



## Hudson River Highway Project

*The Hudson River Highway Project endeavors to develop and implement a logistics system that reliably transports fresh food from regional farms using the Hudson River as the final link to New York City boroughs.*

---

**Introduction:** This paper outlines the vision and strategic approach for the **Hudson River Highway Project**, inviting stakeholders to rethink the region's transportation system for farm products. Small to medium-sized farms in our state are producing at limited capacities, partly because of increasing costs of transportation to New York City, the largest market in the US. During and since the Covid epidemic, truck leasing, maintenance, and labor used to deliver New York State farm products have jumped. By lowering our regional growers' transportation costs, we can help farms expand and encourage new starts to thrive. In addition, land prices in the upper valley regions are lower than in downstate areas. This is an advantage for farmers who wish to expand production and for young farmers wanting to begin a new farm enterprise. Is there a less costly way to get their products to NYC?

Our marine transport system will use the Hudson River, aggregating fresh food at a hub located between Newburgh and Albany. The ferry or barge service will deliver directly to piers in Brooklyn, Queens, Manhattan, and the Bronx. Once a cost saving logistic system design has proved effective, we anticipate purpose-built electric-drive cargo vessels, each with a capacity to haul tons of fresh food. New York State has the technology and the industrial capability to realize this vision. A pilot program in 2026 will provide Proof of Concept and practical design options for optimizing the transport processes. Our waterborne service on the Hudson will be a "win" for New York State, supporting agriculture and expanding access to fresh, healthy food for NYC residents.

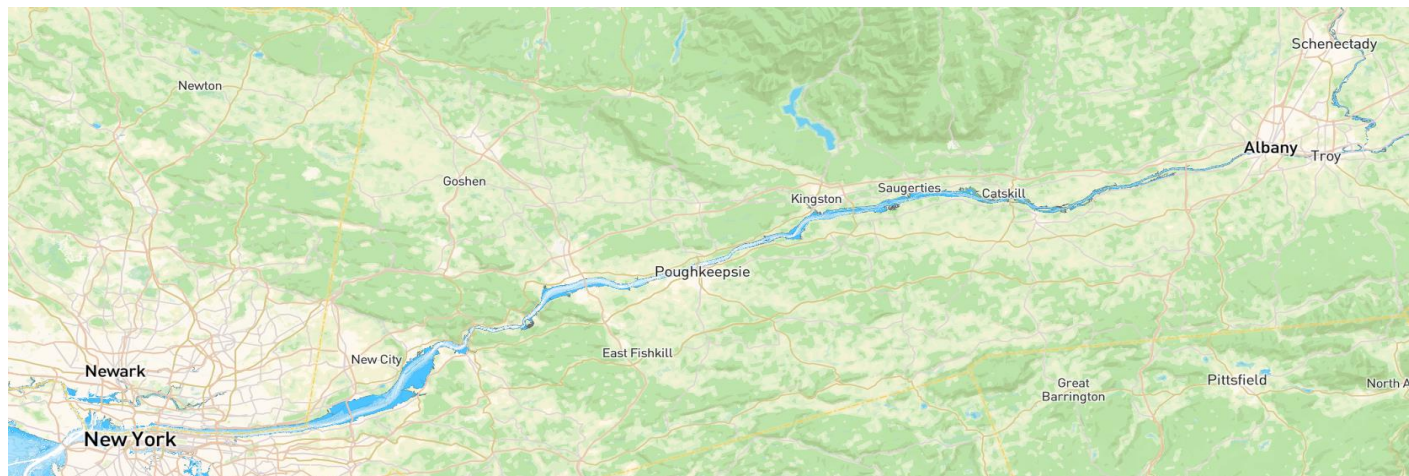
**The Problem:** According to the NYS Council on Hunger and Food Policy 2024 annual report, "...from 2012 to 2022, hired (farm) labor expenditures grew by 68 percent, far surpassing other categories. Despite economic growth between 2012 and 2022, the state lost close to 14 percent of its farms and over nine percent of farmland. New York is losing farms and land faster than nationwide averages." Further challenging our regional farms are the major distributors who truck massive quantities of food cross-country from growers in Mexico, the west coast, and the Midwest states. Drought, animal disease epidemics, long-distance transportation, and farm labor issues are current western food chain problems that impact the reliability of getting critical supplies to NYC.

During the Covid epidemic, there was a noticeable decrease in available food shipments from other states. Large midwestern meat processing plants shut down, causing unacceptable levels of food insecurity and general shortages in many city neighborhoods. Some nonprofits like The Skyline Charitable Foundation sent their own trucks to farms north of the city to gather fresh farm food, delivering to community organizations in the Bronx. Post-Covid, some regional farms have found trucking their products to be increasingly unsustainable.

One example is a farmer in Washington County who uses a 20-ft box truck to deliver 4.5 tons of vegetables direct to NYC customers, two days a week. Each trip requires two farm employees working 10-15 hours. The average cost of the trip in 2024 was over \$1,200. Expenditures for purchasing or leasing a truck, vehicle maintenance, and farm labor continue to increase and erode the already slim margins for most small to medium size farms. Adding to the cost and uncertainty of road transport is the wear and tear on farm trucks using major arteries, bridges, and tunnels into the city. While traffic jams further impact labor costs, truck drivers are in short supply.

## **The Solution:** Marine transport from the upper Hudson River to city borough piers

1. Catchment area: The Hudson and Champlain Valleys, including Vermont and western Massachusetts and Connecticut have a massive concentration of small to medium size farms in that fertile corridor. Farms in western and central New York, Buffalo to Albany, are another bounty of fresh farm products along the Mohawk Valley region. Craft beers, wine, maple syrup, vegetables, fruit, dairy, meat, poultry, eggs, and hemp, all have established suppliers within reach of our state's most navigable river, the Hudson.



**The Hudson River forms a natural highway to transport farm products directly to each borough of New York City**

2. Pilot Project for 2026: Our near-term goal includes a demonstration of our delivery system that aggregates farm products at a strategic pier location on the Hudson River. The upper Hudson River landing site must have nearby access to I-87 to accept continuous supplies of farm products. The aggregation point must have a pier structure that accommodates Roll-on:Roll-off operations, eliminating the need for crane operations at the upper port facility and at the destination borough in NYC. Refrigerated trailers (12ft, 16ft, and 20ft) direct from farms will travel to the pier and drop off food ready for transport downriver to piers that are RO:RO ready. Last mile distributors are already well established in the city for delivery to local customers. Backhaul will also be tested on the return runs upriver. During each test run we will collect data, such as cargo types and quantities, loading and unloading times, river conditions, energy usage, scheduling variations, and other real-time delivery issues.
3. Reliable scheduling: Once the logistic system is fully established, the service will start to replace the in-city truck traffic for fresh farm food. Farmer confidence will encourage additional participation in this streamlined logistics system. Economic scaling to meet growing supply and demand will require close coordination and planning, as increased deliveries to food markets, institutions, hospitals, restaurants, and food banks result in financially sustainable operations.
4. Lowering carbon emissions: Our ultimate goal is to have purpose built vessels that have a battery-powered, electric drive propulsion plant design. This would require any pier facility to recharge the vessel's battery pack during vessel loading and unloading operations. A quiet, streamlined, emissions-free river vessel will cut food supply pollution and drive more efficient transport options using the Hudson River infrastructure well into the next century.

5. Promoting economic growth: By increasing fresh food flowing from our state's northern and western farms to NYC, we expect growth to be evident in several job sectors, including: expansion of existing farm capacity and new farm starts; river vessel design and construction; vessel operation and maintenance; logistics systems management; pierside loading and unloading; last mile cargo bike distribution.

## **Challenges and Mitigation Strategies**

Freshness of Food Off the Farm: For NYC residents, product freshness and nutritional value are key benefits to purchasing from our regional farmers. It is a clear advantage over food trucked for days from farms and warehouses on the west coast and the Midwest. Our Hudson River logistics system is designed to maintain the freshness of our regional farm vegetables, fruit, meat, poultry, eggs, and dairy, using refrigerated trailers from the farm to final unloading at the customer site. Most farmers already have a pickup truck to haul their refrigerated trailer and to transport it to a Hudson River pier. While at the pier, the farmer hitches an empty trailer for the return trip back to the farm, never having to make that grueling trip through NYC streets.

Winter Transport: Vegetable and fruit products are mostly seasonal, but grains, dairy, meat, eggs, maple syrup, craft beer, and wine are examples of products that continue to flow from our region during the winter months, when ice slows river operations. The system is designed to function year-round.

Initial Investment: Upfront municipal capital investments in river infrastructure for this specially designed logistic system will result in efficient, low-maintenance cargo transport that can reliably meet a demanding schedule of pickup and delivery to NYC. Initial capital will be through grants and public-private partnerships. It is also possible that initial subsidies will mitigate the farmer's cost to use the service.

## **Conclusion**

The Hudson River Highway Project represents an achievable solution to the transportation challenges faced by farmers in our region. This project aims to create a sustainable, efficient, and resilient transportation network from farms to the city's institutions and neighborhood outlets. River transport will guarantee the continuous and growing flow of regional farm products to New York City, while significantly reducing the environmental impact of our current trucking paradigm.

To realize these clear advantages, we seek collaboration with regional farmers, farm organizations, shipyard building and repair facilities, technology partners, state and local agencies, universities, and private foundations. Together, we can use technological innovation to drive economic growth, environmental sustainability, and food security. Our initiative will serve as an example to similar regions in the country that have farms near navigable river frontage.