Breaking Point:

EXAMINING AGING INFRASTRUCTURE IN COMMUNITY ASSOCIATIONS
FACING THE TRUTH ABOUT AGING INFRASTRUCTURES

As buildings and their internal systems and physical components age, how can the community associations that own them best prepare to meet the unexpected—but necessary—financial demands.

Over many conversations in recent years, members of the Foundation for Community Association Research (FCAR) have identified aging infrastructures—the physical structures and the components within them that community associations rely on for residents’ safety and well-being—as a critical concern for association managers, boards, homeowners, and residents.

Too often, according to Foundation members—and despite occasional inspections and regularly scheduled reserve studies—associations fail to recognize serious structural and system failures. When damage becomes so obvious that it cannot be ignored, the tendency is to make superficial or temporary repairs and postpone comprehensive, in-depth restoration.

To address this growing problem, the Foundation convened a task force in 2018, comprising attorneys, reserve specialists, engineers, insurance providers, managers, and bankers, to determine what issues are the most prevalent in failing physical components, and—especially—how associations can prepare themselves to address and resolve these issues when they inevitably arise.

Community Associations Institute managers, board members, and contractors in community associations across the U.S. responded in a survey to share their recent major capital projects with the task force. More than three-quarters (81%) of survey respondents reported encountering unanticipated and unplanned-for infrastructure issues over a recent three-year period.

The aggregated information and observations of these respondents revealed empirical data that can enlighten thoughtful association boards and committees, community managers, business partners and contractors, homeowners—anyone who is responsible for the investment of community assets.

This project represents several years of discussion and countless hours contributed from our volunteer leadership. We are grateful to the Foundation Think Tank, which identified the need for this research and provided funding for this project, and to the members of the Aging Infrastructures Task Force for their steadfast volunteer leadership. These industry leaders ensured that we gathered the right data and completed this research project. Thank you.
NO REAL SURPRISES

The overwhelming majority of issues reported by survey respondents—water intrusion in windows and siding, deteriorating balconies or fences, or failing pipes or roofing, among a variety of other problems—were not surprises to those who had to address them. Most of the participating communities encountered ongoing situations that initially were addressed with minimal work because they did not fully understand how long the problem existed and the extent of deterioration. In many cases, the underlying cause of the problem was known, however the community delayed correcting the actual cause because association decision-makers wanted to attempt a minor repair to control the damage or they needed time to develop a financial plan for the repairs. Either action deferred the maintenance and turned costly for the community.

Major repairs often were initiated when liability and life and safety of the residents became concerning and intolerable. Negligence on the part of the board to allow ongoing issues, cleanups, and restorations to be done can also lead to additional unknown and hidden costs.

More than one-third (36%) of respondents experienced plumbing or electrical system issues in the most recent three-year period that were not identified in their most recent reserve study. Thirty percent relayed other initially unidentified problems with components like roofs and roof sheathings, building envelope and structure, and recreational facilities.

BIGGEST CONCERNS

More than three-quarters (80%) of those surveyed felt it was critical that their association have adequate reserves in the event of a major infrastructure failure or construction need. Nearly half (40%) of those surveyed considered deteriorating infrastructure as a top-ranked concern. More than two-thirds (70%) of survey respondents indicated that maintaining property values was of primary importance.

And while about half of respondents felt their associations have adequate reserve funds on hand, just as many respondents considered their communities’ reserve funds inadequate to address any major unplanned component repair or replacement.

Other challenges that communities faced when addressing major infrastructure renovations include:

- Convincing homeowners to accept and contribute to costs
- Recruiting volunteers for the association board
- Prevalent owner/resident apathy

The task force observed that association homeowners and boards often are focused on keeping regular assessments low and only investing in visible, immediate outcomes. While homeowners will tolerate a modest special assessment in an emergency, evidence in this study suggests that it’s often hard to convince them to contribute to long-term maintenance, i.e., higher regular assessments. Substantial special assessments are particularly unwelcome.
Case Study – Listen to Residents

COMMUNICATION, FINANCING, AND PHASED CONSTRUCTION

After years of residents’ complaints about ambient noise and poor energy efficiency, in 2010, management at the University Towers Condominiums in New Haven, Conn., investigated the feasibility of replacing the 1,850 windows in the 238-unit building. Originally installed in 1958, the sliding window frames were difficult to repair because of the building’s steel and concrete construction.

Management issued a request for proposals and selected a firm to proceed with the window replacement. After five years of EPA testing and investigation, which revealed asbestos inside the walls and caulking around the windows, work began in 2015 on the $10 million, multi-phased project. With 80% approval from homeowners, the board was able to secure a bank loan to pay for the first phase of the project, which was estimated at $4.5 million. The association realized a savings of more than $1 million on this first phase, but the original lender said the association needed to find another lender for phase 2.

Again, 80% of the association’s diverse membership voted to secure a second loan of $8 million. Both phases of the project were completed $500,000 under budget and with a high homeowner approval rating. Increasing monthly assessments enabled the association to pay off both loans.

Communication with homeowners was essential during this project, according to Kate Bowman, CMCA, the on-site manager. Because they had been informed and understood the need for the project’s high cost—$10 million—homeowners were willing to approve the necessary funds for it. Residents also appreciated advance notifications of disruptions. The project, which was more disruptive and costlier than originally anticipated, indicated to owners that the association’s reserves funds were inadequate and regular assessments needed to be increased. Association members also realized they needed to fund reserves at a much higher level. The board established a finance committee, which convenes quarterly. In anticipation of other potential large projects, University Towers’ reserves are now funded at nearly three times the level prior to the window replacement project.

Lessons learned: “Make sure board members are educated on reserve studies and why funding reserves sufficiently is necessary. … Be vigilant with inspections and keep up with code issues. … Don’t shirk preventive maintenance. … Take the time to identify a qualified engineer and project manager.”

“Getting old is expensive and cannot be avoided. It’s an issue facing every association with common area. Older associations need to get ready for higher expenses, which will likely mean higher reserve contributions, special assessments, or loan repayments.” —Robert Nordlund, PE, RS
AWARENESS AND EDUCATION
Infrastructure damage was discovered often during repairs or regular inspections, and water intrusion was the most frequent indicator of serious underlying damage. Associations tend to schedule major repairs based on the level of emergency or the cost. Usually, issues affecting elevators, termite infestation, and plumbing or electrical systems are attended to immediately. When possible, associations are inclined to postpone remediating problems in common areas or those related to original construction.

Survey respondents indicated that it would be prudent for association leaders, including homeowners and board members, to learn more about:
- How to plan and execute reserve studies
- How to evaluate and hire qualified engineers, architects, and contractors
- How to implement comprehensive inspection and maintenance programs

More than 80% of survey respondents encountered unanticipated and unplanned-for infrastructure issues over a recent three-year period.

Ongoing Communication Is Essential
Survey respondents found that homeowners and residents were more receptive and supportive of major infrastructure repairs when they were given the opportunity to learn—in advance—about the scope and costs of the project from experts, like the engineers and contractors who had specific knowledge of the damage and how to fix it. They were more willing to authorize assessment increases and to agreeing that a larger portion of the association’s budget should go to reserves.

Homeowners, and even renters, also appreciated regular updates on a project’s progress and alerts about upcoming but necessary disruptions, such as when to expect water or electricity to be turned off for short periods, when an elevator or other building access would be temporarily unavailable, or where to park and for how long during a paving project.

REMEDIES AND LESSONS LEARNED
After encountering and facing aging infrastructure issues, more than 40% of reporting communities increased their regular assessments. They also designated more money to their reserve funds and proceeded with the required work, even if that work had to be completed in planned stages. About one-third of responding associations hired a reserve specialist.

Bringing in an engineer, architect, or other construction expert also was beneficial to making satisfactory repairs, according to 40% of the responding communities. More than three-quarters (77%) of survey respondents hired independent construction experts to assess and/or repair damage from poor original construction. At least one-third (34%) reported hiring an expert consultant to remediate damage caused by termites or other pests.

Respondents also stressed that thoroughly vetting contractor candidates is a critical and vital step in a successful project outcome. They also recommend inviting multiple bids for the work. Factors to look for when considering a contractor include:
- What is the workforce composition, i.e., are all of the workers company employees, or are some subcontractors?
- Is there an on-site manager or supervisor who will communicate changes?
- Can the contractor provide references to both board members and community association managers?
- Are the contractors familiar with working at inhabited communities?
- Is the contractor’s company financially sound?
- Are there any improper or prohibited connections between the contractor and board members?

Financing Major Infrastructure Improvements
Survey respondents used a variety of methods to pay for their major infrastructure repairs and improvements, including:
- Accessing available reserves
- Approving special assessments
- Taking out a bank loan secured by regular assessments

Insurance was rarely a factor when paying for major infrastructure repairs, according to survey respondents. The few exceptions to this include acts of nature and original construction defects or prior repair construction defects that were revealed within an insurance policy’s coverage time limits. Sometimes, individual homeowners’ policies covered at least a portion of the damage to their units, depending on deductibles and other factors.

Boards and their Attitudes
Arguably the biggest factors affecting how and when infrastructure damage is addressed are the association board’s attitude and perspective, and this survey revealed a wide disparity in board philosophies. While some boards are proactive and highly transparent with homeowners, the majority are reticent to increase assessments or often fail to plan long term for infrastructure maintenance. In postponing inspections, reserve studies, and—ultimately—complete repairs or renovations, boards often end up facing an exponentially more comprehensive and expensive project in the long run. In one case study (see “Gaining Homeowners’ Trust,” p. 7),
the construction delays aggravated the damage, compromising residents’ safety. When homeowners wouldn’t approve the needed funds, the project manager petitioned the court for a special assessment.

**Positive Outcomes**
A large portion of survey respondents indicated that their associations made positive changes because of their experience with an aging infrastructure issue, including:

- Designating more money to reserves
- Conducting more frequent and thorough reserve studies, including hiring an engineer, pest control, or other construction specialist to review and assess components
- Creating more formal project plans before commencing work
- Planning necessary work in phases rather than delaying it altogether
- Listening to and communicating with homeowners and residents more frequently and regularly
- Educating homeowners and residents on their communities’ financial and maintenance needs

Homeowners in most of the survey’s case studies rated the outcome of their association’s completed projects very highly. In many cases, homeowners who resisted their association’s project and—particularly its cost—at the outset, ultimately recognized the improvement and benefits to the community once the project was completed.

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70% of survey respondents indicated that maintaining property values was most important.

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**THE RESERVE STUDY—A CRITICAL FACTOR IN PROTECTING AGING INFRASTRUCTURES**

Reserve studies are at the core of planning for the long-term maintenance of building structures and the systems within them. In states where reserve studies are not required, many associations reached this conclusion on their own because of unaddressed and costly repairs. Unexpected but necessary remediation of an unplanned capital project often requires either assessing homeowners a high special assessment or obligating the association to a long-term bank loan. Either way, homeowners eventually foot the bill.

To prevent such costly events, regardless of state requirements, associations need to plan for and conduct regular and comprehensive reserve studies.

To be of value, a reserve study should be conducted and managed by an experienced engineer or infrastructure specialist who will inspect and determine the useful life expectancy of each building system and structure within an association. A comprehensive reserve study is well worth the cost; it is, after all, an investment in the future health of the association’s physical components. Reserve studies should be conducted on newer structures—even those built in the last decade—to assess for any possible construction defects as well as to provide a baseline evaluation and to determine the useful life of all components.

One of the takeaways from this investigation is the need for an engineering or architectural inspection that would reveal common area integrity concerns. Such an inspection, performed less frequently than periodic site-visit reserve study updates, would help the association anticipate and prepare for major issues outside the scope of cyclical reserve projects. Similar to major medical issues, early detection is key to minimizing and managing major aging infrastructure-type deterioration.
Community associations rely largely—many exclusively—on homeowner assessments to pay their bills, which can include services like landscaping, security or professional management; maintenance for sidewalks, streets and building exteriors; utilities like street lighting, water or gas; and mandatory expenses like insurance and taxes. Assessments also fund amenities like pools, fitness centers, tennis courts, playgrounds, and social activities.

Prudent fiscal policy is essential—not only to the association at large, but also to individual homeowners whose assessments fund essential services and promised amenities.

The 2020 Homeowner Satisfaction Survey examines how community associations residents feel about their fiscal responsibility.

The 2020 Homeowner Satisfaction Survey was conducted by Zogby International for the Foundation for Community Association Research.

For additional information on the 2020 Homeowner Satisfaction Survey, visit [www.foundation.caionline.org/research/survey_homeowner/](http://www.foundation.caionline.org/research/survey_homeowner/)
Case Study – Funding Challenges

GAINING HOMEOWNERS’ TRUST

When a major stair-and-balcony-replacement project at the nearly 40-year-old Island J Condominiums in Foster City, Calif., ran out of money, irate homeowners fired the original contractor.

At that point, the architect needed advice on the scope and cost of the next steps, so he called in the president of a small but well-qualified construction project management firm to assess the unfinished work. The new construction project manager found serious problems remained, including decayed wood beams and unsafe stairs, and felt the project should continue. He estimated $7 million to complete it and emphasized that the stairs throughout the community’s 29 six-unit buildings were unsafe and at least half of the estimated costs were required to make them usable.

The association’s management and attorney convened several town hall meetings and information sessions to explain the project’s scope and need for funding to homeowners. In a contentious meeting that required security personnel, homeowners learned that a $40,000-per-door special assessment was required to fund the $7 million. The majority of homeowners voted against the special assessment.

Because the incomplete project was a threat to residents’ safety, the association’s attorney petitioned the court—and was granted—an emergency assessment of about half the needed $7 million, or the equivalent of about $20,000 per unit.

Despite this rough court-ordered approval process and the forced special assessment, the completed work has been highly rated by residents. Besides making the community safer, other benefits to the improved infrastructure include a dramatic increase in property values and better home sales.

Construction went so well that residents threw a party for the construction team. Since then, and with the approval of two-thirds of homeowners, the association board has authorized money for a second year of work that includes painting the entire 178-unit complex and remodeling the clubhouse. The board raised the regular assessments for two consecutive years to avoid further special assessments.

Lessons learned: Get to know and understand your audience so you can educate them on the realities of their situation. Homeowners need a lot of data and information before trusting an outsider.

An association board’s attitude and perspective arguably are the most significant factors affecting how and when infrastructure damage is addressed.
ABOUT THE FOUNDATION FOR COMMUNITY ASSOCIATION RESEARCH

Our mission—with your support—is to provide research-based information for homeowners, association board members, community managers, developers, and other stakeholders. Since the Foundation’s inception in 1975, we’ve built a solid reputation for producing accurate, insightful, and timely information, and we continue to build on that legacy.

Visit foundation.caionline.org

ABOUT CAI

Since 1973, Community Associations Institute (CAI) has been the leading provider of resources and information for homeowners, volunteer board leaders, professional managers, and business professionals in 350,000 homeowner associations, condominiums, and co-ops in the United States and millions of communities worldwide. With nearly 44,000 members, CAI works in partnership with 36 legislative action committees and 64 affiliated chapters within the U.S., Canada, United Arab Emirates, and South Africa, as well as with housing leaders in several other countries including Australia, Spain, Saudi Arabia, and the United Kingdom.

A global nonprofit 501(c)(6) organization, CAI is the foremost authority in community association management, governance, education, and advocacy. Our mission is to inspire professionalism, effective leadership, and responsible citizenship—ideals reflected in community associations that are preferred places to call home. Visit us at www.caionline.org and follow us on Twitter and Facebook @CAISocial.