



THICK versus **THIN**

how technology
can improve public
involvement in the
budget process

by **MARK MACK** and **CHRIS ADAMS**

Recently, governments have been considering what style of public engagement is most appropriate, and what technology works best with that style. In doing so, they are distinguishing between a “thin” and “thick” approach to public engagement — the difference between detailed approaches that require heavy, sustained involvement by the public (i.e., “thick”) and broader, less detailed methods (i.e., “thin”). Thick engagement is generally understood to involve fewer people over longer periods of time, while thin approaches tend to reach more people with shorter time commitments.¹

But is one approach better than the other when engaging the public on budget issues? Most public finance professionals are familiar with resource-intensive “thick” time engagement efforts such as budget hearings, citizen review boards, and finance committees. Likewise, they are familiar with the drawbacks and would gladly trade these approaches for something “thin” and more accessible to larger percentages of the public. Some governments are therefore asking how technology can improve public involvement in the budget process. Are there opportunities to add depth to traditionally “thin” engagement methods that involve large numbers of citizens in small ways? Are there better ways to simplify dense, “thick” financial information? Organizations are therefore exploring both thick and thin approaches in an effort to understand how each style can best be used to engage citizens in budgetary and financial issues.

In the past, neither approach seemed optimal. Simplifying complex issues like budget allocations often ignores important related issues. For example, take the classic challenge of where to make budget cuts. Online budgeting tools, which represent a thin engagement approach, can allow citizens to adjust allocations among departments, programs and priorities (e.g., cut 2 percent from the parks department and add it to the police department), but few address the complex issues associated with such a decision. Are some revenues earmarked specifically for parks? Do ordinances require particular service levels? Does the parks department have unfunded mandates?

Decision makers may also need to consider factors such as:

- Whether park-related activities reduce the need for crime prevention (e.g., police).
- If the majority of citizens prioritize parks above police.
- The possibility that a 2 percent decrease for the parks department might have a greater negative impact on parks than a 2 percent decrease in police department funding would have on police operations.

BUDGET SIMULATIONS

Terms like public deliberation, civic engagement, and public participation are used to describe a wide range of activities.² This lack of clarity can be a problem when using consensus-building technology. In a 2004 article, Carol Ebdon and

Aimee Franklin used the experiences of the City of Wichita, Kansas, and the City of Topeka, Kansas, to identify five basic mechanisms for budget engagement: public meetings, focus groups, advisory committees, surveys, and simulations.³

All have potential benefits, but simulations, even when done using nothing more than paper, pencil, and a calculator, have the greatest promise. The article cites positive comments from both staff and participants in Wichita’s simulation. “The [citizens] do not appreciate the limits we face,”

said a staff member. “We wanted to find a way to get input and at the same time find a way to get them to appreciate our position.” The simulation put participants in the shoes of policy makers, requiring them to think like citizens of the whole community rather than just consumers of services. One resident said, “The benefits are twofold. You can put in your two cents worth, but you get information about the city budget.” In what might be the most telling observation, the authors said, “All interviewees want this exercise to be continued.”

The article also identifies six criteria for community budget participation:

- Input is representative of the community.
- Large numbers of citizens have the opportunity to participate.

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- Input occurs early in the process.
- Sincere preference/willingness to pay is revealed.
- Participation includes two-way communication between the public and city officials.
- The input is considered in the city's decisions.

In the author's assessment, Wichita's use of a simulation was the only mechanism to meet five of the six criteria. The only one it missed had to do with the process rather than the tool — there was no input until late in the process.

The last 25 years have seen dramatic progress in technology that has changed the way we communicate with each other; how we analyze, present, and use data; and, ultimately, how we make decisions. The budget simulations that are available to governments have also vastly improved — in fact, they are close to delivering on the threefold promise of technology to produce an outcome that is better, faster, and cheaper. The experiences of two local governments illustrate both the promise and the growing potential of budget simulations.

EUGENE OREGON: 1991-1992

In 1991 and 1992 the City of Eugene, Oregon, undertook an ambitious effort to engage residents in a conversation about the budget. The goal was to get informed input from residents on how to balance revenues and expenditures over time. The major process requirement “was to force respondents into a realistic approximation of the budget problems facing the city.”⁴ In other words, they helped pioneer the use of a budget simulation for engagement purposes.

Compared to what is available now, the technology available for Eugene's simulation was rudimentary (see Exhibit 1). The city's budget survey was called BOB (Build Your Own Budget), and it consisted of a four-page worksheet that was distributed to residents. Residents were informed about a budget shortfall and asked to look at the services listed on the worksheet and pencil in the new amount they would like to spend on each service. If they did not want to cut their way to a balanced budget, they could write in new collections for revenue sources. However, residents faced the same constraint city officials did: They had to balance the budget.

The results of the simulation should please public officials who are concerned that residents would make unrealistic or only self-serving changes to the budget. “When faced

with a budget gap of at least \$8 million...the vast majority of respondents chose some combination of service cuts and revenue enhancements. When faced with a realistic look at the options for service reductions, that is, no free lunch, the overwhelming majority of respondents chose to raise at least some revenues.” The researchers go on to comment on the benefit to policymakers. “Because the respondents are forced to make the marginal tradeoffs between various services and revenues, the results give meaningful guidance to elected officials.”

Created in 1991, the simulation was sent to 400 residents who were asked to write in their preferred dollar values for

Exhibit 1: The First Page of Eugene's Build Your Own Budget Simulation.


Created in 1991, the simulation was sent to 400 residents who were asked to write in their preferred dollar values for expenditures and revenue, tally up the items, and then write them in the shaded boxes.

HOW WOULD YOU BALANCE THE CITY BUDGET?

The City of Eugene is \$8 million short of the money needed just to maintain current services. The shortfall would be even bigger if the City were to increase services — such as increasing the level of police or fire services, building a new library, or increasing the supply of affordable housing.

How would you balance the City budget? Would you reduce services? Would you create user fees, such as a library fee? Would you increase the money available to pay for current and new services by levying a tax — say, a local retail sales tax? Or some combination of these strategies? These are tough choices.

1. THE BUDGET “SHORTFALL”




Directions: First, use a pencil with an eraser. We start with the \$8 million budget shortfall.

The Budget “Shortfall” = Box A \$8.0 Million

Parks Services	
8 Buildings & Park Amenities	1.55
9 Turf & Grounds	.85
10 Riverside Parks /Owen Rose Garden	.80
11 Landscaping/Park Trees/Hendricks Park	.65
12 Downtown Mall Maintenance	.25
13 Planning & Property Management	.25
Recreation Services	
14 Community Centers	1.25
15 Swimming Pools	.80
16 Senior Centers	.65
17 Athletics Programs	.35
18 Specialized Recreation (for the disabled)	.30
19 Outdoor/Environmental	.15

2. SERVICE IMPROVEMENTS

Directions: Next, we have listed service improvements and their yearly cost. For each improvement you want, please write its cost in the column labeled “New Costs”. (The number to the left of each item below corresponds to its description in the enclosed newspaper tabloid.)



	Estimated Cost (in millions)	New Cost
41 Affordable Housing Construction	.30	
42 Community Policing	4.00	
43 Fire Redevelopment	1.50	
44 New Library	2.30	
45 Tourism/Arts	.70	

Add the “new costs” of the service improvements = Box B

Add the savings from Cultural, Library, Parks & Recreation Services reductions = Box C

Development Services	
20 Building Permits/Plan Checking	1.05
21 Code Compliance	.40
22 Business Licensing	.20
23 Community Information/Parking Permits	.10
24 Business Assistance Team	.40
25 Downtown Development	.20
26 Affordable Housing/Neighborhood Development	.15
27 Metropolitan Partnership Contract	.15
28 Land Use Permits	.65
29 Community Planning	.50
30 Metro Area Planning	.40
31 Citizen Involvement/Neighborhood Groups	.15
32 Transportation: Street Trees	.45

Add the savings from Development Services reductions = Box D

expenditures and revenue, tally up the items, and then write them in the shaded boxes.

In assessing the simulation, research scholars William Simonsen and Mark Robbins were enthusiastic about using a simulation to create meaningful participation, but they noted concerns about how difficult it was for residents to fill it out: “The key problem with including a budget constraint... has been cognitive and computation overhead.” In the intervening quarter century, technology has risen to the occasion to help users more easily understand and weigh tradeoffs, making a traditionally thin approach thicker.⁵

JOHNSON COUNTY, KANSAS: 2012

Johnson County, Kansas, made an important contribution to the field of budget engagement when it used in-house resources to create an online budget simulation in 2012. Following the economic downturn that began with the recession of 2008, officials determined the need “to make significant budget cuts and reorganize departments in order to balance the budget.”⁶ Due to the sweeping nature of the contemplated changes, the county chose to involve the public in carefully thinking through budget issues, focusing on levels of service.

The simulation utilized a graphic interface with charts depicting spending within a service area. Users could move sliders to select different options, with the changes shown in a chart (see Exhibit 2). A narrative description of the program, including options for making increases or decreases, appeared when a user hovered over an item. Once a screen was finished, additional service areas could be accessed. The goal was to create an exercise that could be completed in about 30 minutes.

The simulation was extensively evaluated by a team at the University of Kansas, which published a comprehensive evaluation.⁷ The assessment was generally positive. “Overall,” the authors concluded, “this process was well organized, and the significant time and effort put into the development of the

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budget simulator created many successful outcomes from the use of this innovative engagement tool.” A report to the board says, “The biggest take away from the citizen engagement process is the incredibly positive response from citizens about the engagement efforts, both in the form of the budget simulator and the focus groups.” (The county used the online simulation with focus groups). “Citizens seem to genuinely appreciate the county’s efforts and enjoy being able to participate in the process.”

In their conclusion, the authors made several overarching recommendations, including integrating the budget simulation into an ongoing “cycle of engagement” effort over time, creating an ongoing marketing and communications plan, and seeking better representation among respondents. Here, technology can in some ways be credited for merging both thick and thin approaches to citizen engagement.

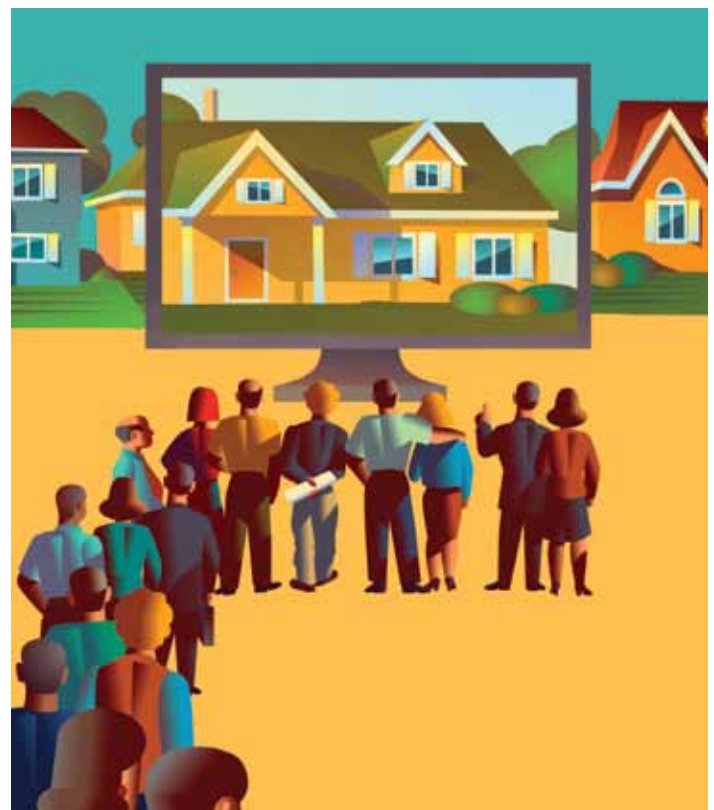
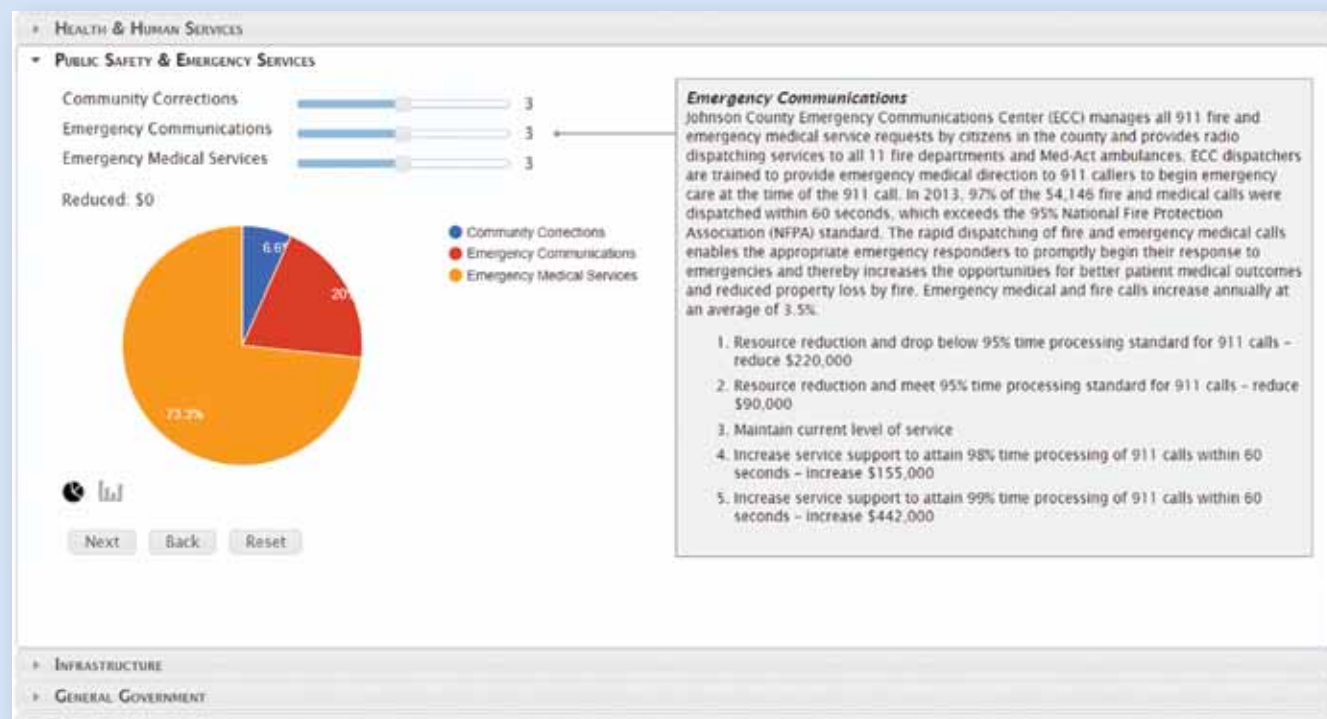


Exhibit 2: Screenshot of Johnson County's 2012 Budget Simulation



SAAS FOR BUDGET SIMULATIONS

In 1991 — the same year that Eugene did its BOB simulation — if you wanted a photo, you would start by opening the back of a camera and inserting film. After winding the film to the first frame, you could take your picture, and once you had used up the entire roll of film, you would carefully wind the film back into its canister and then drop it off at a store to be processed. The next day you would return to the store, where they would rifle through bins of oversized envelopes to find your photos and strips of negatives. If you wanted to share the photo with a colleague, you could give them your print and then order another for yourself. If you wanted to share it with someone in another city, you would put it in an envelope, address it, apply postage, and put it in

a mailbox; then, a few days later, the recipient would have the picture. If you wanted to crop the photo, you used scissors. If you wanted to lighten or darken it, you were generally out of luck.

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Technology has made photos better, faster, and cheaper, and it has done the same for budget engagement. The leap from the pencil and paper of BOB to Johnson County's early online simulation is just as transformative. And, as with photos, the innovation has not stopped in the last five years. Several companies in the United States, Canada, Spain, the United Kingdom, Australia, and Canada now offer public budget simulation tools in a SaaS (software as a service) model, dramatically improving quality and capabilities at a fraction of the cost. This software substantially helps with the major challenges uncovered in previ-

Exhibit 3: Major Outstanding Challenges, and How the Latest Technology Meets Them

Challenge	How Technology Helps
Low Participation Rates	<ul style="list-style-type: none"> ■ Mobile simulations are available, making it more convenient to use anywhere and anytime, even for those without home Internet. ■ Integration with social media expands reach, building momentum among residents. ■ Latest research on user experience is being used to invite participation. ■ Ease of use on tablets makes it easy go to targeted neighborhoods and places such as malls or libraries.
Inaccessibility of Financial and Budget Data	<ul style="list-style-type: none"> ■ Visual interface (less text) helps the average person understand complicated financial information. ■ Nesting of information allows users to easily learn more if they wish. ■ Simulation can be used in face-to-face meetings. One brand of software even comes with a meeting mode that effectively turns the simulation into a facilitation tool.
Need for Deliberative Discussion	<ul style="list-style-type: none"> ■ Simulations can be rapidly updated or changed to reflect new ideas or data.
Representativeness of Sample and Use in Scientific Research	<ul style="list-style-type: none"> ■ By their nature, simulations far exceed the capacity of surveys to provide meaningful information on “willingness to pay” and sincere preferences that would be important both to adjusting service levels and testing possible revenue measures. ■ Inexpensive, online panel recruitment services make it possible to use the simulation as a representative research tool.

ous efforts in places like Eugene, Johnson County, Wichita, and elsewhere. Exhibit 3 identifies major outstanding challenges, and how the latest technology meets them.

CONCLUSIONS

While varying in degree, approach, and methodology, efforts to engage the public at the local level have a long history of mixed results. Since thick engagement efforts are best suited for well-informed participants, they can easily become the default approach when addressing finance-related issues. The drawback is that thick approaches typically involve fewer participants and represent a smaller portion of the community. Herein lies the challenge: While thin public engagement approaches can generate fast feedback from large portions of the public, they often lack the specificity and context needed by local government finance departments.

But technology is changing that. Easy-to-create online simulations that can also be used in face-to-face settings are now bringing thick and thin citizen engagement approaches together. New citizen engagement technology such as budget simulations and approaches to the using these tools suggest

that we may be close to finally achieving the long-sought goal of high-quality budget participation by large portions of our communities, achieving engagement in both a thick and thin manner. ■

Notes

1. Matt Leighninger, “What We’re Talking About When We Talk About the ‘Civic Field’ (And Why We Should Clarify What We Mean),” *Journal of Public Deliberation*, Volume 10.
2. Ibid.
3. Carol Ebdon and Aimee Franklin, “Searching for a Role for Citizens in the Budget Process,” *Public Budgeting and Finance*, Spring 2004.
4. Mark D. Robbins and Bill Simonsen, *Citizen Participation in Resource Allocation*, (Westview Press, 2000).
5. Mark D. Robbins and Bill Simonsen, “A Dynamic Method of Citizen Preference Revelation,” *Journal of Public Budgeting, Accounting, and Financial Management*, Fall 2002.
6. Fred Combs, Jessie Funk, Mike Gotfredson, et al, *Citizen Engagement: Analysis of Johnson County Budget Simulator*, 2012.
7. Combs, Funk, Gotfredson, et al.

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