Community Transportation Needs Assessment Report: Bridgeport, CT

Community-Driven Transportation Plans for the Northeast

Executive Summary

Through engagement with the residents of the City of Bridgeport, the Live Green Connecticut team collected almost one hundred surveys with residents' feedback and assessing their awareness of alternative fuel vehicles (AFVs). Additionally, we hosted two community forums during the audit phase of the project, the first to present the results of the surveys, determine the main barriers to AFV adoption, and gather additional feedback from the community, and the second to demonstrate the potential solutions. At both forums, we saw engaging participation from community members and received additional helpful feedback afterward.

Following this outreach, we determined that the high priority action item moving forward in Bridgeport for the Community-Driven Transportation Plans for the Northeast project should be a focus on the role of identity in vehicle ownership. Main activities for addressing this barrier will include a plan for a car sharing program that can be implemented in the city, as well as hosting a ride and drive event to give individuals the opportunity to experience an AFV firsthand.

High Priority Action Items Identified

The high priority action item for Bridgeport is to develop an AFV car sharing program for Bridgeport residents, offering them the opportunity to see and feel how an alternative fuel vehicle works in day-to-day life, ultimately addressing the role of identity to AFV ownership found from the second community forum and stakeholder feedback. Despite presenting solutions for AFV adoption, most participants at the second community forum were still not interested in purchasing an AFV. It became clear that identity around owning an AFV (or any type of vehicle) is a principal factor in purchasing a car, and something that must be addressed while engaging with community members on the importance of clean transportation. Firsthand experience driving an AFV will provide people with the opportunity to feel what it is like to own one and will be more powerful in changing people's perceptions of the car's abilities than only being provided with educational resources. Giving residents more experience behind the wheel of an AFV can offer self-reflection on their preferences. As a prelude to the AFV car share project, we will host a test drive event

in late 2025. The event will continue the momentum of AFV discussions from this project and boost momentum for the car sharing program plan. Test drives will serve as an introduction to AFV capability demonstrations, and a car sharing program will have a lasting effect on integrating AFVs into residents' daily lives. These strategies when employed together could break through the unconscious identity barrier to AFV adoption that education alone proved difficult to address.

Another high priority action item for Bridgeport is the need for a charging station implementation plan. We will be collaborating with the organization PT Partners to discuss the opportunities for the installation of additional charging stations at various locations in the city, especially at public housing. We will meet to formulate a plan on how to accomplish this action item and make charging more accessible and less of a concern to Bridgeport residents. Using the map marked with resident-identified potential charging station locations, we will draft a plan on how and when those installations can be accomplished. At the end of the grant period, we will present it to the City of Bridgeport.

Project Background

Bridgeport is the most populated city in Connecticut, and the fifth most populated in New England, with a strong manufacturing and industrial history. As of 2024, the percentage of total passenger cars registered as AFVs in Bridgeport is 0.76%, the lowest in Fairfield County. Given this, and the fact that we formed strong relationships with Bridgeport stakeholders and hosted events in the area since 2009, we decided to choose Bridgeport as one of the locations to focus on in Connecticut for the Community-Driven Transportation Plans for the Northeast grant. The goal of this project is to provide a detailed clean energy transportation plan that will be implemented by the community, and we feel that Bridgeport is an excellent municipality for this work.

Summary of Engagement

1. Surveys

    We developed a transportation survey to distribute to Bridgeport residents and community members. The questions asked included basic demographic inquiries, individuals' impression of AFVs and their knowledge of financial incentives for purchasing, how many miles a day they drove each week, their concerns about charging AFVs, and if their employer offers workplace charging. We collected responses from the Black Rock Garden Club and at a community event entitled "Picnic in the Park" where we had a table and spoke with passersby. Additionally, many of the people who attended the first community forum had not yet taken the transportation survey, so we received thirty-seven additional responses from our

outreach efforts at this event. The total number of responses we collected was ninety-nine. The main trends we found in responses were that 0% of respondents had heard of the Connecticut Hydrogen and Electric Automobile Purchase Rebate (CHEAPR) program; 92% did not know the differences in price between a gas car and an AFV; 76% did not know about the financial incentives associated with AFVs; 82% did not know about the reduced maintenance costs of owning an AFV; 76% were interested in purchasing an AFV (if price was not a factor); 58% had not ridden in an AFV; and 58% had not seen charging stations in Bridgeport.

2. Community Forums

In the first forum of the two-part series, we presented the results of the survey and discussed the twelve identified barriers to AFV adoption during breakout groups. Members of the project's Stakeholder Advisory Committee led four breakout groups where we highlighted the main barriers, cited below. We posed three questions to each group: what are the main barriers, what are the priority areas to focus on in AFV adoption, and did anyone learn anything new or surprising they had not known before this event.

In the second forum, we developed a presentation that offered solutions to the top three barriers identified: increased affordability, convenient locations of charging infrastructure, and better reliability. We invited a member from the organization PT Partners to give a presentation which covered the background of the project, a summary of the first forum, the importance of AFV adoption for cleaner air and reducing health problems, an introduction to the Stakeholder Advisory Committee, and the solutions to the barrier of durability. Following this presentation, Pete Babich from the Connecticut Department of Energy and Environmental Protection (CT DEEP) gave a presentation to provide more information on the CHEAPR program to address the barrier of affordability. Like the first forum, the second forum also featured breakout groups, led by stakeholders and community members, where we discussed whether people's perceptions of AFVs changed or not by the learned information, as well as where they would like to see more charging stations around the city. This community-driven project is just that: community-driven. Because of that, we want our stakeholders and community organizations to feel that this is their project as much as it is ours so participants had the opportunity to view on a map of the city where charging stations are located currently and mark where they would like to see more installed. When it came to residents' opinions on AFVs and whether they had changed or not, we found that there was slight change, but most people did not have their views altered significantly. The audience was made up primarily of low-income housing residents associated with the organization PT Partners, as well

as stakeholders on the Stakeholder Advisory Committee (SAC), and other community members.

Main Barriers Identified

The barriers to AFV adoption in Bridgeport are: price; lack of education about financial incentives, reliability, and the location of charging stations; lack of public charging; advocacy; maintenance concerns; durability; safety; weather effects; range anxiety; needing a special outlet at home and possible electrical upgrades needed; home chargers when it comes to affordability and electricity; and access to AFVs.

After the first community forum, the three main barriers to AFV adoption were streamlined to affordability, charging infrastructure, and reliability concerns. It was not until after the second community forum that we discovered a fourth priority barrier, that of the importance of a vehicle to one's identity. Many people have a specific make or model of car in mind that they will drive, and it can be difficult to accept another. Alternative fuel vehicles, being a very different kind of technology than some people are used to, are not eagerly adopted if someone does not see themselves driving one. After this observation, we decided to prioritize this issue for our high-priority action item.

Solutions Identified

Moving forward, we will be working with PT Partners to plan where public charging might be most beneficial to residents of Bridgeport, specifically as it relates to public housing locations. We will set up meetings with them to discuss opportunities, while also consulting the map that participants marked at the second community forum.

Additionally, we will bring demonstrations of alternative fuel vehicles to the residents of Bridgeport through test drives and an AFV car sharing program. While having conversations about the importance and feasibility of alternative fuel vehicle ownership is needed, experiencing an AFV firsthand is integral. We feel that these kinds of in-person moments of connection will aid in expanding perspectives on what kind of car to own.

To make the car sharing program a reality and increase AFV adoption, we will be contacting several organizations, including the Bridgeport City Council and the Bridgeport Regional Energy Partnership (BREP), to determine where their clean transportation work stands and how we can work with them to further our implementation plan. Finally, we will be conducting outreach to find AFV owners in Bridgeport and selecting ten individuals to serve as ambassadors of the implementation plan. We feel that these ambassadors will be key in supporting the citywide car sharing program through their personal experience with AFVs. They will be able to converse with individuals who are curious and open to learning about AFVs and use their relatability to expand positive opinions toward AFVs.

Community Forum Feedback

The reception to both forums was quite positive. Many individuals who attended the first forum came back for the second. While participants in the forums were happy to be included and excited about the project, the willingness to purchase an AFV did not increase for many during the breakout groups despite the presented information and resources. This feedback led us to focus on the identity factor of vehicle ownership. Though conversation and education is extraordinarily important in developing knowledge about AFVs and clean transportation, we feel that based on the outcome of the forums, one of our high priority action items should center on in-person demonstrations and car sharing to allow someone to physically experience an AFV instead of solely hearing about them.

Two of our stakeholders, Scott Burns and Vanessa Liles, both voiced their approval of the car sharing program idea. The previous ride sharing programs that have existed in the city have not been useful, according to Ms. Liles, so to design a well working plan, based on AFV education, to show that AFVs are viable options for everyone, would be greatly beneficial to the community.

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