



United States
Department of
Agriculture

Rural Development



Johnson City Medical
Center, TN



Gilbert Franklin Township
Fire Station, IA



Clarion University
Student Housing, PA

Community Facilities Infrastructure Toolkit

JANUARY 2016



EAST BERLIN
COMMUNITY
LIBRARY
105

Introduction

This *Community Facilities Infrastructure Toolkit* can be used as a guide to help organizations and community leaders better understand the complex process that is required to successfully develop and construct a new facility. The Toolkit outlines the major capacity, credit, and logistical challenges that particularly confront America's small towns and rural areas.

The *Community Facilities Infrastructure Toolkit* is designed to apply broadly across organizations regardless of project type or finance sources—including conventional bank loans, bond financing, or state and federal grant and lending programs. The U.S. Department of Agriculture's (USDA) Rural Development Community Facilities programs particularly applies to the types of projects discussed in the Toolkit, which provides useful recommendations for rural communities seeking financial support from USDA Rural Development.

The Community Facilities programs apply a public-private partnership model consisting of the private community organization, private lender, and the USDA to catalyze rural development

throughout the country. The programs provide direct loans and loan guarantees to numerous projects in several categories: healthcare, public facilities, community support, public safety, educational services, utility services, and food systems. Rural communities with populations under 20,000 are eligible for the program. Contact your local USDA Rural Development office to learn more.

The *Community Facilities Infrastructure Toolkit* contains sections on concept development, planning, designing, environmental compliance, finance, and construction. These sections are ordered roughly chronologically, although some elements of the project process may run concurrently. Organizations are encouraged to review the entire Toolkit and to consult with experienced professionals and your local USDA Rural Development staff before proceeding deeply into the project process.

Contents

Concept Development3

Planning11

Design18

Environmental Compliance..... 22

Finance27

Construction..... 36

Conclusion42

Additional Resources43

Appendix 44

About the Toolkit.....45



Concept Development

The first step in any successful, long-term project is to clearly articulate the project's concept. Community facility projects require input from a variety of stakeholders, accurate budgets, and effective communication with the public. It's important to engage with the impacted community during the concept development stage. Doing so will help to ensure the facility's long term success. This section defines the Project Team, Planning Budget, and Communications Plan.

The Project Team

As the name implies, the development of a community facility project affects people both inside and outside of the initiating organization. The Project Owners should understand these internal and external stakeholders and the role each entity can play in the development of the project concept.

Steering Committee

A Steering Committee helps to direct projects through the many actions and decisions that are necessary over the course of developing, designing, and constructing a community facility project. The core purpose of the committee is to make complex and timely decisions. Many organizations will be tempted to place all project decision-making in the hands of the Chief Executive Officer—but this person will need to continue to manage the day-to-day operations of the organization and will not realistically be able to oversee both tasks effectively.

The committee should be staffed by individuals appointed by the leadership amongst the Project Owners and possess a diverse set of skills relevant to the project's needs. This should include executive- and Board of Directors-level representation, as well as experts with backgrounds in finance, construction, and relevant topical knowledge based upon this specific expertise. The Steering Committee may operate through subcommittees over the life of the project to address specific needs and accelerate decision time.

Internal Assessment

The project concept must include an internal assessment driven by internal stakeholders. The team responsible for this internal assessment will typically include the Chief Financial Officer, Board of Directors, Department Heads, Facilities Manager, and Legal Counsel. These individuals will examine all actions taken throughout the development and planning process, and ensure the project's success.

- *Chief Financial Officer (CFO):* The CFO is responsible for project budgeting and financial planning and should be able to effectively grasp and analyze all relevant financial data. A CFO can act as a representative for the owner to assist with other factors including compliance, timelines, risk, funding, contracts, and attorneys. Many decisions throughout a projects development can save time and money if the CFO is involved in the process.
- *Board of Directors:* Board members are key stakeholders who should provide project support and may be useful in accomplishing various tasks throughout the project's lifecycle. Preferably, the Board contains members who can provide guidance and expertise in policy, fiscal, and legal issues to advance a project.
- *Department Heads:* Each Department Head (or comparable level of management, depending on the organization type and size) should have a clear understanding of the department's responsibility and make sure that the department operates efficiently and provides reliable results.

- *Facilities Manager*: The role of Facilities Manager is to coordinate among departments, prepare a timeline of all aspects of the project, and follow the progress and impact that a decision made by the Planning Committee could have on different departments' use of the new or expanded facility.
- *Legal Counsel*: The primary role of Legal Counsel is to ensure that the project is constructed and operating legally at all times, as well as to provide advice that would keep the new or expanded facility in line with existing and impending regulations.

External Assessment

The internally-developed project concept should be further assessed by external experts, in order to evaluate the assumptions and initial plans made by the internal team. These external experts may include an Architect, Construction Manager, Feasibility Study Preparer, Financial Advisor, Project Manager, Environmental Consultant, and Tax or Bond Counsel. Note that projects relying on state or federal financing may be subject to procurement rules regarding the selection of some or all of these consultants, particularly for any positions directly related to construction. Project Owners should consider these implications before signing contracts. Many of these reviewers will have greater roles later in the project process, but their input is also valuable before substantial time and money are invested in the project.

- *Architect*: The Architect is critical to the process. In addition to developing the formal design (discussed later), an Architect can help communicate the project idea to the community. An experienced Architect can help

focus the project's conceptual development by exploring designs for related facilities and carefully considering the use of the space to be constructed. (See pages 18, 19, 20 & 27 for additional info)

- *Construction Manager*: The Construction Manager is not a position that applies to all projects, as discussed in detail in the Construction section. When used, the Construction Manager will ultimately manage the project construction and oversee the selection of general contractors, subcontractors, procurement of materials, equipment, and labor, as well as decisions related to scheduling, storage, and quality control. Early consultation with Construction Managers will allow the Project Owners to develop realistic expectations for the construction process. (See page 38 for additional info)
- *Feasibility Study Preparer*: A feasibility study verifies the financial assumptions informing the Project Team's budget. The project's capital provider will frequently expect—and the USDA will require— independent verification of those assumptions by a CPA (Certified Public Accountant) firm. If the project's financing source will require a feasibility study, then the selected firm should understand and be able to meet any specific requirements. Consulting with the Feasibility Study Preparer early in the planning and concept development process will help make for a smoother experience when the study is being developed, and may guide the Project Team toward making better informed fiscal decisions. (See pages 8, 15 and 16 for additional info)

- *Financial Advisor:* A Financial Advisor primarily applies to projects that will access the capital markets (i.e. bonds) for project financing. The Financial Advisor assists organizations with complex financial decisions, such as whether to develop a community facility and if so, which debt option would be the most affordable. Consulting with the Financial Advisor early in the planning and concept development process can help the Project Team maintain realistic expectations. (See pages 8, 32, 35, 36, 38, 39 for additional info)
- *Project Manager:* Project Managers add specialized skills and knowledge for organizations initiating complex projects that lack the staff expertise and availability to oversee the project development process internally. A Project Manager will add additional soft costs and may not be necessary for all projects, but can be valuable in many circumstances. (See page 13 for additional info)
- *Environmental Consultant:* An Environmental Consultant can help to identify, detect, develop, and assess strategies for environmental compliance requirements. An Environmental Consultant can be especially helpful if the chosen Architect does not have the expertise to ensure that appropriate environmental and sustainable aspects are considered effectively in the planning process. (See page 28 for additional info)
- *Tax or Bond Counsel:* Counsel exist to help clients stay within the law. Organizations developing community facility projects will likely fall under a wide array of tax laws and regulations. Engaging Tax or Bond Counsel early in the process can help the team consider ownership, use, and financing implications that might otherwise be overlooked. (See pages 27, 30, 33 for additional info)
- *Community Representative:* A community representative can help with the public perception and communication of the project. The importance of engaging the impacted community/intended beneficiaries in the process contributes to the overall project success. Surveys and community or informational meetings concerning the project used to gather Stakeholder input should be organized by the Project Team and attended by the Community Representative. Input gained from community meetings will assist in project design and articulating the community's need. The Community Representative's role is important, as it ensures this input is not lost during the design phase of the project. (See page 11 for additional info)

Note that State and area USDA Rural Development offices can provide additional assistance in finding and recruiting development professionals, including local experts who the agency has worked with in the past.

C.O.R.E. @ the Camptonville Academy Charter School Project, Marysville, CA

C.O.R.E. @ the Camptonville Academy Charter School in Marysville, CA, experienced various challenges when developing their project because they lacked an avenue for funding. The keys to the Academy's success developed from the USDA Rural Development Community Facilities programs, which helped encourage the project to combine efforts with focused stakeholders, knowledgeable board members, and an attentive Steering Committee. The USDA required the project to "go out to bid," which was not what the organization had originally intended. This shift helped to secure a great Project Manager for the lifetime of the project, who helped bridge the experience and resource gaps, and helped manage budget planning, city approvals, securing external Architects and contractors, USDA liaison, and engineering expertise. The Academy was also successful in managing their expectations and overcoming many challenges in order to advance an effective project development process.



Working Together

In order to make sure a project plan is realized, internal and external members must be able to work together effectively. Three critical factors for achieving successful interactions are: selecting qualified firms, establishing single points-of-contact, and ensuring team members follow their roles.

- *Select Qualified Firms:* Project Owners undertaking a community facility project need to hire effective contractors. This may be difficult to achieve, as there may be intense political pressure to work locally or even with specific firms. Hopefully, the right skills can be found locally, but priority must be given to the team with the expertise to complete the project. Organizations should always opt to hire firms that have experience in the specific type of project being developed, particularly if the project is large or complex. Finding the right contractors, Project Managers, and Architects may require posting a broad request for qualifications or working through other trusted project partners (e.g., USDA Rural Development) to identify experienced firms.¹
- *Establish Single Points-of-Contact:* To reduce the occurrence of competing visions or miscommunication affecting the project, each team or firm participating in the project should have one point-of-contact (POC). This rule should be enforced regardless of how many team or staff members are participating. The single POC rule simplifies communication and forces each separate element informing the project to be internally cohesive for the purposes of making decisions.

¹ Organizations should also be sure to consider the impact that funding sources may have on contractor hiring. For example, federal funds typically place competitive bid and minority- and women-owned business requirements on grantees and borrowers.

- *Follow Roles:* The Steering Committee should clearly define each individual's and firm's roles and responsibilities for the project. Each party should be expected to follow these assignments and not veer into other territory without a clear redefinition of the roles in advance. Such clarity will help the Project Owners by maintaining a concise project mission and scope, establishing clear responsibility when choices are made or problems arise, avoiding the duplication of efforts, and ensuring contractors are completing their contractual obligations. These roles should be defined in each consultant's written contract, which can prevent misunderstandings and support a legal case in court, if necessary.

The Planning Budget

Organizations should develop a solid planning budget early in the project process. This budget will allow the Project Team to hold a realistic financial assessment during the development and planning phases. A thoroughly planned budget will consider both reasonable cost estimates for needed elements, and an assessment of the organization's ability to service debt.

Debt Capacity

Debt capacity is the maximum amount the Project Owners can borrow at anticipated interest rates and be reasonably expected to make all payments. Current debt can be subtracted from this figure to develop a rough estimate of the size of facility the Project Owners can currently afford (before considering external equity). This available debt capacity provides the basis for developing the maximum expenditures of the project budget.

Developing the debt capacity analysis requires a fair amount of information and expertise. Five years' of financial statements are typically the standard documentation an Underwriter will seek when

determining financial solvency. Formal audits will contain the necessary information, which include documentation of total revenues (e.g., payments, interest, and contributions), owned assets, outstanding loans, and operating expenses.

Estimating Debt Capacity

To estimate debt capacity, a financial expert will consider several ratios and anticipated lending conditions. Two common factors to consider are the debt service coverage ratio and the loan-to-value ratio:

- Debt Service Coverage Ratio (Net Operating Income / Total Debt Service) must be greater than 1 to have any additional ability to borrow. Higher scores indicate greater debt capacity.
- The Loan-to-value (Debt / Assets) should be below 80 percent to meet underwriting requirements, and provide an estimate of how much equity the project will require to access debt. Additional interest rates and terms will determine the cost of additional debt.

If the Project Owners do not have the internal expertise to make these evaluations, then a Financial Advisor or Feasibility Study Preparer may be able to provide this assessment.

Project Estimates

When developing the project concept, the Steering Committee needs realistic estimates of cost and time. These estimates should begin with true project requirements—the elements that must be completed if the project is to succeed. Additional wants and preferences can be considered if there is ample padding between minimum requirements and the organization's debt capacity.

The following list includes many of the data points that will be most useful to the project estimate during this preliminary project development phase:

- Anticipated utilization rates and volumes;
- Assumed rate increases;
- Debt retirement schedules;
- Expected annual additions of property and equipment;
- Inflation forecast;
- Interest rate forecast;
- Major revenue sources;
- Nature of business;
- Market trends;
- Project purpose;
- Project site characteristics;
- Staff compensation increases (including through staff additions); and
- Tax depreciation and other benefits.

Most organizations will need external information sources in order to collect realistic cost and time estimates. The best source of information comes from comparable projects. Some organizations will be willing to share their experiences with the Project Team. In other cases, experienced Architects, Construction Managers, and Project Consultants may be the best sources of information on related projects. In addition to identifying total project costs and buildout timeline, organizations may also want to learn how their peer organizations made estimates for unknown costs to evaluate their proposed facilities. Trade associations and regulatory bodies may also possess key data related to project costs.

Certificate of Need²

Organizations undertaking healthcare projects may need to complete a Certificate of Need (CON) program before proceeding with the project. The CON program, which varies by state in terms of applicability and process, is designed to prevent over-buying of equipment and over-building of facilities. If applicable, the Project Team will need to complete a formal checklist of procedures involving data analysis aimed at identifying the actual needs and actual capacity of the project. This process should be engaged as part of the concept development phase in order to facilitate reasonable project estimates.

The Communication Plan

During the concept development phase, the Steering Committee should seek the input of community stakeholders regarding the community facility project. Most organizations will eventually seek financing from the public directly (e.g., through contributions) or indirectly (e.g., through state or federal financing), and the community is therefore entitled to participate in the planning process. Projects will also benefit from open communication with the public, either by receiving useful ideas or by avoiding potential disagreements or criticism. Organizations should always be well-prepared when engaging with external stakeholders. A communication plan is therefore necessary.

Communication Partners

The first step in the development of a communication plan is to identify the internal and external stakeholders that are appropriate to engage in project development. The following list defines many of the individuals and groups that may be appropriate to include in the plan:

- Existing and target clientele;
- Industry regulators;
- Local politicians;
- Neighborhood groups or societies;
- Organization and project investors;

- Organization staff and Board of Directors; and
- Potential funders and consultants (if not formally engaged in review process).

As the communication plan is developed, the Steering Committee should decide if certain stakeholders require special outreach efforts. For example, the types of meetings and outreach extended to local elected officials may be very different than those extended to existing clientele. The goal of outreach efforts to elected officials may surround a specific event or expectation for funding, whereas the goal of outreach efforts to existing clientele may be to mitigate fears regarding change or to assess opportunities to provide (or sell) additional services.

Outgoing Message

The message to stakeholders should be consistent, concise, and positive. If different components of the Project Team are presenting different ideas, or cannot readily articulate aspects of the project, then public support and participation may be more difficult to attain. Certainly, a negative message from the Project Team can have significant repercussions for the project's status in the community. In order to maintain a strong message, the communication plan should focus on purpose and need, benefits and costs, and transparency.

² American Health Planning Association. (2014). CON Web Sites & Contacts. Retrieved from: http://www.ahpanet.org/websites_copn.html

- *Project Purpose and Need:* Much like an organization's mission or vision statement, the justification for the facility project should be able to be expressed clearly and briefly, and include defined roles for stakeholders. A well-defined project purpose and need encourages the community to help move the project in the right direction.
- *Benefits and Costs (for stakeholders):* As much as possible, the Project Team should be prepared to define realistic costs and benefits for stakeholder groups. If the project is moving the organization to a new location, staff may have a longer commute—but they may gain space for modern equipment. Costs do not need to be unduly emphasized, but the Project Team should be open and honest in their presentations. To the best extent possible, benefits and costs should be quantified or expressed specifically.
- *Transparency:* The communication from the Project Team to community stakeholders should be clear and forthcoming. This is particularly important when discussing the project's or organization's ability to meet requests, project challenges, and changes as the project develops. If trust in the Project Owners is lost because of misleading or inaccurate information, then the new facility may fail to achieve its community purpose and need.

Project Participation

Communication about the community facility project should not be one-sided. Successful organizations will incorporate stakeholders into the process. Such efforts encourage community ownership and can frequently lead to benefits that are both tangible and intangible over the course of the project and the future life of the facility itself. The communication plan should consider two types of participation:

- *Stakeholder Input:* Interested stakeholders should have opportunities to provide input on the purpose, design, and scope of the project that will be fairly considered by the Project Team. Without doubt, the Project Owners must retain control of the project, and input should not add significant time or cost, nor impact the overall project purpose. With these caveats, incorporating useful ideas into the project can win a great deal of support and add desirable local character to the facility.
- *Stakeholder Activity:* The Project Team should be prepared to channel particularly enthusiastic and engaged stakeholders toward constructive activities in support of the project (e.g., fundraising, advocacy, and subcommittees). Hopefully, enthusiastic stakeholders will want to contribute to, or invest in, the project, but many of these individuals will have additional skills that can be utilized. These may include relevant project expertise, networks of potential donors, or a willingness to provide free labor. If there is no ready channel for these stakeholders, then the Project Team may miss the opportunity to receive this assistance.

With the project purpose clearly defined, the next step in a community facility project is to complete a detailed plan. Effective planning will not only facilitate a completed project, but will further help to ensure that the facility itself is a success for the organization. This is the time to assess needs versus wants, assess the market, and determine what is truly feasible.

Needs Assessment

Unless the Project Owners have a limitless budget, unnecessary elements of the project concept should be eliminated. Paying for the facility—and the ongoing operation and maintenance of the new or expanded facility—will be a substantial burden, and the fiscally responsible approach is to focus on required elements. Separating needs from wants can be a challenge, but the Project Team must do so in order to be successful. Generally, the four perspectives that will have true needs for a project are staff, community, facility, and funders.

Staff

Ideally, the new or expanded facility will improve the staff's work experience. This may include better-equipped work spaces or more room for a growing staff. Preferably, the new space will also improve employee's quality of life, whether by providing more appropriate break spaces or by locating at a more accessible site. The Project Team will need a mix of observation and honest communication with employees to determine what factors are critical to include in the facility project.

At a minimum, the staff needs for the facility are to promote efficient and effective work. How the project will meet these needs depends on the organization, project type, and relevant individualized factors. In planning the new facility, the Project Team and staff should consider both equipment and physical processes. This is the time to explore how both new technology and rearranging department locations may improve productivity.

As long as the costs do not outweigh the benefits, staff efficiency and effectiveness improvements will almost always be a project need.

Employee quality of life improvements may also be project needs, particularly for organizations or regions that struggle to attract or retain a skilled workforce. Many rural organizations are concerned about their ability to compete for scarce labor with large metropolitan areas and a high-quality workplace that includes updated technology and meets industry standards.

It is important to note new facilities which are overbuilt, understaffed, and underutilized are costly to construct and maintain. Assessing staff wants versus needs will be more difficult than developing a facility design for efficiency, but the Project Team can sort through these issues by talking with current and target staff, as well as by observing the facilities operated by peer organizations and market leaders.

Community

The project must also reflect the needs of the community by addressing public concerns and interests collected during the concept development phase. Now, the Project Team must sort through this input and determine what elements are necessary to the facility, which a Community Representative would greatly assist with. Most likely, these requirements will fall into three categories: missing services, local climate, and changing demographics.

- *Missing Services:* Many community facility projects are developed to provide services that the public cannot currently access conveniently. Such needs should be quantified and otherwise documented so they can be verified and prioritized.
- *Local Climate:* The local climate, which includes community interest, should be considered, given its possible impact on overall project success. Community interest may include selecting a site location or accommodating service requests to meet the needs of community groups or leaders. Effective and honest communication should make these needs part of a win-win solution that benefits both the project and the community.
- *Changing Demographics:* Sometimes, the greatest needs will be realized by groups that are not (yet) major components of the community. Rural America is increasingly diverse, and the percentage of the labor force engaged in farming has consistently decreased.³ The community needs assessment should give weight to these trends by assessing the regional rate of change, and considering what will be needed for the facility to serve a socio-economically diverse population.

Facility

The Project Team must give due consideration to the needs of the facility apart from the needs of its users. Site, infrastructure, and maintenance needs should be part of the project plan from the beginning. Considering these needs too late can add significant corrective costs.

- *Site:* The project location will have certain requirements that must be reflected in the facility plan. Sufficient land must be available,

and the land must be able to be appropriately graded and able to support the facility. If the site is a brownfield (contaminated, or potentially contaminated with pollutants), then the site must be able to be cleaned or capped appropriately for the intended use. The presence of wetlands, floodplains, or historic properties that could be adversely affected by the proposed facility should be assessed at this stage, as discussed in the Environmental Compliance Section. Likely, the budget estimate provided an indicator of the land cost that the Project Owners can support. The location of the site (e.g., near the downtown of a small city) may be either a want or need, depending on the project. Depending on the impact of these site factors, donated land may not be a better or less-expensive option than purchased land. The Project Team should determine the effective cost of potential site locations, as well as the purchase price.

- *Infrastructure:* The facility and site utilities require consideration in the project plan. Regardless of whether the facility is targeting a recognized efficiency standard, energy and water efficiency measures can save operating budgets and should be considered at least as potential needs. Infrastructure issues may be significant, regardless of whether the project is an expansion or a new build.
- *Regulations:* There are numerous building codes, land use codes, standards, and federal and state legislation and regulations that may be applicable to the rehabilitation, construction, and operation of the facility. Regulations relating to public safety, utilities, disabled access, environmental resources, underground construction, etc. must be incorporated into the project plan. An old building may have outdated infrastructure (e.g., internet) or Uniform Federal Accessibility Standards access (e.g., elevators) that may drive remodeling costs

³ Kenneth, J. (2006). *Reports on Rural America: Demographic Trends in Rural and Small Town America*. Burham, NH: Carsey Institute. Retrieved from: <http://scholars.unh.edu/cgi/viewcontent.cgi?article=1004&context=carsey>.

above that of new construction. Some regulations will apply to all facilities, while others will be industry-specific (e.g., emergency power solutions for healthcare facilities).

- *Maintenance*: The project plan should include some consideration of future maintenance and whether this creates any needs for the facility design. These needs may simply take the form of sufficient storage space for maintenance equipment. Other factors may be the relative maintenance schedules—or expertise—required for different building materials or equipment. For example, a high-efficiency thermostat system may be difficult for local companies to service and will need to receive special consideration before being included in the facility plan.

Funders

Most project funding sources will have specific requirements that must be met by the Project Owners and the facility in order to qualify. To the extent that the funds are needed to complete the facility, these requirements are definite needs that must be met in the project design. For this reason, identifying likely sources of capital early in the project development process can save significant stress and resources later.

The USDA Rural Development Community Facilities program is a powerful source of capital for rural organizations, and, as with any federal finance program, accessing this capital entails meeting certain requirements. Many borrowers become frustrated with the process of accessing federal finance programs. Program support however is available from USDA Rural Development. Project Teams that cannot acquire financing solely from commercial sources should explore private capital for possible cofounding opportunities with federal programs, such as the USDA's Community Facilities Program.

The primary impacts that funding sources will have on the project plan includes varying document requirements and program regulations, which may increase or decrease project time of project completion. When possible, working with a Project Manager and Underwriter that is experienced with the project's funding source(s) can save everyone time and effort. When experienced partners are not available, working with the funder to educate the relevant parties is critical to success.⁴ Most funders will also have their requirements available online for easy reference.⁵

Federal agencies are not the only funders that will have requirements to be met in order to receive financing. State and local agencies, some foundations, donors, and banks, may also levy requirements for the Project Owners. The Project Owners should engage Legal Counsel before entering into agreements, particularly when dealing with potentially conflicting requirements.

Market Analysis

A market analysis is a responsible step in the development of any large scale project. This analysis defines user demand and identifies opportunities to attract additional users to a given facility. The analysis is a formal version of the information-gathering the Project Team should have targeted during the concept development phase. A thorough market analysis can help Project Owners identify anticipated demand for services and facilities, a comparative price and cost analysis, and a competitive analysis.

⁴ Arduino, K. (2014, October 22). "USDA Financing: 2015 Update on Community Facilities Loan Programs. *Wipfli Insights*. Retrieved from: http://www.wipfli.com/InsightDetail_HC_USDAFncgtoHospitals_Article_Oct2014.aspx.

⁵ Information on USDA Rural Development Community Facilities program requirements is available at: <http://www.rd.usda.gov/files/fact-sheet/RD-Factsheet-RHS-CFGuarantee.pdf> and <http://www.rd.usda.gov/files/fact-sheet/RD-Factsheet-RHS-CFDirect.pdf>.

Demand Analysis

A facility project should not be scaled beyond the ability of the Project Owners to operate the resulting facility. The future use (and revenues) at the site are critical to this operating ability. Therefore, the facility scale should be directly related to the demand current and potential customers have to use the site and services. Demand may be measured from several sources, particularly existing customers, projected demographics, and market trends.

- *Existing Customers:* The market analysis should include an estimate of the retention rate for existing customers, as well as any potential uptick in usage rates.
- *Projected Demographics:* Some facility uses are specifically tied to certain demographics and therefore impact anticipated demand. For example, an aging population will have declining demand for maternity wards.
- *Market Trends:* Some national and regional industry trends will have an eventual impact on the local market and should be considered in the market analysis. For example, the national increase in college enrollment could be expected to produce a greater demand for local community colleges.
- *Current Fees:* This assessment should include a review of the organization's fee structure. Organizational fee structure includes prices currently charged by the organization for services provided. These prices should be compared with competitors' rates and the amount it costs to provide services currently offered and projected to be offered by the organization. Pricing structure and amount can influence revenue growth and the expansion of existing services.
- *Operating Budget:* The price analysis should consider all of the costs incurred by the organization. The primary goal of this assessment is to determine whether the organization is paying an appropriate and fair rate for services, utilities, and maintenance. If costs to operate the organization or current facility are problematic, then corrective measures may be able to be incorporated into the facility design, if not into earlier operations.
- *Projected Changes:* The price analysis should also help the Project Owners understand the future direction of fees and costs. Opportunities to increase rates can help the organization generate additional funds, while changes to operating costs are critical to understand before accumulating debt. Project changes to costs will take the form of both natural changes, arising from inflation and other market forces, as well as changes caused by the new facility. Factors that may change with the new facility or time include staff growth and compensation, fuel use and cost, and other high-impact issues.⁶

Price Analysis

A market analysis should consider the direction of prices, on both the revenue and expense side of the organization's operations. This analysis can help formalize debt capacity projections, which are partially based on net operating income. Items to be considered in a price analysis are current fees, operating budget, and projected changes.

⁶ Stymiest, D. (2014, January 03). "Smart Money." *Health Facilities Management*. Retrieved from: <http://www.hfmmagazine.com/magazine/2014/January2014.dhtml>.

Competition Analysis

The long-term success of most organizations and facilities will depend, in part, on the performance of related groups and services. A competition analysis can help determine the presence and strength of peers in the area. The focus of this report is to determine the likelihood that the organization and facility can achieve projected demand and prices by assessing current and potential market share for the facility and intended services. An element of the analysis may be strategies to overcome competition, or areas that may not be worth challenging. For example, Project Owners may want to add a local history museum to their new facility, but this space use may be destined to fail if the local historical society already has a well-supported museum of their own. Many of these factors can help to indicate the supply and demand of a community facility project in a given area.

Trends in Rural Healthcare Prices

In large part due to changes in the *Affordable Care Act* (ACA), hospitals are undergoing significant changes to their traditional structures. The new focus is on quality improvement programs that include incentive payments and penalties. The broader trend is toward greater cost control and population management as hospitals compete in a “race to the top” for quality scores, rather than simply pursuing reimbursements. In terms of price analysis, revenue potential may be decreasing, but hospitals are encouraged to drive operating costs even lower to yield a positive trend in net operating income. Hospitals that promote efficient and quality services in the new system stand to prosper.

Feasibility Study

The feasibility study exists to verify the financial assumptions made by the Project Team, and to therefore provide a degree of confidence in the organization’s ability to afford the facility project. Feasibility studies consider a variety of factors affecting budget and operations, including the following:

- Audited financial statements;
- Board and management expertise;
- Building use;
- Business plan;
- Certainty of revenue streams;
- Facility requirements;
- Market analysis;
- Operational costs;
- Policy changes impacting performance; and
- Site location.

The feasibility study may be a requirement of funding (e.g., for healthcare facilities using the USDA Rural Development Community Facilities program) but can be useful for any project.

Types of Feasibility Studies

There are several types of feasibility studies and some will even have restrictions on their use. The Project Team should work with the Feasibility Study Preparer and potential funder to determine the right type for the project. A Certified Public Accountant (CPA) firm familiar with community facility projects is likely to provide greater assistance in selecting the right study type and test models. Common types of studies are pro formas, debt capacity analyses; prescribed prospective financial information for certificate of need (CON) applications, internal use only forecasts (IUO), compilation of a forecast, and examination of a forecast. In the context of community facility project funding, the compilation and examination are most likely to be relevant.

- *Compilation:* The compilation is the less strict of the two study types. There is no standard format for the report, which can be tailored to meet the needs of the user. These studies should cost less and require less time than an examination opinion. However, the Feasibility Study Preparer does not certify the financial assumptions, meaning that the study provides a much more limited form of confidence for potential financiers and investors.
- *Examination Opinion:* A feasibility study with an examination opinion includes a certification of the financial assumptions and projections by the Feasibility Study Preparer. This provides financiers and investors with a high level of confidence in the report's findings. This level of opinion requires the most documentation, time, and cost to the Project Owners. The examination opinion should include careful review and testing of revenue and cost history and projections, as well as market and other factors that may affect the fiscal health of the organization or facility in the next few years.

Elements of Feasibility Studies

The feasibility study may cover a wide range of information related to the organization and facility. Several study elements require additional explanation.

- *Board and Management Expertise:* A strong Board of Directors and management team are necessary to keep Project Owners on track through a significant building project. The feasibility study may assess how the current organization leadership provides strategic support and expertise, advocates for the organization in the community, and serves as the key fundraising body for the project.
- *Audited Financial Statements:* Feasibility Study Preparers are often Certified Public Accountants because the core function of the study is to

verify financial assumptions. As such, the review of financial statements is a particularly essential element of this process. Organizations should have clear documentation of their finances, including both revenues and costs. Items assessed may include fundraising documentation, invoice history, outstanding debt, asset documentation, payroll certifications, benefit plans, and insurance statements. Organizations that do not have effective documentation processes in place may need preliminary help from an accountant—and may not yet be in a position to pursue significant financing.

- *Market Analysis:* The market analysis, discussed in the preceding subsection, may be completed, in whole or in part, by the Feasibility Study Preparer. If completed by another firm, the examined opinion will test the assumptions of the Market Analysis.
- *Stress Testing:* One element often included in a feasibility study is stress testing of financial projections, known as “sensitive assumptions.” This process involves testing the financial model if certain projections (e.g., client use) land above or below expectations, and the scenarios assist the Underwriter's evaluation of the project. Ideally, the Project Owners will be able to afford the project both at projected levels and under the stress tests.
- *Project Alternatives:* An important component of a feasibility study is to recognize and consider alternatives by testing alternative concepts and approaches, which will primarily have been identified by the Preliminary Architectural Report.⁷ These alternatives may include different site locations or project scopes. The Feasibility Study Preparer may have a limited ability to test a wide range of options, but the Project Team can work to include a few models in the opinion.

⁷ Teviño, T. (2014, February 4). Guidance for Feasibility Analysis of Health Care Facilities. *U.S. Department of Agriculture Rural Development*. Retrieved from: http://www.rd.usda.gov/files/IA_cf_Feasibility_Health_Care.pdf.

Smart Growth Principles: Designing Projects that Improve the Community

Various resources exist for rural communities to practice smart growth in economic and community development. The Smart Growth Self-Assessment for Rural Communities, developed as part of the U.S. Environmental Protection Agency's Smart Growth Implementation Assistance project is a tool that addresses the challenges facing smaller and rural communities. The Smart Growth Self-Assessment is a compilation of strategies that small towns can use to evaluate their existing policies to create healthy, environmentally resilient, and economically strong places. The Toolkit highlights Smart Growth goal areas like revitalizing town centers, improving health, and using energy efficiently. A selection of relevant strategies is provided below.⁸

Revitalize Village and Town Centers

- Strategy 12** Sites identified for new schools are within municipal service areas.
- Strategy 41** Locate public facilities, particularly destinations that attract visitors, in developed areas rather than on the fringes of the community.
- Strategy 49** New schools are located as close as possible to existing development.

Improve Health and Promote Active Living

- Strategy 13** Traffic calming and context-sensitive street design guidelines are adopted and apply to streets in downtowns, around schools, in residential neighborhoods, and in other key activity centers.
- Strategy 16** Zoning, expedited review, and other incentives encourage healthcare providers, housing for older adults, and assisted living facilities to locate in villages and activity centers with transit and pedestrian facilities.
- Strategy 24** Shared-use agreements expand public access to recreational facilities at schools, churches, and other locations.
- Strategy 27** Sidewalks and trails between downtowns, schools, neighborhoods, and other activity centers connect to form a regional pedestrian and bicycle network.

Use Energy Efficiency and Provide Renewable Energy

- Strategy 18** Create and institute a recommissioning plan for public facilities.
- Strategy 29** Implement and establish a lighting retrofit program for public facilities and a plan for replacing fixtures with energy efficient options.

⁸ Find the full Smart Growth Self-Assessment at: http://www2.epa.gov/sites/production/files/2015-07/documents/smart_growth_self-assessment_rural_communities.pdf

Design

The design phase of the community facility process occurs when the project begins to move from concept to reality. This is the point at which an Architect (or, in some cases, an Engineer) formally participates in the process and develops the facility design. For the USDA Rural Development Community Facility program, this phase includes the Preliminary Architectural Report (PAR).

The PAR is developed to provide project reviewers with a thorough understanding of the project. The information in the report may include narrative descriptions of the project, maps of boundaries, elevations, and demographics, as well as drawings or photographs related to the facility design. The core functions of the PAR can broadly be defined as describing existing conditions, presenting preliminary designs and alternatives, and proposing a specific course of action for the community facility project.

Existing Conditions

The PAR identifies the project need, project scope, and facility type. This information should have been collected during the concept development and planning phases but are being formally presented in the PAR. Readers of the report should understand exactly why the facility is necessary and what the project will accomplish for the organization and community.

The PAR should provide consideration of the implications the project purpose will have for design and construction. This is where regulations, industry and facility requirements should be listed and detailed. An Architect experienced with the specific facility can be invaluable for this process so that the

Project Team can be confident that the facility design will meet all requirements, in addition to optimizing space and minimizing costs. Once the requirements of a specific facility are established, the PAR should describe the project needs in the order of health and safety concerns, system operation and maintenance, and growth capacity. The project needs include a definition of the scale and accessibility of the building.

The next step in the PAR is an evaluation of existing or potential sites. The Project Team should not make assumptions about the project site. All parties, including the financiers, need to be certain that the site is well-suited for the project. Infrastructure, storm water, and traffic factors should be included in this part of the analysis. A traffic analysis or an American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment (ESA) may be an important tool to evaluate a site, and most likely should be considered an essential part of any large scale project. Some locations will not be suitable for a given project, or may require substantial work to be made project-ready. The Project Team should not assume that expanding on an existing site will avoid these issues, as changing requirements may lead to a different site evaluation on adjacent parcels.

Topography is an important element of the site evaluation. Visual characteristics and assessments of earthwork, seismic/faulting, slope stability, groundwater, and other environmental considerations, such as wetlands, floodplains, and historic properties are important to note in the report. Communities should also consider various microclimatic conditions, such as wind, solar

orientation, temperature, humidity, and precipitation to analyze any future threats or potential renewable energy opportunities. Lastly, site evaluation includes a breakdown of potential zoning, codes, and permits to fulfill.⁹

Preliminary Design

Preliminary site design is a general description of a proposed facility, including design criteria adopted for continued use and other pertinent information, such as constraints of zoning and codes. Many Project Owners require the Architect to provide assistance with planning and zoning approvals in conjunction with site analysis services. Such assistance can maximize the potential for regulatory approvals and significantly reduce the Project Owners' risk of economic loss.

Permitted uses can be broken down into variance, special use permits, and accessory structures. Certain project parameters may not be permitted on the site depending on the law. A variance could be necessary to allow for the project to deviate from the zoning ordinance, building code, or municipal code. This may involve applying for a variance to allow the project to take on different dimensional characteristics compared to the building code, such as lot size requirements or the site's minimum property line setback. Zoning regulations designate a tract of land's permitted use. If the site's use, as designated by the zoning ordinance, differs from the use of the proposed project, then a special use permit may be necessary to allow for the project to be constructed.

The preliminary site design must attend to an array of external and aesthetic requirements and preferences. Requirements may include building height limits, lot coverage and open space, parking, landscaping, and signage restrictions. Additional external site factors that must be considered in the PAR include street and drainage improvements. Finally, the layout of the buildable area and a schema of the best potential building should all be discussed at this phase in the process.¹⁰

The PAR will typically not be restricted to one potential site or building layout. The Architect and the rest of the Project Team will need to work together to determine the best way to balance assessing options with reasonable work product and cost. Ultimately, the Project Team should consider more than one potential solution to a facility project. Site preparation or rehabilitation challenges may make alternatives less expensive than expected, or alternative site designs may achieve lower operating costs over the life of the facility. The Project Team should not settle with exploring only one potential solution, and the experienced Architect is well-suited to help with this assessment.

Course of Action

The PAR should go beyond the preliminary site design and set the course to achieve the final design and to begin the project. The primary requirements to move forward from the preliminary design are detailed facility reports and cost estimates.

⁹ Zimmerman, F. (2000). "Site Analysis." *Architect's Handbook of Professional Practice (Excerpt)*. John Wiley & Sons. Retrieved from: <http://www.aia.org/aiaucmp/groups/aia/documents/pdf/aiab089275.pdf>.

¹⁰ Zimmerman, F. (2000). "Site Analysis." *Architect's Handbook of Professional Practice (Excerpt)*. John Wiley & Sons. Retrieved from: <http://www.aia.org/aiaucmp/groups/aia/documents/pdf/aiab089275.pdf>.

Depending on the organization, site, and facility needs, a wide variety of additional reports may be necessary to move forward. In most cases, the Architect will be responsible for acquiring these reports, often through subcontractors.

- *Structural Evaluation:* A structural engineer will need to assess existing structures or plans for a number of factors, including deficiencies, vulnerabilities, or irregularities.
- *Mechanical, Electrical and Plumbing:* Engineering reports will likely include mechanical, electrical, and plumbing (MEP) engineer standards. MEP engineers develop policies, standards, inspection procedures, and evaluation tools to assess the site plan.
- *Civil Evaluation:* This assessment, which may not be required for rehabilitation projects, reviews the facility's impact on the community and whether any additional design factors must be included to mitigate impacts.
- *Geotechnical Evaluation:* This assessment, which may not be required for rehabilitation projects, will formally evaluate the site location for potential concerns, such as soil quality, drainage, and related factors.
- *Efficiency Standards Evaluation:* Achieving lower operational costs through energy and water efficiency should be a high-priority interest for any project. Many savings can be achieved without rising to national standards, such as Leadership in Energy & Environmental Design (LEED) or ENERGY STAR. Regardless of whether the facility will pursue recognition, an Architect or consultant should review the facility design for efficiency improvements.

The information in the PAR should culminate in the cost estimates that will form the basis of the financing requests. The report should provide critical estimates for total project cost, price per square foot, and prices for specific activities, such as development and construction, legal fees, equipment purchases, and contingencies. These cost estimates can be made through a variety of methods. Reviewing the costs of comparable facilities, preferably in the region, should be one source of information. The Architect's experience and bid proposals from a Construction Manager or related firms may also provide this information. As with the preliminary site design, the PAR will preferably provide cost estimates for more than one facility alternative. For projects being funded through USDA, a Rural Development Architect will review these options and must concur that the preferred option is appropriate in size, design, and cost.

Robert Russa Moton Museum, Farmville, VA



The 1951 Moton Student Strike is credited with launching the modern civil rights movement, but transforming the former Robert Russa Moton High School in Farmville, VA into a museum presented a serious financial and design challenge. The planning team developed market and feasibility analyses that suggested a solution: converting 5,500 out of 8,500 square-feet to permanent museum exhibition space while renovating the remaining space for office, retail, and services usage. Recognizing the differences between the uses, the analyses encouraged the organization to pursue a diversified fundraising strategy. The project required approximately \$5 million in capital, with \$2 million for the exhibit design, fabrication, and installation, \$1.5 million for renovation, and \$1.5 million for ongoing operation. Sources of project capital included USDA Rural Development Community Facilities, U.S. Department of Housing and Urban Development Community Development Block Grant, Dominion Resources, Virginia Community Capital, Virginia Tobacco Commission, and nearly a dozen foundation and association grants, including an innovative family donation challenge that spurred contributions from numerous individuals. The resulting facility has been a tremendous success for the community. Learn more at www.motonmuseum.org.

Environmental Compliance

All construction projects financed by Rural Development will be subject to the Agency's environmental compliance review process which incorporates federal Executive Orders and Statutes to protect the natural and human environment. Projects receiving federal funds are subject to the National Environmental Policy Act (NEPA) review process, which may require additional documentation than projects that are not funded by a federal agency. The Project Team should work closely with the federal agency in order to streamline the NEPA environmental review process. The applicant or the applicant's environmental or engineering consultant should coordinate with the Agency to incorporate all required environmental compliance considerations and requirements.

Benefits of NEPA Environmental Review

The NEPA environmental compliance review is an indispensable part of the project development process that assists the Agency and applicants to assess the effect their proposal may have on the natural and human environment. Five major benefits of completing the NEPA environmental compliance review are described below.

- *Informs decision-making:* The NEPA environmental review allows the Project Team, community stakeholders, and potential financiers to develop a complete picture of the proposal and environment prior to making major decisions. This allows the evaluation of alternatives which can avoid or minimize adverse impacts and unnecessary costs.
- *Provides opportunity for stakeholder review and comment:* The NEPA process allows input into the proposal from the public and other stakeholders to be evaluated and the information can then

be shared with other regulators and policy makers. Early stakeholder involvement can assist the Project Team with future communication if adverse environmental impacts are unavoidable.

- *Assists in project planning:* Applicants can take actions to protect, preserve, and enhance the environment by considering environmental issues early in the planning stage. If necessary changes to the projects or additional environmental impacts are identified, applicants can modify project planning and budget accordingly.
- *Allows consideration of competing societal values and goals:* Incorporating all stakeholders' opinion will help stakeholders examine the entire scope of the project as viewed by supporters and opponents. This can help avoid the unequal distribution of adverse environmental impacts among neighborhoods of differing income and minority makeup.
- *Protects the financial interests of the owners and financiers:* The environmental review process may identify adverse project site conditions that could require expensive mitigation or abandonment of the site altogether. If these conditions are discovered after the project's construction has begun, this could cause financial loss to the Project Owners and financiers.

Consider Reasonable Alternatives to Impacts

The environmental review should consider more than one project option that meets the purpose and need of the project. Alternatives may include different project sites or facility footprints. Alternative considerations are required for all NEPA environmental compliance reviews. For projects

that propose impacts to the environment, these reviews must contain an evaluation of all reasonable alternatives to the proposed project that were considered and eliminated, including at least one “no action” alternative. At the end of the NEPA environmental compliance review process, the chief objective of the Project Team should be to choose the best available option. There are several strategies that can help this assessment.

- If adverse impacts are proposed, the Project Team should evaluate alternatives that meet the purpose and need of the proposal but avoid or minimize impacts. The Architect and Environmental Reviewers should ensure submitted materials are current, sufficiently detailed, and complete.
- Environmental review documents must include justification for eliminating alternatives. An alternative should not be eliminated based solely on cost alone, as technical and logistical feasibility are also important.
- To demonstrate a commitment to the environmental review process, and to mitigate the possible repercussions of adverse impacts, the Project Team should work with the Architect early in the planning process to identify alternative designs and locations conceptually, if not physically or legally, that may meet the purpose and need of the project.

National Environmental Policy Act Process

NEPA sets requirements for construction projects receiving funds from federal programs. Instructions for implementing the act can be found in USDA Rural Development’s regulation at 7 CFR Part 1940-G –Supplement the Council on Environmental Quality (CEQ). As an overview, these regulations stipulate the following:

- Applicants must comply with established agency-specific policies and procedures;
- Applicants must provide adequate information for the agency to conduct NEPA reviews; and
- Applicants must prepare for and meet public involvement requirements.

Federal Agency Requirements

Each federal agency may have its own specific requirements for completing the environmental review process. As with any regulation or requirement from any funding source, these requirements must be completed before closing on the financing. Failing to plan for the environmental review in advance may cause significant delays or legal problems for the Project Team. The Project Team should consider procuring either an Architectural or Engineering firm with expertise in NEPA environmental compliance or acquire a separate Environmental Consultant to assess NEPA compliance for the potential sites during the design stage of the proposal. Including environmental considerations early will allow the Project Team to avoid unnecessary, and often costly and time consuming, environmental actions that may have been avoided.

The following list outlines various forms and notices that may be required during a USDA Rural Development Community Facilities program environmental compliance review:

- 60-day Intergovernmental Review Notice (30 in some circumstances);
- Environmental Assessment for Class I Action, RD 1940-21;
- Environmental Assessment for Class II Actions, Exhibit H of RD Instruction 1940-G;
- Environmental Checklist for Categorical Exclusion, RD 1940-22;

- Environmental Justice and Civil Rights Impact Analysis, RD 2006-38;
- Finding of No Significant Impact, Exhibit I of RD Instruction 1940-G; and
- Request for Environmental Information, RD 1940-20.

Refer to State and area USDA Rural Development offices for relevant and site-appropriate forms and notices.

Current Environmental Regulations

The following list provides an overview of some of the major current federal environmental regulations that may apply to a USDA Rural Development Community Facilities project, depending on site location and project type.

- *Section 106 of the National Historic Preservation Act (NHPA)*: This act established a governmental program for the preservation of historic sites and structures, and created the National Register of Historic Places (NRHP). The applicant should provide to USDA a list of historic properties located within a quarter mile radius or within the view of the project area that have been listed or determined to be eligible for listing on the NRHP, including National Historic Landmarks.¹¹ The applicant should describe how identified eligible or historic properties may be affected by the proposed construction activities (e.g. possible disturbance to archaeological sites, visual effects of tower construction). Additionally, the applicant should work with their USDA representative to identify any potentially-interested Indian tribes so that USDA may contact the tribe regarding the identification and protection of any culturally-significant sites or structures within the area

¹¹ Information on historic places can be obtained from the State Historic Preservation Office (SHPO) in each state. Visit the National Conference of SHPOs website to find local offices: <http://www.ncshpo.org/shpodirectory.shtml>.

of potential effects. USDA Rural Development retains the authority to make all findings and determinations for all undertakings under Section 106 of the NHPA. If any effect on a historic site or structure is proposed, preliminary notice to the public may be required.

- *Clean Air Act*: This act is a comprehensive federal law that regulates air emissions from stationary and mobile sources. Applicants must determine if the proposal requires an installation, construction, operating or indirect sources permit in accordance with the Clean Air Act, and if the proposal follows state and local pollution control regulations. The applicant should provide information on the sources, types, and amounts of any air emissions from the construction and operation of the proposed project, the status of the existing air quality in the area, and the presence of topographical or meteorological conditions that may hinder or affect the dispersal of air emissions. Environmental documents must also discuss any odors that may be produced and any mitigation measures necessary to minimize their off-site migration.
- *Endangered Species Act*: Pursuant to this act, USDA actions cannot “jeopardize the continued existence” of a federally-listed threatened or endangered species, or “result in the destruction or adverse modification of habitat of such species.” Federal agencies are required to consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service when any potential for impacts to candidate, threatened, or endangered species or critical habitat exists. Applicants must provide species lists and appropriate species accounts obtained from the U.S. Fish and Wildlife Service’s website for each county affected by construction of the project. USDA will make a determination on the likelihood that an impact may occur and may need a letter of concurrence from the relevant Service.

- *Clean Water Act*: The Clean Water Act is intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Section 404 of the act requires permits to be obtained from the U.S. Army Corps of Engineers prior to discharging dredged or fill material into waters of the U.S., including wetlands, for purposes including site improvement, fill for development; construction of breakwaters, levees, and dams, and placement of fill material for roads, airports, or buildings. In most cases, a permit cannot be issued until the proposed activity has been reviewed under the National Environmental Policy Act (NEPA). Project owners should check with state and local authorities regarding CWA requirements before undertaking the work.
- *Executive Order 11988—Floodplains*: This Executive Order was created to protect human life and property from the hazards inherent in the location of projects within floodplains. The applicant should determine and describe whether any facilities or sites are located within a 100- or 500-year floodplain and if so, whether the community participates in the National Flood Insurance Program (NFIP).¹² Floodplain projects without NFIP participation may be rejected. Proposed construction within a floodplain may require additional elevation certification or alternative siting or design and will require submitting a Federal Emergency Management Agency (FEMA) "FIRMette" map,¹³ including the proposed construction.
- *Executive Order 11990—Wetlands/Consolidated Farm and Rural Development Act (Con Act)*: The intent of this Executive Order and act is to protect the nation's dwindling wetland resources. Applicants must determine and describe whether wetlands are present on or near the project site.¹⁴ The Community Facilities program is prohibited from impacting wetlands by Section 363 of the Con Act, regardless of whether or not the project receives a Clean Water Act Section 404 permit authorizing such impact. In order to identify the presence or borders of wetlands on or adjacent to the proposed site, a wetland delineation or a jurisdictional determination from the Army Corps of Engineers may be required.
- *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*: This act created protections for Applicants and agencies for liabilities associated with the presence of contamination from hazardous substances. For all development, USDA requires the applicant to have a consultant perform an ASTM Phase I ESA on the property to assess CERCLA liability. In addition, if a proposed project is located within or adjacent to a Superfund or brownfield site, the Applicant should contact the U.S. Environmental Protection Agency or state regulatory authority to determine the status of the site and if any restrictions on land use exist for the project site. If there are restrictions, or if mitigation activities would adversely impact the site, then applicants must provide that information and an analysis of project impacts in the environmental document. Similar diligence may be required on any additional properties offered as collateral to secure financing.

¹² Information related to floodplains and National Flood Insurance Rate Maps may be obtained from FEMA's website: <http://www.fema.gov/flood-insurance-rate-map-firm>.

¹³ A FIRMette is a full-scale section of a FEMA Flood Insurance Rate Map that you can create online and is formatted to fit on printers commonly found in offices. There is no cost for creating a FIRMette.

¹⁴ Maps of wetlands may be obtained from the U.S. Fish and Wildlife Service's National Wetland Inventory website at: <http://www.fws.gov/wetlands>.

- *Resource Conservation and Recovery Act (RCRA)*: This legislation was enacted to protect human health and the environment by regulating the storage, handling, and disposal of hazardous wastes and by regulating underground storage tanks. For all development, USDA requires the applicant to have a consultant perform an ASTM Phase I ESA on the property to assess RCRA liability. In addition, applicants should contact the agency in their state with RCRA authority to determine if there are any RCRA permitting requirements for their projects. States may set stricter standards than those required by federal law. Applicants should address the compliance history of any existing and adjacent hazardous waste facilities. Any permit violations should be reported in the environmental review document, including a discussion of any potential impacts on the proposed project. Additionally, the presence of underground storage tanks, as well as their status (i.e. active or abandoned) should be clearly documented in the Phase I ESA.
- *Farmland Protection Policy Act (FPPA)*: This act is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. The applicant should determine the zoning of the proposed project's property and if the project will directly or indirectly cause the conversion of important farmland.¹⁵ If conversion will occur, the project may be exempt under the FPPA. If the project will cause conversion and is not exempt, then USDA Rural Development will complete a Farmland Conversion Impact Rating form and may assess project alternatives and require public notice.
- *Coastal Zone Management Area (CZMA)/Coastal Barrier Improvement Act (CBIA)*: These acts were created to manage and balance competing uses

of, and impacts to, coastal resources, and for the protection of coastal barrier environmental resources and human life, respectively. The applicant should determine whether or not the project is within the boundaries of a coastal zone for purposes of the CZMA,¹⁶ or within the Coastal Barrier Resources System for the purposes of the CBIA.¹⁷

- *Wild & Scenic Rivers Act*: This legislation was enacted to preserve certain rivers with outstanding natural, cultural, and recreational values. Applicants should identify whether the project site(s) contain a river protected by the act.¹⁸
- *Executive Order 12898—Environmental Justice*: This Executive Order was issued to promote environmental justice (the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies). Applicants should provide demographic data on minority populations and income trends in the project area, and the environmental review document should explain how the proposed project will not violate the agency's environmental justice policies. USDA is a member of the Federal Interagency Working Group on Environmental Justice which was established in 1994 under E.O. 12896. The role of this working group is to guide, support and enhance federal environmental justice and community-based activities.

¹⁵ Important farmland can be identified online at www.websoilsurvey.gov.

¹⁶ For boundary and contact information related to CZMA, see the National Oceanic and Atmospheric Administration (NOAA), Office for Coastal Management's website: <http://coast.noaa.gov>.

¹⁷ For boundary information for the CBRS, refer to U.S. Fish and Wildlife Service's official maps at: <http://www.fws.gov>

¹⁸ Protected rivers can be identified at the National Wild and Scenic Rivers System website: <http://www.rivers.gov>.

During the finance phase, the Project Team determines whether the project can access adequate capital to proceed with the project. To this point, the Project Team should have developed a strong understanding of debt capacity, anticipated costs, and projected revenues. For projects using USDA Community Facilities financing, the Rural Development Architect and state environmental coordinator recommendations must also be received and addressed before financing is closed. During the finance phase, Underwriters and other finance professionals will conduct their own, market-based analyses to determine if and how the project can be financed.

Roles and Responsibilities

Project finance involves a number of stakeholder responsibilities. General stakeholder duties were covered in the “Concept Development” section but specific roles in the acquisition of project capital are discussed in more detail, below.

- *Applicant:* The Project Team is responsible for ensuring that all materials required for financing applications and due diligence are completed. Depending on the organizational structure and the underwriting analysis, the Project Owners may also be required to make a personal financial commitment in order to secure financing.
- *Architect/Engineer:* The role of the Architect or Engineer during the finance phase is to provide cost estimates for the project.
- *Community:* Some institutions will require evidence of community support before underwriting a community facility project. Such evidence may include letters of support, votes of public bodies, or participation in a public fundraising campaign.

- *Financial Advisor:* Financial Advisors are primarily used to assist the Project Team with particularly large or complex capital needs, such as bond financing or multi-layered financings. The Financial Advisor can provide a mix of research and analysis to help ensure that the project proceeds with the most secure or lowest-cost financing available, depending on priorities. Preferably, the Financial Advisor’s analysis will include a description of alternative financing programs or structures to achieve the best overall rate and terms.
- *Lender:* The Lender, or Underwriter, will review the application, evaluate the financial information, and determine whether to approve or reject the request for financing. Depending on the size of the project, this process may include significant due diligence and investigation. Similarly, some financing structures, particularly bond financing, may involve analyses from other partners, such as Placement Agent, Trustee, and Bond Counsel.

Sources of Funds for Capital Investments

Potential sources of project capital are limitless. Projects throughout the country have been financed with project owner equity, foundation equity, community contributions, state grants, federal loans, tax-exempt bonds, conventional bank financing, tax increment finance, tax credit programs, and many other sources—as well as numerous combinations of the above. The real challenge in assembling financing is that the capital providers need to feel secure with the project risk so that they can provide affordable rates. This is why a diverse capital base is frequently the best perspective to use in project finance.

Equity Resources

Equity is essentially cash injected directly into the project. The capital stack for most projects will include some form of equity—rarely less than ten percent of project costs and frequently more. Sometimes, equity is given freely, or for no more than a small stake in the project’s design or development. Other times, equity is exchanged for an ownership or financial stake in the project. Common sources of equity are described below.

- *Cash on Hand:* Cash, or project owner equity, is the easiest form of capital to use. The primary concern with project owner equity is that the Project Team needs to ensure enough cash is available to cover operational expenses and contingencies before investing these funds into the project.
- *Foundations:* Foundations exist throughout the country; however community facility projects often find the best partners in their own regions. Foundations may be willing to make contributions or grants to the project. The Project Team should also be open to impact investing, which entails use of the foundation’s equity in exchange for a financial return.
- *Large Donors:* Wealthy individuals and families who are willing to provide significant investments—whether in exchange for input, financial stake, or naming rights—can be a significant source of capital for the appropriate project.
- *Fundraising Campaigns:* Community facility projects can often achieve both equity contributions and demonstrate community support through a fundraising campaign. A wide variety of activities can engage the community to support a campaign, from bake sales to silent auctions, from a simple request for funds to arranging a community race. For organizations that do not regularly engage in fundraising, an Underwriter will need to see collections—not just commitments—when determining the campaign’s value for the project’s financial structure.

Creating a Successful Fundraising Campaign, Franklinton, NC



Shepard Youth Ranch, in Franklinton, NC, an equine-assisted therapy organization in North Carolina, has identified several ingredients to create a successful fundraising campaign including: donor acquisition, capital campaigns, the “ask” (i.e. request of the organization to the donor), leadership, recruiting champions, prospects, and effectively utilizing marketing and media. It is essential to establish several components for non-profit fundraising. First, one should build a WHY statement in order to sell the campaign to raise awareness, funding, and support. Second, it is important to recognize the audience and build a relationship with potential donors, which includes a thorough understanding of where the funding will come from. Finally, one should

be cognizant of how the funds can be broken down from wills, grants, individual donors, to donor acquisition. These steps can be realized by establishing champions who participate, engage, and generate ownership of the campaign. The Shepard Youth Ranch received a USDA – Rural Development Community Facilities Direct Loan funding of \$450,000 which was combined with \$50,000 of donor monetary contributions to purchase thirty-three acres of land with conducive development to administer Equine Assisted Therapy. This community investment provides local services to children with developmental disabilities and at risk teens living in Rural North Carolina.



Direct Lending

Direct lending is the typical Lender-Applicant relationship to picture when thinking about borrowing funds from a bank. Direct lenders include commercial banks, Community Development Financial Institutions (CDFIs), and Farm Credit System banks.

The direct loan market is often best-suited for projects that have relatively simple capital needs and affect the local market. These loans will typically have an interest rate higher than that available through the capital markets, but often with lower initial fees. In fact, the total cost of capital on a direct loan is often competitive with the capital markets until the needed financing exceeds \$3-5 million. The direction of the interest rate market can also have a significant impact on the appropriateness of direct lending for a project, as a bank will have a limited ability to fix an interest rate for longer than a five year window.

Capital Markets

The capital markets provide project capital in the form of bond financing. Although bonds can be intimidating, they are essentially just a loan broken into pieces and sold to investors. In fact, many project bonds for development projects will be sold to a bank, making the process very similar to a conventional loan process. When bonds are sold through a public offering, the purchasing investors (e.g., institutional funds, mutual funds, banks, individual investors) are under no obligation to hold the bond until maturity and have the ability to trade the debt with other potential buyers.

The primary benefit to using bond(s) is capital access—as long as a willing investor can be found, the project can acquire a loan regardless of the financial criteria. Tax-exempt bonds have an additional benefit of having a low interest rate, achieved through the federal tax exemption. In order to access tax-exempt bonds, the project must either be identified as “public,” or must fit into specific

Internal Revenue Service requirements for private activity bonds. In most cases, the cost of issuing bonds effectively limits the minimum bond-financed portion of the project to \$3-5 million, depending on the fees involved.

To access bond financing, the Project Owners should engage a Financial Advisor, Underwriter, or Bond Counsel who can guide the Project Team through this process. In order to attract interested investors, the project will likely need to make a number of documents available for disclosure, such as the feasibility study, design documents, and budget documents. Project Owners should also be aware that communicating with the debt provider in a bond transaction requires working through the Trustee to locate the investors and negotiate a waiver or amendment to the bonds.

The actual form and structure of bond debt can be varied. Some terms and structures of note are described below.

- *Public Placement:* When the bond is sold on the open market to investors, this is known as a public placement. The final size of the bonds and interest rate will be determined by the market’s appetite, or risk tolerance, at the time that the project is taken to market.
- *Private Placement:* Some bonds, and many small project bonds, are sold directly to an institutional investor, such as a bank or insurance company. The size and interest rate are then determined by the investor’s interest.
- *Bond Anticipation Notes /Interim Construction Financing / Bridge Loans:* These are terms for short-term debt that are used, typically during the construction phase, until the long-term debt providers are willing to commit to the project. These terms are discussed further in the “Construction” section.

State Funds

State agencies offer a wide array of financing programs. Depending on the state and agency, these may take the form of bonds, tax credits, loan programs, or grants. The form of capital provided may make a significant difference in its effectiveness in the project. For example, a project short on equity will benefit most from grants or tax credits, while a project that lacks a willing lender will gain the most from a bond or loan program. Each program will have specific requirements to access the funding. The “Development Finance Toolbox” sidebar at the end of this section provides general information on financing tool types and the most commonly-available programs.

Federal Funds

Federal agencies provide access to project funding using various programs which include: grants, direct lending and loan guarantees. Federal lending programs often provide the lowest cost of capital. Characteristics of federal lending programs may include: longer loan terms, no prepayment penalties, flexible loan security requirements and application assistance at no cost to the Project Team. Federal funding generally will have defined locations where funds can be used, defined purposes for which funding can be spent and defined applicants which identifies who is eligible to receive funding. The amount of federal program funding may vary from year to year.

The USDA Rural Development Community Facilities program for example provides both a direct lending and a guarantee program which can be used for multiple purposes to include new hospital construction, academic building construction, public safety projects, equipment purchase, renovations and debt refinance when less than 50% of the loan. The USDA Rural Development Community Facilities direct loan program includes fixed interest rates with loan terms up to forty years. Federal loan specialists

are located in State and area offices and are available to provide application assistance. (See appendix for your nearest USDA Rural Development State Office).

Identifying the Capital Stack

Once the Project Team has completed its due diligence on available financing programs, the next step is to select the elements that will make up the project’s funding sources, or capital stack. The CFO or Financial Advisor will have a significant role in helping the Project Team to complete this cost-benefit analysis. The critical decision factors are described below.

Repayment Ability

The bottom line for accessing debt capital is the organization’s ability to repay the debt with revenue generated by the operations. Debt repayment will largely be assessed through the Feasibility Study and the Underwriter’s analysis. To the extent that a shortfall remains, the Project Team and community stakeholders may be able to work together to leverage one of the following repayment streams.

- *Tax Increment/Special Assessments:* Most local governments have access to tax capture tools known as tax increment finance and special assessments.¹⁹ Rural communities may be able to implement one or more of these tools at the project site, particularly to capture funds that can be dedicated to direct costs or debt repayment related to infrastructure or site preparation.
- *Service Revenue:* Some communities will be capable of creating special taxes for desirable or beneficial service facilities, such as a school, hospital, or fire station. These service revenues can then be dedicated to repay debt associated with the project.

¹⁹ For information on the availability of tax increment finance, visit the Council of Development Finance Agencies (CDFA) TIF State-by-State Map & Report at www.cdfa.net.

The Project Team may also want to consider their ability to work with their capital sources to correct difficulties that may arise over the life of the facility. Typically, a community facility project is seeking 20- to 30-year financing, which is a very long-term relationship for both the Project Owners and the financier. When determining the correct financing source, the Project Team should consider how a debt provider works with the Project Owners.

Rates and Terms

The Project Team's interest in a financing source will depend on the cost of capital and on the term, or length, of the capital's availability. Funding preferences will be weighted toward the least expensive source of funds, although making this determination can be quite difficult. Several factors to consider when evaluating the best funding sources for the Project Team to consider are discussed below.

- *Blended Rate:* Some capital stacks will include multiple interest rates for different debt products. For example, many bond deals include both a tax-exempt bond for the majority of costs and a taxable bond for contingency costs that may not be subject to the same regulations. To facilitate ready interpretation of the interest rate, the cost of these deals is typically expressed as a blended rate.
- *Depreciation:* Some financing sources prohibit the use of certain tax benefits, such as depreciation, either in part or in full. Part of the cost analysis of the capital source should include a review of the organization's tax practices.
- *Useful Life of Assets:* In most cases, capital will not be available for a period longer than the useful life of the assets being financed. For some projects, the extreme difference in asset life between land or buildings and equipment may require the Project Team to pursue separate financing for different asset classes.

Security and Requirements

Lenders require not only the payment of fees and interest, but also security instruments through one or more sources in the event the borrower is not able to make payments. The following items define common security instruments and considerations.

- *Liens:* A lien is a right to take possession of real or personal property pending the repayment of the debt. This is a form of collateral taken by lenders, and will usually be applied against the financed assets, including land, buildings, and equipment. In some cases, liens against personal assets may also be required. The Project Owners must be able to establish clear title for any real property pledged as collateral and may be required to secure an ASTM Phase I ESA or other site evaluations.
- *Debt Covenants:* Incurred debt will bind the recipient to covenants regarding certain actions that may or may not be taken until the loan is repaid. For example, most home mortgages prohibit the Project Owners from acquiring additional liens against the property. For organizations with existing loans, existing covenants should be fully researched before acquiring new debt.
- *Master Trust Indentures:* This bond document defines the rights of bondholders (investors) and the Project Owners, and the responsibilities each part bears to assure those rights.
- *Reserve Requirements:* The project will have a reserve account in order to be able to make standard loan payments if revenues should fall behind for one or more months. The level of reserve will depend on the financial institution and the project's perceived risk.

Joint Financing

Many projects will utilize several sources of capital for financing. When structured effectively, this approach can achieve the lowest possible cost of capital for the project. When mismanaged, however, the result can be significant overhead and legal difficulties. In order to be utilized effectively, the Project Team should consider working with a Financial Advisor and Bond Counsel to ensure that all parties are clear on fees, security, and timing. Several related considerations are discussed below.

- *Rates and Fees:* In some cases, using multiple sources of capital is unavoidable if one source is not willing to acquire all of the repayment risk. In other cases, using multiple sources is the most effective means to achieve the lowest blended interest rate. For example, equipment loan terms are frequently shorter than property terms, and shorter loans are usually less expensive than longer loans, therefore separating the equipment loan may lead to lower overall costs. However, each source of capital may require fees as well as interest. Using multiple state and federal capital sources may add administrative overhead to the management of the capital stack. Fees and administrative costs must be considered when assessing the cost of capital, or the Project Team may significantly under-estimate the savings achieved through a complex capital stack.
- *Security and Liens:* Each source of capital may require separate security for their loan. Some institutions may be willing to accept a secondary position, which delegates their repayment and collateral rights behind those of the primary institution. These rights and priorities need to be clearly understood and documented before financing is closed. This is completed through an inter-creditor agreement, which defines the order of repayment and order of priority for liens and other collateral.

- *Timing of Funds:* A key consideration when dealing with multiple sources of capital is the timing of the distribution of funds. Equity is frequently the first capital in the deal and in some transactions the last capital contributed to the project. Equity thereby provides the most security for the debt providers. Long-term debt will typically not enter the deal until construction is complete, requiring the inclusion of short-term capital. If ownership of the land or building is being transferred, the timing of the transactions is significant to the timing and availability of capital. The Project Team must be certain to have these elements properly aligned to avoid problems.

Refinancing

The organization's financial situation is often stronger before construction, when massive costs with no immediate repayment loom, than after project completion, when the facility is providing new or expanded revenues. Whether to take advantage of this strong fiscal situation, or to capitalize on changes in the interest rate environment, the Project Owners may be able to achieve cost savings by refinancing its project debt before the end of the full terms. Most debt covenants will include provisions about refinancing, and the Project Team should consider and understand these provisions before closing, particularly if there is strong reason to suspect that a lower rate will be achievable down the road. In any case, a Financial Advisor is again the best ally for assessing refinancing opportunities once the project is complete and revenues are demonstrated.

Development Finance Toolbox²⁰

The toolbox approach to development finance brings together an array of financing concepts and techniques to provide a comprehensive response to capital and resource needs. This approach requires a commitment to public-private partnerships and the creation of programs to assist different types of industries and enterprises. The toolbox approach addresses the financing spectrum by breaking down dozens of financing options into five core areas.

Bedrock Tools

Bonds are the bedrock of public development finance and are used to build numerous public and private projects.

Bonds: Governmental Bonds and Private Activity Bonds provide low-rate financing through a federal tax exemption on interest. Specific statutory and procedural requirements need to be met to issue bonds and ensure the tax-exempt benefits.

Targeted Tools

Targeted financing tools leverage taxes to develop a specific geographic area.

Tax Increment Finance (TIF): A TIF district is a mechanism for capturing the future tax benefits or real estate improvements in order to pay for the present cost of infrastructure improvements in blighted areas.

Special Assessment Districts: Property owners within a Special Assessment District pay self-assessed fees to the district's management entity, typically a nonprofit or redevelopment agency, and the funds are used to finance improvements.

Access to Capital Lending Tools

Projects and businesses, particularly those with capital needs under \$5 million, need access to affordable, flexible capital.

Revolving Loan Funds (RLF): An RLF is a funding pool that replenishes itself and can be combined with conventional sources of capital. RLF funds can be used to fill the gap between the loan amount and the amount needed to sustain a business.

Credit Enhancement: Loan guarantees, collateral support programs, and similar structures allow repayment risk to be shifted from a private lending institution to the government through a credit enhancement program that repays part of the outstanding loan amount should the borrower be unable to make payments.

²⁰ The development finance toolkit is the foundational concept for understanding development finance created by the Council of Development Finance Agencies (CDFA). For more information, visit CDFA at www.cdfa.net. See also, Rittner, T. (2015). *Practitioner's Guide to Economic Development Finance, Building and Utilizing the Development Finance Toolbox, 2nd Ed.* Columbus, Ohio: CDFA.

Investment Tools

Tax credits provide incentives for individuals and companies to invest in new machinery, technology, and construction.

Tax Credits: Tax credits allow businesses and investors to claim a credit for committing resources to a project or business. Tax credits can be used to provide an increased rate of return for investors, to reduce interest rates on debt, and to provide repayment for investors in place of cash. Development-minded federal programs are listed below, and many states have companion credits available.

- *Historic Rehabilitation Tax Credits*—provides credits for investments in the rehabilitation of historical or recognized historic buildings.
- *Low-Income Housing Tax Credits*—provides credits for investments in affordable, multi-family housing projects.
- *New Markets Tax Credits*—provides credits for investments in projects in low-income census tracts.

Federal Support Tools

Federal support tools include the wide array of grant, loan, and technical assistance programs provided by the federal government.

Federal economic development programs: There are over 150 federal programs supporting economic development finance.²¹ Many programs provide funding directly to local governments, while others provide funding to a business or intermediary. A selection of programs potentially available to finance community facilities are described below.

- *U.S. Department of Agriculture, Community Facilities*—provides affordable financing to develop essential community facilities in rural areas.
- *U.S. Department of Agriculture, Rural Energy for America Program*—provides financing to agricultural producers and small businesses for clean energy systems.
- *U.S. Department of Housing & Urban Development, Community Development Block Grants*—provides resources to address a wide range of unique community development, including housing, infrastructure, and business development.
- *U.S. Department of Transportation, TIGER Grants*—provides a unique opportunity for federal investment in transformative transportation projects.
- *U.S. Environmental Protection Agency, Brownfields Cleanup Grants*—provides funding for cleanup activities at contaminated sites.
- *U.S. Small Business Administration, 7a Loan Program*—Supports financing for new businesses or to assist the operation, or expansion of an existing business.

²¹ For more information on federal economic development finance programs, visit the Council of Development Finance Agency (CDFA) Federal Financing Clearinghouse at www.cdfa.net.

Construction

The construction phase of the process is the point at which the project begins to take form. How a project is designed and constructed, or the project delivery method, is one of the most important decisions made in the lifespan of a facility project. Several project considerations are affected by the delivery method, such as budget, schedule, and risk assessment. There are unique considerations for every project, and the Project Team must strive to select the best project delivery method. This section provides guidance for which delivery method to choose for a project as well as general information on the construction process.

Price and Risk

The goal of the Project Team during the construction phase is to achieve a completed project while minimizing cost and mitigating risk. Each project delivery method will provide a different means of handling cost and risk. Before delving into the various methods, the Project Team should have a clear understanding of project price models and the implications of risk.

Price Models

Most construction services will be contracted through a fixed price or guaranteed maximum price (GMP) bid. Reimbursement-based bids may also be available from some contractors. These payment methods may be used for contracting design, engineering, and construction services.²² Generally speaking, a design-bid-build (DBB) method or design-build (DB) method will use a fixed price and Construction Manager-as-contractor method will use GMP. Any price model will focus on the price to deliver the scope of work requested in

the construction contract with varying degrees of accommodation for contingencies. Changes to the project scope made by the Project Team—a common occurrence in community facility projects—will likely require additional funds. Organizations should be prepared to finance some amount of contingencies when entering the construction phase.

Fixed Price

As the name suggests, a fixed-price bid quotes the Project Team with a set cost for construction. The model adds flexibility for the Project Owners through the use of alternative, additive, and deductive bid items, which provide for changes to the project within the scope of the fixed price. Additive and deductive bidding involves work items that may be added or omitted from the scope of work. For example, an additive item may be an upgrade of equipment or material to a more costly alternative. An alternate bid may be either an increased or a decreased dollar amount. In this sense, some people will refer to an alternate bid as either an additive alternate (if the differential price is an increased amount), or a deductive alternate (if the differential price is a decreased amount).²³ Although the flexibility of these tools can be attractive, the Project Team should be aware that the financial assessment of the project will consider the maximum scope and price of work, rather than the fixed price without any additive items.

Guaranteed Maximum Price

A guaranteed maximum price is conceptually similar to a combination of fixed and reimbursable bids. Rather than directly providing the final cost, as is the case with fixed-price, the contractor charges for real costs, but only up to the agreed-upon maximum

²² Construction Management Association of America. (2012). *An Owner's Guide to Project Delivery Methods*. Retrieved from: <https://cmaanet.org/>.

²³ Purdy, M. (2007, August 28). "Additives vs. Alternates." *Public Contracting Blog*. Retrieved from: <http://publiccontracting.blogspot.com/2007/08/additives-vs-alternates.html>.

amount. This price includes the contractor's direct fee, subcontracts, and contingencies. Changes to the project by the Project Team may not be included in this bid.²⁴ Otherwise, the contractor is responsible for costs above the guaranteed maximum price.

Risk and Responsibility

The construction phase contains the most risk of the project process. Once contracts are signed, and particularly once ground is broken and the physical structures start being built, the project becomes increasingly difficult to cancel. Financially, the construction period is when the bulk of the costs are created, but the project does not yet have a source of revenue. In fact, most sources of long-term capital will not be available until construction is complete, requiring a separate source of short-term construction capital as a "bridge" to the long-term financing.

Construction risk is mitigated through protections obtained from both the project delivery method structure and the purchase of insurance and bonds. The Project Team should understand these issues and be fully aware of what portion of the risk is held by the Project Owners compared to what portion of the risk is held by the contractors under each structure. Projects should be covered by payment and performance bonds, a type of surety bond that ensures that the project will be completed per the construction contract, even if this requires the selection of a new contractor.²⁵ Insurance—for the Project Owners, the contractor, or both—may be required or recommended in addition to bonding to protect the financial investment of the Project Owners. Similarly, contractors will require subcontractors to have their own insurance or

bonds.²⁶ On the other hand, contractors may require insurance that the Project Team will follow through with their financial obligations.

Project Delivery Method

The "project delivery method" refers to the procurement and management structure that will be used to bring the project through the design and construction phases. Multiple methods may yield a successfully completed project, although some methods will prove more efficient for specific projects. Some of the key factors in choosing a project delivery method are the desired building schedule, project complexity, state and federal procurement statutes,²⁷ budget constraints, and tolerance for risk in the construction process.

Because of financial, capacity, and time constraints, various project delivery methods have evolved to fit particular project, organization, and community needs. Stakeholder preferences vary in regards to project delivery method. For example, a need to prioritize limited administrative costs and clear responsibilities makes design-bid-build a common preference for many projects.

The organization's familiarity with the construction process and management capacity may indicate whether assistance from a third-party contractor will be beneficial during the construction process. This phase requires tremendous experience, expertise, and coordination amongst many stakeholders, so careful communication is required throughout the process. If the project complexity is beyond

²⁴ 3d/International. (n.d.). *CM at Risk*. Retrieved from: <http://www.aci-na.org/static/entransit/cmatriisk.pdf>.

²⁵ Payment and performance bonds are always recommended for projects and will be required on federally-funded projects larger than \$100,000, as well as many state-funded projects.

²⁶ National Association of Surety Bond Producers and Surety & Fidelity Association of America. (2015). *Contract Surety Bonds: Protecting Your Investment*. Retrieved from: http://suretyinfo.org/?page_id=347.

²⁷ Most projects with state or federal funding will be required to use procurement practices that facilitate open competition. The exact process to be followed will vary by government.

the capacity or capability of the Project Team to manage the construction, then this may drive greater consideration of a delivery method that incorporates a Construction Manager or similar role. Most Project Owners will find the construction process to be manageable without adding additional construction management to the Project Team, with hospital projects being the primary exception to this rule.

Procurement of construction services will generally fall under cost-based or qualifications-based methods. Qualifications-based selections avoid the consequences of low-bid and other cost-based methods by focusing on the project's scope of work, and negotiating price based on scope and deliverables.²⁸ The procurement method selected is subject to federal (if using federal funds), state and local regulation, and the Project Team should consult Legal Counsel before posting any requests for proposals or agreeing to any contracts.

Design-Bid-Build

The design-bid-build (DBB) method is used frequently in construction projects. Through this method, the Project Owners engage an Architect (see the "Design" section) or similar contractors to prepare contract documents and a price estimate based on the final design. These documents are the basis of the request for proposals (RFP) that is presented to General Contractors potentially bidding for the work. The selected General Contractor may also hire subcontractors to perform various roles throughout the project's construction phase. The General Contractor is responsible for building the facility according to the design and budget.

²⁸ Construction Management Association of America. (2012). *An Owner's Guide to Project Delivery Methods*. Retrieved from: <https://cmaanet.org/>.

The DBB method has several benefits. The early work with the Architect provides the Project Owners reliable price information before construction starts and substantial control over the design. This method is broadly applicable and understood, and the clearly staged process and familiarity contribute to well-defined roles for all parties involved. The multiple bid phases and clear starting point for construction can be simpler for projects subject to significant local, state, or federal regulations.

Of course, the DBB method has some drawbacks. Projects can go over-budget and may need to be redesigned, which can sometimes be included in the Architect's contract at no additional charge. On a related point, the DBB method places more of the coordination responsibilities on the Project Owners, who must oversee roles, responsibilities, communication, and costs in order to facilitate a successful project.

Alternative Delivery Methods

In addition to the delivery methods described above, the Project Team may wish to explore some alternative methods that may be available in the region. Many possible options exist, restricted only by the creativity, expertise, resources, and risk-tolerance of the Project Owners, financial partners, and available contractors. Not all delivery methods will be acceptable to all funding sources, and state and federal funders may have specific prohibitions against certain models. Notable alternative methods are described below.

Construction Manager as Constructor

The Construction Manager as Constructor (CMc; also known as Construction Manager at Risk) method refers to the selection of a Construction Manager to

be responsible for the construction phase, including hiring subcontractors and overseeing construction for all aspects of the design. In most cases, this delivery method is subject to a GMP, and services rendered will depend on this agreement.²⁹

The CMc method has several advantages and disadvantages. The benefits of this method will primarily be experienced by complex projects. The more that construction and project success depend on multiple subcontractors or exact specifications, the more the Project Team has to gain in efficiency through the CMc method. Although the greatest promise of the CMc method is efficiency, a potential risk of the model can include a poor utilization of resources. Project Owners and Architects should evaluate their expertise and available resources to manage a large scale project. This evaluation should review the benefits of using a Construction Manager and not using a Construction Manager. The identified risk should be mitigated using tools such as contract and price agreed to between the Project Team and the Construction Manager if this method is the best fit for the project. It is important to note the two parties need to be transparent about the project purpose and planned contingency before agreeing to any contract.³⁰

Construction Manager-as-Advisor

The Construction Manager-as-Advisor (CMA) method involves the use of a Construction Manager who serves as more of a project consultant through both

the design and construction phases of the project. The intention of this method is to involve an expert who, by virtue of being paid a flat consulting rate, has no financial stake in the scale of the design or construction work. Similarly, this role could be used to supplement the expertise of available Architects and other consultants, if local firms do not have adequate experience with specific project types or federal approval processes.

The challenge of the CMA method is how to incorporate this additional consultant and fee into the Project without duplicating existing roles, responsibilities and fees. Indeed, the intended purpose of the Construction Manager in this model is to serve as a counterweight regarding recommendations of Architects and General Contractors. Organizations should invest time in hiring experienced, qualified consultants whose resume include verifiable references, in addition to using protective contract clauses if a Construction Manager is determined necessary for the proposed project.

Design-Build

The design-build (DB) method is a comparatively simple structure that engages one party for both the design and construction phases of the project. The DB team is often a joint partnership consisting of a general contractor and a designer. Based on community and project needs discussed, the DB team will establish a fixed price to complete the design and construction of the project early in the process.

There are several advantages to a DB project. The communication flow tends to be straightforward, with a single point of contact overseeing both the design and construction. This simplicity can also contribute to a quicker overall project process,

²⁹ Construction Management Association of America. (2012). *An Owner's Guide to Project Delivery Methods*. Retrieved from: <https://cmaanet.org/>.

³⁰ CM contracts include appropriate contingencies for unbid portions of the project as well as a GMP. The less-defined the project is when the contract is completed, the less reliable the quoted GMP.

particularly by removing the separate bidding process for construction services. With an effective team and contract in place, the DB method can also be cost-effective, with the DB team working under a fixed-price contract and therefore bearing the risks of delays and cost overruns.³¹

The DB delivery method may not be a good fit for all projects. Many sources of financing include procurement regulations. It is important for the Project Team to work closely with the funding source so the Team's ability to select the best qualified DB is not restricted or delayed due to funding requirements. Problems caused by a poorly selected DB team can be exacerbated by the single-bid method. Assuming that the DB delivery occurs through a fixed-price contract, the Project Team will also need to investigate a reasonable project price—the DB team should build some margin for contingencies and profit into their price, but not excessively so. The DB method is particularly dependent upon a trusting and effective relationship between the Project Team and DB team, which may be more achievable for some project types or in some regions more than others.

Public-Private Partnership

Public-private partnership (P3) is a delivery method that is a partnership between a public and a private entity for the purpose of delivering public infrastructure. In some sense, every project involving both commercial and public finance is a P3, contributing to the broad use of the term. In a stricter sense, the P3 model generally entails a public or nonprofit organization, DB team, maintenance firm, and (public and private) financial partners. These parties will have defined roles in the entire project process, as well as the long-term operation of

the facility. In most cases, the maintenance firm will have specified performance criteria as part of their contract, and the operation of the facility will revert to the Project Owners at the end of the contract term.

P3 is one of many tools used by the USDA, and has gained much attention due to its ability to provide funding options for public and nonprofit entities that may be struggling to access adequate sources of capital. Some benefits of P3 projects include the utilization of alternative revenue and funding sources to close a funding gap, use of low cost tax-exempt or taxable financing, transfer of risk to private sector, private-sector efficiencies and innovations, long-term operational and maintenance efficiencies, and combining public and private uses to leverage economic development.

Integrated Project Delivery

Integrated project delivery (IPD) requires significant collaboration between Project Owners, designer, and builder so that liability for project delivery is appropriately managed. The IPD method requires the Project Owners to assemble this team early in the process, such as during the planning phase. This method attempts to spread the risk, responsibility, and liability for a construction project, which incentivizes the entire Project Team to achieve the same set of goals.

Compensation for stakeholders in the IPD delivery method is typically comprised of three components: cost reimbursement, incentives for achieving cost targets, and rewards for accomplishing project goals.³² The IPD seeks to avoid delays, overruns, and other potentially-avoidable problems by aligning the interests of the entire team with those of the Project Team.

³¹ Tyson Building Corporation. (2005). *Design-Build, Design-Bid-Build and Contract Management*. Retrieved from: <http://www.tysonbuilding.com/images/SelectingProjectDelivery.pdf>.

³² Construction Management Association of America. (2012). *An Owner's Guide to Project Delivery Methods*. Retrieved from: <https://cmaanet.org/>.

Capital Markets

The construction phase of the project process entails special financing. As was discussed in the “Risk and Responsibility” subsection, long-term capital will typically not participate during the construction phase because costs are well above revenues, which are normally non-existent at this point in the process. The Project Team will therefore need to work with their financial consultants to access short-term financing for construction.

Interim Construction Financing

Interim construction financing is short-term debt commonly referred to as a “bridge” to the long-term capital participation. The bridge debt is secured by the project and, in most cases, is contingent upon a demonstration of long-term financing. In order to qualify for this debt, the lender must feel confident about the construction process—including the design, contractors, schedule, and structure—and the likelihood that the long-term financing will “take out” the bridge loan. Construction loan terms usually are not more than five years and the rate may be fixed or float over a defined loan index.

In cases where interim commercial financing is not available or not practical due to small project scope, the project may be able to access an interim-like loan product from the long-term lender. In these cases, the lender may make a small portion of the final financing available as certain phases of construction are completed, or at other scheduled intervals. However, depending on the short-term lender’s assessment of the construction risk, the availability of sufficient collateral may be a barrier for bridge loans, and lenders may seek additional guarantees beyond the value of the land or structure alone. In many cases, a project with the stability to attract a reliable source of long-term financing will be able to attract an institution willing to provide interim construction financing.

Take-Out Financing

In some cases, the Project Team may find a financial advantage to using another debt tool in between the interim construction financing and the long-term debt financing. Although take-out financing can generally refer to any replacement financing, the term commonly refers to this mid-stage loan product. Depending on current rates, project security, and lender relationships, a project may be able to roll over a separate short-term debt instrument until the interest rate approaches that of the long-term debt. For example, the Project Team may complete construction and be offered a six-month note at 2.2 percent, significantly below the 30-year rate of 3.5 percent, and choose to continue using these notes until the interest rate catches up to the 3.5 percent. A strong Financial Advisor and Underwriter will be able to help the Project Team identify and capitalize on these opportunities.

Conclusion

The process of completing a new community facility is long and complex and any organization considering the endeavor should be congratulated for their vision and ambition. The *Community Facilities Infrastructure Toolkit* is intended to provide guidance through the Concept Development, Planning, Design, Environmental Compliance, Finance, and Construction phases for accomplishing this goal.

As noted repeatedly in the text, considering all facets of the project lifecycle early can avoid many potential costs and delays. An effective project is led by a Project Team that emphasizes clear communication and hires experienced consultants to address deficiencies. This team develops a project plan that engages a variety of community stakeholders and sorts “wants” from “needs.” This plan is translated into a design considering multiple alternatives for the site and facility layout to help the Project Team make the most effective and efficient choice. This design is subject to environmental compliance review, particularly if publicly funded, that will help the project avoid additional costs and adverse community impacts. The Project Team must secure financing for the reviewed project plan, which will likely require communicating with a variety of capital sources, such as equity partners, commercial lenders, and federal agencies. Once these steps have been addressed, the Project Team is ready to select a construction method and begin the actual building of the project. The complexity of this process should certainly compel the Project Team to carefully consider their course of action before proceeding too deeply into project development.

Fortunately, there are countless tools, resources, and case studies that communities can use to guide them through this process. The *Community Facilities Infrastructure Toolkit* is not only such a guide, but also provides links to additional resources. One of the best places for an organization to begin the project process is by speaking with a local USDA Rural Development office. Even if Community Facilities program funding is not the final outcome for the project, USDA staff are always available to assist rural communities and will be able to connect prospective Project Teams with successful peers in the region. With so much assistance available, committed organizations will be able to succeed in their project plans, developing a facility that benefits both the organization and the community well into the future.

Additional Resources

As communities work through the recommendations in this toolkit, the following resources may provide useful information.

CDFA Online Resource Database

<http://www.cdfa.net/cdfa/cdfaweb.nsf/ordsearch.html>

Rural Information Center

<http://ric.nal.usda.gov/>

National Rural Health Resource Center

<https://www.ruralcenter.org/tasc/flexprofile/indiana>

North Central Regional Center for Rural Development

<http://ncrcrd.msu.edu/>

Virginia Rural Center

<http://www.cfrv.org/>

California Hospital Association

<http://www.calhospital.org/rural-healthcare-center>

Community Facilities Direct Loan & Grant Program

<http://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program>
<http://www.rd.usda.gov/files/fact-sheet/RD-Factsheet-RHS-CFDirect.pdf>

Environmental Requirements

<http://www.rd.usda.gov/files/3565-1chapter11.pdf>

Partnering with USDA's Rural Development

<https://www.cdfa.net/cdfa/cdfaweb.nsf/ordredirect.html?open&id=occ-usdapartner11.html>

Partners for Rural America

<https://www.cdfa.net/cdfa/cdfaweb.nsf/ordredirect.html?open&id=201508-PartnersforRuralAmerica>

Guidelines for Determining Architect/Engineer Fees for Public Works Building Projects

<http://www.ofm.wa.gov/budget/instructions/capinst/aeguidelines.pdf>

Federal Regulations

<http://www.ecfr.gov/cgi-bin/text-idx?SID=6a93367cf2b1605c97abaea683445abc&node=pt7.15.3575&rgn=div5>

Appendix

Alabama | 4121 Carmichael Road, Suite 601 Montgomery, AL 36106 | 334-279-3615
Alaska | 800 W. Evergreen Palmer, AK 99645 | 907-761-7778
Arizona | 230 N. First Avenue, Suite 206 Phoenix, AZ 85003 | 602-280-8747
Arkansas | 700 W. Capitol, Room 3416 Little Rock, AR 72201 | 501-301-3265
California | 430 G Street, Agency 4169, Davis, CA 95616 | 530-792-5810
Colorado | Denver Federal Center Building 56, Room 2300 P.O. Box 25426, Denver, CO 80225 | 720-544-2927
Delaware & Maryland | 1221 College Park Drive, Suite 200 Dover, DE 19904 | 302-857-3616
Florida & Virgin Islands | PO Box 147010, 4440 NW 25th Place Gainesville, FL 32614 | 352-338-3485
Georgia | 355 E. Hancock Avenue Athens, GA 30601 | 706-552-2568
Hawaii | Room 311, Federal Building, 154 Waiānuenue Avenue Hilo, HI 96720 | 808-933-8323
Idaho | 9173 W Barnes Drive, Suite A1 Boise, ID 83709 | 208-378-5617
Illinois | 2118 W. Park Court, Suite A Champaign, IL 61821 | 217-403-6209
Indiana | 5975 Lakeside Boulevard Indianapolis, IN 46278 | 317-295-5767
Iowa | 873 Federal Building, 210 Walnut Street Des Moines, IA 50309 | 515-284-4459
Kansas | 1303 SW First American Place, Suite 100 Topeka, KS 66604 | 785-271-2728
Kentucky | 771 Corporate Drive, Suite 200 Lexington, KY 40503 | 859-224-7415
Louisiana | 3727 Government Street Alexandria, LA 71302 | 318-473-7965
Maine | 967 Illinois Avenue, Suite 4 Bangor, ME 04402 | 207-990-9124
Massachusetts/Connecticut/Rhode Island | 451 West Street, Suite #2 Amherst, MA 01002 | 413-253-4318
Michigan | 3001 Coolidge Road, Suite 200 East Lansing, MI 48823 | 517-324-5208
Minnesota | 410 AgriBank Building, 375 Jackson Street St. Paul, MN 55101 | 651-602-7810
Mississippi | 100 W. Capitol Street, Federal Building Suite 831 Jackson, MS 39269 | 601-965-4326
Missouri | 601 Business Loop 70 West, Parkade Center, Suite 235 Columbia, MO 65203 | 573-876-0976
Montana | 2229 Boot Hill Court Bozeman, MT 59715 | 406-585-2520
Nebraska | 100 Centennial Mall N, Suite 308 Federal Building Lincoln, NE 68508 | 402-437-5559
Nevada | 1390 South Curry Street Carson City, NV 89703 | 775-887-1222
New Jersey | 5th Floor N. Suite 500, 8000 Midlantic Drive Mt. Laurel, NJ 08054 | 856-787-7753
New Mexico | 6200 Jefferson Street, NE Room 255, Albuquerque, NM 87109 | 505-761-4973
New York | The Galleries of Syracuse, 441 S. Salina Street, Suite 357 Syracuse, NY 13202 | 315-477-6465
North Carolina | 4405 Bland Road, Suite 260 Raleigh, NC 27609 | 918-873-2063
North Dakota | 220 East Rosser, P.O. Box 1737, Federal Building, Room 208 Bismarck, ND 58502 | 701-530-2029
Ohio | 200 N. High Street, Federal Building, Room 507 Columbus, OH 43215 | 614-255-2391
Oklahoma | 100 USDA, Suite 108 Stillwater, OK 74074 | 918-682-8831
Oregon | 1201 NE Lloyd Boulevard, Suite 801 Portland, OR 97232 | 503-414-3367
Pennsylvania | 359 East Park Drive, Suite 4 Harrisburg, PA 17111 | 717-237-2291
Puerto Rico | 654 Munoz Rivera Avenue, IBM Building Suite 601 San Juan, PR 00936 | 787-766-5095
South Carolina | Strom Thurmond Federal Building, 1835 Assembly Street, Room 1007 Columbia, SC 29201 | 803-253-3425
South Dakota | 200 Fourth Street, SW, Federal Building, Room 210 Huron, SD 57350 | 605-352-1145
Tennessee | 3322 W End Avenue, Suite 300 Nashville, TN 37203 | 615-783-1345
Texas | 101 S. Main, Federal Building, Suite 102 Temple, TX 76501 | 254-742-9787
Utah | Wallace F Bennett Federal Building, 125 S. State Street, Room 4311 Salt Lake City, UT 84147 | 801-524-4326
Vermont & New Hampshire | 87 State Street, Suite 324 P.O. Box 249, Montpelier, VT 05601 | 802-828-6033
Virginia | 1606 Santa Rosa Road, Suite 238 Richmond, VA 23229 | 804-277-1615
Washington | 1835 Black Lake Boulevard. SW, Suite B Olympia, WA 98512 | 360-704-7737
West Virginia | 1550 Earl Core Road, Suite 101 Morgantown, WV 26505 | 304-284-4886
Wisconsin | 5417 Clem's way Stevens Point, WI 54482 | 715-345-7600
Wyoming | Federal Building, Room 1005, 100 East B, PO Box 11005 Casper, WY 82602 | 307-233-6709

About the Toolkit

The *Community Facilities Infrastructure Toolkit* was produced under a cooperative agreement between the U.S. Department of Agriculture Rural Development and the Council of Development Finance Agencies.



The Council of Development Finance Agencies is a national association dedicated to the advancement of development finance concerns and interests. CDFA is comprised of the nation's leading and most knowledgeable members of the development finance community representing public, private and non-profit entities alike. For more information about CDFA, visit www.cdfa.net or e-mail info@cdfa.net.

Toby Rittner, President & CEO
Council of Development Finance Agencies
100 E Broad Street, Suite 1200
Columbus, OH 42315

Disclaimer: The information contained within is intended to provide accurate and authoritative information. The authors are not herein engaged in rendering legal, accounting, or other professional services, nor do they intend that the material included herein be relied upon to the exclusion of outside counsel. Those seeking to conduct complex financial deals using the tools mentioned are encouraged to seek the advice of a skilled legal/consulting professional.

USDA is an equal opportunity provider, employer, and lender.



United States
Department of
Agriculture

Rural Development

USDA Rural Development is committed to the future of rural communities.