

# St. Elizabeth's Shelter: A Beacon of Hope

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## Abstract:

Nestled in the historic St. Elizabeth's Hospital campus, this flagship homeless shelter project is the first in Washington DC designed to accommodate a variety of discrete support programs for the community to create a place of dignity, a place that is safe and comfortable, and a place of belonging that fits and can grow. During this session, we will focus a discussion on the equitable and sustainable impact of the recently built St. Elizabeth's Shelter. You will hear from the project team members about the successful achievements and challenges overcome. aim to highlight the following:

- a) Initial project goals & integrative synergies that were realized
- b) Social equity goals - St. Elizabeth's Shelter was created in an effort to support the health and well-being of community members, while also encouraging job placement in the local area. To support skills development and job placement, there are training kitchens for developing culinary skills, boutique training, and varying levels of professional development. Through the project a Resident Workforce Program was established for future residents of the shelter have opportunities to receive specialized training and employment. To support occupant well-being, the project incorporates high walkability with second-tier roof access and courtyards. Yoga programs are available, and plans for more exercise programs are in development. The multipurpose room allows for a wide range of activities from social gatherings to events that include town halls for shelter residences and resource fairs, as well as opportunities for residents to attend seminars and workshops. Several other services are available to meet the needs of the community, including onsite catering to provide food for residents, language services, respite care, health clinics, and community involvement.
- c) Carbon reduction goals - With the state of the climate emergency, a primary goal for the building was to reduce carbon emissions through operational energy efficiencies and building material optimization. Both energy and LCA models were performed to analyze the building's operational and embodied carbon footprint. The project incorporated, efficient VAV systems and electrical heater units to reduce dependence on non-renewable energy sources, but could not achieve Net Zero Energy designs due to cost constraints at the time. Even though Net Zero was not realized for St. Elizabeth's shelter, it was analyzed as part of the initial design and will be incorporated into future projects. The project team will speak to the Net Zero targets for future shelters and can expand on how DC's progressive new building code requirements around sustainability is pushing all new construction projects toward Net Zero goals. In regards to embodied carbon, the project team implemented optimizations in material selections and reductions by specifying high-recycled content, low-cement concrete, mineral wool insulation instead of XPS, and evaluating structural efficiencies to reduce concrete while maintaining structural integrity.
- d) Health goals - Indoor air quality testing was an important measure to ensure that the indoor air was free from hazardous contaminants. Reducing indoor air contaminants has significant human health benefits and typically improves occupants' comfort, lowers absenteeism, and increases productivity. The passing of this test is a testament to the careful planning, design, construction, and implementation of St. Elizabeth's Shelter and all team members involved.
- e) Any shortcomings due to project constraints and challenges

## **Presenter Biography:**

**Rachel Nicely** is a Director of Sustainable Programs at Sustainable BuildingPartners (SBP), a full-service energy efficiency and sustainable consulting firm serving the commercial and residential markets. Rachel has been in the sustainable consulting business for fifteen years. Rachel also manages the Whole Building Life Cycle Assessment service within the Sustainable ProgramsDepartment establishing building assessment protocol and currently oversees this activity. She currently serves on the USGBC Water Efficiency Technical AdvisoryGroup, International WELL Building Council Water Advisory Group, ILFI Water Technical Advisory Group and theWashington DC Carbon Leadership Forum Hub Chair.

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