Guidelines for designing digitally-supported participatory processes in urban planning

Dr. rer. nat. Lita Akmentiņa
Centre for Urban Planning
Faculty of Architecture
Riga Technical University

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1. Introduction

Public participation is a common practice in all democratic countries. Yet, designing and implementing meaningful and effective participatory processes is still a struggle. The reasons are related to a broad spectrum of interlocked challenges and factors ranging from the political support for public engagement to the practicalities of implementing specific participatory activities. Our research conducted within the project «E-participation in urban planning in the Baltic States: experiences, impact, and potentials» highlights the need for a structured and contextually-embedded design of participatory processes, often lacking in planning practice.

The growing range of participation tools, digital and non-digital, has opened new opportunities for public engagement. However, the adoption of digital participation tools in planning practice is comparatively slow. Nevertheless, the research shows that using digital tools for public participation can increase the number of participants (Kahila-Tani et al., 2016; Stern et al., 2009) and bring other benefits. At the same time, it does not mean a transition to fully digital participatory processes. The consensus in research and planning practice is that digital tools are supposed to complement, not replace, traditional participation methods (Cropf & Benton, 2019). Therefore, these guidelines focus on designing digitally-supported participatory processes that blend digital and non-digital engagement formats and methods in various ways.

These guidelines in no way provide a roadmap for designing an ideal or perfect participatory process. For many planning experts, it will likely be a summary of what they already know or use in their everyday practice. Our objective is to demonstrate the importance of integrating the planning process with the participatory process and communication strategy in a structured way. Through various examples, we aim to offer you a step-wise guide for designing digitally-supported and meaningful participatory processes and a toolbox of ideas and materials for inspiration.

PLANNING PROCESS

PARTICIPATORY PROCESS

COMMUNICATION STRATEGY
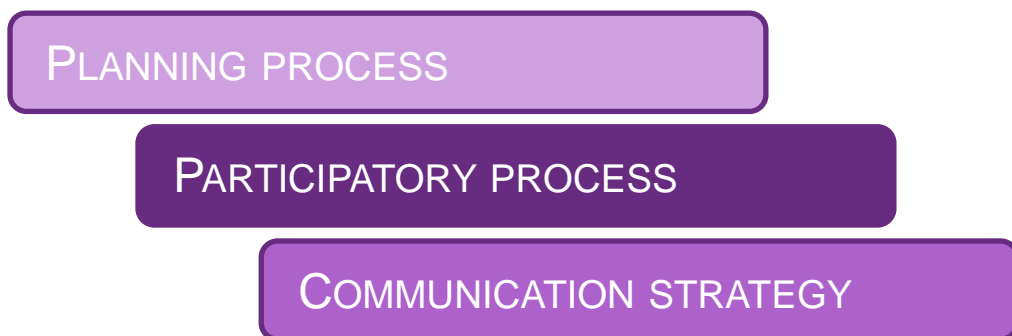
Figure 1. Three stages of designing public engagement in urban planning.

The guidelines are a result of a three-year research project on e-participation in urban planning. They are based on the following:

- ✓ Extensive literature analysis on e-participation and public engagement;
- ✓ Analysis of more than 20 different planning processes in the Baltic countries;

- ✓ Discussions and conversations with planners, community organizations, and other researchers;
- ✓ Site visits and testing of different digital tools.

The guidelines start with an introduction of general principles for designing participatory processes and proceed with a description of a step-by-step design process. The approach is divided into three main blocks dedicated to (1) the planning process, (2) the participatory process, and (3) the communication strategy (Fig. 1). For the participatory process, we further distinguish between the overall process design and planning of specific participatory activities, as suggested by Faulkner & Bynner (2020). We conclude the guidelines with several additional suggestions applicable more generally.

2. General Considerations

Every planning task, big or small, is a project with specific goals, implementation stages, and outcomes. Public participation is an integral part of this project that can substantially impact its duration, costs, and outcomes. The way we design and implement participatory processes also has broader implications for citizen-government relationships, especially in contexts where there is still a dominant societal disposition toward mistrust, uncertainty, and pessimism regarding the plan-making and decision-making processes.

Meaningful and effective public participation in urban planning requires a shift in how we think about, design, and enact public engagement. We want to facilitate this shift by proposing a structured and purposeful approach to designing participatory processes built on known principles of good practice.

Early involvement. In a typical plan-making process, citizens are involved comparatively late. People are usually invited to provide opinions about developed planning proposals when a large amount of work and resources have already been invested in preparing a planning solution. It casts them in a reactive role and provides limited options for impacting the outcome. Giving citizens a choice between going ahead with the proposed plan or making slight revisions can lead to conflict and feelings of disempowerment (Masuda et al., 2008). Early involvement in planning can help identify potential conflicts and allow working toward finding the best solution. People are generally open to negotiations and discussions if they have been given a chance to do so early enough to make a difference. Those developers that approach the local community when starting to work on a new development idea to obtain their input are generally seen more favorably and encounter fewer challenges later in the plan-making and implementation stages.

Inclusiveness. Truly inclusive public engagement practice is hard to achieve. Planners still struggle with engaging diverse participant groups, often left dealing with the 'usual suspects.' Nevertheless, the research shows that the degree to which citizens view the planning process as just and inclusive impacts the acceptance of the planning outcomes and the level of trust in the planning agency or government (Jacquet, 2015). Therefore, inclusiveness or the opportunity and ability of all participants to equally contribute to the plan-making process (Hofmann et al., 2020) should be one of the main considerations for designing participatory processes. Several aspects, e.g., availability of information, diversity of information dissemination channels and participation opportunities (Faehnle & Tyrväinen, 2013), can help make the participatory processes more inclusive.
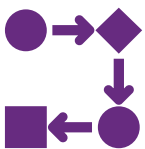
Transparency. Successful and legitimate plan-making and public engagement processes must be transparent (Hofmann et al., 2020). It means that it is made clear to everyone what are the objectives of the process, what are the main steps in the process, and what are the outcomes of each step. It is also important to ensure the transparency of the decision-making by communicating the reasoning behind each decision and, ultimately, the proposed planning solutions. It will help build trust in the planning process and facilitate acceptance of the planning outcomes.

Impact. Public participation should enable citizens to influence the planning outcomes. Many citizens still view public participation as a pointless and formal procedure without real impact. Therefore, a successful participatory process must demonstrate a genuine impact on plan-making and ensure that it is communicated to the participants how their input affected the decision-making (Brown & Chin, 2013). Stakeholders need to feel that their opinions contribute to the development processes through active involvement (Karrasch et al., 2014). It gives legitimacy to the participation process, facilitates changes in the perception of the participatory processes, encourages repeated and broader participation, and contributes to reshaping citizen-government relationships.

Learning. Successful planning and public engagement processes result in more than a planning document or solution (Lachapelle & McCool, 2005). Participation in planning is a learning experience (Simão et al., 2009). Stakeholders are given a chance to gain access to new knowledge, learn about key issues related to the planning task, and, ultimately, learn new skills (Tippett et al., 2005). Learning is one of the forms of empowerment (Oakley, 1991) that enable participants to take a more active part in urban planning and development processes. Therefore, designing participatory processes that facilitate mutual learning and knowledge creation through sharing and interacting is important.

3. Outlining the Planning Process

Before starting to design and plan the participatory process, it is crucial to establish a shared understanding of the planning project and the intended planning process. Participation should be an integral part of your planning project. Therefore, an outline of the planning process will serve as a blueprint for designing the participatory process and activities.

3.1 Defining planning focus and context

Every planning project is context-dependent. Therefore, exploring and defining planning tasks and context early in the process is important. It will help outline the planning process and understand the potential issues or challenges to be addressed through public engagement. The more precise you can be at this stage, the better. The questions below will provide some ideas for describing and defining the planning context.

? What **type of planning project** are you dealing with?

Are you working on a city master plan or long-term strategy? Maybe you are preparing a neighborhood action plan or an urban regeneration project? Try to frame your project using a planning typology that fits best.

? What is the main **focus** of the planning project?

A planning project will typically address various challenges or issues. Still, it is useful to identify one main focal planning challenge or task, e.g., land use zoning, transport infrastructure, housing development, green infrastructure, retail development, industrial development, public services, heritage protection, etc.

? What is the **spatial scale** of the planning project?

Does the planning project deal with the whole area of a city or municipality? Or is it dealing with a specific planning challenge on a smaller spatial scale, e.g., a district, neighborhood, quarter, or land plot? If possible, incorporate a description of the area, e.g., location, size, boundaries, and other defining features.

? Who is the **initiator of the planning project**?

Is it a municipality, a private developer, or an investor? Is it maybe a community-driven project?

? How is the planning project related to other plans or projects?

No planning project starts from a blank slate. Therefore, it is useful to position the planning project in relation to other planning documents, projects, or goals. Is the planning project detailing or amending one of the existing planning documents? What [hierarchically higher] planning goals is the project helping to achieve?

? What **challenges** will the project address?

Although a planning project should have one main objective and focus, it typically addresses several challenges. The more complex or hierarchically higher the planning project, the more challenges there will be. Depending on the planning project, be as specific as possible about the potential issues and topics for your planning project. Also, think about the impact the planning project might have beyond the defined planning territory.

? What could be the potential **conflicting issues** in the project?

Based on the challenges to be addressed in the planning project, identify issues that might provoke negative reactions from citizens or other stakeholders. Early identification of potential conflicts will allow for proactive deliberation and conflict resolution.

? What is the **expected outcome** of the planning project?

Finally, define the expected outcome of the planning project, e.g., strategic goals and objectives for the next 30 years, land use zoning and building regulations, or landscape-architectural design project for public space transformation.

Planning processes are more likely to be successful if the problems they are supposed to deal with are clearly defined (Stenseke, 2009). These definitions should be revised regularly as the planning project progresses. Doing background studies and getting early input from the citizens will help to refine or improve the initial outline of the planning objectives and context.

3.2 Outlining planning stages

Once you have defined the planning focus and context, it is time to outline the main stages of the planning project. Plenty of examples of different planning processes and stages can be used as a blueprint for a planning project. Planners generally rely on statutory planning procedures and experience with different planning projects to define planning steps. As planning projects differ significantly in complexity and scope, it is not easy to propose one template that would fit them all. Therefore, we suggest a simplified and generalized outline of a planning process (Fig. 2) that can be adapted to a specific project by removing, adding, or transforming the proposed planning stages.
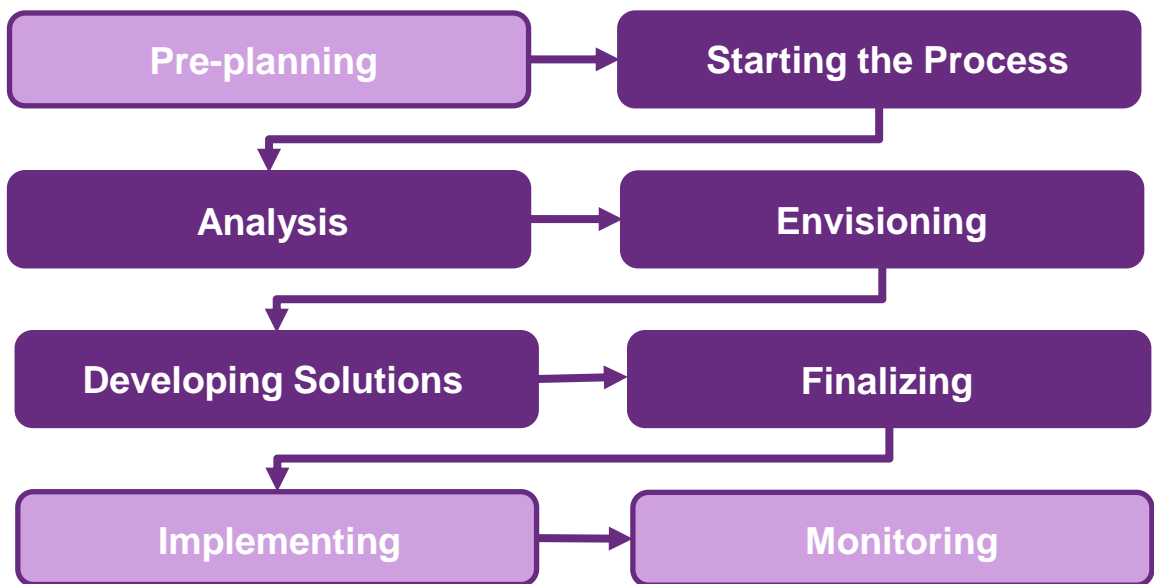
Figure 2. Stages in the planning process.

Pre-planning

A planning process rarely begins with the formal start of the planning procedure. There is often a pre-planning phase that allows for exploring and collecting potential issues, concerns, or ideas. The pre-planning stage might include informal and formal discussions with stakeholders or a preliminary background study of a specific issue or challenge. It is difficult to pinpoint when the pre-planning stage of a specific project really starts, as it is sometimes an unintentional and unstructured process. Pre-planning is often about keeping the communication channels open and proactively monitoring local development processes and emerging challenges.

Starting the Planning Process

Once a need for a new planning project has been identified, the municipality can launch the planning process formally. It typically requires a formal decision by the governing body, e.g., the city council, and approval of a planning task. In the starting phase, it is important to clarify the formal requirements of the planning project, establish the project timeline, agree on the division of tasks and responsibilities, etc.

Analysis

Almost every planning project requires an analytical stage or background study. In this phase, it is important to identify (i) what data and information you need to prepare the planning project (required information), (ii) what data and information you already have (existing information), and (iii) what data and information you still need to obtain (missing information). This preliminary analysis will allow the launching of a comprehensive data collection and analysis process. It might include obtaining technical and spatial data from other institutions, outsourcing or conducting specific background studies, gathering public opinion data, analyzing existing plans and studies, etc. Depending on the complexity of the planning project, the analytical stage can be comparatively lengthy and extensive, involving a variety of stakeholders.

Envisioning

Based on the comprehensive background study, it should be possible to define and agree on the broad outline of the planning solutions and/or vision for the future. Depending on the planning task, these can be strategic goals and objectives or a new spatial vision for an area. You can also use the envisioning stage to propose several development scenarios to facilitate a discussion about development alternatives. The outcome of this planning stage should be an agreement or consensus on the concept for the planning solutions.

Developing Planning Solutions

This stage in the planning process is about how the development scenario or vision will be achieved. Depending on the planning task, the type and format of the planning solutions will differ greatly. It is unlikely to be a linear process. Working on specific planning solutions often uncovers new conflicting issues that might require going back and forth through several planning steps. The intended outcome is to have a draft planning document or project by the end of this planning stage.

Finalizing

The final stage of the planning process involves ensuring compliance with the formal requirements before the approval of the plan or project. It can include conducting a formal public discussion procedure, requesting feedback from state and municipal institutions, and other activities. Some of these procedures can be integrated into previous planning stages. The plan or project is finalized when it is approved by the governing body, e.g., the city council.

Implementation

Implementation of a plan or project can be a gradual or one-off process, depending on the planning task. Long-term planning documents are implemented gradually following a pre-defined action or investment program. Place-based projects typically are executed within two to three years after the approval of a planning project. Some planning documents might incorporate a separate section outlining the implementation procedure, especially if various actors are responsible for the realization of the plan or project.

Monitoring

Complex and long-term planning projects also require progress monitoring and evaluation. Typically, key performance indicators are integrated with the framework of goals and tasks. It allows for assessing the implementation progress and success over time. It can help to identify deviations from the planned outcomes or necessary revisions in line with changing needs or situations.

A planning process rarely occurs linearly. There are planning steps that can be repeated if necessary. The conclusion of each planning stage is also a good time to refine or revise the initially defined planning focus and context.

The outline of the planning process should be a starting point for planning the participatory process and communication strategy. Each planning stage typically requires different engagement approaches and methods. The more specific and detailed the planning steps are, the easier it will be to define clear engagement and communication objectives and choose appropriate approaches.

4. Designing the Participatory Process

A participatory process should be 'fit for purpose' (Faulkner & Bynner, 2020). It must align with the planning task, process, and context to maximize the relevance and usability of its outcomes. We suggest developing a process design to ensure coherence between the participatory and planning processes. We propose a three-step approach to designing a participatory process: (1) defining engagement objective(s), (2) identifying stakeholders, and (3) outlining participatory steps. Remember that this stage is not about specific participatory methods or tools but designing a broad outline of your participatory process.

4.1 Defining engagement objective

Practice shows that public engagement typically follows one of two patterns: (1) instrumental when public engagement is conducted as a means to a particular end, or (2) goal-driven when it is conducted to improve plans or projects and create socially acceptable outcomes integrating public interests (Aitken et al., 2016). In planning, we often see the dominance of the instrumental approach that regards engagement as a formal requirement. Consequently, many participatory processes in planning are conducted to fulfill the statutory requirements. In some cases, it can be enough. But in most cases, using an instrumental approach risks achieving little and wasting time and resources for both organizers and participants.

Designing meaningful participatory processes demands a goal-driven approach when public engagement aims to bring about real benefits and input for the planning process and its outcomes. Therefore, having a clear objective for the participatory process is helpful. In defining an engagement objective, you may want to reflect on the following questions:

- ? What level of engagement do you want to achieve? (Fig. 3)
- ? What outcomes or outputs do you want to obtain from the engagement process?
- ? Which issues or challenges do you want to address during the engagement process?
- ? How will the outputs or outcomes of the engagement process impact the planning solutions?

The objective(s) of the participatory process should be realistic and achievable. It provides a practical focus for an engagement process and the basis for measuring its success. Objectives should deliver a clear message to the potential participants about the foreseen outcome or output of the engagement process and its influence on the planning process (Faulkner & Bynner, 2020).

	Engagement level	Participation goal	Engagement processes
Increasing level of public impact	Inform	To provide stakeholders with balanced and objective information to assist them in understanding the problem, alternatives, opportunities, or solutions.	Informing & data sharing
	Consult	To obtain feedback from stakeholders on analysis, alternatives, planning proposals, or decisions.	Feedback & data collection
	Involve	To work directly with stakeholders throughout the process to ensure that their concerns and aspirations are consistently understood and considered.	Interaction, discussion & negotiation
	Collaborate	To work as partners with stakeholders in each aspect of the plan-making, including the development of alternatives and the identification of the preferred solution.	Co-creation, co-production & collaboration
	Empower	To place final decision-making in the hands of stakeholders.	Co-management & co-governance

Figure 3. The spectrum of public participation (based on IAP2 International Federation (2018)).
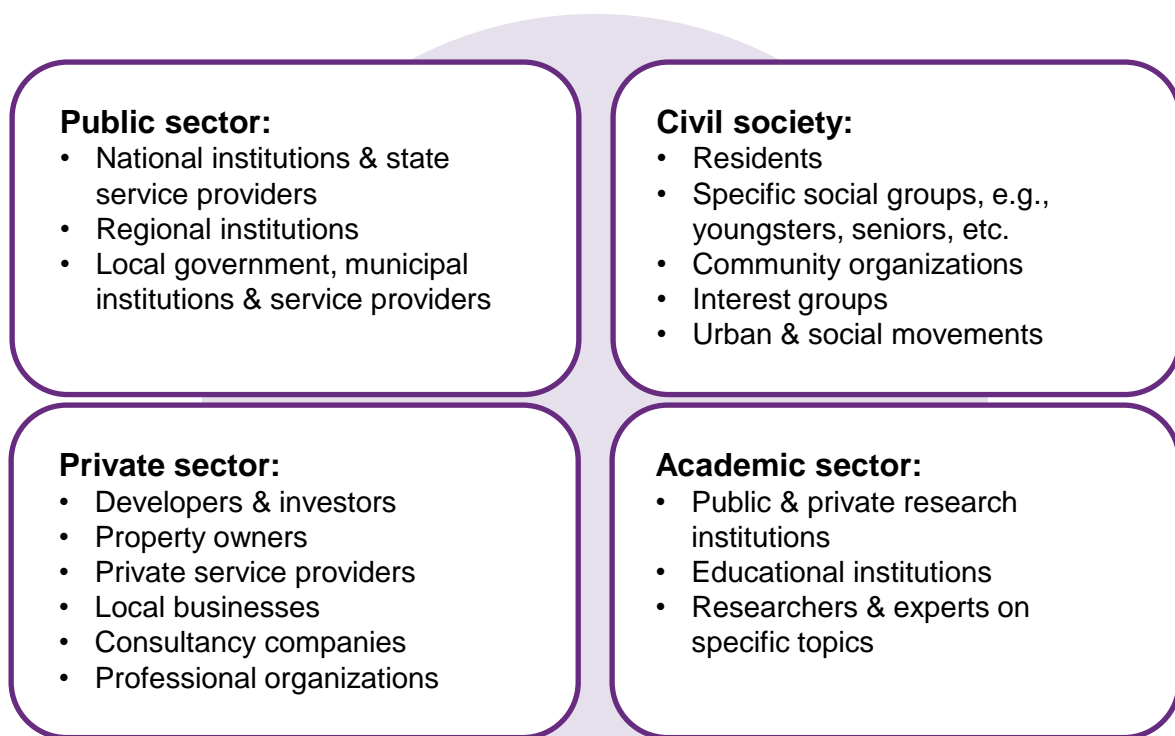
4.2 Identifying stakeholders

An important step in designing any engagement process is deciding whom to involve. Although it is a crucial step, stakeholders are often selected and involved on an ad hoc or voluntary basis without properly considering their interests and relevance to the planning task or issue (Reed et al., 2009). It often stems from the notion that public engagement in urban planning requires involving everyone. As much as that may be true, such a perspective limits the possibilities for designing meaningful and inclusive engagement processes. Analyzing and identifying relevant stakeholder groups early in the process can help design targeted outreach activities to ensure that all stakeholder perspectives and inter-relationships are represented (Rasch, 2019).

The identification of stakeholder groups is usually made through stakeholder analysis. It is a process with two key steps: **(1) stakeholder identification** – creation of a list of stakeholders and identification of their interests regarding the planning project, and **(2) stakeholder prioritization** – analysis of stakeholders' influence on the planning project and prioritization of stakeholders' interests (Yang, 2014). Several approaches for carrying out stakeholder analysis are used in various contexts, e.g., Stakeholder Circle methodology and Social Network Analysis. If you are familiar with these methods, feel free to adopt and apply them to your planning project.

For those that have never done any form of stakeholder analysis, we propose a simplified approach for identifying and analyzing stakeholders. Based on the planning task and context, we suggest (1) creating a list of all stakeholder groups that might have an interest in the planning project and (2) developing a brief profile or description of each stakeholder group. It will help you understand the spectrum of potential participants and their motivations, attitudes, perspectives, and interests.

There are three main questions to consider when creating a list of stakeholders for a planning project:

? Who has a stake in the planning project?

? Who will be affected by the planning project?

? Who can contribute relevant knowledge or expertise to the planning project?

Public sector:
- National institutions & state service providers
- Regional institutions
- Local government, municipal institutions & service providers

Civil society:
- Residents
- Specific social groups, e.g., youngsters, seniors, etc.
- Community organizations
- Interest groups
- Urban & social movements

Private sector:
- Developers & investors
- Property owners
- Private service providers
- Local businesses
- Consultancy companies
- Professional organizations

Academic sector:
- Public & private research institutions
- Educational institutions
- Researchers & experts on specific topics

Figure 4. Examples of stakeholder groups.

The more complex the planning task, the more extensive your list of stakeholders will be. In some cases, it might be helpful to break down the planning project into more manageable parts, e.g., based on the planning challenges. In defining different stakeholder groups, be as specific as possible. There are various ways to define and specify larger stakeholder groups, e.g., citizens (Fig. 4). Don't hesitate to ask for suggestions from your planning team or conduct informal inquiries with some key actors.

Once you have developed a list of stakeholders, it is helpful to consider their relation to the planning project and other stakeholders. You can create a brief profile of each stakeholder group using some of the following questions as a starting point:

What would be their motivation to participate in the planning process?

What is likely to be their attitude (opposition/support) toward the planning project?

Do they have specific interests regarding the planning project?

Which planning issues or challenges are they likely to prioritize?

What knowledge could they contribute to the planning project?

What are their ties to other stakeholders?

Based on a brief analysis of stakeholders, you can assess which stakeholder groups should be engaged more or targeted in dealing with specific planning challenges. You should also consider how to communicate with or involve each stakeholder group. It will help you design more targeted engagement activities.

4.3 Outlining participatory steps

The basis for designing the participatory steps is the overall engagement objective and the outline of your planning process. Each planning stage will likely have different needs for public engagement and, consequently, different tasks. Therefore, we suggest a five-step approach to help you design a participatory process aligned with your planning project (Fig. 5).

| Brainstorm | Conceptualize | Define | Arrange | Review & Adjust |

Figure 5. A five-step approach for designing a participatory process.

Brainstorm. Use the outline of your planning steps and start with a brainstorming session. Think about what type of knowledge or input you might need at each planning stage and what could be the best engagement format to achieve that. Consider all the ways stakeholders could contribute to achieving the planning outcomes.

You can use the following questions to facilitate brainstorming:

? What is the outcome of the planning stage?

? What knowledge/input could different stakeholders contribute to reaching this outcome?

? Do you need to generate diverse information or arrive at a specific solution or decision?

Conceptualize. Once you have developed initial ideas, we suggest conceptualizing them using the fourfold model of knowledge needs and modes of civic engagement (Fig. 6). The model allows differentiating between (1) knowledge divergence and convergence and (2) participation (working with a broad public) and collaboration (working in small, selected groups), bringing forth four ways of stakeholder engagement in urban planning (Staffans et al., 2020).

Diverging – Participation (I) engagement aims to obtain a large variety of data, information, ideas, and knowledge from a broad public to be used in the following planning and participation stages. The purpose of **Converging – Participation (II)** engagement is to structure or organize collected knowledge to identify what level of support different ideas get from people. It can result in valued knowledge claims or a selection of ideas to be elaborated further in the process. **Diverging – Collaboration (III)** engagement aims to get knowledge and ideas from diverse groups (not individuals). These can be used as a basis for discussions or other participatory activities in the following steps. Finally, the goal of **Converging – Collaboration (IV)** engagement is to collaboratively organize and integrate different approaches, knowledge, and ideas in a smaller group. The result is a shared understanding of the planning outcome or solution (Staffans et al., 2020).

Define. Based on the selected type of knowledge needs and engagement mode, start defining each participatory step in relation to the planning project. For each participatory step, specify the following:

- ✓ Participatory task
- ✓ Expected outcome
- ✓ Timing within the planning process/stage
- ✓ Links to other participatory steps
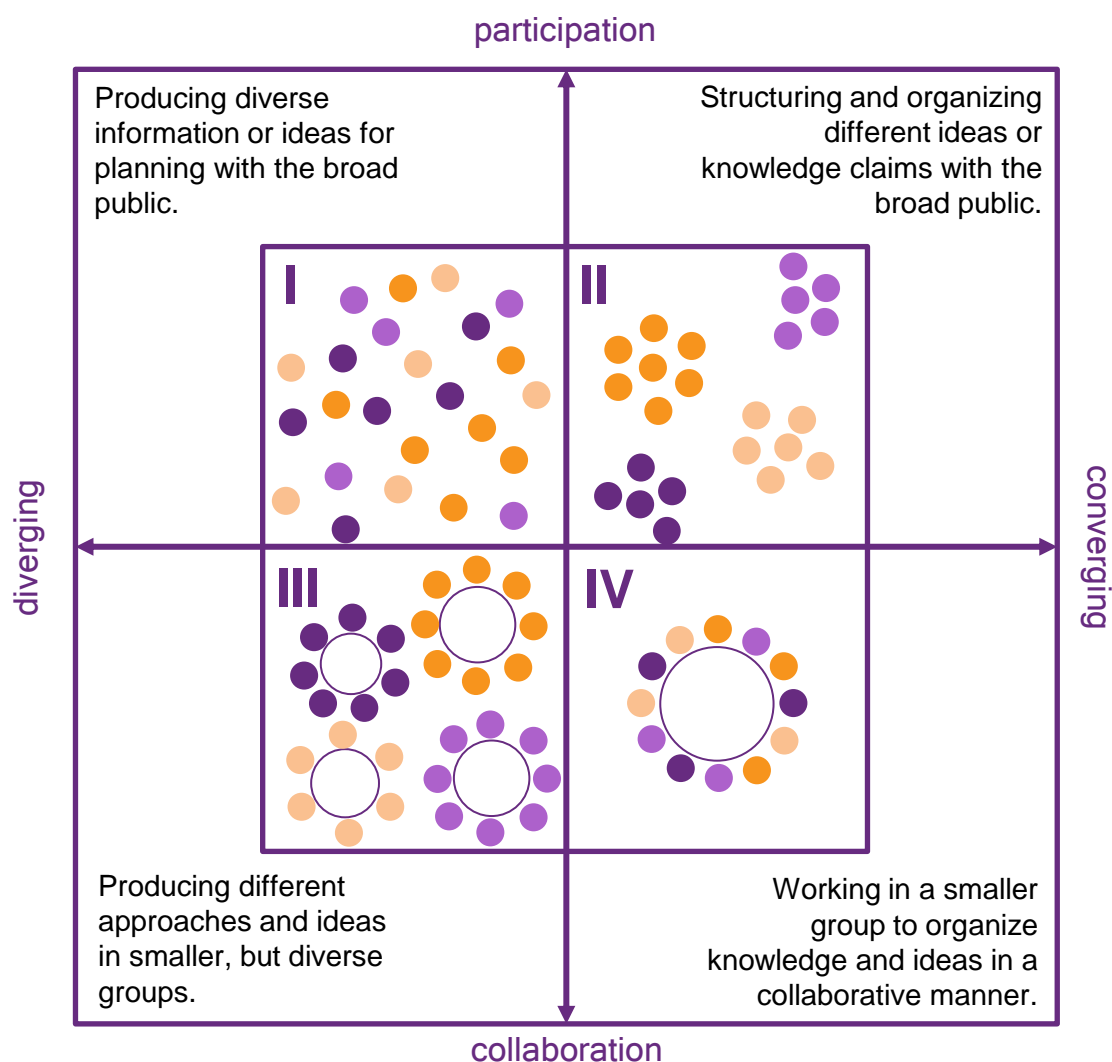- ✓ Potential participants (stakeholder groups)

Figure 6. The fourfold model of knowledge needs and modes of civic engagement (Staffans et al., 2020).

Arrange. After clarifying the tasks and expected outcomes of each participatory step, it is time to think about the progression of the steps. You should consider and reflect on the most appropriate timing within the planning process for each participatory step and its links to other steps. In essence, it is important to outline how the information and knowledge generated at each participatory step feeds into the planning process and affects any following participatory steps. It will allow you to develop an ordering of steps that makes sense for the overall planning and engagement process.

Review & Adjust. Generating the outline of participatory steps should be an iterative process. Once you have developed the first process outline, discuss it with your planning team. Allow each team member to have a critical look at each step, deliberate on the defined participatory tasks and outcomes, and adjust the process outline until you have reached an agreement. The whole planning team must be on board with the overall engagement objective and the inputs and outputs of each participatory step.

5. Planning Participatory Activities

Each participatory step is like a mini-project. It has a specific task, duration, and expected outcome. Therefore, once you have agreed on the outline of the participatory steps, it is time to get more specific and work out how each step will be realized. It means choosing the participatory method or approach, selecting specific tools, and working out all the other practicalities related to implementing each step (Fig. 7).
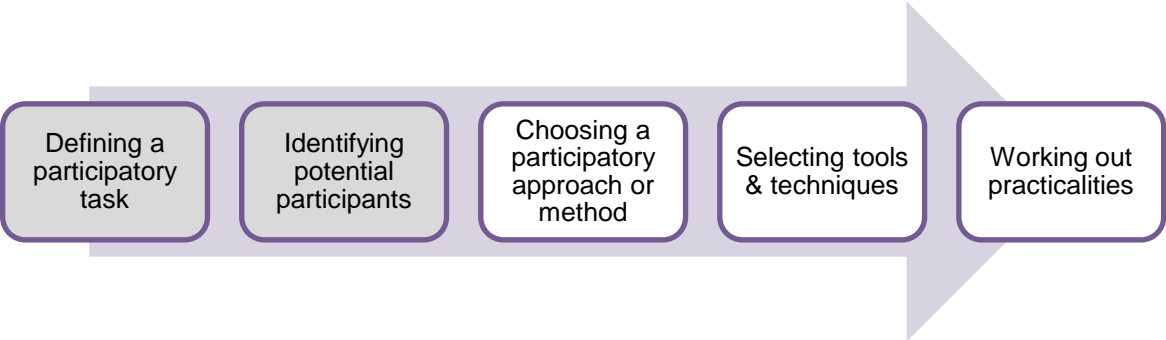
Figure 7. A five-step approach to planning participatory activities.

5.1 Choosing a participation approach or method

In the previous process design stages, you were already asked to work out the participatory tasks for each step and define potential participants. These should be your guiding principles in choosing the appropriate approach or method for the specific participatory step. Avoid choosing the methods you know just because you feel comfortable or knowledgeable about using them. Instead, focus on the task and expected outcome of the participatory step to identify the most straightforward method to do the job (Faulkner & Bynner, 2020). You can also use the fourfold model to help narrow down the options for appropriate methods.

Nowadays, there are plenty of toolkits to help you choose different approaches and methods. For example, project Hupmobile provides a library of 16 traditional and 16 online participation methods to get you started. Each method can be adapted to different planning problems or contexts. We provide several examples in Table 1 to demonstrate some available options.

Table 1. Examples of approaches and methods.

Participatory task	Planning stage	Conceptual characteristics	Examples of approaches and methods*
To collect citizen input on specific urban challenges or issues	Analysis	Diverging – Participation	Questionnaire surveys Public participation GIS
To generate ideas about the future of an area	Analysis	Diverging – Participation	Ideas competition Crowdsourcing
		Diverging – Collaboration	Brainstorming Walk-through Participatory mapping

Table 1 continued.

Participatory task	Planning stage	Conceptual characteristics	Examples of approaches or methods*
To prioritize/shortlist options for the future development of an area	Envisioning	Converging – Participation	Voting on options or ideas
		Converging – Collaboration	Prioritizing or ranking
To obtain a consensus on future development priorities or scenario	Envisioning	Converging – Collaboration	Geo-Design
To co-create design solutions for an area or planning project	Developing Solutions	Diverging – Collaboration	Design charette or workshop
To discuss the proposed design solutions or alternatives	Developing Solutions	Converging – Participation	Planning [discussion] forum Geo-Discussion
		Converging – Collaboration	Public forum
To collect feedback on a design solution	Finalizing	Diverging – Participation	Public display Online Official Comment System

*See the Appendix for a brief description of each method

Many available methods can be scaled and adapted to the specific planning task and the intended group of participants (broad public or small group(s)). You can also use methods or event formats incorporating several engagement forms. For example, a community planning forum combines interactive displays with open forum debate and workshop groups. It allows addressing several participatory tasks like generating ideas and discussing them to identify options for future development. Whichever method or approach you choose, you should consider the input and abilities required from the participants. You cannot expect meaningful and productive participation without considering the preferences and characteristics of participants.

5.2 Selecting tools and techniques

Once you have chosen the participatory methods, it is time to select specific tools or techniques for implementing or supporting each participatory activity. At this stage, it is important to decide on the most appropriate format for carrying out the participatory activity and the use of specific tools or materials.

Nowadays, we have a broad range of digital tools for conducting meetings, surveys, mapping, workshops, voting, and other activities. It allows us to use different formats for conducting participatory activities. You should select one that fits best:

- **Traditional or non-digital format**: a participatory activity conducted as an in-person event or happening requiring the physical presence of participants in a specific time and place. Typical examples include public discussion meetings or forums.
- **Digital format**: a participatory activity conducted fully online. Depending on the chosen method, the participants can provide their input whenever and wherever (e.g., public participation GIS or online discussion forum) or join an online event at a specific time (e.g., online public discussion meeting).
- **Digitally-supported format**: a participatory activity conducted as an in-person event or happening but using digital tools to facilitate the on-site interactions or other activities. The examples include using interactive e-voting and polling tools, digital map tables, or virtual/augmented reality tools to facilitate on-site discussions.
- **Hybrid or blended format**: a participatory activity synchronously conducted as an in-person and digital event or happening. A common example is a questionnaire survey conducted using paper-based and online questionnaires or a public discussion meeting that participants can attend in person or watch online.

The choice of a format primarily depends on your target audience (potential participants). Not all stakeholders are able to use digital tools, and not all stakeholders have the liberty or interest to attend on-site events. A hybrid or blended format appears to be the most inclusive and democratic. Still, it is also the most resource-demanding and often more difficult to manage. Although we have plenty of tools to conduct all types of activities online, not all participatory methods are easily transformable as online events. A typical trend is to conduct participatory activities for the broad public online, while work in smaller groups takes place in a traditional or digitally-supported format.

The choice of a format determines the accessibility of the participation opportunities for the intended target group. Therefore, making an informed decision based on the participants' preferences and abilities is crucial.

Another aspect to consider is the tools you can access for conducting the specific participatory activity. While platforms for conducting online surveys or meetings are commonly used in almost all organizations, the more specific tools, e.g., public participation GIS or digital map tables, might not be easily accessible to you. Ideally, you should choose a tool that is best suited to do the job. However, we are often constrained by the available resources. Therefore, the choice of a tool should be a compromise between the ideal and available tools. Check out the examples of different digital tools in Table 2.

Table 2. Examples of digital tools.

Tool(s)	Description
Google Forms, Microsoft Forms, SurveyMonkey, or other online survey platforms	Online survey platforms allow you to create online questionnaires for collecting citizen input in the form of written or predefined responses to a standard set of questions.
Slido, Mentimeter, or other interaction tools	Interaction tools provide options for creating real-time polls, Q&A, quizzes, and word clouds during an on-site or online meeting. It can be an ice-breaker, conversation starter, or support tool for events with larger audiences.
Zoom, Microsoft Teams, and other virtual meeting platforms	Virtual meeting platforms allow conducting online or hybrid meetings. Many platforms have improved their functionality to include break-out rooms, whiteboards, and other solutions to enable collaborative work. It allows for conducting brainstorming sessions or design workshops fully online.
Miro and other visual platforms	Visual platforms provide a virtual space for collaboration and co-creation. You can use it for brainstorming with the help of sticky notes, images, mind maps, and other functionalities or mapping options with mind maps. Visual platforms have become essential support tools for meetings and workshops.
groupwisdom™ or other concept mapping tools	Concept mapping tools allow participants to brainstorm, organize, and rate ideas in a group setting. The outcome is a visual concept map of ideas and their interrelationships. It can be used to break down complex planning challenges in the early planning stages.
Facebook	Facebook is typically used for information dissemination, but it is a simple alternative for organizing online group discussions, crowdsourcing ideas, polls, or voting. Facebook also provides options for live streaming on-site events, potentially allowing to reach a broader audience.
Mappilary	Mapillary is a collaborative street-view mapping app that utilizes images to create a street-level view of the world. Using mobile devices, participants can contribute to the map with their photos. Mappilary or a similar product can help you crowdsource visual data to be used in other participatory activities.
ArcGIS	Esri's ArcGIS is a powerful mapping and analytics software providing various products. ArcGIS products can be used to implement participatory activities or support on-site events. You can use ArcGIS Survey123 to create map-based surveys or ArcGIS Dashboards to present location-based analytics in an intuitive and interactive way.

Tool(s)	Description
Maptionnaire	Maptionnaire is a community engagement platform that enables participation in urban planning processes and provides GIS-backed data for decision-making. It has a broad spectrum of functionalities that are constantly evolving. Maptionnaire allows to design questionnaires and collect data, measure results and analyze information, communicate about projects and plans, and collaborate with residents and colleagues.
Geodesignhub	Geodesignhub enables the organizing of sophisticated digital negotiations. The technology is used to expedite projects and develop consensus and agreements on complex problems in different planning domains. It works best with up to 50 participants (online or in-person) and requires professionally trained facilitators.

5.3 Working out practicalities

Each participatory activity requires various decisions about practical details related to the implementation. Depending on the complexity of the planning and participatory process, the practicalities can be worked out early in the process or gradually as you progress through each step. We suggest paying special attention to the timing and necessary materials and resources for implementing each participatory activity as early as possible.

The timing of each participatory activity incorporates several aspects. We already asked you to position each participatory step in relation to the planning process or stage when designing the participatory process. The next step is to get a lot more specific and draw an approximate timeline of the planning process and participatory activities. You should consider: (1) the duration of the participatory activity, (2) the time needed to prepare for the participatory activity, and (3) the time required to analyze and evaluate the outcomes of each participatory activity. For example, developing and testing a questionnaire can take several months, and so can the results' analysis, although data collection can last only a couple of weeks. Therefore, it is important to factor the preparatory and analysis phase into your process timeline.

Another overlooked aspect is the materials and resources needed to implement participatory activities. This includes human resources, financial resources, and any other type of resources you will need for implementation (e.g., venue, devices, stationary, etc.). If possible, define the number of people and their workload required to implement the activity, estimate the overall costs, and detail any other resources you need.

At the end of this stage, you should have a clear outline of the overall participatory process and each participatory activity. It is helpful to visualize it as a timeline or Gantt chart. We also suggest summarizing the details of each participatory activity in a structured way. You can use the list in Table 3 as a template.

Table 3. A summary of information about each participatory activity.

1. Planning stage	8. Duration [start & finish]
2. Participatory task	9. Preparatory phase [duration]
3. Expected outcome(s)	10. Analysis phase [duration]
4. Participants/stakeholders	11. Team
5. Participatory approach or method	12. Cost estimate
6. Format	13. Other resources
7. Tool(s) or technique(s)	14. Impact & links to other activities

6. Preparing the Communication Strategy

Without an effective communication strategy, no planning or public participation process can be truly successful. Continuous communication between the planning agency and the public is an indispensable rule and an integral part of the planning process. It ensures that the planning outcomes gain legitimacy and have a better chance of being implemented (Vajdovich-Visy, 1993). Yet, structured and continuous communication is often lacking in planning. In many cases, communication activities are sporadic and inconsistent. It can provoke a negative reaction from the public and facilitate feelings of mistrust and uncertainty. Therefore, we suggest developing a communication strategy alongside the planning and participatory process to ensure timely, effective, and transparent information dissemination.

The basic outline of a communication strategy should provide answers to the following questions:

? Who is the target audience? [participants/stakeholders]

? What information do you want to deliver? [content]

? How are you going to deliver the information? [tools & approaches]

You should be able to define your target audience based on the stakeholder analysis done earlier. Therefore, the following sections will primarily focus on what you should communicate about [content] and how you should communicate [tools & approaches].

6.1 Communicating about the plan-making process

A planning process lasts a comparatively long time. Depending on the complexity of the planning project, it can be a year, two years, or even several years. Therefore, it is important to ensure that any person can access information about the planning project, plan-making process, its outcomes, current status, and future steps at any time. It provides process transparency and traceability.

The information about the planning project and process should be prepared and published as early as possible and maintained and updated throughout the planning process. Good practice examples suggest several practical and simple communication approaches to ensure that.

A one-stop source for project-related information

One of the key aspects of a good communication strategy is the availability of relevant and up-to-date information on plan-making and engagement processes that is easy to locate, use, and understand. A *one-stop shop* approach is considered good practice to ensure access to all the relevant information on the planning project and process. Typically, a planning agency creates a specific, easy-to-locate section (page) on its website dedicated to the planning project. More complex planning projects can have a separate website, but it should be linked to the commonly used information source, e.g., a municipal website.

A one-stop information source should contain basic information about the planning project, context, and planning and decision-making process. It should also provide access to all the relevant project documentation (e.g., decisions, reports, and draft plans) and links to external information sources (e.g., news items, events, etc.). It is also important to provide the contact details of a key person responsible for the planning project or communication with the public. Alternatively, you can set up a contact form on the website for further inquiries or questions.

Visual process outline

The information provided to external stakeholders must be easy to understand and contain minimal technical language (Brown & Chin, 2013). The practice shows that visual information is often easier to understand and provides a clear overview of complex information. A visual outline of planning, decision-making, and public engagement steps helps to make the plan-making process more transparent and traceable. The visual process outline should be integrated with the project timeframe so that any person can identify the current status quo at any time (Fig. 8). The outline should be published as early as possible and kept up-to-date throughout the planning process.

Timeline

Although somewhat similar to the visual process outline, the timeline ensures the traceability of decisions, planning steps, milestones, events, and project outputs in one place. It can be presented as a chronological list of all project happenings, providing access to relevant documentation or links to external sources. It contains more detailed information than the visual process outline and allows anyone to backtrack the past events and their outcomes.

Ideally, a visual process outline and timeline should be integrated into the one-stop information source. It will provide structured and graphical information on the project and planning process.

6.2 Communicating about the participatory activities

The success of your participatory activities largely depends on the effectiveness of your communication strategy. Therefore, it is important to plan how you communicate and with whom before, during, and after each participatory activity. The *'how'* should be determined by the intended target audience. If it is broad, the communication approaches and tools should be diverse to maximize the outreach. If you are targeting specific groups of people or stakeholders, you should employ more direct and targeted communication approaches.
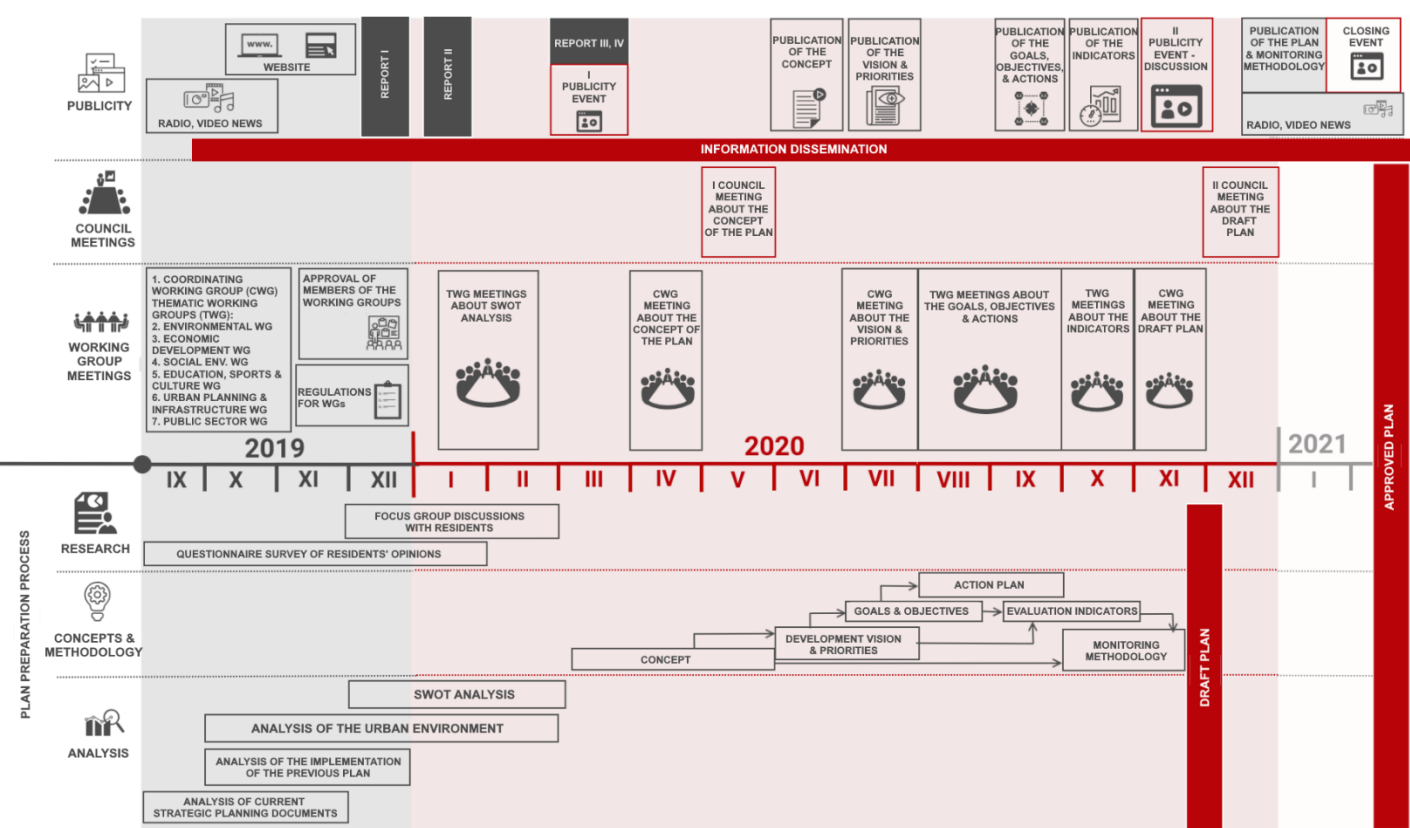
Figure 8. An example of a visual process outline (adopted from the Klaipėda Municipality Strategic Development Plan 2021-2030 preparation process).
Source: https://www.klaipeda.lt/lt/naujienu-archyvas/naujienos/strateginio-pletros-plano-rengimo-metodika/7324

Before. Communication before the participatory activity is about raising awareness about the upcoming engagement opportunity and reaching out to the intended target audience. At this stage, you need to make sure that the potential participants and the general public are informed about the following:

- What is going to happen? [participatory activity]

- Why is it going to happen? [purpose & expected outcome]

- When and where is it going to happen? [time & place]

- How is it going to happen? [format]

- Who can participate? [target audience]

- What do they need to do to participate? [instructions]

If the objective is to involve a small group of people or a specific stakeholder group, it is more effective to send out individual invitations via e-mail or use other direct communication channels available to you. It is common to include an RSVP request in your initial invitation and send out a reminder shortly before the event. For collaborative events in smaller groups, it is usually vital to know the number of participants planning to attend to scale and prepare the event or activity accordingly.

If you are aiming to engage a broad public, you should opt for using various communication channels to reach a diverse audience. Examples include press releases, newsletters, newspapers, social media, TV and radio announcements, posters, etc. It is a good idea to consult public relations experts in your institution to identify the best communication channels and timing for the participatory activity.

During. The communication during the participatory activity depends on the type of activity and its duration. In case of events, the communication is aimed at informing the general public about what is happening on the day. Nowadays, a common approach is to post pictures and highlights on social media or invite media to create a news item about the event. It helps to raise awareness about the planning project and process.

In other cases, e.g., crowdsourcing of ideas lasting one or two weeks, the communication during the participatory activity will be primarily directed at attracting more participants. The real-life examples have demonstrated that the volume of citizen input through crowdsourcing platforms is directly related to marketing activities. The planning agencies typically use social media to promote this type of engagement. Still, other communication channels should also be used at the beginning and toward the end of the process. It will help to diversify and broaden the group of potential participants.

After. The communication immediately after the participatory activity is aimed at providing first insights into the process and its outcomes. It should be used as an opportunity to communicate to the participants and general public about the following:

- What happened? [participatory activity]
- Why did it happen? [purpose]
- When and where did it happen? [time & place]
- How did it happen? [format]
- Who participated? [number & profile of participants]
- What were the highlights? [impressions, first results]
- What will happen next? [next steps]

Regardless of the type of participatory activity and the target audience, the post-participation summary of the activity should be communicated to everyone. It will help to ensure process transparency and raise awareness about the planning project.

6.3 Communicating the impact

Providing feedback and communicating the impact is crucial to the plan-making process. It ensures process transparency and builds trust and mutual respect between the participants and the planning agency. Therefore, timely and regular informing activities aimed at communicating about the impact of participation on plan-making and decision-making must be an integral part of the communication strategy.

Communicating the impact means providing clear and understandable information about:

? What were the outcomes of the participatory activity?

? How were the outcomes used/analyzed?

? How did the outcomes impact the plan-making decisions?

The planning agency is not obligated to incorporate or use all suggestions or ideas. But it must provide a justified explanation of why something was accepted or rejected. People are more likely to accept a negative response if they have received a justified clarification for the decision or an offer of compromise.

Different planning projects or participatory activities require different approaches for communicating the results and impact. As you progress through the planning stages, people should be able to follow the progression of changes in the planning project and the reasoning behind them. Therefore, we suggest several typical approaches that can be used to communicate the outcomes and impact of participatory activities.

Reports. Collecting citizen input from a broad public results in many ideas and suggestions. They must be structured and analyzed to be used later in the participation or planning process. In such a case, providing individual feedback is difficult if not impossible. Therefore, a report on the outcomes of the participatory activity is a good alternative. Not all participants will be interested in reading a full report. We suggest preparing a brief summary of the main outcomes (highlights) that will be integrated into the planning project and a detailed report for those who want more information. Visual aids like infographics or maps can help to make the information more understandable and accessible to everyone.

Meeting minutes. Discussions or negotiations in small groups usually are accessible to a limited number of people. A good way to make this process more transparent is to provide meeting minutes highlighting the main discussion topics and outcomes. Whether the meeting leads to a consensus or compromise, meeting minutes ensure a legitimate record of the discussion.

News releases. News items, written or audiovisual, are a simple way to communicate the outcomes and impact of the participatory activities to a broad audience. They should highlight the main outcomes of public engagement and outline the changes to the planning project resulting from citizen input. You should avoid making general statements, e.g., that the citizen interests will be considered or taken on board. Instead, communicate about specific changes that are made due to public participation.

Informative events. Follow-up informative events are another way to communicate the outcomes and impact of the participatory activities. These allow you to present and discuss the citizen input and resulting changes to the planning project with the public. The events can be combined with other participatory activities to facilitate further engagement.

Explanatory briefs. When releasing an updated version of a planning project or document, it is useful to prepare an explanatory brief outlining the main changes compared to the previous version. Few people can read through and understand the technical and legal language used in the planning documents, let alone identify changes from one document version to the next. Therefore, explanatory briefs can be a helpful way to provide summarized insights into the main changes and their justification using more comprehensible language.

Highlighting changes in the plan. Another way to demonstrate changes in the planning project or document is to use special markings or highlights for those parts that have been changed due to public engagement. It helps to demonstrate the impact of participation clearly and visually. It can also help to build a feeling of joint ownership of the plan, as people will get a sense of their overall contribution to the plan-making.

7. Final Remarks

The design of a participatory process is rarely linear and fully complete. You will likely need to go back and forth between different steps and make adjustments as you progress through the planning and participatory process. Implementing participatory processes in many ways is a learning experience of what works and what does not work within the specific context or with the chosen target audience. It requires a degree of openness to possible changes and even failure. Moreover, participation is not something that happens overnight. It is a habit that needs time to develop in society and institutions. Therefore, we want to conclude these guidelines with final suggestions that look beyond the design stage of the participatory processes.

Evaluation. Participation is still rarely evaluated in planning practice (Laurian & Shaw, 2009). At best, the evaluation is integrated as the last step of the participatory process, allowing reflection on the entire process and its success. We suggest incorporating some form of evaluation throughout the participation process. It will allow for monitoring the progression and success of each participatory step and identifying any need for changes. It is important to understand whether the chosen engagement format, methods, and tools allow you to get the desired results and reach the audience you want as early as possible. Therefore, it is helpful to define several success criteria for each participatory step already in the process design stage based on the participatory task and expected outcomes.

Flexibility. A project rarely gets implemented precisely how it was planned. Participatory processes often face various internal and external risks that impact their success. Therefore, flexibility and adaptability of the participatory process (Rowe et al., 2004) are important aspects of public engagement. In recent years, in particular, we have seen a need to adapt traditional participation methods for use online due to the global pandemic. Even when you are not subjected to major global events, you have to be open to changes in your initial process design to meet the needs and expectations of the participants and fulfill the participatory tasks.

Building a participatory habit. Participation in urban planning is something people need to learn, especially in sociopolitical and geographical contexts where democratic processes are comparatively new. It is unwise to expect immediate success just because you have designed a great participatory process. Building trust between the planning agency and society through consistency, transparency, and demonstration of the impact of the participatory processes takes time. In a way, it requires creating a participatory habit on both sides so that public engagement becomes an integral part of the local governance processes. It should be a long-term goal of any local government that wants to facilitate planning and development aligned with the needs and expectations of their citizens.

Finally, the authors acknowledge that these guidelines do not address the full spectrum of questions and challenges related to designing participatory processes. Therefore, we have prepared a list of sources and materials to provide additional examples of guidelines, methods, and practical cases. Many of these can be used as supplementary materials during process design or inspiration for trying out new participatory methods.

8. Additional Resources

Guidelines

OECD (2022) **OECD Guidelines for Citizen Participation Processes**, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/f765caf6-en.

Faulkner, W., & Bynner, C. (2020). **How to design and plan public engagement processes: a handbook**, What Works Scotland.

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Slocum, N. (2003) **Participatory Methods Toolkit: A practitioner's manual**, United Nations University.

CitizenLab: **Community Engagement: a Practitioner's Guide,** Part 1 & Part 2.

CitizenLab: **How to create a communications plan for community engagement.**

Maptionnaire (2022) **How Community Engagement Can Help in Creating Better Cities?** Advantages of Digital, Map-based Services for Urban Planning and Beyond.

Methods & Tools

Hupmobile's **Participatory Tool-Kit**: a library of 16 face-to-face methods & 16 digital methods.

Community Planning Website: a database of various methods.

Participedia: a database of 360 methods and tools.

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Appendix: Examples of Participation Methods

Method	Description
Brainstorming	A group discussion aimed at generating ideas. It is usually the first step in exploring a new project or planning task. There are various techniques to facilitate more effective brainstorming, e.g., rapid ideation. More info: Techniques for More Effective Brainstorming
Crowdsourcing	An open call for ideas aimed at solving a specific problem or collecting various suggestions for an area or future development scenarios. It is typically done in an online space with a basic framework and guidelines while remaining as open as possible to receive diverse submissions. More info: Crowdsourcing
Design charette or workshop	Hands-on, intensive workshop sessions bringing together people from different disciplines and backgrounds. The work is typically conducted in small groups around a table with plans or a flexible model. Different groups can deal with different areas or topics. The idea is to capture the vision, values, and ideas generated by the participants. More info: Design Charette, Design Workshop
Geo-Design	A collaborative planning and design method supporting the creation of various design alternatives or future scenarios in an iterative process. The method typically uses GIS-based analytic and design tools to support the collaborative process. The final result is the convergence of developed alternatives into a collective vision. More info: Geo-Design
Geo-Discussion	A web-based structured discussion forum coupled with an interactive map. It can be used to collect feedback and ideas from residents about the draft of a local land use plan or design alternatives for a specific area. More info: Geo-Discussion
Ideas competition	Competition-based crowdsourcing of citizen ideas aimed at facilitating creative thinking and generating greater interest and participation. It is based on a clearly defined task, submission requirements, and evaluation procedure. The submitted ideas are evaluated by an expert panel or by using public voting. The winning ideas receive broad recognition and an award. More info: Ideas competition
Online Official Comment System	An online platform for providing feedback and suggestions on a planning project. It typically requires identity authentication and supports a formal public discussion/display process. More info: Online Official Comment System
Participatory mapping	A paper-based mapping activity aimed at finding out how people view their area. People can draw and use pins or sticky notes to indicate different places or problems on the map. It helps to understand differences in perception, collect local knowledge, and facilitate debate about local issues. More info: Participatory mapping, Mapping

Method	Description
Planning [discussion] forum	An online discussion forum where different stakeholders can interact and discuss a planning project or planning solutions. More info: Planning forum
Prioritizing or ranking	A group activity aimed at placing in order of priority pre-defined development options. The available options are worked out using brainstorming, surveys, or other methods prior to the group discussion and prioritization activity. More info: Prioritizing, Feedback Frames for Prioritizing Options
Public display	A pre-defined period (e.g., 30 days or 4 weeks) when the public is invited to view and comment on a draft plan or project. The planning documentation is publicized online and displayed on the premises of the planning agency. People are provided with several options for sending in their suggestions or comments. More info: Public display
Public forum	A public meeting with an emphasis on debate and discussion of specific issues or questions. It is similar to a Deliberative forum. More info: Deliberative forum
Public participation GIS	A map-based survey method allowing to collect structured geographic and non-geographic information. It is typically conducted online using a GIS-based survey tool. More info: PPGIS
Questionnaire survey	A structured data collection method comprising a set of questions or statements requiring a response from participants. It is typically used for background studies or the collection of citizen opinions on various topics. More info: Questionnaire, Survey
Voting on options or ideas	An online or offline voting process aimed at identifying ideas or proposals that the public considers more important or acceptable. It can be organized through various mediums, allowing people to vote in favor of one or several options. You can manage this process online, e.g., using social media platforms, or onsite, e.g., using the dot voting technique. More info: Dot voting
Walk-through	A walk together with the representatives of different stakeholder groups in the community/project area. The walk-through facilitates a discussion of issues onsite through observing, questioning, listening, photographing, and taking notes. A walk-through typically follows a pre-defined route, while an informal walk is a group walk without a definite route, stopping to chat and discuss issues as they arise. More info: Walk-through