Design / Commissioning

Summary of Presentations

Fitwel

- Liz York and Joel Kimmons from CDC presented on Fitwel's origins
- Eleni Reed and Denise Funkhouser shared GSA's experience piloting and using the Fitwel program
- Joanna Frank and 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 and Randy Fiser from the American Society for Interior Designers (ASID) shared their experiences implementing WELL at their new Washington DC headquarters

Fitwel Background

CDC, GSA and NYC NYC Department of Health and Mental Hygiene collaboration

Licensed to and operated by the Center for Active Design (CfAD)

Over 600 projects in system. GSA is pursuing Fitwel certification for 22 of its owned, existing buildings in FY 2017, 2 per Region

Fitwel provides 60+ low-cost, high-impact strategies for enhancing building environments to improve occupant health and productivity

All strategies are voluntary— strategies improve community health, reducing morbidity & absenteeism, instill well-being, support social equity, provide healthy food options, and/or increase physical activity

WELL Building Standard Background

The IWBI team includes public health, engineering, and building science experts

Medical researchers, practitioners and scientists were convened to develop building standards, employing a peer review process for research sources serving as a basis for the standards

WELL demands more than good design; it requires data-driven environmental assessments through third party on-site performance verification, with performance reviewed every three years

WELL works with LEED, Green Star, BREEAM, and other globally-utilized rating systems to drive human and environmental sustainability.


Over 350 projects encompassing over 76 million square feet are utilizing WELL

Existing Buildings Crosswalk Diet – Exercise – Smoking Cessation

- Area of Positive Impact
- Related Guiding Principle
- Fitwel
- WELL Building Standard
- DoD Unified Facilities Criteria 1-200-02 (Dec 2016)
- GBI: Green Globes & Guiding Principle
- Compliance EB Assessment
- USGBC: LEED v.4 EBOM
- ASHRAE 189.1 (2014 / 2017)

Green Building Advisory Committee, Health & Wellness Task Group Draft cross-walk between Areas for Positive Impact & Guiding Principles / Rating Systems and Criteria to Meet Guiding Principles Health & Wellness Goals (Note: this document represents the deliberations of a task group to an independent advisory committee, and as such, may not be consistent with current GSA or other Federal agency policy.) Revision Date: May 31, 2017								
Areas for Positive Impact	Guiding Principles for Sustainable Federal Buildings (Existing Building U.O.M.)	fitwel™	THE WELL BUILDING STANDARD™	DoD Unified Facilities Criteria 1-200-02 (Dec 2016)	Green Building Initiative: Green Globes - EB (U.O.M.) Guiding Principles Compliance Existing Buildings Assessment Program *NOTE 1: upon completion of GB/ANSI Standard 01-20XX, additional updates will be completed for CIEB tool. Anticipated completion 2017. *NOTE 2: Green Building Initiative is in process of changing the Guiding Principles Compliance Assessment Program to comply with the DoD Unified Facilities Criteria 1-200-02, 01 December 2016) requirements that include Health & Wellness.	LEED v.4 Existing Building: Operations and Maintenance (EBOM) U.O.M.	ASHRAE 189.1 - 2017 / IgCC 2018 (NOTE: As of 5/18/17 additions based on 189.1-2016 plus confident estimate of changes that will be incorporated into 2017 version)	Research Support
Health & Wellness: General as part of Integrated Assessment, Operation and Management of Existing Buildings Integrated Teams Integrated Assessments of Operations and Management Practices Continual Improvement Process including Health & Wellness Measures	1. Employ Integrated Assessment, Operation, and Management Principles a. Integrated Assessment, Operation, and Management Through an integrated process and team, identify and implement sustainable operations and maintenance policies that improve building environmental performance, protect natural, historic, and cultural resources, support occupant health and wellness, and improve the climate resilience of facilities and operations.	Fitwel is a cost-effective, high-impact building certification standard that optimizes building occupant health and productivity through targeted improvements to workplace design and policies. Fitwel has a vision for a healthier future where every building is enhanced to support the wellbeing of its occupants and surrounding communities. It is based on the idea that all office facilities can be improved through specific, incremental changes into healthier places to work, regardless of their size, age, and location. Operational policies and recommendations are included within each credit for integration into Operations and Management of a building.	Comprehensive and interdisciplinary approaches are necessary to meaningfully address the complex issues of human health and well-being. A narrow focus on select aspects of health is inadequate to the task. Many factors of the physical environment have a significant impact on day-to-day health and productivity, but it is often the interactions between multiple environmental factors that matter most. A growing body of research supports these claims but little has been done to translate research into practice. The WELL Building Standard therefore draws from multiple disciplines of scientific study, and presents an integrated approach that reinvents the built environment around its occupants, transforming the places we live, work and learn into systems intended to promote and improve human health and well-being. Operational policies and recommendations are included within the description of each credit grouping.	Chapter 2 Building Design & Construction 2-1.2 Work in Existing Buildings 2-2 Employ Integrated Design Principles 2-2.1 Integrated Design 2-2.1.1 Integrated Planning 2-2.1.2 Evaluation for Design Strategies 2-2.1.3 Evaluation of the Site 2-2.1.4 Site Integration and Design of the Building Chapter 3 Assessment of Existing Buildings for High Performance and Sustainable Building (HP&SB) Compliance 3.1 Overview 3.2 Employ Integrated Assessment, Operation, and Management Principles Through an integrated process and team, identify and implement operations and maintenance policies that improve building environmental performance, protect natural, historic, and cultural resources, support occupant health and wellness, and improve the climate resilience of facilities and operations. Chapter 5 Sustainable Installations 5.1 Overview Projects are not stand alone initiatives but are part of a comprehensive sustainable installation master plan that defines the holistic vision for planning and development of the installation. The value of planning is to look beyond the	Green Globes - New Construction (NC) 3.1 Project Management 3.1.1 Integrated Design Process (IDP) 3.1.1.1 Was an integrated design process (IDP) employed, which included a minimum of five of the key design disciplines involved in the project? (Check as many key disciplines below as apply.) 3.1.1.2 IDP Performance Goals 3.1.1.2.1 Were (qualitative) green design goals established at the pre-design phase for the following: 3.1.1.2.1.1 Site Design? / 3.1.1.2.1.2 Envelope? / 3.1.1.2.1.3 Material efficiency? / 3.1.1.2.1.4 Indoor environment? 3.1.1.2.2 Were performance goals (metrics) established at the pre-design phase for the following: 3.1.1.2.2.1 Energy efficiency? / 3.1.1.2.2.2 Renewable energy? / 3.1.1.2.2.3 Greenhouse gas emissions? / 3.1.1.2.2.4 Water conservation, efficiency, and reuse? / 3.1.1.2.2.5 Life cycle impact? / 3.1.1.2.2.6 Construction waste diversion? 3.1.1.3 IDP Progress Meetings for Design (Design and Construction Phases) GBI - EB 4.12.5 Is there a Health & Safety Committee that meets regularly and carries out regular inspections of the property? 6.1 Does building management have a written environmental policy? 6.1.2 Are there stated goals and targets document in the policy manual with respect to each of the following? 6.1.2.1 Energy Conservation? / 6.1.2.2 Water Conservation? / 6.1.2.3 Waste Reduction and Recycling? / 6.1.2.4 Environmental Purchasing? / 6.1.2.5 Reduction in use and proper handling of hazardous products? / 6.1.2.6 Training and education?	LEED v4: BD+C: New Construction (NC) Pilot Credit 100: Integrative Process for Health Promotion (New Construction?) -To support high-performance, cost-effective and health-promoting project outcomes through an early analysis of the interrelationship among building systems. To facilitate a systematic consideration of the impact that project design and construction has on health and well-being. -Identify synergies that promote health across disciplines and building systems. -Analysis to review OPE, BOD, DDs, CDEs, in relationship to health-promoting outcomes. Credit: Integrative Process To support high-performance, cost-effective project outcomes through an early analysis of the interrelationships among systems.	ASHRAE/ICC/IES/USGBC 189.1 contains a number of building and system design requirements in Section 6, Indoor Environmental Quality, where are intended to meet the goal of the standard to "enhance building occupant health and comfort." The scope of that section reads as follows: "5.1 Scope. This section specifies requirements for indoor environmental quality, including indoor air quality, environmental tobacco smoke control, outdoor air delivery monitoring, thermal comfort, building entrances, acoustic control, lighting quality, daylighting, and low-mitting materials." Section 10 of the standards, Construction and Plan for Operation, has additional requirements to ensure that the design requirements are met in the constructed building and to support good indoor environmental quality in the occupied building over time. Informative Appendix F: Integrated Design	

Replace with Checklist for Simplification & Usability

Green Building Advisory Committee, Health & Wellness Task Group			
DRAFT Checklist for Existing Buildings			
(Note: this document represents the deliberations of a task group to an independent advisory committee, and as such, may not be consistent with current GSA or other Federal agency policy.)			
Date: June 1, 2017			
Areas for Positive Impact	Means for Achieving Potential Outcome	Guiding Principles for Sustainable Federal Buildings (Existing Building U.O.N.)	Applicable Guidelines, Standards, and Rating Systems
General Health & Wellness	Integrated Team Approach for Assessment, Operation and Management of Existing Buildings.	1. Employ Integrated Assessment, Operation, and Management Principles a. Integrated Assessment, Operation, and Management	 Fitwel: No specific requirement. Operational policies & recommendations included in each credit. WELL Building Standard: 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

- Area for Positive Impact
- Means for Achieving Potential Outcome
- Guiding Principle for Sustainable Federal Building (EB)
- Applicable Guidelines, Standards and Rating Systems

Diet – Potable Water – GP Occupant Health

Fitwel

9 Water Supply

10 Cafeteria and Prepared Food Retail & 11 Vending Machines and Snack Bars

WELL Building Standard: Nourishment Feature

30 Fundamental Water Quality (Precondition)

37 Drinking Water Promotion (Optimization)

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

Chapter 3 Employ Integrated Assessment, Operation, and Management Principles

3-5.4 Occupant Health and Wellness: Convenient Access to Potable Water

Green Globes - EB

4.0 Emissions, Effluents, & Pollutant Controls: 4.10 Is the drinking water safe?

GBI Addressing 2-5.4 and 2-2.1.1 Access to Potable Water from the DoD UFC 1-200-02 in revised Guiding Principles Compliance Assessment Program.

LEED v.4: EBOM/NC

Pilot Credit 105: Lead Risk Reduction

ASHRAE/ICC/IES/USGBC 189.1

6. Water Use Efficiency: limits on use of potable water for irrigation and in HVAC systems. Requirement for water bottle filling stations for half of all drinking fountains. (2017/Addendum 2014)

H & W Concepts in Leased Settings

H & W Concept	Leasing Setting/ User			
	<u>Model Commercial Leasing Provisions</u> (GBAC Task Group)	<u>Tower Companies</u> (uses LEED-CI and EBOM v3)	<u>Jamestown</u> (encourages Energy Star + LEED)	<u>GSA Lease Language</u> (aligns w/GPs for leases)
Integrated H&W	None	None	None	None
Healthy Dining	None	None	None	None
Potable Water	None	None	None	None
Stairwells	None	None	None	None
Active Workstations	None	None	None	None
Fitness Access	None	None	None	None
Bike Facilities	Yes	Indirect	Yes	None
Transit/Walkability	Yes	Yes	Yes	Yes
Smoking Reduction	None	Yes	Yes	Yes
Daylight	Yes	Yes	Yes	Indirect
Plants	None	None	None	None
Views	None	Yes	Yes	None

Note: Pilot and Innovation credits were not included

Possible Next Steps

- Review model leasing provisions to see what is directly or indirectly included in leasing language regarding Health & Wellness attributes.
- Transform the Checklist into more of a design guidance/reference document, which can link to other more detailed resources or incorporated in SFTool.
- Clarify which systems offer third party verification or certification as it may be a requirement for the user.
- Evaluation of any additional guidelines, standards, or rating systems that include relevant criteria to support compliance with the Health & Wellness GP requirements that should be added into the listing.
- Evaluation of cost that is associated with recommendations that are included within the Checklist guidance tool.

Resources

- <https://fitwel.org/system>
- <https://www.wellcertified.com/en>
- <https://www.buildinggreen.com/feature/programming-buildings-health-well-fitwel-and-beyond>
- <https://www.thegbi.org>
- <http://www.usgbc.org>
- [http://www.wbdg.org/FFC/DOD/UFC/ufc 1 200 02 2016.pdf](http://www.wbdg.org/FFC/DOD/UFC/ufc_1_200_02_2016.pdf)
- <https://www.ashrae.org/standards-research--technology/standards--guidelines>
- <https://energy.gov/eere/femp/downloads/2016-guiding-principles-sustainable-federal-buildings-updates-crosswalks>

Discussion Questions

1. Is the Task Group generally on track to produce recommendations and resources of use to Federal agencies?
2. What do you think should be included in the business case for health and wellness recommendations?
3. What other resources, standards, organizations, etc. should the Task Group be tapping in support of its work?