You Get What You Pay For

Reforming Procurement in Naperville, Illinois

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Procurement Manager Kim Schmidt had long been known by her colleagues in the city of Naperville, Illinois as unfalteringly polite, even when dealing with the most difficult of vendors. She was, however, reaching the end of her patience. She knew that the city's process and structure of procurement kept them from securing the best contracts. As a result, Naperville was not receiving consistently high-quality professional services.

Schmidt wanted to change that. She believed that the city could generate more public value not just by negotiating harder for low prices, but also by altering the very structure of their procurement process. After advocating inside City Hall for a new process, Naperville's senior leaders agreed to pilot a new approach called "Cost as a Component" procurement. Its first test case would be a major IT services contract.

Naperville, Illinois, and Quality-Adjusted Cost (QAC) Procurement

The city of Naperville, Illinois, located west of Chicago, had a population of around 150,000 in 2020. It was largely white and comparatively wealthy for the Chicago metropolitan region. After Chicago, it was the fourth-largest city in the state, and it was growing fast. Yet, prior to 2015, prominent vendors providing cities in the area with professional services had reservations about working with Naperville. These vendors provided cities with everything from IT services to neighborhood traffic studies.

From 1995-2015, Naperville's City Council and other city leaders prioritized contracts for city services at the lowest price in order to save as much taxpayer money as possible.[1,i] But the council's exclusive focus on price led to push back from city staff and the chief procurement officer at the time, who instead proposed a quality-adjusted scoring system that considered quality and then had vendors compete, primarily on cost.[2]

The approach paid less attention to services' variations in quality relative to cost. The city scored all proposals through a single quantitative compilation metric: Quality-Adjusted Cost, or QAC. The QAC procurement model had two steps: first, city staff would review all requests for proposals and provide

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[i] For a specific example of contracting using the original procurement approach, see: Jan Fischer, CPPB, "City Of Naperville: RFP Number: 12-184, IT Support Services," *City of Naperville,* April 17, 2012, accessed June 25, 2019, through Kim Schmidt.

a "qualification score"; second, they would divide the proposals' *total costs* by that qualification score to derive a QAC score. The city would award a contract to the bidder with the lowest QAC score.

QAC had its advantages. The procurement team could easily score proposals using a standard system. They could then provide clear and defensible reasoning to both vendors and city taxpayers about why they chose certain proposals. Further, Naperville's City Council could guarantee low taxes, low spending, and the lowest possible city operating costs. QAC worked best when requests for proposals (RFPs) were clear cut and vendors could quickly and painlessly submit proposals showing their cost and service specifications.[ii,3] "I really liked QAC for simple projects. It was great for a traffic signal design because it is straightforward, for the most part," said Engineering Manager Andy Hynes. "The city would get great results and consultants, and save money."[4] In 2015, Naperville also used QAC for a contract for a cost-of-service rate study for the city's electric utility. The awardee, Utility Financial Solutions, had a high-quality score and a far lower bid. They were a great partner and saved the city over $30,000.[5]

But the QAC model had shortcomings and was not always popular with the vendor community. "We did not like Naperville's status quo approach," said Peggy Martinus, from Magenium Solutions, an information technology vendor. "We are a small business with expertise in a particular area. We find that government RFPs are often strictly about price. We are not going to win on that. If it is strictly price, we would not even respond," she said.[6] Indeed, many vendors had stopped applying to Naperville contracts altogether.

The QAC process was very rigid: once vendors met the minimum quality threshold, they had to deliver a fixed number of hours of service for a fixed cost, sometimes over many years. Schmidt believed that the emphasis on low cost and the rigidity of QAC was the cause of fewer vendors applying to Naperville-issued RFPs overall, including for major, multi-year contracts.[7] Other cities in the Chicago area, by contrast, used different metrics for scoring proposals, like Quality-Based Services (QBS), which did not include cost as a criterion of evaluation.

Another major issue with the QAC model was that while the city saved nominal amounts of money it ultimately got what it paid for. "QAC often had hidden costs for us, from the budgetary perspective," said City Finance Director and Chief Procurement Officer Rachel Mayer.[8] "With QAC, there's a strong basis that these are taxpayer dollars; we have to provide the greatest value. Value is a combination of both price and quality. If the vendor cannot complete the work or we have multiple change orders, did we get the best value?" asked Deputy City Manager Marcie Schatz.[9]

A telling example was a 2007 RFP issued for the installation and operation of equipment to monitor drivers running red lights, including citations and fine collections. The contract was awarded to a vendor with the lowest QAC score, who submitted the lowest bid but also earned the lowest qualification score. (See Appendix 1 for examples of QAC scoring.) In the end, this vendor could not

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[ii] In the context of city procurement, a Request for Proposal (RFP) is a document issued by a city government to solicit responses or proposals from vendors, often through bidding processes. Vendors are agencies or companies interested in providing a good, service, commodity, or asset to the city and include in their proposal a description of the cost and scope of their work. Naperville's procurement processes were transparent to the public and decisions on proposals required clear and objective criteria.

adequately develop and manage its product and service. "The QAC process failed; [the vendor] fell flat on its head. After much work, we had to go back out and issue a totally new RFP," said Schmidt.[10]

The second time around, Redflex won the red-light RFP and was ultimately a great partner. It had been a preferred vendor the first time around, too, though at a slightly higher cost. Naperville learned that if its procurement approach did not foster quality, flexibility, and long-term partnership, the city could end up at a loss.

Procurement Manager Kim Schmidt

Schmidt was a hard-working and creative procurement manager. Her office was filled with chart-paper posters with motivational language like "What is our mission?", "Performance Measures", and "What does 'Maximize Value' mean?".[11] According to her colleagues, she routinely arrived at the office by 6:30 am and was always looking for opportunities to make processes more efficient or streamlined, no matter how embedded they seemed to be. "I had the pleasure of working with Kim through her entire career, even in her hiring process," said Schatz. "She was always open to new ideas and continuous improvement. If she were still doing this in fifteen years, she would still be improving and learning. She had this customer mentality."

One area Schmidt was determined to improve was the very structure of the city's procurement process. It was clear that QAC was not always working; the right vendors and the right proposals were not winning, and the model was not reliably delivering quality services for a competitive price. More, the QAC model was not allowing Naperville to advance innovative partnerships or creative solutions. Schmidt wanted to compare proposals across multiple variables, not just quality-adjusted cost, and to consider innovative offers as true contenders. She sought a process that would increase the number of interested vendors and give city officials more information and control to determine the best service providers.

That opportunity came when Schatz connected Schmidt with the What Works Cities initiative.[iii] Although procurement reform was not initially on the menu, Schmidt pushed hard internally and looked for like-minded colleagues. "I first spoke with Rachel Mayer, the city's finance director and chief procurement officer. Mayer has a good working relationship with Marcie Schatz, who was overseeing the innovation work. Moreover, Mayer could credibly speak to the financial cost of using the QAC approach, which often caused pains in the long run," Schmidt said.

The first step was deciding where to pilot a new procurement approach. Schmidt, Mayer, and Schatz started by holding brainstorming sessions, asking questions like: "Where are the biggest problems with our system as it is?" and "Where is the QAC model working least effectively?" After considering upcoming procurements for services ranging from public works to electric utilities, they settled on experimenting with upgrading services for information technology (IT).[12]

[iii] These innovations were supported by Harvard Kennedy School's Government Performance Lab (GPL) and Bloomberg's "What Works Cities" initiative. More about the GPL's work on procurement in Naperville can be found here: https://govlab.hks.harvard.edu/naperville-il-technology-contracts

This plan made sense to Schmidt. Following the 2008 financial crisis, Naperville's IT investment had not increased at the same pace as other areas such as infrastructure and public safety[iv] and in 2012, the city experienced a major IT systems breach. "We learned that IT provides critical support to every department. At that point, we didn't have email. We were back to phone and fax," said Schatz. The IT system was the city's nerve center and affected all aspects of city service delivery. It was also a department that would benefit from vendors providing more time, attention, and flexibility, and where the QAC model was not working well.

As Naperville set out to substantially improve technology services in 2017, Schmidt hoped that a successful RFP process with an IT services contract could lend credibility to a new procurement approach. She could then share lessons across city departments.

The IT Services Upgrade Contract

Schmidt began to meet with Tom Urbas, Naperville's IT network manager, and learned that the city's IT department received only a handful of proposals for service upgrades in the past. "In the old process, everything had to be in the scope of work," said Urbas. "That took time. And so, some people did not do it, they saw it as a waste of time."[13] If the scope of work did not include a specific task or project, the city had to formally change the RFP. This was a complicated and rigid process that resulted in lower-quality services. In its last major IT services contract, the city paid a large sum for a big, multi-year contract with a vendor.[14] Naperville was locked into that contract for years even though the vendor was not well suited for specific, smaller tasks.

As Schmidt began to think about ways to restructure the IT services agreement—a large and recurring multi-year contract—she worked alongside Greg Wass and Mollie Foust, a senior advisor and an assistant director at the Government Performance Lab, respectively. "The Chicago market is really massive, and Naperville IT was getting third- or fourth-tier service," said Foust. "The big companies typically went for larger contracts, with the state or with the city of Chicago."[15] Naperville's efforts to compete for these contracts had been unsuccessful. "Naperville would offer something like 2,000 hours of set IT-related services they needed. But it was never clear what Naperville was trying to use these hours for," said Foust. "It became hard for a vendor to know what Naperville needed. Naperville was receiving low-quality staff, and contracts were routinely over budget, with high staff turnover. Vendors would get to know Naperville's context, then leave for a larger city." A procurement overhaul would clearly have a substantial impact on the city's ability to compete for the highest-quality vendors for its IT services contract.

Cost as a Component

Schmidt launched a procurement process that clarified not just specific *outputs* from a contract, like the number of hours inputted to Cisco Webex upgrades, but also larger *outcomes*, like more efficient city IT operations or consistent service from vendors. Beyond technology upgrades, the city wanted its IT contracts to foster a partnership where vendors would prioritize attention to specific challenges. In addition, the city needed vendors to take a flexible approach so that it could work with the best-suited

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[iv] The 2008 Financial Crisis was a global economic downturn caused by the subprime mortgage sector that affected banking, the stock market, and city pension outlays.

vendor for a specific task or sub-task. And while price was important, Schmitt and her colleagues also wanted to reward creativity, risk-taking, and high-quality service. For instances where contracting was cut and dry, the city retained the original QAC procurement approach.

Schmidt realized that planning and preparation would be key to implementing a successful new RFP process. Accordingly, the city restructured its entire approach well in advance and patiently developed its new RFP structure. When it was time to launch, there was clarity across the selection team, and in the vendor community, about the city's new model. And thus, the Naperville "Cost as a Component" procurement model was born.[16]

Naperville began by advertising its new IT services RFP widely. From emailing IT vendors to online postings to ads in the *Chicago Tribune*, the city made it clear that it was interested in soliciting all types of vendors for its major, forthcoming RFP for IT services.[17] The RFP asked vendors to describe how they planned to achieve the outcomes they described, including the performance metrics and targets against which their services should be evaluated.[18] The number of submitted proposals jumped from three to over a dozen.[19]

Schmidt and her team then proceeded to select finalists using their novel approach. Their scoring system included both qualitative and quantitative components that compared vendors' responses to the city's original outcomes.[20] "With this new approach, we ask for cost right up front," Schmidt said. Numerous factors affected a proposal's score: the cost or price of the project, the vendor's approach or methodology, best practices, quality, creativity, and more. Schmidt continued, "We tell the evaluation committee: 'you get to put price in your evaluation wherever you feel comfortable.' And this allows team members to duke it out themselves about the role of price."[21]

After narrowing down the pool of vendors, the evaluation committee conducted extensive interviews with the finalists, at times even asking companies to "act out" their responses to hypothetical challenges.[22,23] Based on these interviews, they developed a second, updated score for each vendor.[24,25] The city then shortlisted multiple vendors to provide Cisco and Microsoft IT services. These were flexible contracts, unlike QAC's parameters of a set, specific number of hours or tasks. The shortlist thus allowed the city's IT department to work with vendors based upon their specialties.

When a specific project came up, a work order was issued with a time horizon ranging anywhere from two days to more than a year. The vendors on the shortlist were each given an opportunity to bid for a specific work order, depending on whether that task fit their strengths. "And at the end of it all, price negotiations did still happen within an individual work order," Schmidt said.[26]

"The newer RFP process ["Cost as a Component"]—quite frankly, it [made] a lot of sense," said Bob Rice of West Monroe. West Monroe often worked with Naperville using QAC contracts and though it had yet to be awarded a work order using "Cost as a Component," it appreciated the process. Rice continued, "RFPs are so time-intensive. This approach is all about: 'let's get qualifications, shortlisting, and then, let's get the nuts and bolts of the actual request, later, in a more specific way.' We loved it."[27]

The work-order process meant that mini-negotiations were repeated. The city's IT department soon learned which vendors typically excelled in specific settings. If vendors did a poor job with one work

order, their reputation could be affected, so they were incentivized to provide high-quality work. Because Naperville had multiple vendors pre-approved for the work orders at any given time, all vendors were working not just to meet their contractual obligations, but also to hone quality relationships with the city's IT department and beyond. The QAC approach, by contrast, was restricted to only one vendor winning a single, fixed multi-year contract, meaning less flexibility and no opportunity for the city to recalibrate if a vendor's service was lacking.

A Way Forward?

The "Cost as a Component" approach was considered a great success. "When vendors understand that we care about more than just low cost, they bring a better team to the project—a higher level of quality," said Philip Tartaglia, a project engineer with the city's Transportation, Engineering, and Development (TED) Business Group. "We as a city were also changing. Under the old model, our thinking was: 'I don't want to get burned.' Now, this allows people to be proactive and focus on personnel and good outcomes."[28] Schmidt began to speak with leaders in departments across the city about standardizing "Cost as a Component" citywide.

Even with the success of the "Cost as a Component" approach, Schmidt acknowledged that QAC still had an important role to play: "when you have a situation where qualifications matter but beyond that the service is straightforward, you want a more straightforward process where you can really push the vendors on price."[29] In those instances, the city was not seeking creativity or innovation, but rather a job done at the lowest cost.

And there were, unsurprisingly, challenges in the new process. The procurement team found that vendors were confused by the RFP's "Outcomes to be Achieved" section. "In a couple debriefing meetings, vendors would say: 'we do not even know what you want, what you mean, by outcomes.' In this section, they would usually just recap what we, Naperville, said in our 'Outcomes Desired' section, but they would add some 'fluff' to it," said Karin Kietzman, a procurement officer with the city.[30] Additional training was needed for internal staff and the vendor community to understand outcomes-based contracting.

The procurement team also noted that specific work-order negotiations could be tedious, especially if an RFP was for a project with definite scope. As a result, both QAC and "Cost as a Component" remained available procurement options. However, there were circumstances where it was unclear which model was more appropriate.

In one case, for example, the team was debating how to respond to requirements put out by the United States Environmental Protection Agency (EPA) for Risk and Resilience certification. Naperville had its own city water utility, and it needed to develop a Risk and Resiliency Assessment to be certified under new guidelines.[v] City engineers argued that this was a nationwide certification process that would be fairly straightforward, so it made sense to select a vendor mainly on the basis of price. While

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[v] The US Environmental Protection Agency (EPA) typically issued base-level guidelines that set legal limits on contaminants in both drinking and wastewater. The Clean Water Act (CDA) and the Safe Drinking Water Act (SDWA) allowed individual states to set and enforce their own drinking water standards if they were at least as stringent as EPA's national standards. The same applied for cities. For more information, see: https://www.epa.gov/enforcement/water-enforcement.

there was little need for creative or custom solutions at that moment, this round of new EPA requirements could have potentially been followed by further requirements down the pike. Developing a long-term partnership with a consultant capable of providing innovative solutions in more complex cases could have had advantages, keeping the utility ahead of the curve well into the future. Cost differences, however, were significant. Low cost bidders were proposing $100,000 for the project, while innovative, custom-tailored contracts would cost $400,000. "It was a tough call," said Ries. "Do we do as little as possible to check the box, or really be thorough to get ahead of this?"[31]

In another case, Naperville's Transportation, Engineering, and Development Business group conducted a series of traffic studies in the city's historic Westside neighborhood. The community had seen large increases in traffic as population expanded, and the city was debating whether to use QAC or "Cost as a Component" to fund traffic-calming measures.[vi] On the one hand, traffic-calming measures for older, higher-density neighborhoods were fairly standard at this point, and many contractors knew exactly how to implement those solutions affordably. On the other hand, "Cost as a Component" reforms could allow for specific innovations and solutions for the Westside neighborhood, and set the stage for custom-tailored, iterative, citywide solutions over time.

As Schmidt and her colleagues considered upcoming negotiations for city services, the question that kept coming up was: when should Naperville negotiate procurement using QAC or "Cost as a Component," and why?

[vi] Examples of traffic-calming measures can include speed bumps, narrowing traffic lanes with planters or installation of bike lanes, and raised pedestrian crossings.

Appendices

Appendix 1   Quality-Adjusted Cost (QAC) Process

Using the QAC process, a committee of Naperville staff evaluated proposals on a set of selection criteria, which had been shared with vendors in the Request for Proposal (RFP). These criteria included items such as the proposer's experience, qualifications, technical expertise, references, and responsiveness as well as the comprehensiveness of the proposal. The city of Naperville included the following description in RFPs:

> *A selection committee comprised of City staff will review, evaluate and score all proposals, based on the criteria and weights defined above [table not included]. The total score for each vendor will be converted to a decimal (i.e., 86% becomes .86). After all proposals have been scored, each proposer's Fee Proposal will be opened. Proposed costs will be divided by the respective proposer's qualification score (expressed as a decimal) to yield an "adjusted cost." The vendor with the lowest adjusted cost will be recommended for award, subject to approval by the City Manager.*

Source: City of Naperville RFP 12-184 (IT Support Services), issued March 28, 2012

The following tables include de-identified data from the city of Naperville to illustrate the QAC process.

Table 1

Name of Consultant	Criteria #1 (out of 40)	Criteria #2 (out of 20)	Criteria #3 (out of 20)	Criteria #4 (out of 15)	Criteria #5 (out of 5)	Total points (out of 100)	Cost proposed	QAC
Vendor A	36	17	18	13	4	**87**	$4,750	$5,460
Vendor B	31	15	16	10	4	**75**	$4,999	$6,665
Vendor C	33	16	14	13	4	**80**	$4,750	$5,938
Vendor D	31	16	11	12	4	**74**	$3,700	$5,000

Vendor D had the lowest QAC and was awarded the contract. However, they failed to deliver on the contract, and the city had to put out a new RFP.
Source: Kim Schmidt

Table 2

Name of Consultant	Criteria #1 (out of 40)	Criteria #2 (out of 20)	Criteria #3 (out of 20)	Criteria #4 (out of 15)	Criteria #5 (out of 5)	Total points (out of 100)	Cost proposed	QAC
Vendor E	26	18	9	12	4	**68**	$4,050	$5,956
Vendor F	38	28	9	13	5	**92**	$5,400	$5,870
Vendor G	15	9	4	6	2	**35**	n/a	n/a

After the new RFP, Vendor F had the lowest QAC and was awarded the contract. They were a successful partner with the city.
Source: Kim Schmidt

Appendix 2   "Cost as a Component" (CAC) Process

The following description comes from a Request for Qualification (RFQ) issued by the city of Naperville in 2017 using the "Cost as Component" (CAC) Process.

SELECTION CRITERIA

CRITERIA	WEIGHT
Capability, Capacity and Qualifications of the Vendor	40
Suitability and Quality of the Approach/Methodology	30
Outcomes to be Achieved	30
TOTAL:	**100**

SELECTION PROCESS
The shortlisted vendors will be selected based on a **three-phase evaluation process**.

Phase 1 – Proposal Evaluation
This phase will serve to select a subset of proposing vendors to enter into the next phase. The selection committee will review, evaluate and score all of the proposals based upon the information provided in the proposal using the criteria and weights defined above. The top vendors with the highest qualification scores will be invited to interview with the selection committee.

Phase 2 - Interviews
Vendors selected to participate in Phase 2 will be scheduled to attend individual interviews with the selection committee (and SMEs, if applicable). Following the interviews, the vendors may be re-scored by the committee using the criteria and weights defined above to develop the final qualification scores. The top vendors with the highest qualification scores will be invited to be a member of the final shortlist of vendors for future IT strategic support services projects. The City anticipates no more than five shortlisted vendors.

Phase 3 – Performance Measures and Contract Negotiations
The City will invite the shortlisted vendors enter into negotiations regarding the performance measures and Master Service Agreements. The performance measures will be negotiated collectively with all of the shortlisted vendors while the Master Service Agreements will be negotiated with each shortlisted vendor individually. Failure to reach consensus will result in the vendor(s) not being considered further. Following the completion of this phase, City staff will recommend the shortlist of vendors for City Council approval.

The selection committee included a procurement officer, department representative/project manager, evaluation team members, subject matter expert (SME), and legal liaison. Each evaluator rated proposals and interview responses either unacceptable (0-49%), acceptable (50-69%), good (70-84%), or outstanding (85-100%), as defined by a rubric. The evaluation team considered everyone's rating for each criterion, came to consensus, and drafted consensus comments to support the scores. Following the award, shortlisted vendors were asked to respond to work orders. Vendors were selected based on lowest cost, qualifications for a particular project, and/or performance on past projects.

Sources: City of Naperville RFQ 17-010 (IT Strategic Support Services), issued January 18, 2017; "Proposal and Interview Evaluation Instructions" provided by Kim Schmidt.

Endnotes

[1] Procurement Manager Kim Schmidt, interview by authors, July 10, 2019.

[2] Schmidt, interview by authors, August 13, 2019.

[3] Schmidt, interview by authors, July 10, 2019.

[4] Andy Hynes, interview by authors, August 13, 2019.

[5] "Quality Adjusted Fee Summary: RFP #15-177 - 2015 Comprehensive Electric Utility Cost-Of-Service Rate Study," *City of Naperville,* April 17, 2012, accessed August 15, 2019, through Kim Schmidt.

[6] Peggy Martinus, interview by authors, August 13, 2019.

[7] Schmidt, interview by authors, June 27, 2019.

[8] City Finance Director and Chief Procurement Officer Rachel Mayer, interview by authors, August 13, 2019.

[9] Deputy City Manager Marcie Schatz, interview by authors, August 13, 2019. All other quotes from this individual are from this interview unless cited otherwise.

[10] Schmidt, interview, August 13, 2019.

[11] City of Naperville, site visit and interview, August 13, 2019.

[12] "Naperville, IL Technology Contracts," *Harvard Kennedy School Government Performance Lab,* accessed June 13, 2019, https://govlab.hks.harvard.edu/naperville-il-technology-contracts.

[13] Technology Network Manager Tom Urbas, interview by authors, August 13, 2019.

[14] "Vendor List: RFP 11-073 Managed Technology Services," *City of Naperville,* accessed June 24, 2019, courtesy of Kim Schmidt. Relevant documents from Kim Schmidt include the original QAC RFP document (11-073), bidders list and RFP opening list. The RFP was awarded to Sentinel Technologies.

[15] Mollie Foust, interview by authors, June 10, 2019. All other quotes from this individual are from this interview unless cited otherwise.

[16] "RFP Specifications: Price as a Component," *City of Naperville,* 1-24, *accessed* June 24, 2019, courtesy of Kim Schmidt.

[17] "Vendor Communications Summary," *City of Naperville,* accessed June 24, 2019, courtesy of Kim Schmidt.

[18] "Technical Support Elements," *City of Naperville,* RFQ 17-010: IT Support Services, issued January 18, 2017, accessed June 24, 2019, courtesy of Kim Schmidt.

[19] "Bidder's List," *City of Naperville,* RFQ 17-010: IT Strategic Support Services, accessed June 24, 2019, courtesy of Kim Schmidt.

[20] "Proposal And Interview Evaluation Instructions," *City of Naperville,* accessed June 24, 2019, courtesy of Kim Schmidt.

[21] Schmidt, interview, July 10, 2019.

[22] "RFP 17-010 respondent information," *City of Naperville,* accessed June 24, 2019, courtesy of Kim Schmidt.

[23] "Proposal And Interview Evaluation Instructions," *City of Naperville,* accessed June 24, 2019, courtesy of Kim Schmidt.

[24] "RFP 17-010 respondent information," *City of Naperville.*

[25] "Proposal and Interview Evaluation Instructions," *City of Naperville*.

[26] Schmidt, interview by authors, June 19, 2019.

[27] Robert Rice, interview by authors, August 13, 2019.

[28] Project Engineer Philip Tartaglia, interview by authors, August 13, 2019.

[29] Schmidt, interview, July 10, 2019.

[30] Karin Kietzman, interview by authors, August 13, 2019.

[31] Amy Ries, interview by authors, August 13, 2019.

Note: All links were accessed as of the case's original publishing date.