ENVIRONMENTAL FINANCIAL ADVISORY BOARD

June 4, 2019

Mr. David P. Ross
Assistant Administrator for Water
United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Assistant Administrator Ross:

The Environmental Financial Advisory Board (EFAB or Board) is pleased to present you with its thoughts and recommendations on guiding principles for how community leaders across the country can better evaluate the range of financing alternatives available to them when considering environmental infrastructure projects. These principles are contained in the enclosed paper, ***A Decision-Maker's Guide to Alternative Service Delivery Options for Public Utility Projects***. This guide contains a step-by-step approach for community officials to use in evaluating a range of infrastructure project pre-development options.

The paper responds to the Agency's request to examine the potential of financing alternatives, including public-private partnerships, to help address the significant ongoing monetary challenges associated with water infrastructure projects. In its work, the EFAB found that a range of alternatives from a number of sources already exist, but that community officials may still not be aware of all of the resources currently available. They may also lack familiarity with many of the alternatives available and have limited time and experience to address these issues. In addition, the amounts, types of resources, and requirements vary from state to state and from community to community.

Accordingly, the guide developed is not determinative or prescriptive, but rather a step-by-step process to help officials consider and determine an optimal approach to their infrastructure challenges given their individual circumstances. The Board has striven to keep the guide concise and to use clear and plain language. The guide has been designed to harmonize with, and be used in coordination with, more lengthy and detailed informational materials being developed by EPA's Water Infrastructure and Resiliency Finance Center.

In our work developing this guide, we have become increasingly convinced of the important role that EPA needs to play in educating communities regarding the need for, and the value of, thoughtfully and efficiently identifying and considering all available financing alternatives at the earliest possible time. We encourage the Agency's Water Infrastructure and Resiliency Finance Center to work with all interested parties in improving access to information on the plethora of detailed resources available to communities on this subject.

The EFAB is pleased to provide you with this guide and hopes that it will be shared with local officials across the country. The Board appreciates the opportunity to support the Agency's efforts to help the regulated communities achieve and maintain environmental compliance. If you or your staff have any questions about this paper, or would like to meet to discuss it, please let us know.

Sincerely,

Joanne M. Throwe, Chair
Environmental Financial Advisory Board

Enclosure

cc: Edward Chu, Designated Federal Officer, Environmental Financial Advisory Board
Benita Best-Wong, Principal Deputy Assistant Administrator, Office of Water
Andrew Sawyers, Director, Office of Wastewater Management
Raffael Stein, Director, Water Infrastructure Division
Sonia Brubaker, Director Water Infrastructure and Resiliency Finance Center

Environmental Financial Advisory Board

A Decision-Maker's Guide to Alternate Service Delivery Options for Public Utility Projects

June 2019

A Decision-Maker's Guide to Alternative Service Delivery Options for Public Utility Projects

Decision-makers in the public water and wastewater sector often have too little time and other resources and limited funding to address ever expanding infrastructure capital needs and operation and maintenance costs.

This ***Decision-Maker's Guide to Alternative Service Delivery Options for Public Utility Projects*** (Guiding Principles) developed by the United States Environmental Protection Agency (USEPA) Environmental Financial Advisory Board (EFAB or the Board) provides a concise set of steps when considering Alternative Service Delivery (ASD) options, including Public-Private Partnerships or Public-Public Partnerships (P3s) for current or potential water or wastewater projects.

These Guiding Principles are designed to be considered with the lengthier and more detailed "Alternative Project Delivery, Basic Concepts in Alternative Procurement Operations and Financing for Public Infrastructure" learning module to be produced by the Water Infrastructure and Resiliency Finance Center (WIRFC) of the USEPA.

We emphasize that:

1. ASD options are *not* "free" money as private-sector partners always expect a return on their investment.
2. ASD shifts both risks and duties from the traditional procurement and project management context. Each organization considering ASD needs to understand which risks and duties will be shifted by ASD, the value/cost components associated with these risks and duties, and whether or not it has the organizational capacity to competently address them.
3. State and local laws generally create and support the conventional procurement and project management context, but they do not always support ASD. Changing them may require the investment of an organization's political capital.

Properly executed ASD can help organizations effectively address infrastructure needs - from initial capital investment and construction to operations and maintenance responsibilities - by stretching scarce dollars. Members of the EFAB have had first-hand experience with ASD in both public and private sector roles that informed development of these Guiding Principles.

EFAB Members, June 2019

Introduction to the Step Process

These Guiding Principles have been organized as a series of ten steps designed to set the framework for considering and selecting a pre-development ASD or other option. ***The ten steps can be viewed in the one-page process chart accompanying the paper.*** The timing of each step and the overall timing of the ten-step process will vary for each organization based upon the type of organization, the project being considered for ASD, and the ASD option under consideration. At any point in the ten-step process, the decision-maker may determine that an ASD is not the optimal solution. When considering, an ASD option, it is important to continually focus on the purpose and goals of the potential infrastructure project.

The Steps:

Step 1: Identify a project (new construction or the major renovation of existing infrastructure) for which an ASD approach is to be considered in addition to conventional approaches.

WHY – In order to proceed with any ASD approach, decision-makers must select a project that could be a candidate for evaluation. In order to be a candidate for evaluation, the decision-makers in this step need to identify key issue(s) and/or problem(s) associated with the project that could be potentially addressed more effectively through ASD rather than conventional approaches.

When considering an ASD and deciding whether or not the project is a candidate for the pre-development ASD evaluation process, it is very important that decision-makers at this first step understand and weigh, in broad, general terms the following:

- the structure of various ASD options including the processes, participants, required decisions, legal constraints, the related marketplace and established practices;
- the advantages, disadvantages, opportunities, and risks related to ASD;
- the impact on affected parties including decision-makers, utility personnel, ratepayers, procurement officials, and community and industry stakeholders;
- the capability of the utility/organization to manage and administer an ASD option; and
- the ability to achieve the project's objectives.

WHO – The decision-makers in this first step include the utility leadership, whether political, policymaking and/or managerial, who would initially identify the project that is a candidate for a pre-development ASD evaluation.

Step 2: Organize and appoint a Steering Committee (the Committee) to guide the development and evaluation of pre-development efforts for the project.

We suggest forming a Steering Committee (the Committee) to guide the step process. A Committee can provide expertise from diverse perspectives, independent technical analysis and third-party autonomy throughout the process. The Committee approach may be more relevant for large or medium-sized utilities. Smaller utilities may rely more on a few key decision-makers to guide the process.

WHY – The Committee can support the efforts of the key decision-makers that have identified a project for pre-development ASD evaluation. Members of the Committee will have a variety of expertise and stakeholder engagement to more comprehensively guide the development and evaluation process.

- **Political *and Managerial Roles* –** Some utilities/communities have established practices for developing and evaluating new approaches. In some organizations, the involvement of political representatives (elected officials) is deemed necessary to demonstrate accountability and to provide a channel for communication with community and stakeholder groups. In others, the utility leadership relies on management and professional staff to handle such matters including community and stakeholder outreach. Unless there are unusual circumstances justifying an atypical approach, an entity should find it workable to utilize established practice to designate ownership and makeup of the Committee. However, if a staff driven structure is used, there should be a commitment to inform the political leadership about the critical aspects of any ASD evaluation, plans or recommendations on an as needed basis.

CONFLICTS OF INTEREST – Chairs of the Committee shall not have any real or perceived conflicts of interest. Members of the Committee shall be required to disclose any real or potential conflicts of interest. This will help the Committee to deliver sound and objective recommendations devoid of real or perceived bias and that do not serve the interests of the member or the member's organization. The Committee should develop policies and procedures for vetting Committee member candidates for real or potential conflicts of interest and for managing conflicts over the course of the Committee's work. To avoid any perception of conflicts of interest, the Committee may engage with independent consultants or subject matter experts to provide information or to serve in an advisory role.

WHAT – Subject to the considerations below, the utility leadership, whether political, policymaking and/or managerial, should create a Committee by:

- establishing a mission statement (statement of purpose) to broadly define the Committee's purpose (expectation), including delegation of any authority and responsibility, and the scope of the Committee's work; and
- appointing members, including a chair.

WHO – The Committee should either have ASD, general management, project management, procurement or related expertise or experience, or include individuals representing groups that will either significantly affect or be affected by ASD. The key is to select a group that can both compile information (input) and provide feedback (questions, suggestions and comments) in a constructive manner during the Committee's work. Likely members include project engineers, operations management and/or technicians, procurement staff, finance staff, elected officials, general management, community/stakeholder representatives and ASD consultants, among others. The size of the Committee should be broad enough to be representative but small enough to be efficient.

CONSIDERATIONS –

- Government and/or utility staff may be assigned to the Committee to help facilitate work.
- A Committee approach may be more relevant for large or medium-sized utilities. Smaller utilities may rely more on a few key decision-makers to guide the pre-development decision-making process.
- Note: If outside expert consultants are appointed, Step 7 will need to accelerate.

Step 3 Committee Develops the Mission.

Step 3a: Identify and prioritize motives and objectives for any ASD options under consideration.

WHY – The goal of every public utility should be to bring projects to fruition in the most efficient and effective way possible, and presumably it will be the steering committee's responsibility to identify the options for making that happen. A clearly defined set of project objectives and a consensus of their relative priority are essential for evaluating project delivery alternatives and determining which approach is preferred. This step is critically important and provides the basis for choosing to engage in an ASD.

WHAT – The Committee will identify and define the overarching goals and objectives for the project irrespective of the delivery method selected. In other words, the following questions should be answered.

- What are the primary reasons for advancing the project – what is it intended to accomplish?
- What are the most important project objectives? These could include lowest upfront capital cost, lowest operating cost, lowest lifetime cost, fastest completion, greatest reliability, maximum risk transfer to the contractor, etc.
- How *exactly* would each objective be defined and/or measured? Some objectives lend themselves well to measurement (e.g., cost, schedule) while others are more difficult (e.g., retained control, risk transfer). It is

useful to establish measurable targets, where possible, although this step may need to be revisited later in the process.
- Once a short list of objectives is agreed, which are the most important? The committee will need to understand the possible tradeoffs between objectives (i.e., schedule versus cost) in order to prioritize thoughtfully.
- How much control is the utility willing to give up in order to achieve the core objectives?

A decision matrix may be helpful in analyzing and communicating the relationships between alternative project objectives and alternative project delivery methods. Once the objectives are identified and prioritized, they should be summarized concisely, communicated to stakeholders, and revisited throughout the process as a measuring stick for future project success.

HOW – It can be beneficial for each Committee member to be interviewed separately by one non-committee member to discuss potential objectives and record initial comments and opinions. The interviewer would then consolidate feedback from all the interviews and present it to the full committee for group discussion, debate and finalization. If the organization has a collaborative culture it may be more effective to address this in a workshop setting that can provide both education and feedback.

Step 3b: Determine any significant barriers to ASD pre-development, development, and procurement.

WHY – The Committee should identify any boundary conditions to project delivery alternatives that are immovable or would be very difficult to overcome. This will inform the evaluation process going forward and can/will be the basis of an initial screening of the range of options under consideration.

WHAT – Significant challenges or barriers may include whether:

- local or state statutory and regulatory authority exists for pre-development activities and various ASD options under consideration;
- sufficient, knowledgeable staff is available or can be added to advance the project through the pre-development process as well as to properly develop and manage any ASD through the procurement;
- there is sufficient budget to fund pre-development activities (e.g. hire specialized financial, legal and engineering consultants);
- the organization's balance sheet or other financial constraints will be adversely impacted by the ASD; and
- any contractual limitations (e.g., collective bargaining agreements) might limit or prevent the use of ASD.

The Committee should explore this topic with a mindset of identifying and understanding any *potential* internal and external constraints, and with a focus on identifying feasible solutions.

HOW – The Committee should meet with the community and utility legal, financial and technical staff, consultants and professional organizations to discuss what is known about constraints to pursuing ASD options. Many nuances might not be understood at this stage, however, and any initial red flags should be noted as areas of concern for further assessment.

Step 3c: Define the work plan for System project personnel and/or outside expert consultants to develop the preliminary comparative analysis of ASD options under Step 3.

WHY – Using the Committee to help identify additional expertise is very important. A well thought out high-level plan for completing the comparative analysis will set expectations for time, cost, and process for all parties and facilitate completion of the analysis by the responsible staff and/or consultants.

WHAT – The work plan should identify key steps, timelines, responsibilities and resources committed to the ASD evaluation process. The Committee (in consultation with project personnel and/or outside consultants) may use the EPA learning module (see page 1) and other resources to inform development of the work plan. The plan should:

- clearly identify work to be performed by internal staff versus work to be completed by external advisors;
- specify the points at which the Steering Committee will be involved in the effort and when they will be consulted by project personnel;
- identify other stakeholders who should be consulted during the process;
- identify the decision points along the way at which the Steering Committee can decide to continue or discontinue the effort; and
- identify the timing and content of regular progress reporting.

If key stakeholders external to the analysis are identified, a communications strategy for interaction with those stakeholders should be developed.

HOW – Once the initial plan is adopted, project management staff will assess progress against the plan and present revisions as needed for Committee review and approval.

Step 4: System project personnel and/or outside consultants conduct a preliminary comparative analysis of ASD options and prepare a preliminary project ASD evaluation report.

WHY – It will be important for the system project personnel and/or outside expert consultants to develop a comparative analysis that establishes a baseline case that can be compared to all of the ASD options in order to provide a framework for making decisions and establishing the next step.

WHAT – Define a baseline case for the project, detailing all of the project lifecycle costs, using conventional approaches for design and construction, operations and maintenance, debt financing, and ownership.

The system project personnel and/or outside expert consultants should also provide potential ASD cases that reflect the relevant potential ASD options for the project from well-established private-sector techniques (e.g. design-build, outsourced operations and maintenance, privately-placed debt and project financing, and shared equity ownership). These should be modeled as close as possible to an "apples-to-apples" comparison to the baseline case.

The various cases can provide a comparative analysis that considers the synergistic value of various combinations of ASD options under similar assumptions and scenarios.

The comparative analysis should identify any major legal and regulatory limitations on using relevant ASD options beyond those identified in Step 2b. The comparative analysis should be summarized in a preliminary project ASD evaluation report for the Committee.

CONSIDERATIONS – A comprehensive analysis of potential limitations should extend beyond procurement laws to include ethics, labor relations and work rules, the power to contract and incur debt, environmental regulations and substantive rules governing the ownership, maintenance and transfer of public property as well as other topics. The analysis of these topics may be time consuming and resource intensive. The range of potential solutions may be obvious or subtle.

The outcome of this comprehensive legal analysis may lead to dismissing ASD as a plausible option for project delivery for a particular public body. The existing legal barriers may simply be too complex or difficult. Changing laws may be beyond the power, resources or appetite of the utility or community.

Importantly, the comprehensive legal analysis should identify the stakeholders and interests who are invested in both the conventional and ASD models. The relative influence of these stakeholders and interests with respect to the local and state executive and legislative branches should be assessed in order to calculate the likelihood of success for any required legislative or regulatory changes. In addition, care must be taken to consider the political, financial and public perception implications of any lobbying activities.

If decision-makers conclude that state or local legislative, regulatory or other policy changes are required, and the foregoing assessment concludes that such changes can be realized on a timely basis, the entity should develop a plan and timeline for those changes taking into consideration other aspects of the project schedule. In creating that timeline, the entity should consider whether to proceed immediately or to await the outcome of some, or all, of the subsequent steps.

The decision to pursue such changes may lie with ultimate decision-makers (e.g. policy makers) above the level of Committee members, who will either already be aware of the identified stakeholders and interests or will be very interested in

their views. The Committee may not be able to engage in issue education unless these ultimate decision-makers are prepared to expend political and financial capital to pursue legislative changes. Assuming the Committee receives approval to proceed with changes, legislative champion(s) and allies must be identified, approached and persuaded to pursue the necessary legislative changes. The language of any proposed change must be carefully drafted to promote approval and minimize potential opposition. Finally, the Committee must be prepared for only a partial success or a lengthy legislative process.

System project personnel and/or outside expert consultants should summarize initial findings, preliminary evaluation results possible roadblocks and suggested next steps in a report to the Committee, including likely major stakeholder concerns on utilizing relevant ASD options.

Step 5: Committee Review – Prepare a report summarizing the Committee's findings to date.

WHY – The Committee can serve as the first step of scrutiny in deciding whether to implement the ASD. Once system project personnel and/or outside expert consultants have gathered the necessary information to compare the different structures, the Committee can ask questions that will further clarify relevant decision-making points. Building consensus within the Committee is necessary to gather the support of outside stakeholders.

HOW – The Committee narrows the scope of the pre-development evaluation based upon the preliminary project ASD evaluation report and testimony and prepares a report summarizing the financings to date (with the assistance of System project personnel and/or outside expert consultants).

Step 6: Committee Socializes the Plan – Communicate and consult with various constituencies to educate and gain support for subsequent pre-development activities (may include other city council members, utility unions and professionals, various residential and non-residential ratepayer representatives, the media, etc.).

WHY – The details, costs and benefits of an ASD are often misunderstood by stakeholders because the transactions are often complex and tailored. Because ASD may involve higher initial costs and/or require involvement by a party outside of the government, those who are not involved in the comparative analysis may not appreciate the transfer of risks or other potential benefits. It will be important to structure a campaign to inform the relevant stakeholders.

Step 7: Secure resources for pre-development evaluation.

WHY – The ASD evaluation requires a range of skills, knowledge and investment in order to provide leadership with a fully informed understanding of alternatives. Few, if any, agencies have these resources available internally or within their existing suite of external advisors, so external resourcing will likely be required.

Furthermore, internal staff contributing to the process will need to be made available from their day-to-day responsibilities in order to support the effort.

WHO – A mix of internal and external resources is needed. Internal staff members that possess knowledge of key project areas will need to be involved in the ASD evaluation process. This may include legal, finance, operations, procurement, construction and public relations. Resource planning should contemplate these staff members being dedicated to the ASD effort for some portion of the process.

Specialized outside expert consultants may be needed in the following areas:

- **Engineering –** Firms that understand the risk transfer mechanisms inherent in various forms of ASD and the type of engineering support required during ASD procurement
- **Financial/Procurement –** ASD financial advisors typically assist sponsors in evaluating the cost, timeline and market appetite for ASD options, and will help evaluate alternative revenue, financing and credit considerations of these options
- **Legal –** Most forms of ASD contracts are very different from conventional public sector design-bid-build documents, and specialized legal advice is essential to understanding what forms of ASD will be viable to the sponsor and the market.
- **Public Relations –** For sponsor agencies that do not have a robust PR capability it can be useful to engage external PR support that both understands local issues and has experience in ASD communications.

CONSIDERATIONS – Given the specialized skills required and the learning curve effects for a first time ASD project, the steering committee should anticipate higher than normal costs for exploring ASD as opposed to more conventional procurement options.

Sponsor agencies can leverage existing ASD advisory procurement documents from other agencies in order to save time and to benefit from lessons learned by other agencies.

Specialized advisory support can be expensive, and it will be important to scope the initial effort carefully in order to get to a go or no-go decision cost effectively. Advisory contracts should require a high level of cost and progress reporting and allow the flexibility to adjust the level of an advisor's effort without any penalty.

Effective project management of the ASD evaluation process will be important - both to manage costs and to ensure that core study objectives are being met. The steering committee should pay close attention to how the project will be managed and allocate sufficient resources for that effort.

There is a strong tendency for sponsor agencies to default to use of existing advisory resources because it is easier, faster, cheaper and a level of trust already exists. Unfortunately, this typically does not position the ASD evaluation

process for success. Potential advisors should be able to demonstrate successful ASD evaluation and implementation experience. Existing advisors can be used to augment the effort, especially in evaluating a "business as usual" baseline.

Step 8: Develop scope of pre-development evaluation process and final report.

WHY – The goal of evaluating ASD options is to make an informed decision about which project delivery path is preferred. The steering committee should anticipate opposition from internal and external stakeholders when choosing an ASD option. Therefore, it is imperative that the evaluation plan addresses the core decision criteria and produces a report that fully documents the evaluation process and provides sufficient evidence to support/defend a recommendation.

CONSIDERATIONS *(for the scope of the study and the final report)* **–** The scope should compare ASD delivery alternatives to a "business as usual" delivery option as a baseline, but all delivery options should evaluate the same project scope (same performance standards, asset quality, service conditions, etc.).

The process should seek both to identify any constraints to ASD options and how those constraints could be addressed. The evaluation effort might benefit from reviewing relevant case studies of similar projects and how those sponsors determined to use ASD. The view of the market participants (such as contractors, investors, and operators) should be investigated to assess the likely reaction to an ASD option. The final report should document the sponsor's overarching objectives, evaluation process, limitations of the evaluation, assumptions, sources, valuation methodology, etc. Opinions and conclusions should be clearly identified as such.

One important purpose for the report is to educate decision makers. Therefore, the report should explain key terms, avoiding P3 industry jargon, and provide relevant examples of ASD applications where possible. Ideally, the final report will conclude with a recommendation. If that is the objective, the report should be structured as a "business case" for the preferred ASD option. If an ASD option is recommended, the report should identify key steps required to implement the ASD option and any additional resources that might be required and provide the steering committee a realistic timeline to completion.

Step 9: Communicate report findings to various constituencies (see Step 6).

WHY – In order to determine whether or not there is sufficient support to proceed with procurement of an ASD, there must be full and transparent communication of the report findings to the various constituencies identified in Step 5. Such communication can help build trust between the Committee and these constituencies, particularly if the Committee has represented to the constituencies that it would fully evaluate each of the ASD options under consideration in the assessment report and widely disseminate the findings once the report is completed.

HOW – The level of constituent outreach will depend upon the type of ASD evaluated and may involve the assistance of internal or external communications experts. Certain ASD evaluations that are of interest to a large number of constituencies are more likely to require presentation of the report findings in public meetings to which they are invited. ASDs involving change of control such as for privatizations or concessions are more likely to require greater community outreach. Other ASDs may require more limited community outreach and could be handled with presentations of report findings in group or one-on-one meetings. One-on-one meetings with certain constituencies such as elected officials may be most appropriate. A public relations firm may be deployed to help the Committee publicize the report and assist in the development of the messaging in the report presentation.

CONSIDERATIONS - Certain constituencies may be sensitive to some of the conclusions of the report. The Committee and its advisors (including the public relations firm) will need to anticipate the reaction of the various constituencies to the report and tailor the message accordingly. Additional meetings or other communications may be necessary to address constituent concerns.

Step 10: Determine whether or not there is sufficient support from various constituencies to proceed with ASD procurement.

WHY – Sufficient support from key constituencies to proceed with procurement of ASD is critical to ensuring a successful procurement outcome. Without this support, constituencies might be able to block the development of any ASD that does not address their concerns.

HOW – Public engagement in Step 10 should identify any key constituencies that have significant concerns regarding any of the ASD options under consideration. Decision-making regarding proceeding with ASD development and procurement should be based upon a determination of sufficient support.

CONCLUSION

This paper provides Guiding Principles organized as a series of ten steps that form a framework to use in considering a pre-development ASD or other option for a potential infrastructure project(s). The ten-step process (see one-page process chart accompanying the paper) can be used by key utility decision-makers in a measured step-by-step manner to: identify a project for pre-development ASD evaluation; select ASD options for evaluation; evaluate the ASD options from engineering, financial/ procurement, legal and public relations perspectives; communicate the results of the evaluation to key constituencies to determine the level of support for the preferred ASD or other option; and decide whether or not to proceed to the development and procurement stage.

The decision-makers can establish a Steering Committee to guide the ten-step process, supplemented by outside expert consultants as needed. Smaller utilities may choose to rely on a few key decision-makers to guide the process.

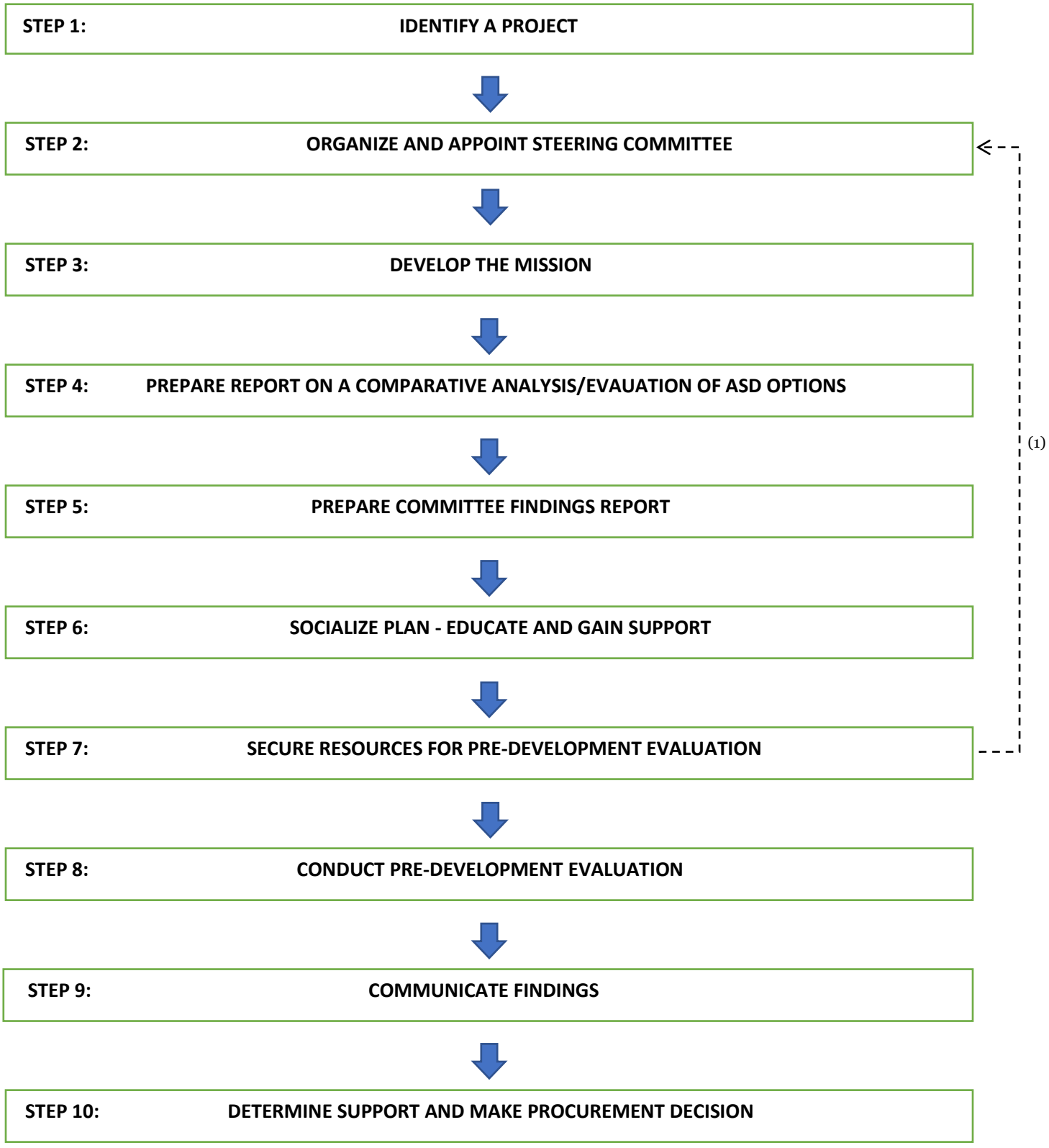
Upon completion of the ten steps, the decision–maker should be better informed as to whether ASD is a potential value-added possibility for project delivery and, through the process, will have established the supportive framework to embark on the next steps for proceeding with the process.

This deliberative process should demonstrate the benefits of an ASD option, if any, compared to the baseline of a conventional approach. If the conventional approach is more beneficial, the utility should not proceed to the ASD development and procurement stage. Alternatively, the ASD option may be more beneficial but may be subject to legal or political impediments to implementation such as statutory limitations on the use of the particular ASD approach at the state or local level. Under that situation, the utility will need to decide whether or not it wants to try to overcome these impediments through legislation. Political support will be needed to proceed to the development and procurement stage which requires transparent outreach to key constituencies throughout the process. By identifying any potential impediments early, decision-makers may be able to overcome these impediments and proceed to the development and procurement stage if it is considered to be beneficial for the utility and the community it serves.

ENVIRONMENTAL FINANCIAL ADVISORY BOARD

A Decision-Makers Guide to Alternative Service Delivery Options for Public Utility Projects

Guiding Principles - Steps



(1) If outside consultants are appointed