Session D: Investing in Infrastructure

Goal: Storage, aggregation, distribution, telecommunications, and other forms of on-farm and commercial infrastructure will be sufficient to meet increasing year-'round consumer demand.

Potential strategies:

- Create more distribution opportunities, including transportation, aggregation, and storage, for internal freight movement (e.g., Greensboro to Newport) and inbound/outbound movement of food systems/agricultural products. Coordinate the transportation system to achieve maximum transportation efficiency (e.g., aggregation centers, full loads, etc.), which may require a freight plan for NEK agricultural products (e.g., food, fiber, forest products, etc.).
- Centralize and strengthen existing food hubs of distribution in the NEK by co-locating third party brokerage systems, producer cooperatives, and aggregation and storage infrastructure. A Food Hub “brokerage” and distribution system could provide local, community based solutions to distribution bottlenecks. Food hub distribution activities include: online brokerage systems to link producers and consumers; and distribution and aggregation infrastructure (including non-traditional forms such as root cellars, school facilities, etc.). Further, producers could form cooperative arrangements of food hub distribution to allow pooled resources for equipment, storage, and distribution infrastructure.
- Explore the feasibility of establishing a leased storage facility through a public-private partnership or through a partnership with an existing business that may be able to absorb operating costs.
- Support further study of the freight movement of non-durable goods (perishable food) in the Northeast Kingdom. This would include inbound, outbound, and internal freight movement. Link these indicators to recommendations for the infrastructure needed to increase the efficiency of the network.
- Explore the feasibility of developing a “food miles” measurement that can be used in marketing local foods.
- Make regional producers aware of benefits of participation in the Foreign Trade Zone designation.

This session is designed for you to dive deep into facilitated discussion, assess the changes in the region, and answer the following questions:

- Can we commit to these goals and strategies? Are there other goals or strategies that we should include?
- What actions can WE commit to today in support of these goals and strategies? And…who are “WE”?
- How will we know when we are successful?

To aid the creative thinking process, you’ll find highlights of achievements and significant developments since 2011.
What’s happened in local food infrastructure since 2011...

The NEK is rural and remote, making aggregation, storage, transportation, and distribution of product one of the major barriers to developing a vibrant farm and food economy. The opening of the Vermont Food Venture Center made available shared storage space – for dry, refrigerated, and frozen – at a monthly rate. Climate controlled areas are served by a backup generator. Nevertheless, there is an additional need for storage of all types.

Storage: A 2014 feasibility study conducted by NCIC indicated that a standalone leased vegetable storage facility would not be financially viable. Given the rates producers were willing to pay (about $5 per pallet per month), a standalone operation could not generate sufficient revenue to cover operating costs. While a shared use commercial facility may not be sustainable in and of itself, opportunities exist among potential public-private partnerships – or simply through a collaborative effort among area producers. Producers who either have excess storage capacity or who are planning to invest in their own infrastructure may be able to reduce their own operating expenses by leasing out to other producers. Such arrangements would require strong central coordination (like a Web site or similar match-making resource among producers). Additionally, collaborative efforts will rely on adoption of best practices to ensure product safety and minimize liability. The Vermont Food Venture Center and producers with shared use efforts such as the Cellars at Jasper Hill may be able to provide guidance in developing such practices.

Transportation: In 2011, the region was served by two Vermont-based distribution companies, providing pickup and transportation: Black River Produce accommodates shelf stable, refrigerated, and frozen products and travels throughout New England and New York. Upper Valley Produce can accommodate shelf stable and refrigerated products and currently reaches locations as far north as Lyndonville. (Additional pickup may be arranged for a minimum of a half-truckload.) Two additional service providers have now entered the scene since then. Myers Produce is a Hardwick-based regional distributor that buys fruit and vegetables from small, primarily organic farms in Vermont and Massachusetts, and sells to wholesale customers in New York City and the Boston area. Farm Connex (formerly D&S) is not a distributor, but will deliver frozen, refrigerated, and shelf-stable goods to its delivery routes throughout Vermont and into New Hampshire. The transportation company also provides dry, refrigerated, and frozen warehouse space and cross docking capacity.

As with storage, food producers who invest in their own transportation equipment may be able to reduce overhead through collaboration with other producers. The similar logistical challenges – coordination, product safety, reliability, availability – will ultimately determine success. There may be additional opportunities through shared transportation infrastructure, such as refrigerated trucks available for short-term use by a fee. Such an endeavor will require financial and logistical planning.

In 2013, the Northeast Kingdom established a Foreign Trade Zone. The zone was expanded in 2015 to include Lamoille County businesses. Legally, a Foreign Trade Zone (FTZ) is an area within the United States that the federal government considers outside the country, or at least, outside of the U.S. Customs territory. Certain types of merchandise can be

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Investment and Expansion Resources

In addition to private lending, stakeholders in the regional farm and food economy should consider some of the additional planning, financial, and technical resources available:

- **USDA Rural Development:** The NEK maintains a Rural Economic Area Partnership designation, one of only four such designations nationwide. The designation gives applicants access to some of USDA RD’s 40 grant and loan programs through a special set-aside reserved only for REAP Zones. Since 2011, the region has received more than $3.2 million in USDA funds for furthering food system development. Funding programs include Value-Added Producer program, Rural Business Development grants, Rural Energy for America grants, and Business and Industry Guaranteed Loans. This program has also allowed regional service providers (like NCIC) to provide technical assistance to farm and food businesses.

- **Working Lands Enterprise Grants:** In 2012, the Vermont Legislature created a competitive grant program to spark investment in the agriculture and forestry-based businesses.

- **Vermont Community Loan Fund:** The Food, Farms & Forests Fund offers low-rate flexible financing.

- **Vermont Housing & Conservation Board:** The Vermont Farm & Forest Viability Program has been providing business and planning and technical assistance since 2003.

- **Vermont Community Development Program:** Grants to municipalities can be re-lent to businesses for start-ups or expansions. Existing grants in the region are currently being recapitalized in a revolving loan fund known as a “Nonprofit Community Development Organization.” The NCDO is managed by NVDA.
imported into a Zone without going through formal Customs entry procedures or paying import duties. Some of the benefits of operating within an FTZ are obvious. At the very least an FTZ can help a business defer paying duties. How the FTZ can benefit regional processors will likely depend on the ability to aggregate demand. For example, area distillers and maple producers import bottles from Italy, but none currently import enough to save money through the FTZ. There may be untapped potential for an import operator to achieve cost-efficiency.

**Selected Benchmarks from 2011**

The 2011 NEK Food System Plan set the following benchmark:

The number of farms associated with Green Mountain Farm Direct (or any newly emerged food hub distribution model) will increase.

In FY2015, Green Mountain Farm Direct reported more than $350,000 in gross sales from 45 producers statewide to 96 customers. That is an increase of more than 2300% from 2011, when gross sales were just $14,544 from 20 producers. Green Mountain Farm Direct currently works with 15 producers in the NEK, including the Vermont Food Venture Center, which provides fresh-cut and frozen vegetables, such as frozen broccoli and shredded carrots from local growers. The VFVC’s Farm to Co-Packer program helps farmers expand their markets by helping them identify crops that grow well in volume, identifying retail and institutional markets looking for product, and processing the fresh-cut and frozen product.

In 2013, Green Mountain Farm Direct developed a business plan with the assistance of the Vermont Housing and Conversation Board’s Farm Viability Program. This process helped GMFD identify areas of growth, liability and strength. A key outcome from the business plan was to begin receiving payment for the business and services they provide, moving the entity towards financial sustainability.

The St. J Local Food Alliance – which seeks to improve access to affordable, healthy, and locally produced food in the St. Johnsbury area – is an emerging food hub in the region. Connecting farmers with consumers is at the heart of St. J ALFA’s mission, and they currently strive to reach more customers by promoting farms and farmers market through their online presence and printed local food guides. St. J ALFA also attempted to aggregate and distribute sales through an online farmers market. The entirely volunteer-driven effort was ultimately unsustainable and the market closed. However, lessons from this experience can help to strengthen future efforts.

The 2011 NEK Food System Plan set the following benchmarks:

- **The number of farms reporting Internet access will increase; and**
- **By 2013 broadband Internet will be available to 100% of the region.**

According to the 2012 Census of Agriculture, 992 farms in the region have Internet access, up from 793 farms in 2007. However, the percentage of farms with Internet access in Essex and Orleans Counties, is lower than the statewide percentage. (Figure 1).

Significant gaps in broadband service coverage remain, and according to the Vermont Public Service Department, Essex County is one of the most underserved counties in the State. Broadband services such as DSL, cable modem, dial-up internet, wireless and satellite have been deregulated at the federal level by the FCC. What this
means for consumers is that the state of Vermont cannot compel any company to offer broadband services, nor can the Board or the PSD regulate how these services are offered or what companies charge for them.

Before it was absorbed by the Department of Public Service, the Vermont Telecommunications Authority built its own fiber optic infrastructure for underserved geographic areas. The **Northeast Kingdom Fiber Network** is a “dark fiber” (i.e. in place but unused) network, that is ready for lease to multiple providers, both broadband Internet and cellular companies. The 160 mile network includes the following connections in Figure 2 and connects from Guildhall across to Northumberland, NH to a 744-mile New Hampshire fiber optic network.

**Figure 2: NEK Fiber Network Routes**

![NEK Fiber Network Routes](image-url)