

DESIGNING FOOD FACILITIES

OVERVIEW



Lifecycle Performance

A building's performance considering costs over the life span of a building, including purchasing a site and developing new land, retrofitting an existing building, ongoing maintenance, and utilities costs.

Demographics

The study of social factors gender, age, income level, education, etc. as they pertain to understanding consumers in your market area.

his series, *Designing Food Facilities*, shares the basics of USDA's free architectural services (Wholesale Market and Facility Design) and the design process for new or renovated farmers markets, food hubs, community kitchens, or mixed-use facilities.

These documents:

- Outline the elements that stakeholders must consider when building farmers markets, food hubs, and shared kitchens.
- Offer quick references of what to expect when considering renovations or new construction.
- Provide guidance for anyone interested in learning more about working with USDA architects and the design process in general.

Farmers markets connect farmers and consumers, promote local foods, and strengthen local economies and community bonds. Food hubs and community kitchens expand local farmers' capacity by making locally-grown food more widely available through food aggregation, local and regional distribution, and value-added processing.

During design of a farmers market or other food-related facility, creativity should be balanced with practical considerations. Developing plans is an iterative process that may require adjustments along the way. Budget or space restrictions may require the simplification of previous plans. Feedback from stakeholders and others in the community is vital to the design process.

The development of facility designs must respond to the limitations of the site and are influenced by contextual factors such as climate and topography. Other factors that influence design include facility size, location, financial feasibility, and amenities.

Project managers and stakeholders should be aware of business and practical design trends as they consider a new or expanded facility. The following are some examples of recent design trends:

- Space for processing and developing value-added products.
- Dedicated space for cooking demonstrations, especially with the growing connection that vendors are developing with local chefs.
- Allowing space for special events that functions both as a gathering place in the community and may be a source of revenue for the facility.
- Building <u>lifecycle performance</u>, looking at building performance for the extent of its life, from the time it is constructed to demolition, is growing in importance, as owners look for ways to optimize energy use.

Farmers market success is not determined solely by building design. Lasting success relies heavily on management, community outreach, and promotion. A long-term vision will help the facility adapt, as will other factors, such as market competition, **demographics**, and vendor mix shift. A long-term plan may also need to consider available space and finances, as the facility may benefit from modification or expansion.

The ultimate design and configuration of a market structure must fit the economic environment of a specific region with realistic expectations. Business forecasts, including revenue and customer and vendor numbers, are important for assessing feasibility and will influence the design for all retail, warehousing and distribution facilities.

Design work requires synthesizing an extraordinary range of overlapping elements. Aesthetic, technological, economic, human, environmental, and safety factors must all come together into a coherent and appropriate plan. Design decisions will have a lasting impact on the future of the community and local agricultural economy.

USDA SERVICES

The Wholesale Market and Facility Design team provides technical assistance and support to stakeholders regarding the construction of new structures or the remodeling of existing ones. These facilities include wholesale markets, farmers markets, public markets, incubator kitchens, and food hubs, all of which are important parts of the national food distribution network. The facilities may be indoors or outdoors, a single building or an industrial complex.

Market construction projects can require major capital investment. USDA AMS' involvement may facilitate project advancement. The design involves far more than its appearance. The building must also be functional, safe, efficient, and meet the needs of the people using it. Our support involves leadership in design development, from the initial concept discussion with the customer through hand over to a local professional in the completion of the construction documents. The team also offers review of the costing phase and the construction process. In developing the design, our work follows building codes, zoning laws, fire regulations, and other local and state ordinances for Americans with Disabilities Act compliance.

The program does not offer or provide any engineering disciplines (i.e. structural, mechanical, plumbing, HVAC, etc.). Nor does it provide the stakeholder with construction documents, specifications, or stamped and sealed documents for construction.

Our services include, but are not limited to, assistance with:

- Review of environmental issues/ impacts.
- Site selection (space planning, layout, etc.).
- Initial design concept (sketches, programming, floor plans, elevations, etc.).
- Building cost study (S.F. costs only).
- Coordination with local design professionals as a non-contracted third party.
- Third party design reviews as a non-contracted third party.



USDA normally receives requests for assistance from local entities, such as a municipal or county governments, non-profit organizations, farmers' co-ops, or community economic development corporations. Service may entail the layout of an open-air facility, a single building, or a building complex. Each request requires detailed information about the proposed project and sponsoring entities, including: 1) the number of farmers being served, 2) a short statement about the goals of the project, and 3) the tasks needed to meet the goals. A request form for USDA-AMS architectural services is available by accessing: https://www.ams.usda.gov/sites/default/files/media/TechnicalAssistanceRequestForm.pdf.

For more information on USDA Wholesale Markets and Facility Design, visit: https://www.ams.usda.gov/services/local-regional/facility-design.

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