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Step-by-Step Guide to Integrating Community Input into Green Infrastructure Projects

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This Guide provides a step-by-step process that local governments can use to integrate community input into their green infrastructure projects. It starts with a review of the benefits of involving the public in the decision-making process. It then sets out eight steps that local governments can take to involve the public. For each step, we provide details and tips to help local governments as they move through the process. These steps are directed at project development (e.g., local government has already committed to implementing a green infrastructure project in a particular community and is looking for input into project siting and design), but could be used for broader community planning as well (e.g., developing a plan that will guide future investments in green infrastructure in a particular community).

INTENDED AUDIENCE: This Guide is primarily directed at local governments since many green infrastructure projects are carried out at the local-government level (i.e., they are initiated or required by local government). The Guide could, however, be a useful resource for other groups looking to implement green infrastructure projects, like community and non-profit organizations.

Note that the information included in this Guide comes largely from interviews conducted as part of an Albuquerque-based project with representatives from local, state, and federal government, as well as from the non-profit and private sectors. A list of the interviewees is included in our Acknowledgments section.

Definitions

Green infrastructure: we use the term "green infrastructure" to refer to a way to collect and clean rainwater where it falls. Using plants and soil, green infrastructure projects reduce the amount of rainwater entering 'grey' water infrastructure (e.g., storm sewers, pipes). This can help reduce flooding. Green infrastructure projects can also help to clean and conserve water and provide recreational and other benefits to the community.[1]

Community: we use the word "community" to refer to a group of people living in proximity to each other and who are the stated beneficiaries of and/or impacted by a project, in this case, a green infrastructure project that is intended to manage flooding.

Why Involve the Community?

There are a number of challenges to involving the community in the decision-making process. Chief among these is the additional resources (e.g., time, money) it often takes to effectively engage the community. This can be particularly challenging for local governments that have limited resources.

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1.   For more information on green infrastructure, see our fact sheet "What is Green Infrastructure? What are the Benefits?" (Feb 2017), available from www.eli.org/sites/default/files/docs/gi_what_is.pdf.

So why involve the community in the decision-making process? Aside from any potential legal requirements,[2] there are a number of benefits to involving the community, including:

- **Improves Project Design**: it is likely that community members have useful information about their community (e.g., where flooding occurs), which can help with the design and placement of the project. Community members can also provide guidance about how to design the project so that the community will be more likely to use and be involved in the project.

CASE IN POINT:

Local Water Councils Improve Cost Effectiveness of Danish Stream Restoration

In 2014, Denmark transitioned from a top-down water basin management planning approach, to a planning scheme informed by local water councils with input from the public. The incorporation of local knowledge about practical considerations of restoration proposals enabled a 135% increase in the amount of stream length proposed for restoration, compared with a plan designed by the national nature agency, using the same budgetary constraints.[3]

- **Helps Address Resource Constraints**: community participation can help address some of the resource constraints that local governments are facing. Community members can play a role throughout the process, from community outreach to project planning, implementation, and maintenance. As one interviewee noted, a community's assistance with project maintenance and monitoring allows local governments to focus their attention on other issues that require more expertise. This means that local governments can stretch their limited resources further.

- **Builds Support for Current Project**: community participation can help build support for the green infrastructure project. This could have important short-term benefits (e.g., community supports the proposed project), as well as long-term ones (e.g., community becomes long-term stewards of the project). Experimental evidence has shown that people who believed a decision was based on public input rated that decision more favorably than those who were told the same decision was based only on expert opinion, suggesting that public participation itself improves legitimacy.[4]

2. For example, certain laws, like the National Environmental Policy Act (NEPA), may apply, which have public participation requirements.
3. Graversgaard M, Jacobsen BH, Kjeldsen C, Dalgaard T. Stakeholder engagement and knowledge co-creation in water planning: can public participation increase cost-effectiveness? Water. 2017; 9(191): 29 p.
4. Arvai JL. Using risk communication to disclose the outcome of a participatory decision-making process: effects on the perceived acceptability of risk-policy decisions. Risk Analysis. 2003; 23(2):281-289; Dietz T and Stern PC [editors]. Public participation in environmental assessment and decision making. Washington (DC): National Research Council; 2008. 305 p.

- **Builds Support for Future Projects**: community participation can also help build support for future green infrastructure projects. By participating in the process, community members have the opportunity to learn about and see the benefits of a green infrastructure project first-hand, which could translate into support for similar projects in the future.

- **Could Lead to More Equitable Outcomes**: community participation – along with certain other local government action – may lead to more equitable outcomes (see the box below on "More Equitable Outcomes" for some actions that local governments can take).

More Equitable Outcomes

In 2012, the non-profit organization PolicyLink released a paper on "Community Campaigns for Infrastructure Equity: A Review of Four Case Studies." The paper distilled four features of successful "community campaigns for infrastructure equity."[5] While these features relate to community campaigns, they are also broadly applicable to local governments trying to "achiev[e] equitable outcomes"[6] in their communities:

- **Make "a commitment to infrastructure equity principles"**: equity must be considered from the start (e.g., as part of "the criteria used to evaluate the various projects [being proposed]").[7] As the paper notes, "resident participation alone without a commitment to equity principles is not likely to lead to improved outcomes for historically underinvested communities."[8]

- **Build community capacity**: one of the "key challenge[s] to achieving equitable outcomes" is building capacity in communities.[9] While certain community-based organizations have been successful in "develop[ing] the capacity of community leaders from historically underrepresented communities,"[10] local governments can also support these efforts (e.g., participate in community educational events about what green infrastructure is and its benefits).

- **Mobilize "support [from] a diverse pool of stakeholders"**: it is important "to gain the support of a diverse pool of stakeholders," particularly where infrastructure investments need voter support before they can move forward.[11]

- **Make a commitment to "long-term engagement"**: local governments need to "[b]e prepared for long-term engagement" since "[i]t takes time to build local knowledge and buy-in."[12]

Note that the paper also includes "Seven Principles of Infrastructure Equity," which are described as "a framework for understanding infrastructure equity." The seven principles relate to (1) Regional Outcomes; (2) Attention to Community Infrastructure; (3) Criteria for Infrastructure Priorities; (4) Equitable Distribution; (5) Economic Opportunities; (6) Fair Financing Mechanisms; and (7) Community Engagement.[13]

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5. PolicyLink. Community campaigns for infrastructure equity: a review of four case studies. 2012. Available from www.policylink.org/sites/default/files/Community%20Campaigns%20for%20Infrastructure%20Equity.pdf
6. From the second feature (see later in the box), PolicyLink (2012), 1.
7. As noted in one case study, "[i]f equity considerations were a part of the criteria from the beginning, it could have led to more projects for low-income communities being prioritized." PolicyLink (2012), 6.
8. PolicyLink (2012), 1.
9. PolicyLink (2012), 1.
10. PolicyLink (2012), 1-2.
11. PolicyLink (2012), 2.
12. PolicyLink (2012), 2.
13. PolicyLink (2012), 3. See the paper for additional details on each of these principles.

Steps to Involving the Community

Before involving the community, local governments should set out a plan for engaging the community. This plan should include:

- **Goals**: set clear goals for what you would like to achieve with your outreach. If you set a goal of meaningfully involving the community, it will be important to involve the community early and often in the process. This will help ensure that the community has the opportunity to influence the process and not just comment on decisions that have already been made.

- **Engagement plan**: set out a clear plan for engaging the community. This plan should, among other things, identify the points in the process when the community can engage (e.g., project planning, implementation), how the community can engage at those points, and the types of outreach that will be conducted. The rest of this Guide sets out a template that can be used to help draft this plan, which should be shared with the community for their review and input before moving forward (e.g., during Steps 1 and 2 of the process described below).

Below we set out eight steps that should be taken to effectively integrate community input into green infrastructure projects. Note that these steps are intended to set out a general process and are not intended to address any legal requirements that may apply.

1. Conduct outreach to the community
2. Get initial input from the community
3. Take and synthesize community input into a draft proposal
4. Obtain feedback from the community on the draft proposal
5. Incorporate the feedback, as appropriate
6. Finalize the proposal and distribute it to the community
7. Involve the community in implementation and monitoring, to the extent possible
8. Provide updates to the community

Each of these steps is examined in more detail below.

STEP 1:
Conduct Outreach to the Community
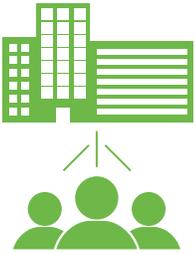
As a first step, local governments should conduct outreach to the community. This step will lay the groundwork for the process moving forward. Some key actions that could be taken in this step include: identifying relevant stakeholder groups, identifying leaders of these groups, building relationships with these leaders, and working with these leaders to identify community needs and priorities and to provide information to the community.

How to Get Started

If you are unfamiliar with a particular community, it may be difficult to figure out how to begin your outreach and, more specifically, how to identify the relevant stakeholder groups and their leaders. A good starting point is to contact established community networks, such as neighborhood associations, homeowner associations, local churches, local community groups, local parent teacher organizations, and university extension programs. You may be able to identify some of these networks and the appropriate person to contact through a simple internet search. Others may require additional work (e.g., they may be identified after some initial calls and meetings with the contacts you identified through an internet search). These networks may be the relevant stakeholder groups, or they may point you to the relevant stakeholder groups.

NOTE: It is important to be in listening mode during the initial outreach. Some ways you can ensure that you remain in listening mode include asking about community needs and priorities, providing only the basic information about project opportunities, answering questions rather than telling contacts what is being done, and asking for suggestions about who else should be involved.

The Role of the Community Champion

Some of our interviewees pointed to the importance of finding community champions. These champions can help:

- Build support for project opportunities in the community
- Conduct outreach
- Organize community meetings
- Ensure the project is properly maintained over the life of the project

Especially for long-term projects, it may be important to work with established community groups (e.g., a local youth corps). This helps ensure that there will be a community champion in place even if individual community members move away or otherwise decide not to be involved.

Note that, before community members can help, they will likely need some instruction. For example, they will likely need an explanation of what green infrastructure is and what benefits it can bring to the community, as well as information on the public participation process. They will also need proper training before they can assist with implementation of a project. While this will require an upfront investment of time and money, this investment can lead to long-term assistance with the project.

Providing Information to the Community

Before the first meeting takes place, it may be helpful to provide some preliminary information to the community. Some types of information that may be useful to provide include:

- A fact sheet that explains project opportunities and potential benefits
- A fact sheet that explains the project planning process and how community members can be involved in that process
- A map of the area that highlights, for example, where flooding is known to occur and possible sites for a project

If written materials are provided, they should be short (ideally, each fact sheet should be no longer than one page) and use plain language. In communities with non-English speakers, materials should be translated.

STEP 2:
Get Initial Input From the Community

After conducting some outreach to the community, the next step is to get initial input from the community. This meeting should take place early in the process so that the community has the opportunity to provide input before significant decisions have been made.

Before the Meeting

Before any meeting, the community needs to be notified. This should occur at least two weeks before the meeting, and ideally one month before. Some ideas for notifying the community include:

- Advertise in the local newspaper
- Mail notices to households in the affected community
- Post notices on social media
- Post notices on your website
- List the meeting on free events or community calendar(s)
- Advertise on the local radio or television station
- Ask churches, stores, and community centers to post notices
- Post large signs outside the venue on the day of the meeting

Using Social Media for Outreach

Social media can be a useful tool in conducting outreach to a community. But it is important to keep in mind that it may not be effective in reaching certain groups, like older adults, low-income populations, and some minority groups, who may not have access to the internet or use social media. Social media should therefore be just one of several tools used in outreach.

While these notices will reach a large number of people, more targeted outreach is likely needed to persuade community members to participate. For example:

- Going door-to-door with flyers about the meeting
- Working with local schools to send a text to parents or provide students with flyers that they can bring home
- Working with local groups (e.g., neighborhood association) to advertise the meeting
- Promoting the meeting at other community meetings or events

This sort of outreach is time-consuming and may seem impractical for many cash-strapped governments. In practice, the type of outreach used will depend in part on the size of the community you are trying to reach. Some green infrastructure projects may involve a small neighborhood or even just a few blocks, while others could encompass a larger geographical area like the length of a river

running through a city. For smaller projects, you may be able to conduct more targeted outreach (e.g., going door-to-door), but it may be impractical for projects that could impact a larger community.

But, even in larger communities, established community networks and community champions can help with more targeted outreach. For established community networks, it is likely that they have listservs or other ways to communicate with their members. These can be used to reach community members. Community champions can also help with outreach. For example, members of a local group could go door-to-door in the community with flyers. This will ensure that the flyers are reaching community members from a trusted member of their community. It also provides an opportunity for the local group to explain project opportunities and the process, and answer any questions that community members may have.

What Should Be Included in the Notice?

The notice should include:

- Purpose of the meeting
- Some background information on project opportunities
- Description of what will happen at the meeting (e.g., agenda)
- Date, time, and location of the meeting
- Whether food or child care will be provided
- Whether translation will be provided
- Name and phone number of a person to contact with questions

Note that, depending on the community, the notice may also need to be translated.

Choosing a Venue

The venue should be a place that is convenient for community members to attend (e.g., within walking distance for many community members), and should be familiar to community members (e.g., a local community center). Make sure that the venue has a projector and screen if you will need them.

Signing in at the Meeting

Ask community members to sign-in before the meeting. Sign-in sheets should request the community member's name, address, phone number, and – where applicable – email address. This information will help with any follow-up communications.

Character of the Meeting

Where possible, each meeting should:

- Be family friendly
- Be free to attend

- Provide food (and, where possible, accommodate dietary restrictions)
- Provide translation, if needed
- Take place in the evening or on the weekend (not during normal working hours)

What Makes a Meeting Family-Friendly?

It is important to make meetings family friendly so that families can attend together, without the need to find and pay for child care. To be family friendly, the meeting could offer child care or separate activities for the children, or could include children in the meeting itself. Note that community centers often have enclosed play areas. Community center staff or community volunteers could help supervise.

Aaron Volkening, "Greendale_GrangeAve_2010_07_12" (from flickr), licensed under CC-BY 2.0. Cropped from original.

Format of the Meeting

The meeting should be as interactive as possible. We provide some ideas about how to make it more interactive in the box below.

Ideas for More Interactive Meetings

Education

- Demonstrate concepts with hands-on activities (e.g., to explain the concept of "stormwater infiltration," different surfaces like grass and pavement can be used to show which surfaces absorb water and which ones do not)
- Show photos of green infrastructure projects that have been completed
- Conduct a walking tour of an area that already has green infrastructure elements
- Show a map of the relevant project area

Project Ideas

- Run participatory mapping sessions, where participants take pens and/or stickers and a large map of the community and collaboratively identify and label community features and needs[14]

- Break into small groups (e.g., up to 10 people) to discuss ideas. The smaller groups could then choose one representative from each of their groups to provide a brief summary of their discussions to the larger group at the end of the meeting.

Narrowing Down Project Ideas after Brainstorming

- Employ side-by-side preference comparisons, where participants evaluate alternative design proposals by observing options side-by-side, two at a time, and sequentially selecting the more preferable of each set of options[15]

- Conduct sticky dot polling, where participants are given colored sticky dots and asked to place them next to their preferred option(s)[16]

- Conduct "Ease/Impact" voting in a 2x2 table that allows participants to see the tradeoffs between ease of implementation and degree of impact[17]

14. Davis D, Meyer J, Singh A, Wright M, Zykofsky P. Participation tools for better community planning. 2nd edition. Sacramento, CA: Local Government Commission; 2013. 50 p.
15. Georgia Department of Community Affairs. Supplemental planning recommendations: suggested community planning techniques. Available from https://www.gmanet.com/getmedia/d2bc297e-653f-4240-9300-c4bed9f90210/DCA-Supplemental-Planning-Requirements-Participation-Techniques.pdf.aspx
16. See: Davis et al. (2013).
17. National Charrette Institute. Forget dot voting, use an ease/impact map. 2016 Feb 29 [cited 2018 Mar 12]. Available from http://www.canr.msu.edu/news/forget-dot-voting-use-an-ease-impact-map

At the end of the meeting, the community should be informed about next steps and the approximate timeline for completing those steps. Let them know about any uncertainties in the timeline.

> **NOTE:** Depending on the size and nature of the project opportunity, you may want to have more than one meeting at this stage.

Other Ways to Collect Feedback

There are likely many community members who will not attend the meeting. To get their input, it may be helpful to set up an information booth at places where community members regularly attend, like local churches, grocery stores, and community centers. The booth can provide information to community members, while also collecting feedback. There are also other ways to collect input; for example, a survey or questionnaire could be sent out to the listserv(s) of established community networks.

STEP 3:
## Take and Synthesize Community Input Into a Draft Proposal

The third step is to take the community's input and integrate it into a draft proposal. This step is challenging for a number of reasons, including having to:

- Weigh competing ideas
- Determine the goals of the community, which may not always be clear
- Determine how the goals of the community can be achieved, if not the exact ideas

Make clear how comments were addressed: there are likely to be ideas and other comments that cannot be integrated into the draft. Explain why these comments were not integrated. Where comments were integrated, explain how that was done (e.g., indicate where the input can be found in the proposal). This will help the community understand how their comments were taken into account. Note that comments from the community can be addressed throughout the draft proposal, or in a separate section (e.g., there could be a section on "Community Input to Date").

STEP 4:
Obtain Feedback From the Community on the Draft Proposal
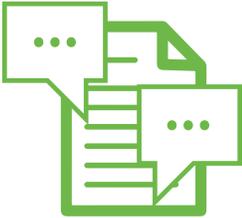
Once the proposal has been drafted, it should be distributed to the community for feedback. This can be done in some of the same ways that notice was provided for the first meeting (e.g., mail, posting on your website; see Step 2 above for more details). The draft should be accompanied by a separate summary that highlights the key elements of the proposal. The summary should be short and written in plain language. It should also clearly spell out the important dates (e.g., deadline for submitting comments, meeting date(s)). Depending on the community, it may also need to be translated into one or more languages.

In addition to accepting written comments, a meeting should be scheduled to present the proposal to the community and receive feedback. This meeting should be held no earlier than two weeks after the proposal has been distributed, so that community members have time to review the proposal before the meeting.

While most of the guidance provided for the first meeting applies to this meeting (e.g., venue, character of the meeting), the format is likely to be somewhat different, as this meeting is focused on getting feedback on a proposal. This meeting should still, however, be as interactive as possible. Some ideas for making it interactive include:

What About Outreach?

Community members will need to be notified before any meeting. This outreach can be conducted in a similar way as for the first meeting (see Step 2 above) and can also be combined with distribution of the proposal. If someone (like a community champion) is going door-to-door, it is an opportunity to provide a brief summary of the proposal and answer any initial questions community members may have.

- **Answering questions in the meeting**: the community is likely to have questions about the proposal. It will therefore be important to set aside significant time in the agenda to answer questions. This will be particularly helpful for community members who are unsure of what questions to ask, allowing them to listen to the questions that others ask and hear the responses to those questions. Remember that some of the people at this meeting will not have attended the first meeting and may not understand how the proposal was developed.

- **Setting up information booths**: another way to interact with community members is to set up information booths outside the meeting room or around the edges of the meeting. This will allow community members to ask questions one-on-one. The booths could be set up before and after the meeting.

Here are some ways to design a meeting so that it runs more smoothly (note that these tips apply to any meeting, including the meeting described in Step 2):

- Set clear goals and objectives for the meeting – what this meeting will and will not do
- Set clear ground rules for participation (e.g., everyone's opinion matters; do not be judgmental or make it personal; be concise so everyone can participate; only one person talks at a time)
- Ask participants to think about whether they are the type of person that speaks up frequently at meetings or the type that often remains quiet. Then ask those that speak frequently to make sure that they allow 3 to 6 people (depending on the number of people that are attending the meeting) to speak before they speak again. If they are the type that remains quiet, ask them to speak at least once.
- Allow time for participants to air concerns before moving on to brainstorming or commenting
- Set time limits where appropriate
- Have an experienced facilitator

At the end of the meeting, the community should be informed about next steps and the approximate timeline for completing those steps. Let them know about any uncertainties in the timeline.

STEP 5:
Incorporate the Feedback, as Appropriate

At this step, the community's comments should be incorporated into the proposal, as appropriate. As in Step 3, there are likely to be comments that can be integrated, and others that cannot. Make clear how comments were addressed, so that community members can understand how their feedback was taken into account. This can be done throughout the proposal or in a separate section.

STEP 6:
Finalize the Proposal and Distribute It to the Community

After the proposal is finalized, it should be distributed to the community (see Step 4 above for details about how to distribute the proposal). This proposal should be accompanied by a separate summary that highlights the key changes that were made between the draft and final proposal. It should also include the next steps and the approximate timeline for completing those steps. Let the community know about any uncertainties in the timeline. The summary should be short and written in plain language. Depending on the community, it may also need to be translated into one or more languages.

STEP 7:
Involve the Community in Implementation and Monitoring

While it may not be practicable for every project, the community should be involved in project implementation and monitoring to the extent possible. There are a number of benefits to involving the community at this step. For example, community members can help local governments with their maintenance and monitoring duties. While community members will likely need training before they can participate in this step, it can be cost-effective over the long term. It may be helpful to work with established community groups at this step since it will help ensure that there is continuity even if individual community members move away or otherwise decide not to be involved.

STEP 8:
Provide Updates to the Community

The community should be given regular updates about the project. An update can be shared with the community in different ways (e.g., through a meeting, social media, community champions). Multiple communication tools will likely be needed; the tools that are used will depend in part on the type of update. Significant developments may call for a community meeting along with other outreach (e.g., social media, newspaper advertisement), whereas less significant updates may only require an email or – in communities where there is limited internet access – an update by mail.

Let the community know when the project is complete. This is a good opportunity to celebrate with the community (e.g., hold a street party, media event, community work day). If you celebrate, acknowledge the people and organizations in the community that were involved in the project, and thank everyone for helping to make the community a better place.