## PROJECT INTRODUCTION









## PROJECT SUMMARY

The Hampton University Millennial Village Design Team's main goal is to design a marketable Net Zero Ready container home for the ViBe Creative District in Virginia Beach, Virginia. Container Homes are not suitable for every homeowner but they have a particular appeal to a generation of young and creative people across the country. For Virginia, container housing is not readily accepted in many municipalities but in the ViBe district, ongoing discussions between City code officials and local architects about the benefits of container housing are setting the stage for a future container housing boom. Our team is actively working with stakeholders of this area who believe Net Zero Ready container homes are marketable, cost effective, sustainable, and most importantly attractive to the creative millennial generation.

Hampton University's Solar Decathlon Design team has partnered with Jay Epstein of Health-E Communities, a local developer who has been at the forefront of sustainable housing design for decades. He has been researching and testing net zero strategies on traditional wood framed housing in communities such as Walnut Farm in Williamsburg, Virginia and The Villas at Rocketts, a solar subdivision in Richmond. He shares the ViBe's vision for housing and is eagerly helping the team to test container construction from a cost and building science standpoint.

Why market to Millennials? Young individuals between the ages of 18-38 are in search of alternative options to the traditional single family home. The City of Virginia Beach is attractive to this young generation due to fairly low housing costs (median home price of \$217,000 is less than the national average of \$240,000), mild coastal climate, and relative proximity to larger metropolitan areas such as Washington, D.C. In a recent CNBC report, Virginia Beach was listed as the 10<sup>th</sup> most popular city in the nation among the millennial generation. Similarly, Time magazine reported in 2016 that Hampton Roads is the "No. 1 urban area" for millennial move-ins.

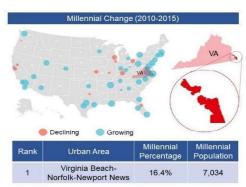


Figure 1. Millennial Population Growth in VB

Why the ViBe Creative District? On April 21, 2015, the City of Virginia

Beach established the boundary of the ViBe Creative District by ordinance and declared it "an arts and cultural district and technology zone" with incentives established by the Virginia General Assembly. The ViBe's purpose is to serve as a vibrant center for the arts, culture, and technology, and to support artists, technical, and creative businesses to help them flourish and cross-pollinate. The ViBe is a work/live area of the city not far from the oceanfront where creative and young business owners have built a thriving venue for artistic and progressive endeavors. Residents of the ViBe District appreciate the nearby oceanfront of Virginia Beach and acknowledge the opportunities of sustainable living and sustainable business practices which is why Zero Energy Ready Homes are the perfect fit for the the ViBe Creative District.



Figure 2. Murals by Local Artists in ViBe Creative District

Why container housing? In Virginia Beach, shipping containers are abound in the Hampton Roads area, home to the nation's third largest and busiest shipping port – the Port of Virginia. In 2018 alone, the four principal facilities of the Port of Virginia, all located in Hampton Roads, moved a total of 1,612,760 container units. Although containers have been widely used on the west coast and in the southwest regions of the United

States, they are a recyclable, modular, structurally sound, and cost-effective solution to housing on the east coast.

Stakeholders The Hampton University Design team has been collaborating with the Executive Director of the ViBe Creative District, Kate Pittman, as well as a local architect, Jeremy Maloney, as they express the vision of The Millennial Container Village. In doing so, Kate Pittman and Jeremy Maloney captured the vision and a marketable strategy that will attract and maintain creative, young individuals living and working in the ViBe District area of Virginia Beach. Kate Pittman works primarily with clients in this unique area of the city and holds a pivotal stakeholder role. She is integral to the area's success and is the direct link to the City of Virginia Beach's Office of Cultural Affairs, Strategic Growth Office, Special Events Office, Departments of Public Works and Landscape Services, Commissioner of the Revenue's office, and Convention and Visitor's Bureau. She has overseen a recent change in the city code to allow live/work communities more flexibility in planning and construction and is hoping to see continued support for container housing in the City of Virginia Beach. Jeremy Maloney, owner of Altruistic Design, has also recently worked with the city officials to garner support for container construction. Having grown up in the area, Jeremy understands the residents and business owners of the ViBe District inside and out and has seen firsthand the transformation of the area into a creative mecca on the east coast. His architectural practice supports all kinds of creative entrepreneurial efforts and has been the architect for clients such as Commune Restaurant, a sustainable farm to table restaurant and Three Ships Coffee Bar and Roasters, a self-made coffee roaster in the Virginia Beach ViBe Creative District.

This collaboration has its eyes on the future of housing that caters to future leaders – millennials that value the characteristics described by Dan Anderton in his blog, "Millennial Housing: Paving the Way for Change": private and public spaces in housing, technology integration, local neighborhood gathering spaces, small-scale green spaces, and environmental site design measures.

## DESIGN STRATEGY – Marketability

In order to make this project feasible, the Net Zero Container homes need to be market rate and cater to the needs of our stakeholders. Building in this area will allow the residents of the container village to have access to all of the amenities the ViBe district has to offer, from farm-to-table restaurants and the Virginia Beach Oceanfront to art studios and business incubators. As of the writing of this report, city officials are discussing a proposal to create a surf park resort within a 5 to 10 minute walk from our site.



Figure 3. Market Growth Potentials for Millennials and Artists