

Tri-Valley Transit Prioritizes Sustainability

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Most people think of Tri-Valley Transit -- formerly known as Addison County Transit Resources (ACTR) and recently merged with Stagecoach -- as “the bus company,” with fixed routes and gas-guzzling buses.

But behind the scenes, TVT has been leading the charge in making portions of Vermont’s public transit, as well as their entire business model, more sustainable and efficient.

Their main initiatives include several innovative steps:

- Adding electric buses to their fleet
- Investing in green energy for their office buildings
- Working to right-size routes so that they aren’t sending bigger buses on routes than is needed, and
- Discussing the potential of on-demand microtransit to better serve the entire state.

These initiatives aren’t an afterthought; they are products of TVT’s dual mission statement: to provide reliable and accessible public transportation, and to protect the environmental health of the communities they serve.

Electric buses

TVT will add four electric buses to its fleet between summer 2022 and summer 2023, after receiving a \$1 million grant from the Federal Transit Administration. Two buses will initially operate on local routes in the Middlebury area before expanding to the tri-town route between Middlebury, Bristol and Vergennes. The two other buses will operate in Orange County between Randolph and Bradford.

As part of Green Mountain Power’s emphasis on cleaning up the state’s electric grid, GMP will help TVT establish charging stations across the towns the electric buses will serve. The charging process will draw on Vermont’s relatively clean electric grid.

Electric buses have become more cost-effective in recent years, but they remain more expensive and limited in their capability to cover larger routes and steeper terrain when compared to conventional diesel buses.

TVT regional director Bill Cunningham says TVT and the state of Vermont are “well ahead of the curve” when it comes to introducing electric buses compared to comparable rural areas around the country. He added that adding electric buses in the near future represents a deep



commitment by the Vermont government, GMP and TVT to help decarbonize Vermont's transit system and create a greener future for the state.

Sustainable offices

TVT prioritizes sustainability at the office, too, not just on the road.

TVT's Middlebury office, completed in 2013, was built with sustainability in mind. Its rooftop solar array produces about 85 percent of the electric power needs of TVT's regional offices. It was also built with a rubberized roofing system that collects and stores rainwater and snowmelt, which TVT then uses to wash their buses. With this system, TVT's water needs are about those of a four-person household, Cunningham said.

In the winter, the Middlebury office is heated in part with sustainable wood pellets, and, in the shoulder seasons, the office uses heat pumps for heating and cooling. The office's lighting needs are minimized by the office's open design and southern exposure, which allows TVT staff to utilize natural light as much as possible.

Another TVT office is nearing completion in Bradford, complete with similar sustainability specs. Once completed, the solar arrays at the Bradford and Middlebury offices will produce all of the electric power needed for TVT's operations. Any new TVT building, including future plans for an office building in Randolph, will have renewable heating and cooling sources, as well.

Better service, fewer emissions

[Transportation -- mostly cars and trucks -- accounts for almost 45 percent of the state's emissions.](#) TVT is committed to making their transit services a more convenient and accessible alternative to private cars, thereby limiting the number of cars on the road and curbing transportation emissions. They are doing this by right-sizing routes and expanding microtransit services.

Right-sizing routes involves making sure they aren't running bigger buses -- and causing more emissions -- than needed, and making sure they are running buses on routes at the best times. Ideally, this maximizes the number of passengers served in one trip and minimizes the number of would-be passengers opting to drive a private car instead.

Microtransit is an innovative on-demand public transportation solution that could allow TVT to better serve smaller towns and more of Vermont's rural communities.

Microtransit services are already being explored in other parts of the state. Green Mountain Transit is currently operating [MyRide](#), a two-year microtransit pilot program in the Montpelier area. Passengers can schedule rides in advance with the MyRide mobile app and be booked into a shared vehicle with multiple passengers heading in the same direction.

TVT is interested in providing similar on-demand services in the future that could take passengers to their destinations or take passengers to the fixed bus route, making public transportation more convenient and efficient.

TVT will be doing a study on the viability of microtransit in the Addison and Orange counties in the next year, and a Request for Proposal for the study will be developed in the near future.