Sustainability in Real Estate: A Conversation with Patrice Frey

ABR Capital Partners (ABR) recently spoke with Patrice Frey (PF), the former CEO of Main Street America, about sustainability in real estate, the groundbreaking sustainability report she spearheaded in an earlier role as the Director of Sustainability at the National Trust for Historic Preservation (NTHP), and the environmental benefits of extending the useful life of existing buildings.

ABR: What type of projects does Main Street America focus on?

PF: Main Street America is a subsidiary of the National Trust for Historic Preservation and is also the largest nationwide nonprofit supporting downtown and neighborhood commercial district revitalization. It has a network of about 1,300 affiliate communities and provides training, technical assistance, grant-making opportunities, and peer learning to help bring people and businesses back downtown. I was the CEO of Main Street America for almost 10 years before stepping down in 2022 to work on a new project.

ABR: Speaking of the National Trust for Historic Preservation, *The Greenest Building: Quantifying the Environmental Value of Building Reuse*, which you worked on when you were the Director of Sustainability at NTHP, makes the point that extending the useful life of a building through an adaptive reuse project, retrofit, refurbishment, or repurposing, almost always offers environmental savings over demolition and new construction. The report also states that it can take between 10 and 80 years for a new, energy-efficient building to overcome the negative climate change impacts that are caused by its construction. Were you and your team surprised by this?

PF: No, I don't think that surprised us. We had suspected, based on some of the embodied energy numbers we had seen, and the importance of those numbers, that the environmental impact was going to be quite significant. The thing that surprised me is the range of impact, and that part of the range depends on where you are in the country and how clean the grid is. If you're in Portland or Washington state, where the grids are pretty clean, then it takes even longer for a new green building to recover the carbon impact, or the environmental impact, of its construction. If you're in a place where the grid isn't as clean, like Chicago, then the time frame is smaller, and that surprised me, personally.

ABR: Life cycle analysis, or LCA, was used in the study. Can you please describe this concept?

PF: Life cycle analysis is a comprehensive way to understand the environmental impact of a building over time. It includes the extraction of materials that are used to manufacture the building, the materials themselves, the construction of the building, and the building's operations through the end of its useful life. Life cycle analysis was still new when we used it for *The Greenest Building*, so it was difficult and time-consuming to assemble the data. But today, there are tools on the Internet that can generate an LCA assessment relatively quickly using some basic information about a building. Whereas back when we did our study, it could take months to formulate the analysis.

ABR: Many people are familiar with operational carbon emissions from buildings, but are less familiar with embodied carbon emissions. Can you describe embodied carbon and how it relates to life cycle analysis?

PF: The number that always gets the most play is that 27% of global greenhouse gas emissions come from the operation of buildings, and that is significant. We are never going to meet our climate targets if we do not address building operations. I want to be very clear about that. But, there is also another 13% of global greenhouse gas emissions that come from embodied emissions, which is the carbon cost from constructing buildings and constructing the infrastructure that serves those buildings, so this is something we really have to pay attention to.

ABR: What are your thoughts on some of the climate change legislation that has been enacted recently?

PF: I'll speak to the legislation I know the most about, which is the Inflation Reduction Act. I'm very familiar with the Act's Greenhouse Gas Reduction Fund, which is a $27 billion program that EPA is implementing. Main Street America

worked very hard on this initiative. We led a national coalition of statewide and local organizations, to advocate to the EPA to allow funding for adaptive reuse projects through the Fund, precisely because of the embodied carbon in our existing buildings and the embodied carbon from new construction.

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ABR: What are some of the barriers to adaptive reuse projects?

PF: With interest rates being what they are, and materials and labor costs being what they are, right now, I think it can be hard to make these projects pencil in healthy markets, and it can be very hard to make these projects pencil in disadvantaged or economically vulnerable places. In communities of color and rural places, we see real problems in accessing capital to support adaptive reuse projects and we also see where the projects financially are upside down. The fundamentals are just really tough. So again, we're excited that the Greenhouse Gas Reduction Fund can be a source of low-cost debt to support reuse projects. C-Pace helps and some other programs help, too.

The availability of labor in some parts of the country is also a barrier to reuse projects. That is everyone from contractors, to architects, and engineers. There is also a spatial mismatch in some locations. We have a ton of vacant buildings in a lot of post-industrial, Midwest and Northeastern towns, but that is not where most of our population is. We have seen huge population shifts, especially to the South, and that presents a challenge, because a city or region might have buildings that are good candidates for reuse projects, but those areas might not have enough demand for the new use of those buildings.

ABR: What do you think the future holds for adaptive reuse projects?

PF: I'm not quite sure how this unfolds because our cultural default setting is building new. I do hope the availability of federal funds at such a significant scale will help tip the scales in favor of repurposing more buildings. There are some cases where you absolutely need new construction for one reason or another, but we also have to consider the importance of reusing existing buildings as part of the carbon conversation. I think there are estimates that there are as many as 19,000,000 vacant buildings in the country. That is an extraordinary amount of space we could be putting back into active use. I think adaptive reuse projects also allow property owners to create high-quality assets that can fetch a premium, and we have seen this in some of the reporting that is out there.

Beyond the environmental benefits, there are so many other reasons to reuse buildings. Certainly, if you're talking about historic or older buildings, those places often have a ton of character. While not every building is culturally important, a lot of them are, and a lot of people are attached to the buildings in their neighborhood or their downtown area, and are excited to see those buildings repurposed, and their neighborhoods and downtowns come back. There is a huge benefit to these projects and it's worth the engineering challenges and the financing challenges to support this work.