

Regional Food Systems Infrastructure



In recent years, an emphasis on eating locally grown food has flourished. Amid concerns about the energy required to transport food around the globe, the environmental impacts of large-scale industrial farming operations, and food safety issues, many Americans have sought to direct more of their food-purchasing budget to producers located closer to home. Farmers markets, community-supported agriculture (CSA) programs, and efforts to strengthen connections between regional producers and consumers have grown exponentially to meet this demand; indeed, the number of farmers markets in the U.S. has more than tripled since 1994.¹

However, eating local is still a niche market. Even as households have increased purchases of locally produced items, large-scale institutions such as school districts, hospitals or supermarket chains

struggle to adapt their buying practices to support smaller suppliers. Significant barriers prevent small and mid-sized farmers and ranchers from connecting with the expanding base of consumers who seek locally grown food.

For example, many regions lack the transportation and distribution network required to support area producers. According to the U.S. Department of Agriculture, which has recently begun to emphasize the importance of connecting farmers with nearby markets through its “Know Your Farmer, Know Your Food” program, the number of slaughterhouses nationwide declined by more than half between 1992 and 2008. Simultaneously, the number of small farms has increased.²

Limited access to regional processing facilities, slaughterhouses, dairy-bottling plants, cold-storage facilities, auction markets and distribution hubs hampers growth among small- and medium-size producers and limits their ability to offer their products to the regional market at affordable prices. Facilities that are needed in many regions to support regional food purchasing include shared-use or cooperative facilities such as processing, storage and distribution facilities, commercial kitchens or kitchen incubators for small businesses, and mobile processing facilities.

Many regional development organizations (RDOs) and councils of governments are exploring how they can develop and support regional food systems infrastructure. Promoting small- and mid-size agricultural operations offers numerous benefits to a region, including sustained economic development, protection for regional farmland and rural landscapes, and reduced vehicle miles traveled (VMT) and greenhouse gas emissions. Additionally, sourcing food that is locally or regionally grown fosters a better understanding of food safety and supply issues in case of food-borne illnesses or contamination—something that is harder to trace in global food distribution networks. Finally, strengthening connections between regional farmers and area consumers can advance community nutrition and healthy living programs, such as farm-to-school projects and



Grain processing facility (photo courtesy of SACOG)

initiatives that support low-income populations, seniors and children. By developing partnerships with area farmers and other stakeholders, RDOs can help to develop regional food systems infrastructure that will support economic development initiatives and other program goals.

Sacramento Area Council of Governments: Rural-Urban Connections Strategy

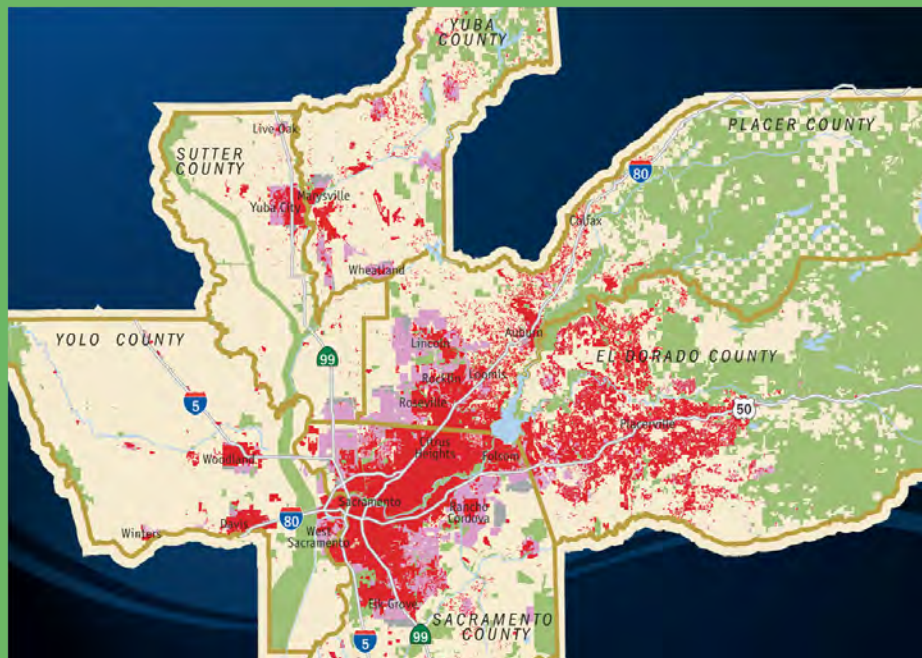
The Sacramento Area Council of Governments (SACOG) serves a six-county region in California that includes both the Sacramento metropolitan area and rural, agriculture-based communities. Following the adoption of the *Blueprint 50-Year Smart Growth Land-Use Strategy*, the region’s long-term planning framework, SACOG began to explore the region’s rural land use issues more closely. SACOG Executive Director Mike McKeever states, “In addition to altering the urban growth pattern, we realized we need mechanisms to help rural areas thrive.” In 2009, SACOG launched its Rural-Urban Connections Strategy (RUCS) to uncover the interdependency of the rural and urban parts of the region. Within the RUCS framework, SACOG is exploring land use and conservation issues, agriculture infrastructure,



Blueprint: Transportation/ Land Use Project

In 2002, the Sacramento Area Councils of Government initiated the Blueprint: Transportation/Land Use Project, a regional visioning project that aimed to develop a long-term growth management strategy. The Blueprint process relied on strong data, interactive modeling software and broad public participation to develop a regional plan that would balance the region's housing options, transportation choices and land development patterns. This process culminated in the adoption of the Blueprint 50-Year Smart Growth Land-Use Strategy, a regional planning framework that articulates a vision for sustainable growth. The Blueprint

addresses transportation and housing choices; compact, mixed-use development patterns focused on existing assets; natural resources conservation; and high-quality design. Under the Blueprint plan, the amount of urbanized land needed to accommodate projected population growth through 2050 will be reduced by more than half, in comparison with the baseline scenario. The Blueprint plan has been implemented as the region's Long-Range Transportation Plan and forms the basis for other planning initiatives in the region. Visit <http://www.sacregionblueprint.org/> for more information.



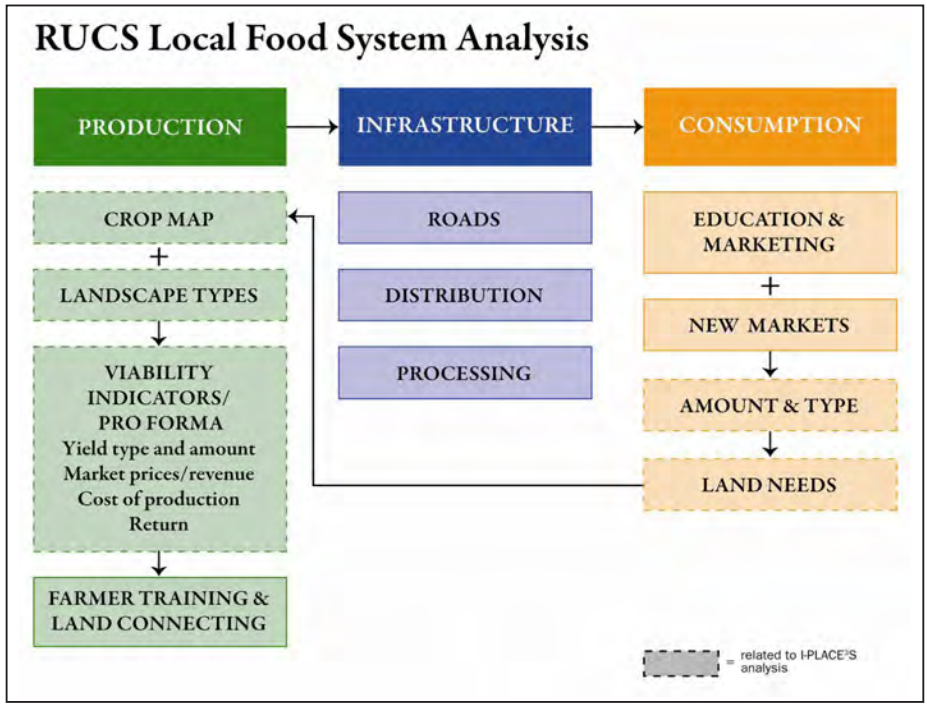
The Blueprint envisions that the projected population growth in the SACOG region through 2050 will be accommodated using compact growth patterns and a focus on sustainable development (map courtesy of SACOG).

economic opportunities, forest management and environmental concerns.

The SACOG region is home to some of the most productive farmland in the world, producing 3.4 million metric tons of food annually. The region's population consumes 2.2 million metric tons of food per year; however, less than 2 percent of that food is produced by local growers.³ Through the RUCS initiative, SACOG is seeking solutions to address this production and consumption mismatch. A root cause of this incongruity is that processing and distribution facilities have consolidated outside the region, meaning that local growers lack the infrastructure needed to process and retain their product for markets internal to the region. The loss of distribution and processing facilities has not only limited intra-region food production and consumption flows, but has also led to job losses and greater wear and tear on roadways and diminished air quality due to increased truck traffic in and out of the region.

David Shabazian, RUCS Project Manager at SACOG, says, "We have plenty of farmers and plenty of consumers; what we're lacking is the local infrastructure that connects them." SACOG has found that the limited number of growers who sell their products locally are primarily selling through farmers markets, CSAs and other direct-sale venues. As SACOG and its partners seek to scale up regional food consumption and facilitate connections between local growers and institutions such as schools, aggregation, distribution and processing hubs will be necessary to better facilitate these flows.

Using I-PLACE³S, the same software model that was used for urban land use analyses in the Blueprint process, SACOG has developed an econometric model to examine the agricultural outputs of the region. This model assesses agricultural production, including crop data, economic data, land use changes, water consumption, transportation and infrastructure



SACOG's chart illustrates the production-infrastructure-consumption flows of regional food systems.

In many rural or exurban areas, converting farmland to residential or commercial development is attractive to municipal governments seeking to grow their tax base. To help rural communities make growth decisions that are fiscally sustainable, SACOG has developed an infrastructure fiscal impacts model. This model allows decision-makers to see the impacts of land use changes and infrastructure investments. Users input land use information, the type of proposed development, and projected demands on and capacity of existing infrastructure (water, transportation, services and parks) into the model, which then generates the infrastructure needs and costs, service costs,

systems and labor movement, among other factors. McKeever says, "Our focus is to bring high-quality data to the table, so it's not an ideological process." By developing a sophisticated, data-driven tool that can be manipulated to analyze a range of situations and incorporate a number of variables, SACOG has been able to better explain the economic value of the region's agriculture sector to both rural and urban stakeholders. The model allows the user to test market fluctuations and their effects on agricultural output, to experiment with various economic scenarios and see how they will affect crop output, and to assess the relationship between market conditions, land use changes and demand on resources such as water, labor, and transportation and infrastructure.

payback period, revenue sources and cost-revenue gap. With this information, users are able to evaluate infrastructure and service needs and the projected costs and revenues of proposed developments, and are therefore able to make choices that are better-informed and take into account the community's long-term needs.

SACOG's goals with the RUCS project, which is still in progress, are to address the gaps found within regional agriculture production and consumption patterns. They seek to increase capacity for local food production by connecting farmers to available land and increasing training opportunities. They plan to grow initiatives on the market end of the flow by expanding farm-to-institution programs, increasing opportunities for local sellers, heightening consumer awareness and supporting agritourism. In the middle lies the crucial connection: expanding opportunities for distribution and processing within the region so that food imports can be reduced and more food grown in the region can be consumed in the region. At the same time, SACOG aims to maintain and expand food exports as an anchor of the regional economy. Other transportation-related issues the team is exploring as the project moves forward include safety issues on rural roads and farm worker housing and transportation options.

The Urban-Rural Edge

Conflicts abound at the urban-rural edge, where agricultural operations may be in close proximity to newly developing residential and commercial areas. Local concerns about the siting of new agricultural facilities in these areas and the associated traffic, noise, odor and waste from the operations can challenge the construction of new facilities. Urban development on the edge of traditional farming districts threatens not only the long-term economic viability of farming, but also brings concerns such as increased traffic, pets and invasive species, and vandalism and theft.⁴

Southwestern Wisconsin Centralized Distribution Hub

The Southwestern Wisconsin Regional Planning Commission (SWWRPC) provides intergovernmental planning and coordination of community development, economic development and transportation planning for five rural counties. To support area produce growers, SWWRPC recently undertook an initiative with a local producer and distributor to open a distribution hub and storage facility. Staff learned about the logistical issues facing area growers through their relationship with Rink DaVee, a small-scale distributor who focuses on produce and local food distribution. SWWRPC applied for and received funding from “Buy Local, Buy Wisconsin,” a Wisconsin Department of Agriculture, Trade and Consumer Protection grant program that provides competitive grants for projects that are likely to stimulate Wisconsin’s agricultural economy by increasing the purchase of Wisconsin grown or produced food.⁵



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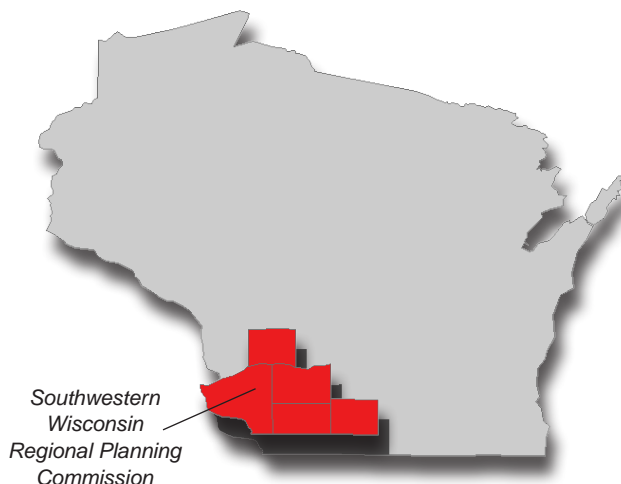
of area agriculture businesses. Amy Seeboth, Planning Manager at SWWRPC, says that the hub “is envisioned as a centralized meeting place for producers, buyers and distributors, where products could be cross-docked, aggregated or sold directly to buyers.”

Finding a suitable storage facility at an affordable price was a challenge, and the lack of a long-term lease at the current facility creates uncertainty around the future of the project. Small and mid-size producers struggle to afford even discounted rents. Additionally, SWWRPC learned in this process that distributors who manage storage facilities are required to obtain a state license which must be renewed annually.

SWWRPC leveraged state funding to perform market research, lease out storage space and provide business consulting services to area growers.

With this two-year grant of \$27,000, SWWRPC performed market research and sought out viable cold-storage facilities. They are now in the pilot phase of leasing a centralized distribution hub in Madison, which includes cold-storage space and a loading dock. Currently, approximately 15 tenants use the space to store produce. SWWRPC has leveraged the grant money to provide business consulting services to area growers.

According to SWWRPC, the purpose of this pilot phase is to develop a model for low-cost, affordable access to refrigerated storage to small- and mid-scale Wisconsin producers and distributors. Ultimately, they intend to establish fixed rates and membership options that are both financially feasible and suitable for the needs



Southwestern Wisconsin Regional Planning Commission



Land-of-Sky Regional Council and the Southwestern Commission, which serve adjacent multi-county planning districts, formed a partnership to develop a livestock market to meet this need. They leveraged their regional connections to

Seeboth has discovered additional transportation and distribution challenges that small and mid-size farmers and growers face. For instance, many producers may not calculate transportation costs into their business financing. Typically, growers will use their own trucks to transport their product to farmers markets, distributors or other regional hubs for sale of their goods, and often fail to include the cost of gas and vehicle maintenance into their overall business plans. Seeboth states, “A tool that farmers could use to calculate VMT costs and build into their business plans and pricing structure would be very useful; this is really hurting our producers.”

work with Western North Carolina Communities, a regional entity that supports community development and agriculture initiatives across Western North Carolina, to find a suitable site for the livestock center and to raise the money to build it. WNC Communities established a limited liability company (LLC) to oversee the facility and select the operator. After researching a number of sites, the partners secured a long-term, low-cost lease on a site in Haywood County that would be accessible to the majority of Western North Carolina’s livestock producers.

Western North Carolina Regional Livestock Center

After the last remaining private auction house in Western North Carolina went out of business in 2004, livestock producers were forced to sell outside the area, increasing their costs and complicating their schedules and work plans. According to a feasibility study performed by the Haywood County Economic Development Commission, Western North Carolina is home to approximately 3,000 livestock producers of approximately 80,000 head of cattle annually, about half of which was being sold at auctions outside the region. The study found that selling outside the region led to higher transportation costs and lower prices for the cattle. The increased stress on the cattle due to longer transit times caused them to lose weight, reducing their size and quality, and therefore the sellers’ profits. Access to a livestock market in the region would reverse those losses and improve their prices per head.⁶

The WNC Regional Livestock Center is expected to add 500 part-time jobs, 20,000 cattle and 30,000 acres of pasture throughout Western North Carolina.

The entire cost of the project is budgeted at \$3.1 million, including site design, construction, landscaping and environmental initiatives. These funds were raised from a variety of public and private sources. As of mid-November 2010, site work and construction on the 44,500-square foot facility was nearly complete. The new market is anticipated to add 500 part-time livestock production jobs, 20,000 additional cattle, and bring 30,000 acres of idle pasture back into production throughout Western North Carolina. The facility will employ four full-time workers and eight part-time workers. In addition, the market is expected to attract 150 to 200 farmers, buyers and spectators to the area each week, further supporting area businesses.⁷

Both Land-of-Sky and the Southwestern Commission played key roles in facilitating connections and capitalizing on existing relationships to get the project funded and built. Bill Gibson, Executive Director of the Southwestern Commission and himself an owner/operator of a small (20-head) cattle farm, states that access to this new market will be a major incentive to keeping hundreds of small farms in production.



*The WNC Regional Livestock Center under construction
(photo courtesy of WNC Communities)*

Roles RDOs Can Play in Regional Food Systems Infrastructure

Regional development organizations are uniquely positioned as neutral organizations that can form relationships and promote alliances among various stakeholders. Many organizations serve both rural and urban areas, further allowing them to make connections between the suppliers and consumers. Food systems issues intersect with many aspects of RDOs' other responsibilities, including economic development strategies, small business development, transportation and land use planning, and support for sustainable communities. The following checklist highlights some ways RDOs can support food systems infrastructure in their regions:

- **Act as a convener:** Capitalize on existing relationships with other regional entities, local governments, state agencies, elected officials, transportation and land use planners, economic development practitioners, small business owners, farmers and ranchers, school districts, hospitals, grocery store and restaurant owners, distributors, public health organizations and other stakeholders to develop the regional dialogue.
- **Develop a robust database:** Work with partners to collect and analyze data that highlights the region's key issues.
- **Form a working group:** Evaluate the existing conditions of the regional food systems and identify the region's opportunities and challenges.
- **Perform a regional food assessment:** Document regional agricultural and food systems data and outline strategies for strengthening connections between regional producers and consumers. See the Mid-Ohio Regional Planning Commission's *Central Ohio Local Food Assessment and Plan*, a noteworthy example for such an assessment (<http://www.morpc.org/energy/center/LocalFoods.asp>).
- **Create a regional food systems plan:** Complement and fortify existing regional goals and strategies related to sustainable economic development, transportation planning and land use planning.
- **Provide technical assistance:** Assist local governments seeking to develop land use policies and zoning ordinances that support regional food systems.
- **Offer guidance:** Direct farmers and other food producers to regional, state or federal programs available to them.



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Visit these websites for more information:

Sacramento Area Council of Governments: www.sacog.org

Southwestern Wisconsin Regional Planning Commission: www.swwrpc.org

Southwestern Commission: www.regiona.org

Land-of-Sky Regional Council: www.landofsky.org

Endnotes

¹ US Department of Agriculture, Agriculture Marketing Service. "Farmers Market Growth." <http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateS&navID=WholesaleandFarmersMarkets&leftNav=WholesaleandFarmersMarkets&page=WFMFarmersMarketGrowth&description=Farmers%20Market%20Growth&acct=frmdirmkt>, accessed November 11, 2010. Note: CSAs are programs under which members pay an annual or seasonal fee to an area farmer in exchange for a regular supply of farm products. For more information, see: <http://www.localharvest.org/csa/>.

² Zezima, Katie. "Push to Eat Local Food is Hampered by Shortage," The New York Times, March 27, 2010. <http://www.nytimes.com/2010/03/28/us/28slaughter.html?scp=1&sq=slaughterhouses&st=cse>

³ Data provided by Sacramento Area Council of Governments.

⁴ Sacramento Area Council of Governments; Zezima.

⁵ For more information about the Wisconsin Department of Agriculture, Trade and Consumer Protection "Buy Local, Buy Wisconsin Grant Program," visit http://datcp.state.wi.us/mktg/business/marketing/val-add/directmktg/blbw/blbw_grants.jsp.

⁶ Letter from L.T. Ward, Western North Carolina Communities Vice-president, to Haywood County Manager David Cotton, dated October 1, 2010.

⁷ Ibid.



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