

It's A Kind of Magic! Addressing The Arnstein Gap in Planning with the QICE Public Participation Performance Framework

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1 ABSTRACT

The gap between citizens' aspirational desires for public involvement quality in planning and the perceived current level, a.k.a. the Arnstein Gap, is well-documented (Bailey and Grossardt 2006, 2010). Authors Bailey and Grossardt have demonstrated in recent work how this Arnstein Gap is consistent across different geographical contexts and that it has remained more or less consistent across twenty-five years of these measurements (Bailey 2019, Bailey and Grossardt 2025). To the degree that Arnstein Gap presents a societal problem, for instance, a large Gap reflects lack of public confidence in professional activities and plans, and thereby signals a lack of legitimacy in the planning system overall, it is a problem that merits attention, analysis, and efforts directed at solution – even if these can only ever be partial (Weymouth and Hartz-Karp 2019).

Building on previous work including CORP here I explore strategies that planners can use for delivering strong public involvement performance and thereby nudging the Arnstein Gap smaller. Strategically avoiding engineering process aims around slippery, opaque, loaded and contradictory terms including “trust” and “consensus” (Shakeri 2025), this paper applies the QICE (Quality, Inclusion, Clarity, and Efficiency) framework for public involvement design and measurement and explores how QICE allows planners to address the competing desires of multiple stakeholder groups including citizens, planners, and project managers and sponsors (Bailey et al. 2015). Performance measurements are presented and the impacts are discussed using extensive real-world data from more than twenty years of project work. With acknowledgment to Freddie Mercury and his bandmates, this is not really “A Kind of Magic”; instead, these results suggest that public involvement process design using a multistakeholder framework in conjunction with careful operationalization that includes logical method selection and sequencing can deliver high performance across multiple criteria.

Keywords: Arnstein Gap, public participation, citizens, spatial planning, public involvement

2 INTRODUCTION

We begin with a fundamental question: what does it mean, to deliver “good” public involvement? And, according to whom? Accommodating, incorporating, making effective use of, and to some extent reconciling, input from large numbers of participants with wildly varying levels of confidence in private- and public-sector project managers and sponsors, resource endowments and investment propensities, experience, education and knowledge is a persistent challenge. In research articles this is framed as a solution-resistant “wicked problem” (Carcasson 2020) that confounds theorists. For decades it appears to have overwhelmed practitioners and professionals in terms of amelioration, even if not solution.

While acknowledging the dimensions of the problem and addressing it, research and professional literatures ran a gamut from participant exclusion or denial, for instance the TRB's infamous “guidance” in their 1999 White Paper on Public Involvement to “identify naysayers”. In his book on wicked problems, Head (2015, 137) argues that “Rather than a reliance on expert-driven science and data analysis, a central focus is on how to convince a majority of citizens that political leaders are providing policy leadership.” Setting up dichotomies of citizens vs. experts reinscribes and augments the polarization that is an increasingly universal concern.

These approaches treat participation as an input-output system and either do not acknowledge the role of method, or focus on methods – perhaps “approaches” – that prove totally impractical in the real world, such as seeking “consensus” and “building trust”. None of these approaches work, because they seek to enforce the expert episteme on the citizens through process control, involving participant and data selection or denial, and even manipulation while turning participation into a political theater. Mantysalo et al. (2023:11) summarize thus: “In our view, the underlying problem is that the theoretical work on communicative

planning, and related ideas on deliberative democracy in planning, mainly focus on illegitimate forms of exercising power over others.”

Apart from the voluminous literature that acknowledges the apparent intractability of this “wicked problem” in various ways, we know these approaches do not work because large and temporally-consistent and geographically-extensive data sets show that the citizen-perceived Arnstein Ladder levels (Arnstein 1969) are between 2 and 4 and that an Arnstein Gap is apparently a universal phenomenon (Bailey and Grossardt 2025). If so, then what could be more “legitimate”?

To state our foundational assumptions we define “good public involvement” using measurable multi-stakeholder sourced criteria, delivered with the intent of reducing the documented and universal Arnstein Gap.

All planning and urban development decisions are to some degree public goods decisions because they involve the expenditure of public monies and the allocation of benefits, costs and risks across the public who fund the projects. This means that resource and legal constraints play a major role in determining what may be termed the feasible planning and urban design envelope. However even within constrained development projects, such as block-scale Transit-Oriented Development, or urban zoning, almost always a range of options exists. This article examines how best to design and deliver public involvement in defined and constrained real-world cases. Blue-sky visioning is considered as a separate domain.

From this contested starting point, we summarize the methodology termed Structured Public Involvement, or SPI (Bailey et al 2003, 2010, 2011). We designed SPI according to the principles of John Rawls’s (1971) Theory of Justice, around three pillars of (i) procedural justice, (ii) access to justice, and (iii) distributional justice with the assumption that the first two are primary and that the third is conditioned by these first two (for more, see Bailey and Grossardt 2010, Grossardt and Bailey 2018). This is not an absolute; of course, because justice may be construed differently by individuals or groups but a clear starting definition is critical for design and measurement purposes.

We identify the sociopolitical domain within which planners operate and present a four-group stakeholder model. Epistemic challenges that capture dimensions of the “wicked problem” are defined in relation to these stakeholder groups. Building on this model, we explain the development of a four-axis framework for evaluating the performance of public participation (QICE) that addresses the needs and desires of each stakeholder group. Drawing on more than twenty-five years of real-world data, we show how high performance public participation in planning is fostered by logical model development and application in partnership with stakeholders.

3 EPISTEMIC CHALLENGES

Numerous epistemic challenges exist to effective large-group participation; e.g. Citizen “ignorance” (Krek 2005, Poplin 2022); Stakeholder Strategy; competing desires and needs (Fung 2015); process scalability (Campbell and Marshall 2000); planning domain constraints, the role of technology; and institutional factors such as the overall levels of confidence in the project sponsor (Johansen and Upham 2026). Studies examining challenges to public participation in planning reiterate well-published key points; e.g. “In addition, the arrangement of forums, workshops or public meetings requires adequate funds, long preparation time, and enough staff.” (Abas et al 2023) and “low interest to participate” and “low efficiency”. This is not surprising considering the lack of measurement criteria for public involvement. According to former CEO Gordon Bethune (1998), “What you measure is what you’re going to get.” No measurement = no delivery.

We begin by partitioning the decision domain into four stakeholder groupings; citizens, public participation professionals (PPP), technical experts and project sponsors. The diagram represents typical – not idealized – interactions between groups; PPP cannot work without public participation, project managers are often responsible to, or are themselves, elected officials and may attend or direct meetings, while technical experts may interact with public data but are not always required to interact personally with citizens.

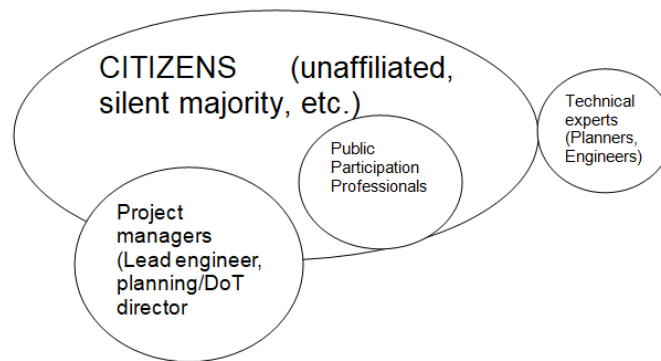


Figure 1: SPI Stakeholder group framework (Bailey et al 2003, 2012, 2015)

Given the epistemic challenges, and the stakeholder domains as outlined, how may we – the professionals – design and deliver higher-performance public involvement? Recognizing that what professionals want is not likely to match perfectly, if at all, with what either project sponsors or citizens want, the first step is to identify performance measurements that are meaningful to each stakeholder group. This requires defining a multicriteria performance framework. It is also critical to ensure that the criteria are measurable using indicators that are consistently applicable, transparent and meaningful to each respective group.

Measurement	Stakeholder Group	Indicator	Method of evaluation
Q – Quality	Citizens	Likert-scale satisfaction	Real-time anonymous polling, written or electronic
I – Inclusion	Professionals, project managers	Count of attendees, count of self-identified stakeholder groups, demographic matching using participant data	Facilitator counts, keypad inventory,
C – Clarity	Professionals	Utility for professionals e.g. planners, engineers	Scorecard, post-meeting narrative surveys with thematic analysis
E – Efficiency	Project managers, sponsors and investors including responsible public bodies	ROI performance for project sponsors and managers	Net cost divided by Q, I and C metrics e.g. cost per attendee or data point,

Table 1: Inventory of QICE performance framework (Bailey et al 2012, 2015)

This separation of criteria allows for process measurement to be performed for each group in partial isolation; we say partial because there are interdependencies and feedbacks between each group and their valuations, but there are compelling reasons why such an effort should be made.

Citizens, for example, are often not familiar with professional design vocabularies (Grossardt et al 2002, Bailey et al. 2007). Highway engineers speak in terms of “Level of service” which is a compound network performance measure that is not simple to explain to non-engineers (Roess and Prassas 2014). Planners have recognized for more than a century that zoning classifications are also not always clearly understood by citizens (Williams 1922, Reynolds 1969). Therefore it may not be useful to adjudicate process performance from the citizen viewpoint using any of these professional design vocabulary criteria.

Lane (2005:283) argues that “Specifically, it makes little sense to evaluate public participation in terms that are not shared by the planning model itself.” While planners have requisite expertise, that is desired by citizens as shown by aspirational Arnstein Ladder level six, and the process must generate data that is directly useful to planners, the authors disagree with this perspective if it is interpreted to exclude some evaluation criteria that are not subject to planners’ definitions. By collapsing criteria into professional terms, and designing and conducting the process in hock to this professional discourse, this resituates public involvement at a lower Arnstein Ladder level than necessary (Bailey and Grossardt 2006, 2025).

Another consistent refrain consists of “low education levels among the public” (Marzuki 2015). While citizens may desire education in technical and legislative procedures that govern how and when they are asked to appear and contribute, it is critical not to condition participation on normative “levels” of education or understanding. All values should be accorded equal weight during elicitation. Any other choice is fascism. This does not mean that all values will emerge in the eventual configurations and solutions, but that they were included equally as inputs without prejudice.

This matrix was developed independently of, and slightly prior to, the seven-axis framework presented by Kubicek et al. (2010) and used by Bertelsmann Stiftung to evaluate participation projects for their 2011

Mohn Prize in Vitalizing Democracy (Bertelsmann 2011). It is interesting that despite the diverse origins of the research syntheses of authors Bailey and Grossardt on the one hand (urban planning and transportation projects in the US, primarily Anglo referencing and sources) and Kubicek et al. on the other (primarily German experience and German-language literature), the four criteria in Table 1 map well to four of the Kubicek et al. criteria.

For method application transition, the next consideration is which technique(s) to use? And when? There are a plethora of participation techniques and considerable debate about their qualities. By performing a literature review (bailey et al 2012, 2015), the authors identified a range of techniques and then evaluated their performance across the four dimensions of QICE. Figure 2 shows a graphical representation of selected techniques.

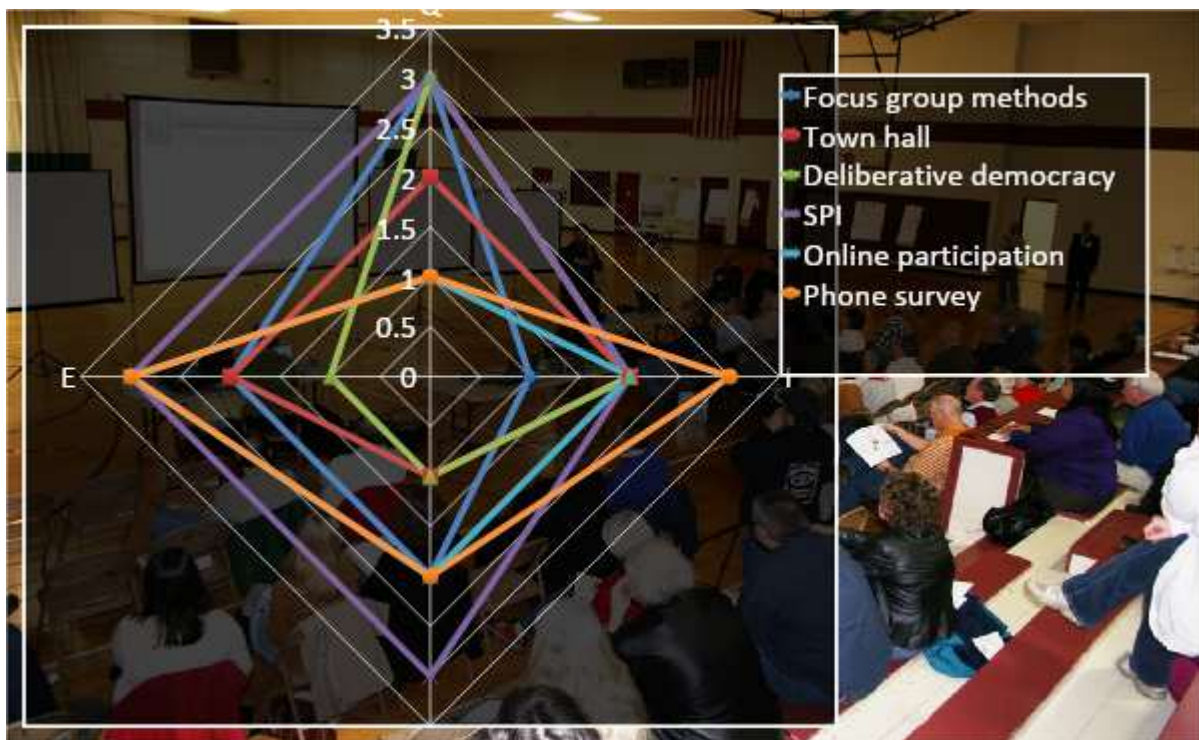


Figure 2: QICE evaluation of participation techniques (Bailey and Grossardt 2010)

Over the years since, more scholars have observed these lacunae and have joined the calls for more comprehensive and objective approach to design of participation e.g. Stelzle and Noenning (2019) who note “Another expected upcoming development is a more systematic approach to the combination of methods. At the moment the combination of methods depends on the experience of the moderator (e.g. the commercial TRIPLEX participation model) and without a proper scientific background.”

We (Bailey et al. 2015, Grossardt and Bailey 2018) unpack the term “combining” methods into two distinct domains; selection and sequencing. Selection of methods can be supported by reference to their performance with respect to each axis of QICE (Fig 2); internet and telephone surveys are efficient, yielding high data per unit cost, but do not generate high Q. Citizens advisory panels that are heavily invested in process and who are well known to planning authorities can yield high Q, but low I because they do not include large numbers and in some cases cannot be argued to be representative of larger valuations.

Additionally the temporal order of methods matters, for instance, high I can be supported by employing the online participation which can increase interest and therefore, number of participants, and High Q obtained from inperson meetings (above) can increase online participation numbers with sufficient awareness. Presentation of unfeasible or widely-reviled planning options in time-and resource-intensive inperson meetings and charettes, resulting in frustration, low-Q and low-I, can be avoided by conducting the broader phone/online surveying prior. We encourage readers to extend these performance mappings and identify trade-offs across other techniques.

Following Rydin and Pennington’s (2000) definition of “the collective action problem” and the role of social capital, there are many facets of process performance that are desirable and often regarded as challenging to

achieve. For now, we focus on two key process performance dimensions that reflect how the application of QICE across numerous projects delivers useful and important results; i) the process/outcome dichotomy and ii) the transferability/universality of the method.

4 DECOUPLING OF PROCESS SATISFACTION FROM OUTCOME SATISFACTION

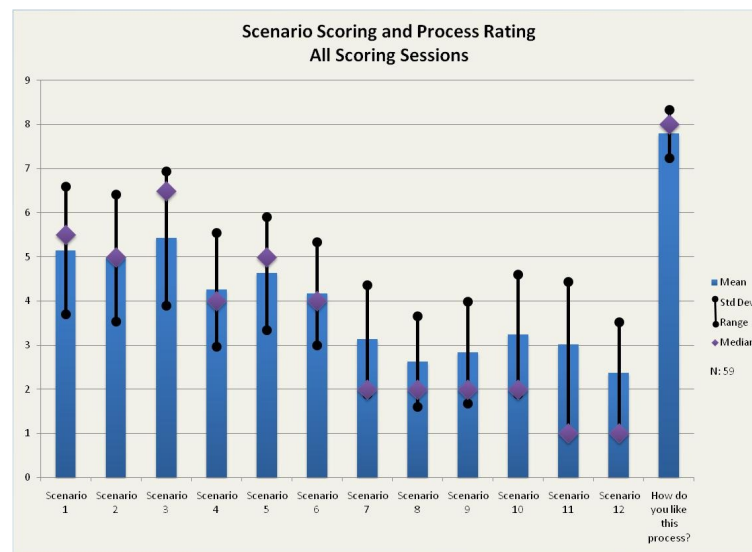


Figure 2 shows citizen evaluations of twelve geovisualized future use scenarios for a large nuclear plant (Bailey 2011, Ormsbee 2011), conducted on a scale of 1 to 9 points where 1 is “least suitable” and 9 is “most suitable.” The mean scenario scores ranged from 2.3 to 5.4. The process mean was 7.8. This is one meeting with fifty-nine participants. However, the authors have published identical data from more than three hundred public meetings that show results fully consistent with this slide. In no case has the mean for any outcome option exceeded the suitability evaluation for the SPI process.

Another issue that emerged from the database was the coupling between personal preferences and process outcomes. These processes have no champions. They diffuse power. Their outcomes can be hard to predict for those invested in the elite design system, even those with considerable experience and deep community ties. On one occasion, to illustrate the concern, we proposed to a context-sensitive bridge design team that we all participate in a sweepstake prior to the public involvement process (Bailey et al 2007). Everyone contributed a dollar and winner take all. There were eighteen team members and thirty-two visualizations representing potential designs for public evaluation. The team members included bridge designers, architects and planners with decades of experience. Nobody won the sweep.

5 CONSISTENCY OF PERFORMANCE

The large group process challenge is not in the first instance conditioned by the specific planning or urban design project. The overall problem of eliciting useful data from large numbers of participants with widely varying levels of knowledge, investment, and confidence in the sponsoring entities and then converting these data into useful design and planning guidance that may be actioned by professionals in their domains is shared by all such public processes; for example. Environmental management, energy futures, transportation system investment and development, park policy and more. Achieving this while delivering high satisfaction levels to each of the involved stakeholder groups, who often have non-aligned or even competing objectives, is another hallmark.

Therefore, processes that demonstrate consistent performance with respect to all stakeholder groups across multiple applications in different contexts, locations and scales, may stake their claim to be high performance public involvement. These SPI data sets are representative of numerous others that the authors have aggregated over more than twenty-five years of real-world SPI work.

This is much more than simply asserting that planning does not have a lock on charettes, or that immersive VR computer visualization is best suited for urban design.

We have focused here on the systemic design aspects of the SPI protocol, which are necessary but not sufficient conditions. There are a set of further operational considerations that must be met in delivering this

performance that we lack space to address fully here. However, these may be summarized in terms of meeting facilitation practices (Schuman 2005, Hunter 2009, Herd 2019) e.g. always start and end meetings on time; ensure technology is backed up, maintain a high proportion of participant-driven data throughout the meeting to prompt discussion; respond to all questions, ensure all participants can evaluate if they choose to do so, resist process hijacking by individuals, and much more. One primary addition to these established principles is the central role of citizen-generated SPI data in structuring group process discussion, conducting issue probing and ensuring high Q-metric delivery (c.f. Bailey and Grossardt 2003, 2018).

We encourage readers to review an under-appreciated CORP classic, Alenka Krek's 2005 article on "Rational Ignorance of the Citizens in Participatory Planning", explicating how and why civic disengagement is not the cause of, but is driven by, poor public involvement in planning, and in conjunction with the QICE frameworks, then analyze how impressions that motivate rational disengagement may be mitigated via high-performance methods.

6 DESIGN "ROBUST" (I.E. GAMING-RESISTANT) PROCESSES

We define "robust" in this context as the capacity to resist gaming, meaning disproportionate influence development by any party or group; for example, it is not desirable that a Citizens Advisory Board (CAB) convened by municipal authorities takes it upon itself – or is encouraged to – function as a proxy for larger groups without any verification of valuations vis-a-vis any larger, apparently less-involved groups. We say "apparently" because in a number of cases, poorly-designed processes that rely heavily on CAB input for planning decisions, can result in the sudden triggering of large-scale participation by previously dormant groups that can deliver project crisis.

Process "gaming" is characteristically epistemically-centered (by the academe and professional experts) as a citizen or stakeholder problem. Certainly there are participants and groups who seek to realize a specific outcome and will work to that end regardless of how many different or opposing views they encounter. Numerous professional guides have premised suggestions on this principle; for example the 1999 TRB Public Involvement White Paper contained exhortations such as "identify naysayers".

However there is also the possibility of internal gaming by experts, such as planners or engineers, who for whatever reasons are invested in a specific design or outcome and seek to reverse-manage public involvement processes to ensure that their preferred outcome is realized (Grossardt and Bailey 2018, p.x). Because these experts are integral and essential to the project, and their views are often privileged compared with the lay majority, this possibility requires careful consideration. On the one hand, the point of public involvement is to elicit and incorporate views and values from citizens at large, while on the other, the knowledge of planning and design experts is essential in identifying and delivering functional built-environment outcomes.

How do we know if a process is gaming-resistant? The overall Q-scores for the project are indicative, because processes that are not conducted according to principles of justice that are aligned with citizen beliefs and expectations are not adjudicated with high suitability scores.

So now, we can evidence-supported prediction that, with 95 percent confidence, we can achieve a Q-metric (citizen process satisfaction score) of 8 points or higher on a 1 through 10 point scale on any public goods project using this protocol. We can also conclude that regardless of the perceived satisfaction levels of specific outcomes, the process can be evaluated with high scores. These deliveries conform to John Rawls' theoretical formulation of procedural justice (Rawls 1971), around which the SPI process was designed (Bailey and Grossardt 2010).

7 THE VALUE OF PERFORMANCE MEASUREMENT

In 2008, during a research presentation at a large community visualization facility in the US attended by numerous professionals and researchers, we showed an early set of SPI performance data and we were asked "So, why aren't you millionaires?" This was an unexpected question and at that time, we found ourselves confounded. Perhaps fortunately for our sanity as researchers, our goal was not to accrue large personal wealth but, as we reflected later, we considered how the question could be depersonalized and inverted to ponder systematically, if not monetarily, then what objective value is there in such performance measurement?

This prompted us to research official bodies. We wrote the Office of Management and Budgeting to inquire if there were requirements for data gathering by Federal agencies. There are twenty-three of these agencies, which spend billions of dollars each year on mandated public meetings and involvement via compulsory EIS and NEPA and other legislative requirements. There was – and still is – no requirement to document anything except the procedural timeline and registration conformance to e.g. checkboxing the 28-day advance notice of a public event or project proposal. This means, for instance, that there is no count of attendees – something that we as classroom instructors are habituated to performing in our daily and yearly lives and recording in our systems. In the years since, transportation has implemented requirements for public involvement practice guides and reporting via e.g. STIPs, however, these are not mandatory and are not subject to Federal aggregation and reporting.

From the funding and agency viewpoint, then, the realistic, systemwide answer was – and still is – none. This is not just about SPI, but applies equally to any method developed around a performance framework. Without performance metrics, any process can be labeled “inclusive” “efficient”, “useful” and so on.

The role of technology in planning

According to Deep (2023, 664) “The integration of technology into urban planning enhances resource allocation, promotes sustainability, and improves overall quality of life.” Technology & Architecture (2025) asserts that “Urban planning is now more inclusive, sustainable, and efficient thanks to these developments.” Yet these claims lack hard data and are moreover contradicted by an extensive research literature as well as numerous media productions that are skeptical, describing only specific and limited utility if any at all.

Technology does not magically solve the group process problems in planning, or indeed any domain. Christman and Schinagl (2023:141) argue that the technological facilitation of “translocal planning” and “digital datafication of spatial realities” constitute both risks and potentials for planning.

It is the job of professionals and process designers to ensure that all participants’ valuations may be elicited without such tacit screening. For example, forms of computer visualization are well-proven to be useful in this way, for instance by presenting specific spatial and structure configurations and use patterns in a way that matches participants’ sensory understandings, so that they may more effectively evaluate different options. Immersive environments are one example. GIS has a mixed reputation for effective transmission of land use options, with some studies finding while others find promotion of exclusion and disenfranchisement. As Aitken (2014) finds in her survey, ICT overall “requires critical reflection to ensure that it does not aggravate, rather than alleviate, these problems. For example, reliance on ICTs may risk leading to new inequalities in access to planning systems. Furthermore, questions relating to who participates, and who controls participation in planning processes remain relevant and pressing.”

8 AI! “IT’S A KIND OF MAGIC!”

Four decades on, Freddie Mercury’s words are most apposite. Constant exhortations regarding the utility – the inevitability – of AI and the “need – to adopt now permeate – even saturate – popular culture (RTF 2025), trade blogs, professional publications and research articles. For example, Deep’s review article (2023, 664) asserts that “The integration of technology into urban planning enhances resource allocation, promotes sustainability, and improves overall quality of life.” However there is no data presented in support and no definitions of these terms are offered. In this way the purported benefits of AI mirror the “benefits” of previous tech-waves in planning; and have we not all heard this before with respect to GIS (Nedovic-Budic 1999), visualization (Scroth 2010), internet participation and deliberation portals (Aguirre and Nyerges 2011) etc.?

Sanchez et al. (2026:294) perform a review of published papers and argue that AI in planning presents ethical challenges including “bias, transparency, accountability, privacy, and misinformation” which are to be countered by “human oversight and continuous monitoring” – thereby essentially negating the very economic and ostensible “efficiency” reasons for AI adoption and implementation.

The specter of AI watching AI and failing to deliver useful output is already visible in the education field, where anti-plagiarism tools use AI to combat student and researcher use of AI and not only fail but foster mistrust (Giray 2024). In a blunt MIT Sloan School blog post titled “AI Detectors Don’t Work: Here’s What to Do Instead”, “OpenAI, the company behind ChatGPT, even shut down their own AI detection software

because of its poor accuracy.” At this stage, inclusion of AI in analysis of public involvement data in any capacity beyond data summary would be premature and may be counterproductive.

In sum, although these technologies have had some impact, primarily improving visualization capacity and fidelity in the professional fields of planning, engineering and urban design, and they have been shown to deliver useful, if limited, increments in specific metrics such as youth participation, (a component of the I - metric), they patently have not delivered a revolution in the reach and quality of public participation and they have not “democratized” (Stockholm 2026).

Planning projects involving the valuable resource commitments of numerous participants with the goal of long-term infrastructure arrangement and build are not a good time for experimentation involving technology premised on fact-free and often tacitly incentivized elite adoption. System failure, lack of transparency, and overall frustration with the disconnect between real life and planning are risks.

In discussions of equity in planning, the emphasis on the “digital divide” presupposes that those who do not or cannot access the technology are estranged from the nonarticulated but authentic or meaningful participation of those who can and do. This framing masks a core issue of data reliability and stakeholder confidence in technologies particularly those of remote participation. Even without employing the “T-word” or trust – a word that the authors find highly problematic in planning for reasons advanced previously at CORP and elsewhere (Grossardt and Bailey 2018, Bailey and Grossardt 2025, Bailey 2025a, Bailey 2025b) – it is clear that many citizens are dubious of the motives and effect of such deployment.

Therefore, implementation of technology to support participation in planning systems can rely on techniques that are tried, tested, evaluated and whose properties are known from all angles. The SPI results shown here illustrate that evidence-driven selection of technologies and integration into methods based on fit with a performance evaluation framework such as QICE can deliver useful results for all stakeholders.

9 THE TWO T-WORDS: TECHNOLOGY AND TRUST

Tech systems are even positioned to compete with each other on the principle of “trust” in pursuit of adoption e.g. Kudu (2019) “Given the current topology of technology innovations, there is no solution better than blockchain that embodies trust.” The apogee is reached in IT and tech promotional discourse for urban system design and management, for example according to XRSI “Smart cities built on RDG™ do more than deploy new tools. They build citizen trust as the cornerstone of a sustainable and inclusive digital society.” AI-driven license plate reader vendor Flock (2025) claims “Building Public Trust Through Transparency: How Flock Helps Communities – and Why You’ll Want to Be Part of It.” Yet, none of these define “trust” nor how exactly they “help communities” and there are many people who want no part of it (Deflock Tucson 2025, Colorado Newline 2025, The Oaklandside 2025 etc.)

An emerging research literature suggests that the higher the stakes, the lower the “trust” in IT; for example, according to Shoabjareh et al. (2024, p.8) “...when individuals make more crucial decisions, particularly regarding work trips, a higher level of distrust in technology (in this case TIAs) has a considerably stronger adverse effect on the usage of the technology.”

There is much more that could – maybe should – be said, but the larger point here is that “Trust” is not evident in historic or current Arnstein Gap data, regardless of the adoption and social permeation of IT and communication technologies. In some cases, technology is not even a solution in search of a problem, but more closely resembles a problem in search of another problem. Instead, positioning technology by testing it and evaluating logically how each instance promotes Q, I or C and therefore E, is a more promising and sustainable way to integrate technology into planning than shotgun promotion or data-free forced application.

10 CONCLUSION

This is a vast, open territory whose contours are unclear, and the stakes for planners – and all of us – are high. Planners must mediate between the ever-increasing and polarized demands of vested parties, which now appear to include well-funded IT and AI-driven interests, as well as traditionally-recognized elite factions. With social exclusion, disenfranchisement and polarization all increasing, a patently-intensifying loss of confidence in civic institutions, particularly planning (RITP 2025), and the consequent temptation to retreat from larger engagement with citizens strengthening, it is more important than ever to consider the

importance of method in shaping not only the QICE-measurable quality of public involvement but also planners' and citizens' experience.

In the meantime, we continue to analyze the core concepts including the how the T- and C- words are used (Bailey and Grossardt 2025) and how these concepts are mobilized in academic, institutional and professional planning discourses to frame the goals of public involvement and comparing these with broader citizen understandings. Our aim with this ongoing program is investigate how the expansive, indeterminate, and problematic concept of "trust" may be reformulated as a justice-based process goal (Rawls 1971), in part, to more accurately capture what both planners intend and citizens want, i.e. increased confidence in process and outcomes. A relatively limited literature is emerging that directly connects process design and planning delivery; for instance, research in international contexts demonstrates that, via attention to process design, a reduction in the Arnstein Gap can be achieved (Weymouth and Harz-Karp 2019).

This "wicked problem" needs logical, systematic, iterative, and evidence-driven reasoning. As Bryson et. al. (2013, p.30) state: "Effective and operable measures of participation can help policy makers learn from implementation so that they can enhance the effectiveness of the remainder of the participation effort they are currently working on and build long-term institutional capacity for future participation." Enhancing the effectiveness of the participation effort can be advanced by means of granular focus on process design and performance criteria including QICE outcomes. In pursuit of this broad-scope and long-term goal, the QICE project database, exemplified here, demonstrates consistent performance across temporal, geographical and project domains.

"The waiting seems eternity

The day will dawn of sanity"

Queen 1986

We hope so. Meantime, we conclude, with respect to Freddie Mercury and his bandmates: It's Not A Kind of Magic! It's The Application of Logic!

11 REFERENCES

- Abas, A., Kadir, A., Mohd, A. and Muhammad, K.. A systematic literature review on public participation in decision-making for local authority planning: A decade of progress and challenges, *Environmental Development*, Volume 46. 2023. <https://doi.org/10.1016/j.envdev.2023.100853>
- Aitken, M. E-Planning and Public Participation: Addressing or Aggravating the Challenges of Public Participation in Planning? *International Journal of E-Planning Research (IJEPR)* 3(2). 2014.
- American Planning Association. *The Future of Planning is Agile, People-Centric, and Technologically-Advanced*. 2021. <https://www.planning.org/blog/9211711/the-future-of-planning-is-agile-people-centric-and-technologically-advanced/>
- Arnstein, S. "A Ladder of Citizen Participation," *Journal of the American Planning Association*, Vol. 35, No. 4, pp. 216-224. 1969.
- Bailey, K. „Addressing the Arnstein Gap in structured participatory planning.“ *University of Auckland School of Architecture and Planning*, 6th December 2023.
- Bailey, K. and Grossardt, T. Addressing the Arnstein Gap: Improving Public Confidence in transportation planning and design through Structured Public Involvement (SPI). In Schrenk. M. (ed) *Proceedings of the 11th International GeoMultimedia Symposium* 11:337-341. Vienna, 2006.
- Bailey, K. and Grossardt, T. Culture, Justice and the Arnstein Gap: The Impact of Structured Public Involvement on U.S. Transportation Infrastructure Planning and Design. *Proceedings of Real CORP 2007*, p. 283-290. Vienna, 2007.
- Bailey, K. and Grossardt, T. Towards Structured Public Involvement: Justice, geography and collaborative geospatial/geovisual decision support systems. *Annals of the Association of American Geographers* Vol. 100, Issue 1, pp.57-86. 2010. <https://doi.org/10.1080/00045600903364259>
- Bailey, K., Grossardt, T., Ripy, J., Toole, L., Williams, J. B., & Dietrick, J. Structured Public Involvement in Context-Sensitive Large Bridge Design Using Casewise Visual Evaluation: Case Study of Section 2 of Ohio River Bridges Project. *Transportation Research Record* Vol. 2028, Issue 1, pp.19-27. 2007. <https://doi.org/10.3141/2028-03>
- Bailey, K., Blandford, B., Grossardt, T., & Ripy, J. Planning, Technology, and Legitimacy: Structured Public Involvement in Integrated Transportation and Land-Use Planning in the United States. *Environment and Planning B: Planning and Design* Vol. 38, Issue 3, pp. 447-467. 2011. <https://doi.org/10.1068/b35128>
- Bailey, K., Grossardt, T. and Ripy, J High-performance public involvement: frameworks, performance measures, and data. *Transportation Research Record* Vol. 2499, Issue 1, pp. 45-53. 2015. <https://doi.org/10.3141/2499-07>
- Grossardt, T. and Bailey, K. *Transportation Planning and Public Participation*. Elsevier. 2018.
- Bertelsmann Foundation. *Vitalizing Democracy through Participation*. Bertelsmann Stiftung, Gutersloh. 2011.
- Bethune, G. And Huler. S. „From Worst to First: Behind the Scenes of Continental's Remarkable Comeback.“ New York: John Wiley&Sons. 1998.
- Blandford, B., Ormsbee, L., Grossardt, T., Anyaegbunam, C., Hoover, A., Bailey., K. and Ripy, J. *Community Visions for the Paducah Gaseous Diffusion Plant Site*. Kentucky Research Consortium for Energy and the Environment. Lexington, KY. 2011. http://works.bepress.com/ben_blandford/16/

- Bryson, J., Quick, K., Slotterback, C. and Crosby, B. Designing Public Participation Processes. *Public Admin Rev*, 73: 23-34. 2013. <https://doi.org/10.1111/j.1540-6210.2012.02678.x>
- Campbell, H., & Marshall, R. Public Involvement and Planning: Looking beyond the One to the Many. *International Planning Studies*, 5(3), 321–344. 2000. <https://doi.org/10.1080/713672862>
- Carcasson. Between Thick and Thin: Improving Public Engagement Through A Wicked Problem Lens. National Civic League. 2020. <https://www.nationalcivicleague.org/ncr-article/between-thick-and-thin-improving-public-engagement-through-a-wicked-problems-lens/>
- Christmann, G., and Schinagl, M. Digitalisation in everyday urban planning activities: Consequences for embodied practices, spatial knowledge, planning processes, and workplaces, *Journal of Urban Management*, Volume 12, Issue 2, pp. 141-150. 2023. <https://doi.org/10.1016/j.jum.2023.02.001>
- Connelly, S., Vanderhoven, D., Rutherford, R., Richardson, L. and Matthews, P. Translating research for policy: the importance of equivalence, function and loyalty. *Humanities and Social Sciences Communications* Vol. 8 Issue 10. 1057/s41599-021-00873-z. 2021.
- Colorado Newslines. 2025. <https://coloradonewslines.com/2025/10/23/denver-object-to-flock-cameras/>
- Deep, G. The Impact of Technology on Urban Infrastructure. *International Journal of Science and Research Archive*, 2023, 10(02), 664–668
- Deflock Tucson. 2025. <https://deflocktucson.com/>
- Flock. 2025. <https://www.flocksafety.com/blog/building-public-trust-through-transparency-how-flock-helps-communities--and-why-youll-want-to-be-part-of-it>
- Fung, A. Putting the public back into governance: The challenges of citizen participation and its future. *Public administration review*, 75(4), 513-522. 2015.
- Head, Brian W. *Wicked Problems in Public Policy: Understanding and Responding to Complex Challenges*. Palgrave MacMillan. 2015.
- Herd, M. *A Planner's Guide to Meeting Facilitation*. PAS Report 595. American Planning Association, Chicago. 2019.
- Hunter, D. „The art of facilitation: the essentials for leading great meetings and creating group synergy.“ 2009.
- Johansen, K. And Upham, P. Arnstein's ladder of citizen participation revisited: 50 years on, what have we learned? Ch. 5 pp. 104–121. *Economics* 2026. <https://doi.org/10.4337/9781035348756.00012>
- Keatts, A. *Voice of San Diego (2014) All That Urban Planning Jargon Noone Understands*, Translated. 2014. <https://voiceofsandiego.org/2014/01/03/all-that-planning-jargon-no-one-understands-translated/>
- Krek, A. *Rational Ignorance of Citizens in Participatory Planning*. 2005.
- Kubicek, H., Lippa, B., Koop, A. *Erfolgreich Beteiligt? Bertelsmann Stiftung*. 2010.
- Kundu, D. Blockchain and Trust in a Smart City. *Environment and Urbanization ASIA*, 10(1), 31-43. 2019. <https://doi.org/10.1177/0975425319832392>
- Lane, M. Public Participation in Planning: an intellectual history. *Australian Geographer*, 36(3), 283–299. 2005. <https://doi.org/10.1080/00049180500325694>
- Mäntysalo, R., Westin, M., & Mattila, H. Public Planner – A Deliberative Authority. *Planning Theory & Practice*, 24(1), 11–29. 2023. <https://doi.org/10.1080/14649357.2023.2177713>
- Marzuki, A. "Challenges in the Public Participation and the Decision Making Process." *Sociology & Space/Sociologija i Prostor* 53.1 (2015).
- Massachusetts Institute of Technology. „AI Detectors Don't Work: Here's What to Do Instead“ 2026. <https://mitsloanedtech.mit.edu/ai/teach/ai-detectors-dont-work/>
- Nedovic-Budic, Z. Evaluating the Effects of GIS Technology: Review of Methods. *Journal of Planning Literature*, 13(3), 284-295. 1999. <https://doi.org/10.1177/08854129922092405>
- Oaklandside. 2025. <https://oaklandside.org/2025/11/18/oakland-police-lawsuit-license-plate-camera-flock-safety/>
- Poplin, A. *Play Ames 2.0 Pop Up moving community engagement in Ames, IA. Fall 2022. Final Report*. 2022.
- Reynolds, J. *Public Participation in Planning*. *Town Planning Review* Vol. 40, No. 2. 1969. <https://doi.org/10.3828/tp.40.2.dr215u538245277g>
- Rydin, Y., & Pennington, M. Public Participation and Local Environmental Planning: The collective action problem and the potential of social capital. *Local Environment*, 5(2), 153–169. 2000. <https://doi.org/10.1080/13549830050009328>
- Roess, R., Prassas, E. The Fundamental Concept of Level of Service. In: *The Highway Capacity Manual: A Conceptual and Research History*. Springer Tracts on Transportation and Traffic, vol 5. Springer, Cham. 2014. https://doi.org/10.1007/978-3-319-05786-6_3
- Royal Town Planning Institute. *Majority of Planners say Public Misunderstands Planning System*. 2025. <https://www.rtpi.org.uk/new-from-the-rtpi/majority-of-planners-say-public-misunderstands-planning-system/>
- Sanchez, T. W., Brenman, M., & Ye, X. The Ethical Concerns of Artificial Intelligence in Urban Planning. *Journal of the American Planning Association*, 91(2), 294–307. 2025. <https://doi.org/10.1080/01944363.2024.2355305>
- Saßmanshausen, S., Radtke, J., Bohn, N., Hussein, H., Randall, D. And Pipek, V. Citizen-Centered Design in Urban Planning: How Augmented Reality can be used in Citizen Participation Processes. *DIS '21: Proceedings of the 2021 ACM Designing Interactive Systems Conference* pp. 250 – 265. 2021. <https://doi.org/10.1145/3461778.346213>
- Schuman, S. *The IAF Handbook of Group Facilitation. Best Practices from the Leading Organization in Facilitation*. Jossey-Bass, San Francisco. 2005.
- Schroth, O. *From Information to Participation: Interactive Landscape Visualization as a Tool for Collaborative Planning*. vdf Hochschulverlag AG. 2010.
- Shoabjareh, A., Ghasri, M., Roberts, T., Lapworth, A., Dobos, N. and Boshuijzen-van Burken. C. The role of trust and distrust in technology usage: An in-depth investigation of traffic information apps usage for mandatory and non-mandatory trips. *Travel Behaviour and Society*, Volume 37, p.1-10. 2024. <https://doi.org/10.1016/j.tbs.2024.100816>
- Stelzle B. & Noenning J. A method for the assessment of public participation in urban development, *Urban Development Issues*, vol. 61, pp. 33–40. 2019.
- Stockholm Resilience Center. *Wicked Problems of Smart Cities*. 2026

<https://www.stockholmresilience.org/publications/publications/2019-11-21-wicked-problems-of-smart-cities.html>

Rethinking the Future. Technology & Architecture: The Impact of Technology on Urban Planning. 2025.

https://www.re-thinkingthefuture.com/technology-architecture/a13123-the-impact-of-technology-on-urban-planning/#google_vignette

Weymouth and Hartz-Karp (2019).

Wilker, J., Rusche, K., & Rymsa-Fitschen, C. Improving Participation in Green Infrastructure Planning. *Planning Practice & Research*, 31(3), 229–249. 2016. <https://doi.org/10.1080/02697459.2016.1158065>

Williams, F. *The law of city planning and zoning*. Рипол Классик. 1922.

XRSI. 2025. <https://xrsi.org/publication/smart-cities-built-on-citizen-trust-with-responsible-data-governance-as-the-foundation>