Creating a Realistic Project Budget

By Richard Fanelli, AIA, CFM, IFMA Fellow, FM Studios

Two of the most critical measures of a successful project include staying within budget and delivering on schedule. You don’t achieve these two major goals by accident. Instead, they must be planned for from the beginning of any project.

It starts with a general framework based on the project manager’s experience doing similar types of projects of a similar size and scope. Project costs, at the early stages of project planning, should be kept as a range of numbers rather than a specific number or cost per square foot. Any specific number that is quoted early on in the planning phase of the project will be remembered and cast in stone (most likely that number will come back to haunt you). As I tell my students at George Mason University and IFMA: Keep a database of project costs to refer to for future projects (taking into consideration inflation and geographic factors).

Cost per (useable) square foot or cost per person:

This can be based on projects of a similar size and similar scope of work based on your database. If you don’t have a database to refer to, ask trusted professionals in your network and take an average of those numbers. Influential criteria that will influence your conceptual budget include:

- Project size
- Project schedule (reasonable vs. fast track)
- Project scope and level of buildout, upgrades (building standard vs. high-end)
- Project phases (one phase vs. multiple phases)

- Location of the project (downtown vs. suburbs)
- Union vs. non-union labor requirements
- Building infrastructure upgrades needed (if any)
- Non-construction-related costs identified (i.e. furniture, equipment, AV, cabling, signage, artwork, plants, moving expenses, soft costs for A&E (architectural & engineering) services and project management services)

Once a realistic, conceptual project budget range has been established, include it in a project scope statement that defines the project scope, the project goals and objectives, the internal and outsourced project team members needed, along with a conceptual project schedule. Submit this document to the project champion (executive who will be responsible for the project) so that the document can be formally approved by management.

As the project is developed and defined, a pricing benchmark can be established through the preparation of preliminary A&E pricing plans.

Preliminary pricing plans:

These are based on a final space plan with descriptive notes referencing specific, proposed upgrades. A preliminary power/communications plan, reflected ceiling/lighting plan; and schematic mechanical plan can be included in the preliminary pricing plans. The more information, the better the pricing accuracy. This package is sometimes referred to as a schematic drawing package or 30% drawings. Value engineering to the project scope can be done after the preliminary pricing is completed without major revisions to the A&E drawings.

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From the President

As I sit here writing this letter, we are in what has become the longest government shutdown in our history. And while the effects are felt throughout the country, there's likely much more impact here in our own backyard by virtue of the concentration of Federal Agencies and workers here in the DC Metro Area. I see the effects on friends and neighbors, businesses that I have supported throughout my time here, but more so, I see how it is impacting the facility management industry and our members. After all, even with the government shutdown, facilities still need to remain operational, although with very limited services, and therefore a limited facility management team. Some of the more visible institutions being impacted by the closure are the DC Museums like the National Gallery of Art (NGA) and the Smithsonian. Not only do we see those responsible for the upkeep of these facilities sent home (or in some cases working without pay in order to maintain our National Treasures), but basic services like trash pick-up in the Mall and public restrooms maintenance have been suspended as well. This not only has impacted the state of our facilities, but also the tourism industry and the businesses that thrive from it. Visitors who had planned trips long before the shutdown, who likely held hope that the government would reopen by the time they were here, found themselves in front of closed gates, like that of the National Zoo. I still have the image of that little boy who kept walking back to the closed gates hoping it was a mistake.

No federal workers also means businesses that rely on their patronage (like food trucks and dining establishments) have seen a major decline in their business. Restaurants that would typically be full to the brim at lunch time have few patrons. With less patrons to serve, businesses need less employees to cover shifts, necessitating cutting down hours for employees or letting go of others. Otherwise, they face the potential of having to close down for good if they can’t pay the bills. But despite the strains we face, I see displays of the strength of the human spirit, generosity, and collaboration that gives me hope. Groups of volunteers have gone to pick up trash at the Mall and our National Parks; businesses around the area are providing free or discounted services to furloughed federal employees; direct sales organizations that historically have provided an added source of income to many families are providing financial aid to get impacted individuals some provisional income while they wait; banks, utilities, and phone companies are also waiving late fees and working with those impacted to establish a payment plan to lessen the burden of not having had a paycheck since the end of the year. If you have been furloughed, know that there is assistance out there. The Washington City Paper has put together “The D.C. Guide to the 2018-19 Government Shutdown,” where you can find information ranging from getting free food, to help with utility payment assistance, and more.

The Capital Chapter also wants to provide some assistance where we can. We understand that when money is tight, professional networking or professional development is not high on the list of priorities, but so important for everyone’s personal development. As such, we’d like to offer attendance to any upcoming events in February that we have planned for free to any furloughed federal employees. Just reach out to us via email at staff@ifmacap.org with the Program you wish to attend and the best way to contact you to get you registered for the event. Some of our upcoming programs include:

- SOME [CET Speed Interview Event (February 13th)
- What the Finance? (February 26th)

To our membership, I hope you’ll all find some time to help those impacted. Here are some things you can all do to help:

- Donate to a food pantry
- Donate to repair National Parks
- Volunteer to clean-up and pick-up trash in the Mall/National Parks
- Support businesses helping furloughed workers

We are a strong community that thrives because we all want each other to succeed, to be happy. Don’t be afraid to reach out to your community if you need help or guidance. At the time of publication the government is back up and running, but for a limited time while negotiations continue. The stability of the deal is unclear and many government employees will continue to need our support!

With hope,

Mayra Portalatin, SFP
President Capital Chapter of IFMA 2018-2019
Facility Engineering Associates (FEA)
By Stephen Meador, CEM, LEED AP O+M

Dynamic Glass, like many leading-edge building technologies, is at the confluence of sustainability, occupant health and well-being, and smart connectivity. Manufacturers compare the transformative impact of dynamic glass on the window industry to the impact of the smart phone on the cell phone industry. However, just like the smart phone, that transformative impact comes with a cost.

“The analogy is important as the magnitude of the difference is that great,” said Jordan Doria, Senior Channel Marketing Manager at Sage-Glass, one of the primary dynamic glass manufacturers in the United States. “We are capable of doing much, much more than a simple static window, so indeed we cost more.”

The cost of dynamic glass, along with basic product awareness, have been key factors limiting its adoption by building owners and managers. Dynamic glass has been more of a niche product, usually reserved for buildings trying to meet specific goals such as making a bold architectural statement, preserving views, or pursuing the highest levels of green building certification. Local examples include the Roosevelt High School atrium in NW DC, the Dirty Habit DC restaurant in Penn Quarter, and the American Geophysical Union (AGU) Headquarters near Dupont Circle. Even in Washington DC, considered a national leader in sustainable buildings, use of dynamic glass has been limited, although the market here is growing faster than the rest of the northeast corridor. That growth is due to the region’s premium real estate offerings, its vibrant new construction and major renovation activities, and its leadership in sustainability. While dynamic glass can vastly improve a building’s sustainability, there are benefits to this technology that go well beyond energy savings.

By far, the most common type of dynamic glass found in the built environment is electrochromic (EC) glass. EC technology has been around for decades, but has only been deployed commercially as architectural glass within the last 5-10 years. EC glass uses a thin film of metal oxides and low voltage electricity (needed only during transitions) to tint the glass to a desired level, blocking unwanted solar radiation while still maintaining some level of transparency. EC glass stands in contrast to other dynamic glass types such as photochromic (which reacts to light, ...
February 13, 2019 • 5:00pm - 8:00pm

Join the Capital Chapter and So Others Might Eat (SOME)/Center for Employment Training (CET) as we again join forces to support the development of the programs’ trainees and graduates. Chapter members will participate in “speed interviews” - short opportunities for students receiving services from SOME/CET to receive first-hand knowledge and feedback from FM members which will prepare them for job opportunities and interviews.

We are recruiting chapter members to serve as both interviewers and coaches - to share their FM stories, and to join us for a transformational evening, not just for the students, but for everyone. We look forward to paying it forward - please join us!

Click here to register

Location: District Center Atrium, 555 12th Street NW, 2nd Floor Washington, DC 20004

WTF (What the Finance)?

Budgets, Best Practices and Navigating All Things Financial in Facility Management

February 26, 2019 • Time: 5:30pm - 8:00pm

2019 - a new year, a new look to the future for capital renewal or equipment replacement facility needs. Year after year, many of us find ways of adapting to continually reduced budgets. One way to combat this trend is in disrupting it - finding a means of shifting the paradigm for your facilities. One of the most essential questions that we all face is that of how to get facility projects funded. Please join the Capital Chapter and fellow FMs as we help you navigate through the difficult world of facilities & finance. This is a great way to meet and network with fellow FMs, discuss challenges of your budget and how fellow FMs may have overcome them, and see how partnering with IFMA can support you in your career.

Attention Federal Employees: In an effort to assist those affected by the government shutdown, the chapter has extended complimentary registration for this event. Please contact staff@ifmacap.org to take advantage.

Click here for more information and to register.

Location: Kimball, 1130 Connecticut Ave. NW, #1150 Washington, DC 20006

Fees:
- FMs/Professional Members: $20.00
- Associate Members: $50.00
- Non-Members: $75.00

Save the Date - Annual Golf Outing

Mark your calendars for May 20th for the Annual CCIFMA Golf Outing! This year we will be at the International Country Club in Fairfax, VA. More information will be available soon. Check the website for updates.
Holiday Party – A Fun Night of Socializing at The Boardroom

We hope everyone had a wonderful holiday. On December 12th close to 130 members and friends celebrated at the chapter’s annual holiday party at The Boardroom in Clarendon, VA. The venue provided lots of space for mingling, great food and a wonderful theme of games, which are always fun to bring people together during the holidays. Kimball’s signature cocktail sponsorship provided everyone the opportunity to enjoy a Kimball Cosmopolitan with a lime wedge (for Trivial Pursuit). Korth Construction was our Twister sponsor. Thanks to both of our sponsors for their support!

The silent auction raised close to $3,400 which will be donated to Bright Beginnings. This is a record high so thank you to everyone who donated and participated in the auction. Established in 1990 by the Junior League of Washington, Bright Beginnings is a nonprofit organization that operates early childhood and family learning centers for children and families experiencing homelessness in the DC area. Its two centers offer free, full-day, year-round and developmentally-appropriate early childhood education for children ages six weeks to five years old. The chapter’s donation will help support these efforts.

Over the past year, we have received consistent feedback indicating that our Capital Chapter events are very warm and welcoming, and the Holiday Party continued with that theme. Chapter President, Mayra Portalatin, extended holiday wishes to everyone. One of the guests, the Director of Baltimore Museum of Art, even travelled by train from Baltimore to celebrate with us. Thanks to everyone for your continued support of the Capital Chapter!

Two Great Events to Kick Off the Year!

By Anne McGregor, Meridian

The Capital Chapter’s Membership Committee kicked off not one, but two events on Thursday, January 30th. The first event was the New Member Orientation, which provided an opportunity for attendees to come together to learn about IFMA and the impact on their FM career, while getting to know other new members. Rich Fanelli, FM Studios, discussed his tenure with the chapter and explained all the positive aspects which has impacted him personally and professionally. Attendees then divided into two groups, FM Professionals and Business Associates, to network with their peers. The orientation concluded at 5:30pm, which allowed attendees the opportunity to segue into the chapter’s networking reception.

The reception provided a casual gathering to network, ask questions, and mingle with Professionals and Associates. It was a lively and enjoyable event with excellent participation, especially considering the 15 degree temperature! Both events were held at Atlantic Media, located at the Watergate, 600 New Hampshire Ave., Washington DC. The venue is a beautiful facility overlooking Washington, DC. The chapter would like to thank Lee Mayer, Facilities Manager at Atlantic Media for hosting our events.

The Membership Committee has made an effort to utilize different FM locations for its events. It has worked exceedingly well as membership attendance has increased and the knowledge of the IFMA organization is imparted to a greater degree. Check the website for future membership events.
What’s Behind Your Walls?

Why every owner should invest in a robust plan for laser scanning and photogrammetry now, even if they aren’t sure how they are going to use them immediately. The data you gather during construction will pay dividends for the entire life of your building.

By Bert Aultman, Procon Consulting, LLC

Facility owners are heavily invested in the properties they own and manage, but that is often hard to tell when you visit the facility manager’s office. Some are still operating exactly like they did 20 years ago, with cardboard boxes, file cabinets, and drawing rolls. Some offices will at least have digital versions of that same information on their shared network drives. Either way, facility managers are still often armed only with 2D drawings and product specifications that didn’t match the building when it was delivered, much less after years of operations, minor projects, and repairs.

Even the most diligent and prepared professional will be challenged when relying on incomplete, poorly organized, or conflicting information. Poor or incomplete information leads to considerable unnecessary risk in the operation of your facility. It also creates inefficiencies in the day-to-day operations and maintenance activities that add cost and time even to basic tasks and may cause important preventive maintenance tasks to be missed. It makes it harder to diagnose issues or give direction to outside vendors or contractors during construction or maintenance projects, again leading to increased costs and added time. The end results are more outages, shortened life of critical systems, and increases to the total cost of ownership of the facility. Additionally, all of these situations are potentially disruptive to building occupants. Most could be avoided with more accurate, more complete, and better organized building information.

When it comes to facility management technology, many owners wait on the sidelines, rightfully concerned that the technology solutions available in the marketplace can be flawed, expensive, technically overwrought, or often all of the above. I don’t blame them, but in doing so they are missing opportunities to capture important information during new construction or major repair and alteration projects. Not only can many of today’s imperfect solutions be implemented effectively providing a return on the investment over the life of your facility, but capturing that data now will prepare the facilities team newer and better solutions that aren’t so far off in the future.

One of the first areas that owners can leverage right now with limited investment, easy payback, and no real risk is taking the opportunity during any major construction activity to perform 3D laser or lidar scans of infrastructure inside walls, above plenums, and in other areas that will be closed in. There is no better mechanism for getting high-fidelity, verified, as-built building information. This technology has matured considerably in the last five years which has led to lower prices, better product, and more availability. There are more highly qualified providers producing better results at considerably lower prices. Software providers have also introduced low cost or even free viewers that can display the resulting models in a robust BIM program.

An alternative to laser scanning that is low cost and low barrier entry that some owners should explore is photogrammetry. While the name makes it sound complicated, the current solutions require very little technical knowledge or training. Basically, photogrammetry uses multiple 2D photos, sometimes combined with low-fidelity lidar sensors, to create 3D models of a space. There are several providers, such as Matterport, which provide hardware and software necessary for an end-to-end solution, but there is also low cost software that can take data from a cell phone camera and stitch it together into a 3D “model” of your space. You will want to make sure that any tool, hardware or software, you choose will output data into a standard, non-proprietary file type, but at this point, most everyone supports multiple file types (or the .ifc file extension). The results do not have the same accuracy as a laser scan, but if implemented correctly they are certainly more valuable than 3,000 construction progress photos hidden on a shared drive. This is a definite case where the whole is greater than the sum of the parts.

Whether you have resources to spend on laser scanning or need to pursue lower cost photogrammetry, the technology is easily available today to provide immediate value to your team for the life of your assets. There is little risk to jumping in and using these tools today because the investment is low and the resulting model files are portable enough that they can be integrated into almost any technology you choose going forward or can provide value standing alone. The real risk is in the missed opportunity to capture information in a meaningful, structured way while the wall, ceiling, or mechanical space is open and available. Once those walls are in place, the only way to really know what is behind them is to break them open.

In a future article I will discuss how to add even more value by leveraging these models in a robust BIM program.

About the Author:

Bert Aultman, PMP is Manager of the Business and Technology Management Division, for Procon Consulting, LLC, a full-service asset management consultancy in Arlington, VA. Bert has managed multiple large technology implementation programs for both private and public clients. His practice areas include organizational and operational planning, change management, technology, capital and operating budgeting, performance management, and process improvement. Bert has a Mechanical Engineering degree from the Georgia Institute of Technology. He is currently managing a Program Management team supporting GSA’s Office of Facility Management and another supporting the Architect of the Capitol’s implementation of a new PMIS solution.
Creating a Realistic Project Budget
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Pricing check at 60% and 90% of drawing completion:

Budget and scope fine-tuning can occur as the drawings become better defined. If pricing is checked at 60% and 90% then the construction costs shouldn’t be a surprise when 100% A&E drawings are bid or priced out. Note: a great resource for incremental pricing checks are general contractors who have been pre-qualified to bid the project as either a negotiated bid by one general contractor or multiple general contractors for a competitive bid.

As you continue to refine the budget, you can ask some guiding questions to make sure you are on the right track and using all the resources at your disposal.

Project budget reality check:

1. Has the project budget been established by management as an arbitrary, not to exceed figure based on a defined scope, certain expectations and level of quality or is the figure somewhat flexible based on your conceptual budget pricing exercise?
2. Is there a project champion (executive) who is experienced in heading up similar types of projects that will represent you and your team’s interests?
3. Are there sufficient resources to implement and complete this project? (i.e. internal staff dedicated to the project and financial resources to hire qualified consultants and cover all other hard and soft costs including a contingency to cover the costs of any potential change orders?)
4. Does management have a process in place to get input and feedback from the end users and to control end-user change requests so that project change orders can be controlled?

As you practice these guidelines over time, continue to debrief after each project to review the original budget and lessons learned. As mentioned, don’t forget to add any new findings to your database of project costs for future use.

For more educational articles on effective management of facilities projects, visit the FM Studios blog page.
Get the Most from Your Membership with CFM, FMP and SFP Designations

A key benefit of IFMA membership is maintaining professional growth through the facility management professional program which offers three designations: Certified Facility Manager (CFM), Facility Management Professional (FMP) and the Sustainability Facility Professional (SFP).

The CFM credential sets the industry standard for continuing the knowledge and abilities of practicing facility managers.

The following individual recently earned CFM credentials:

Jason Buckingham
Ronald Kaczmarek
Omorede Rainey

You can also earn the Facility Management Professional (FMP) designation, a knowledge-based credential demonstrating a proven comprehension of the basics of facility management. The FMP designation can be completed in approximately 12 months, and FMP candidates may customize their training to build the specific knowledge they need to meet individual goals.

The following individual recently earned FMP credentials:

Cindy Clearwater
Hassan Corbin
Kion Gibbs
David Jimenez

IFMA’s SFP is an assessment-based certificate program delivering a specialty credential in sustainability. By earning your SFP credential, you will develop and gain recognition for your expertise in sustainable FM practices while impacting your organization’s economic, environmental and social bottom lines.

Facility Management Professional (FMP) Credential Courses

**FMP 0705: Operations and Maintenance** • Feb 8 - 9, 2019  
**FMP 0710: Project Management** • Mar 8 - 9, 2019  
**FMP 0715: Finance and Business** • Apr 5 - 6, 2019  
**FMP 0720: Leadership and Strategy** • May 3 and 4, 2019

Learn more at: https://execed.gmu.edu/fm

Organizational and Corporate Training

George Mason University offers Facility Management professional development programs designed to improve FM industry knowledge and leadership skills for employees and organizations. Choose from a comprehensive 10 course Facility Management Certificate Program, the FMP Credential Program, the SFP Credential Program, or a customized program designed specifically for your group.

Contact Lee Bennett today at 703-993-4805 to discuss how these George Mason FM training programs can help within your organization.
IFMA Foundation Update - January 2019

2019 Scholarship Applications Are Now Available!

The IFMA Foundation, IFMA chapters and councils, and the FM community has awarded more than $1.7 million USD to more than 500 FM professionals since 1991. This scholarship allows aspiring and practicing facility managers to achieve higher education.

Along with the scholarship, students are given complimentary registration to IFMA’s World Workplace Conference & Expo; offering them the opportunity to network and build relationships with leading FM professionals.

Winning recipients are divided into teams to participate in the IGNITE FM! Student Challenge. The teams are given time to solve a complex FM problem and then have an opportunity to present their solutions to an audience. Judging is done by FM professionals, with the winning team receiving a financial prize and recognition of their presentation. Click here for application and guidelines.

20 FREE Student Registrations for IFMA Facility Fusion 2019!

Good news! IFMA has agreed to provide 20 complimentary student registrations to the IFMA Facility Fusion Conference & Expo in Atlanta, GA April 8-10, 2019. The IFMA Foundation will host a lottery on Friday, February 16 for these 20 complimentary student passes. CLICK HERE to sign up for the lottery and complete the lottery form.

Currently enrolled students connected to an IFMA accredited degree program are eligible to submit a lottery form. Winners of the complimentary registrations will be asked to volunteer with IFMA conference activities. If you have questions about applying for a scholarship or the lottery for complimentary student registration contact: Christina Gonzales, Program Support Specialist at: christina.gonzales@ifma.org or 281-974-5651.

Get Linked into the Pulse of the Capital Chapter!

This is your invitation to get more involved with the Capital Chapter of IFMA through our LinkedIn Group! LinkedIn is a great tool to connect with those in the FM industry; stay informed on current events and industry news; and share your knowledge. Visit www.linkedin.com to create an account, then search for the group IFMA-Capital Chapter and follow the prompt to request to join. Note: This group is only open to Capital Chapter members. If you’re not a member, navigate to the chapter website and click the JOIN link at the top of the screen. We’ll see you online!
Is Dynamic Glass Heating Up in the Capital Region? Continued from page 3

like some eyeglasses) or thermochromic (which reacts to temperature), neither of which are controllable like EC. If EC glass experiences a power loss, it transitions to clear mode.

Architectural EC glass typically comes as double-paned insulating glass units (IGUs) that include a connectivity pigtail. Each window has its own IP address and can therefore be managed individually or in zones. EC windows can be controlled in various ways, including wall switches, mobile apps, photo sensors, and predictive models tied into a Building Management System. The models use building and environmental inputs, including real-time weather updates and sensor data, to tint the windows just prior to sun impacts. Other industry offerings include laminated impact windows (hurricane-rated) and large panes up to 6’ x 10’.

EC windows save energy (more on that shortly), but what makes them truly transformative is their impact on building occupants. Not only do EC windows minimize hot sun and glare when tinted, they do this without inserting something opaque, like interior blinds or exterior louveres, between the occupant and the outside. Occupants can therefore stay connected to the outdoors throughout the day, while natural light can augment building lighting in a controlled fashion. For employers, outdoor views and natural light can have a huge impact on considerations like employee recruiting and retention, absenteeism, and productivity. A study conducted by Future Workplace determined that employees consider natural light and outdoor views to be the most valued office perks. Another study by Cornell University determined that eyestrain, headaches, and fatigue were significantly reduced in buildings with EC windows. With employee costs (per square foot) typically exceeding utility costs by two orders of magnitude, it makes sense to invest in building technologies that not only save energy, but keep people happy, healthy, and productive.

That’s not to say energy savings aren’t key to building out this technology, especially since cost-effectively financing an EC project could be directly related to its level of savings. Energy savings are generated in a number of ways and are dependent on a number of factors, including geographic location. Since energy savings from EC windows are typically greater in cooling-dominated climates, the DC region is attractive in that respect. Ongoing savings can be substantial because of the reduced need for electric lighting (from increased daylighting) and reduced HVAC operation (from reduced solar loading in summer and passive solar heating in winter). This can be especially helpful in reducing peak demand charges during cooling season. EC windows can also reduce the size of required HVAC equipment during new building design or when retrofitting HVAC systems for improved efficiency.

Detailed research on the energy savings associated with EC windows in the DC region is not well-documented. However, based on generic modeling studies that looked at this and other U.S. climate zones, it appears EC windows can substantially reduce cooling loads and energy consumption (i.e. cooling loads by 20-49%, whole building energy use by 8-20%, and peak energy demand by 8-26%). Because energy savings are highly dependent on a variety of environmental and building factors, including total glazed area and comparison window types, it is critical to conduct detailed energy modeling to determine potential savings for a particular building scenario.

A local example is illustrative. The AGU project near Dupont Circle is unique in that it is both net-zero and a major renovation. The selection of triple-paned EC windows was one key to achieving a net-zero building. Joseph Dilenno, a Senior Mechanical Engineer at Interface Engineering, indicated that energy modeling estimated perimeter cooling load reductions ranging from 40% to 50% when utilizing dynamic windows instead of code minimum windows.

Like energy savings, estimating costs for EC windows requires an increased level of effort and analysis. Industry sales and marketing representatives are reluctant to share hard pricing information, but it’s an understandable effort to keep the uninformed from comparing apples to oranges. Dynamic windows provide a lot more benefits to a building than traditional windows, including eliminating the need to buy or maintain interior and exterior shading features, smaller utility bills, potential downsizing of HVAC systems, happier, healthier, and more productive occupants, and cost-effective points toward green building certifications like LEED and WELL. The price for EC windows seems as dynamic as the windows themselves. Prices have dropped significantly as economies of scale have taken hold, manufacturing has improved, and new competitors have come on-line. Still, for those interested in directly comparing the cost of dynamic windows to more traditional low-emissivity (low-e) windows, it appears that about 1½ to 3 times that cost is a good place to start.

View, Inc. is another big player in the dynamic glass industry. In a recent podcast, Jeff Riley, a sales executive for View Dynamic Glass, said that EC glass is a good investment because it improves building net operating income (NOI) through faster lease times and reduced utility costs.

“We deliver a positive ROI, simply by driving NOI, especially if you think of us as an amenity. You know, developers spend money on an art sculpture in the lobby, or a rooftop bar or a nice gym. No one is calculating ROI on their gym equipment, right?”
Is Dynamic Glass Heating Up in the Capital Region?  

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Given that an EC project may not always meet strict organizational return-on-investment (ROI) criteria for self-funding, other longer-term financing approaches could become attractive, especially if a situation calls for action sooner than later. While an energy savings performance contract (ESP) could be one approach, they typically come at a premium cost. Financing through Commercial Property Assessed Clean Energy (C-PACE) could be a better avenue for deploying EC more widely in DC region. C-PACE financing is available in the District, most counties in Maryland, and Arlington County, VA. According to program administrators, none of these programs has seen an EC project financed to date. This may be because C-PACE usually focuses on retrofitting existing buildings, while the cost and ROI considerations of EC windows have kept them off the list of common energy savings retrofits.

C-PACE generally provides up to 100% financing for qualifying commercial energy improvements to existing buildings, such as high-efficiency HVAC equipment, lighting, control systems, renewables, and shell or envelope improvements. C-PACE funding is repaid by the building owner through a property tax surcharge or directly to the capital provider. The property assessment transfers with the building if sold, and costs can be passed on to tenants. Financing terms vary by program. Minimum loan amounts usually fall between $25-100K, while maximum loan amounts can be $25M or more. Loan periods are typically 5-25 years. Projects are cashflow positive if structured properly.

C-PACE programs may require some sort of project efficiency or payback criteria to be met prior to financing, such as Savings-to-Investment Ratio or energy performance compared to code requirements. Scott Dicke administers the C-PACE program for Arlington County, VA. In addition to facilitating funding for energy saving retrofits to existing buildings, the program also funds new construction projects (up to 20%) if as-built energy performance exceeds current energy code by 15% or more. He says building owners and developers follow a standard practice to determine project funding eligibility, which would apply to projects involving EC windows.

“...to get the delta in performance, which determines their eligibility for C-PACE financing in Arlington County.”

Utility incentives may also be helpful. Pepco provides electric service to the District and some of the surrounding counties of Maryland. Pepco representative Eric Moberg said that while EC windows don’t currently fall under the standard incentive program for medium or large businesses, they would be eligible for a custom incentive if the project were deemed cost-effective based on modeled energy savings, materials cost, and installation costs.

For now, EC windows aren’t for everyone, at least not yet. However, the time may be now for some building owners and managers, depending on their timing and goals. For instance, a planned HVAC retrofit could align nicely with consideration of EC windows due to their impact on cooling load and therefore HVAC sizing. The argument could become even more compelling if improving occupant satisfaction or seeking green building certification are in play. From Jordan Doria’s perspective, the consideration is this:

“If someone just wants a ‘simple’ energy savings retrofit, dynamic glass probably is not atop their list. If it’s aggressive sustainability goals, preservation of views or maximizing daylight for occupant comfort, then dynamic glass is in the consideration set.”

New Member Spotlight  

Continued from page 3

other employees in leadership positions to become members in organizations such as IFMA, amongst other organizations that would be helpful to our career growth and advancement.

What interested you in becoming a member?
I wanted access to the knowledge of other professionals for peer input as my responsibilities continue to grow. I also want to tap into the adjunct services / vendor community as a resource for the different needs we have in our firm in general, and our Washington DC office in particular.

How do you expect the Capital Chapter to benefit your career?
I anticipate becoming very active in chapter events to grow my professional network within the FM community. I also feel that the chapter can help me gain additional facilities management knowledge through educational seminars, conferences, and online content.

Some of your favorites…

Movie: Lord of the Rings  
Food: Surf and Turf  
Hobby: Outdoor activities such as running and fitness workouts  
Vacation Spot: Dubai (visiting my family) and Hawaii  
Restaurant: Old Ebbitt Grille  
Weekend Activities: Hiking and hanging out with friends
Capital Chapter’s JOBnet Delivers!

Looking for a Job? Looking for a great candidate to fill a vacancy? Visit the Capital Chapter’s JOBnet and access jobs and candidates in the metro-DC area. The most recent job postings are listed below:

**Title:** Director of Facilities  
**Company:** Sidwell Friends School  
**Location:** Washington, DC  
**Posted:** 1/19/19

Sidwell Friends, a PK-12, co-educational Quaker day school, seeks a talented individual with executive-level skills and a strong business orientation to serve as the School’s Director of Facilities. This is a full-time, 12-month position that will report to the Assistant Head of School for Finance and Operations. The Director of Facilities will be responsible for the smooth operation of the total plant with focus on improving facilities and analyzing operations of the School’s two main campuses (located in Bethesda, MD and Washington, DC) situated on a combined 20 acres of approximately 545,000 square feet.

**Title:** Facilities Manager  
**Company:** Vectrus  
**Location:** Alexandria, VA  
**Posted:** 1/18/19

This position manages the facilities to provide efficient, economical and professional service to VMSC and surrounding VA portfolio. Performs work in directing, supervising, and coordinating all Facilities Management activities. Responsible for the preparation of plans and quality workmanship at all VA facilities, overseeing/performing building/equipment repairs, remodeling, budget preparation and management, office allocations, and management of sub-contractors.

**Title:** Project Manager  
**Company:** University of Maryland Baltimore County  
**Location:** Baltimore, MD  
**Posted:** 1/16/19

The incumbent will manage design and construction process for new construction and renovation projects. Specific duties include: Coordinate and lead project development activities from point of client conception through project completion; support the procurement of and the administration of contracts for the design and construction teams; create, coordinate and facilitate project schedules; prepare and maintain project budgets; liaise between internal clients, campus administrators, and external contractors; provide expertise in a professional field of civil engineering, architecture, electrical or mechanical engineering; coordinate project development, design review, contract administration, and support development of and implementation of campus standards and management guidelines; prioritize ongoing and new projects, as well as conduct research and gather information; and perform other duties as assigned.
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Capital Chapter Upcoming Events…

Feb. 13: **SOME/CET Speed Interview Event**  
District Center Atrium, Washington, DC

Feb. 26: **WTF (What the Finance)?**  
Kimball, Washington, DC

March 19: **Credentials Celebration**  
Tower Club, Tyson’s Corner, VA

May 20: **Annual Golf Outing**  
International Country Club, Fairfax, VA

Oct. 16-18: **IFMA’s World Workplace**  
Phoenix Convention Center, Phoenix, AZ

For more information, or to register, visit the Capital Chapter [website](#) or call **703-691-IFMA**.