



## DASH: Database for Analyzing Sustainable and High Performance Buildings

### **BACKGROUND:**

There are currently many research efforts underway that collect robust and extensive building performance data. However:

- Existing project databases are limited in scope (by developer, owner, company, and /or region).
- Metrics are often limited to specific categories, with little or no cross-over:
  - Real estate
  - Energy / Operations
  - Productivity
- With so many existing databases and research studies, data collection methods are not consistent.

In 2004, DASH was established to help address these issues under the moniker “High Performance Building Database Protocol and Repository” (HPBDPR). The current DASH plan includes:

**MISSION:** Facilitate consistent collection of quantitative data about green, sustainable, and high performance buildings through collaboration of existing building information databases, organizations, companies, and researchers.

**SCOPE:** Increase the quantity of, quality of, and access to information about green, sustainable, and high performance buildings by creating an building metric information clearinghouse, identifying gaps in currently collected building data, developing consistent protocols for data collection and reporting, and establishing a national green, sustainable, and high performance building data repository that will support independent assessment and analysis of investment, operation, and occupant-related building metrics.

### **STRUCTURE:**

Green Building Alliance (GBA) has received continued strong support for its role as a facilitator and catalyst for this much-needed project. Starting in Summer 2008, GBA transitioned into co-managing DASH, along with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE). National stakeholders from real estate, industry, consulting, academia, national laboratories, and government continue to be involved in DASH in the following engagement levels:

- DASH Consortium
- Working Groups
- Advisory Board
- Corresponding Committee

### **AUDIENCE:**

The DASH audience includes the following stakeholders, who are listed in order of focus:

- Financial stakeholders & Decision-makers (*developers, investors, owners, and owner/operators*)
- Researchers & Analysts
- Designers (*architects, engineers, contractors, and other specifiers*)
- Product manufacturers & Facility managers

### **DASH CONSORTIUM**

The DASH Consortium primarily consists of organizations that host or hold existing building information databases.

- These organizations collaborate to promote clarity and consistency in building metric collection about green, sustainable, and high performance buildings, with a goal to effect improvement in how information about all buildings is collected, stored, and analyzed. The Consortium helps define consensus-based DASH policy.

## DASH TASK DESCRIPTIONS

- **Clearinghouse** (Chaired by GBA and New Buildings Institute)
  - Create and make public literature review of relevant background and dataset information.
  - Determines what existing organizations are currently collecting what types of and which specific building information data, as well as who has access to this information, and at what price.
  - Provides ongoing updates to this building metric inventory.
  - Includes a mapping activity to determine what information currently exists and what real estate, operational, and occupant-related building metrics previously identified by DASH as priorities are still missing from the current breadth of building information data collection.
  - Work with the Consortium to identify and describe metric and data gaps, as well as encourage collection of this missing information.
  
- **Protocol** (Chaired by ASHRAE and Pacific Northwest National Laboratory)
  - Links each building metric to a standard methodology, whether existing or created by DASH.
  - May attempt to provide conversion capabilities between existing information collection systems.
  - Assists Consortium members in moving toward consistency data collection (where possible)
  - Works with Consortium members to identify how existing databases can help fill current information gaps.
    - Development will most likely be tiered, with the following prioritized order:
      - Real estate/financial
      - Operational (*will heavily reference ASHRAE's forthcoming protocol*)
      - Occupant-related/productivity
  
- **Database/Repository** (Chaired by ASHRAE and CoStar)
  - The DASH database will be a user-friendly national repository for building data, although international information will be encouraged.
  - DASH will collect information about green, sustainable, *and* high performance buildings
  - The initial database focus will be new construction and major renovation/rehabilitation projects.
  - The database will pursue a diversity of building types, geographic locations, and delivery methods.
  - DASH will collaborate with and incorporate existing information from various agencies currently collecting building information data.
  - The DASH Database will offer data providers various levels of participation/data accuracy:
    - Basic
    - Intermediate (*opt in*)
    - Advanced (*opt in*)
    - Case study (*opt in to research*)
  - Partial data records will be accepted.
  - Building identification information will be anonymized and confidential, with partial identifying information possibly being accessible at different access levels.
  - Where possible, metrics will be organized so answers come from dropdown list choices (*e.g., primary building type*).
  - An attempt will be made to cluster or group questions into categories in order to make data requests less overwhelming.
    - Overall and contributing metrics may facilitate this strategy.
    - The initial DASH database will initially be an example, not a representative sample (*i.e., a limited subset for in-depth study*).
  - Where possible and available, benchmark data will be included.
  
- **Marketing and Outreach** (Chaired by GBA and USGBC)
  - DASH's marketing and outreach will be a collaborative effort to instill in building industry stakeholders the benefits of logging building performance.
  - The details of DASH and why its goals are important for its audience will be provided.
  - Consortium members will reach out to their organization's members and other partners to recruit data providers.