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EBA WINTER JOURNAL

Environmental Bankers Association

In This Issue

A Message from EBA's President

Welcome to the Winter 2020 edition of our EBA Journal. I must begin by thanking co-editors Elizabeth Krol and Dianne Crocker—and their wonderful volunteers for putting this together. As usual, it exceeds expectations. Inside this journal our community expresses itself. I hope you notice that none of the authors claim to have all the best answers or try to set themselves above anybody else.

Don't take that to mean we don't ever disagree. But we've learned there is never just one correct way to look at something. While an agency action level might be black and white, the way to get from due diligence to making a deal is never a certain path. There are always multiple options for any problem, and we tend to enjoy the environmental chess game. We also like to talk about it. Please enjoy.

And as you enjoy this Journal, please share it with others, and especially with those who are not in your field. Networking was part of the reason we developed the Journal. We intended the authors would share it with prospective customers and others as part of their own marketing and in doing so spread more awareness of the EBA.

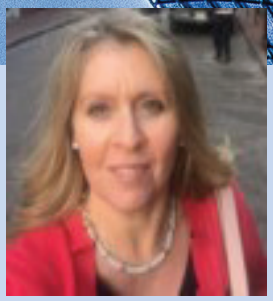
We're symbiotic this way, as the individual or company grows, so does the organization we belong to. Many of us realize today's new contact may be tomorrow's new customer or EBA leader or just a great friend to reconnect with at one of our conferences. It's to our great benefit that our members are by organization rather than by the individual. To Bankers and Affiliates, I challenge you to share us with other members of your staff. Don't be afraid. You're just being a leader.

And don't be afraid if they're not the most technically sophisticated, or even technical at all. Interest is more important than technical capacity for a trade association anyway. Marketing is just as important as expertise, right? It is to the EBA.

I recently twisted the arm of one of my heroes, Dennis Firestone, to intervene on behalf of a friend and his coworker, Amanda Horan, to get her a ticket to a conference. She shows up with little experience in our industry, but with a curious nature and a volunteer's spirit. I watched her own a few conversations and easily become one of the gang, all to Dennis's credit. No, she wasn't the single most triumphant technical expert of our industry. God, that would have been boring. What she became is a person who sees value in the EBA and who continually offers to help. PRICELESS! Thanks, Dennis.

And speaking of EBA heroes, just a few more of mine, in no particular order are Jeff Telego, John Rybak, Julie Kilgore, Rick Ferguson, Michael Bell, Lizz Barringer-Lagomarsino, Fred Dindoffer, Holly Neber, Cathy McGowan and Carol LeNoury. I also see the future in folks like Rita Wiggin, Ryan Marcos, Vanessa Chambers and Meghan Maltby to name only a few. We're in good hands.

Thank you,
Bill Sloan



Editor's Corner

Hello, EBA!

Welcome to sunny Phoenix for our Winter 2020 meeting—the Valley of the Sun and home of the Rock & Roll Marathon, as well as our own Lizz Barringer-Lagomarsino and Dennis Firestone. And if this is your first time at the EBA conference, we're happy you're here with us!

The Environmental Bankers Association celebrated its 25th Anniversary in 2019, and we are excited as we look forward to the future of the organization. We have a terrific meeting planned, and the future is bright for our esteemed organization as we adjust to a changing market landscape and the development of new technologies poised to reshape lenders' risk management.

This Winter 2020 EBA Journal includes some favorite features, like a recap of our Summer 2019 conference and a look to the future of our market, as well as articles contributed by subject matter experts on some of the most timely topics impacting lender due diligence.

We are honored to feature a contribution from Bloomberg Environment's Mary Ann Grena Manley and Dylan Bruce on the emergence of ESG (i.e., environmental, social, and governance) information in lenders' due diligence. CREW Network's 2019 President and dedicated EBA member, Holly Neber, generously shared a personal and insightful piece on her path to leadership. On the ASTM front, this edition features two important updates: one on the newly established BEPIE Energy standard which brings energy assessments into the mainstream for property due diligence, and the other on what you can expect in the next round of revisions to the E 1527 Phase I ESA standard. A team of experts at AEI contributed a piece on how recent concerns about PFAS risk are impacting environmental due diligence as states issue regulations to limit human exposure to these "forever chemicals." Last, Real Capital Analytics' Jim Costello shares his insights on how the landscape of commercial real estate lending is changing as traditional national/regional/community banks face aggressive competition from non-bank lenders and insurance companies.

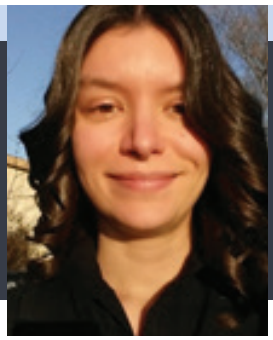
We are sincerely grateful for the contributions to our EBA Journal by these our authors—and to the EBA Journal Committee. The EBA is fortunate to have such talented, experienced and generous professionals among its members. As always, we welcome your recommendations for topics and content for the Summer 2020 edition of the EBA Journal.

Best wishes for a productive and prosperous year ahead!

All the best,
Dianne & Elizabeth

June 2019 Summer Recap

Author: Ruxandra Niculescu, REM
GSI Environmental



The June 2019 Summer conference was the conclusion of EBA's year-long 25th anniversary celebration, but it also marked the start of exciting EBA exclusives, and continued traditions that have become a hallmark of these conferences.

The conference crowd packed the seats to learn what proposed ASTM revisions were on the horizon. A recurring issue raised by EBA members was the consistency (or lack thereof) in reports crossing the desks of lenders, and whether the E 1527 standard can be used to streamline and remove redundancy in the Phase I ESA. A heated discussion also arose over whether depth to groundwater should be included in a report and whether an environmental professional should be the only person allowed to perform site reconnaissance.

The topic of emerging contaminants was brought up during the ASTM revisions track, and left many stumped on how to accurately assess PFAS risk given that these substances are not regulated by the federal EPA under CERCLA. Currently, the consensus remained to address emerging contaminants as a non-scope consideration; however, this may soon change as new regulations are developed, and consultants and lenders may need to amend their current stance. Additional proposed revisions to keep in mind are clarifications on adjoining and adjacent properties, data gaps, and chain of title/AUL search requirements.

Another well- attended session at the summer conference was one addressing the U.S. Small Business Administration's updates to the environmental guidance in the SOP 50 10 5 document. The agency made a number of clarifications on issues like: how many sources are needed in an RSRA (only as many as is necessary to fill in data gaps) and testing requirements for child-occupied facilities (i.e., lead in paint and drinking water – adapted from HUD guidelines).

Case studies were incorporated into many of the sessions, providing real-world examples of when things go right, and when they can go terribly wrong. One such case was discussed in Tuesday's Integrating Environmental & Construction Risk Management – Ongoing Challenges of Working Towards a Common Goal. The case was unique in that the environmental consultant had somehow managed to perfectly delineate around contamination beneath a building (no contamination was identified despite a well-implemented scope). It wasn't until the construction team began work that contamination was discovered, resulting from a drain failure inside the building.

If you missed the summer conference, be sure to download a copy of the EBA Journal online and read the start of the three-part mini-series developed specifically for EBA on the elasticity of Phase I ESA pricing. It will be a great introduction to the 2020 conferences and a series of focus group meetings throughout the New Year. ▪

ASTM Announces Publication of E3224 to Incorporate Building Energy Performance into Property Due Diligence

Author: Anthony J. Buonicore, P.E., Sustainable Real Estate Solutions, Inc,
Chair, ASTM Building Energy Performance Task Group

Sound business considerations, coupled with growing regulatory requirements, are driving prospective buyers of commercial real estate to include an assessment of building energy performance in the property condition assessment (PCA). A building that is an energy under-performer, as compared to its peers, may find its competitive position in the marketplace and its valuation negatively impacted.

In addition to building owners and investors, lenders financing property transactions also are increasingly becoming interested in understanding a building's energy performance. Lenders have always had a keen interest in understanding any factors that can impact the value of their collateral and the creditworthiness of their borrower. A building's energy performance may impact both. Energy efficient buildings have lower energy costs that can increase cash flow which will improve the affordability of loans or mortgages, and reduce repayment risk. Recent studies on CMBS loans have even suggested that energy efficient buildings may experience a lower risk of default. Moreover, energy inefficient buildings may be more difficult to rent or sell, and are at higher risk of obsolescence. As such, it becomes increasingly likely that pre-acquisition due diligence consultants will be asked to include an assessment of building energy performance in their PCA.

Unfortunately, existing PCAs following ASTM E2018 do not address a building's energy performance. This shortcoming was the principal driving force for development and recent publication of ASTM E3224, Building Energy Performance and Improvement Evaluation (BEPIE) Standard Guide. The BEPIE is designed to be conducted as an adjunct to the PCA, with a goal to determine whether a building's energy performance is under-performing compared to its peers, and if so, identify the cost of potential measures to improve energy performance and at least achieve parity with peers.

The BEPIE scope-of-work includes:

1. collection of building and energy-consuming equipment information, including whole building energy consumption, most of which is already collected in a standard PCA;
2. weather-normalizing the building's baseline energy consumption; benchmarking the building's energy consumption by comparing it to the energy consumption of peer buildings in the same geographic area and climate zone; and
3. determining if the building's energy consumption meets, is greater than ("under-performing") or is less than the energy consumption of peer buildings.

If the building's energy consumption is "under-performing" compared to its peers, the BEPIE scope-of work includes:

- evaluating the extent to which the building is under-performing;
- based upon the survey conducted in the PCA, identifying potential energy efficiency measures to improve the building's performance to at least the level of its peers; and
- providing a probable cost estimate for these energy efficiency measures.

Two approaches to perform a BEPIE are included in E3224:

1. A screening assessment designed to be conducted prior to an acquisition, i.e., during due diligence as an adjunct to the standard PCA; and
2. A more comprehensive assessment (such as an ASHRAE Level 2 energy audit) that includes more rigorous investigation as may, for example, be conducted post-acquisition by a building owner seeking to make an investment in energy efficiency improvements.

The principal focus of E3224 is on conduct of the screening assessment.

The BEPIE screening assessment is designed to be a cost-effective and valuable adjunct to a PCA for the following reasons:

- Most of the information needed to conduct a BEPIE screening assessment is already collected in the standard PCA, minimizing the incremental cost. As a result, it is expected the BEPIE will be a streamlined and cost-effective addition to the standard PCA scope-of-work.
- If a building is an energy under-performer as compared to its peers, the probable cost to improve energy performance will likely be viewed as another "deficiency" in purchase price negotiations with the seller. Moreover, any associated price reduction may be used by the purchaser for post-acquisition energy improvements.
- The "split incentive" barrier associated with triple-net lease buildings (where the owner pays for energy improvements, but the tenants receive the energy savings benefit) would no longer exist as the cost of energy improvements would likely have already been taken into consideration in the purchase price, i.e., as a price reduction.
- In those areas of the country where building energy disclosure regulations exist, PCA consultants would be providing a valuable service to their prospective purchaser clients by advising them that such public disclosure exists which may impact the building's valuation and competitive position in the market-place.

As commercial real estate owners, investors and lenders gain valuable insight to potential impacts and risks associated with a building's energy performance, it becomes increasingly likely that such end-users will request their PCA consultants to include the ASTM E3224 BEPIE screening assessment as an adjunct to their standard PCA deliverable.

A copy of the E3224 BEPIE may be obtained from ASTM at www.astm.org. ▪

UPCOMING CHANGES TO ASTM E1527: A Sneak Peek at Proposed Areas of Revision

Author: Elizabeth Krol, PG, EP, National Client Manager, Partner Engineering & Science, Inc.

For nearly two years, a dedicated task group of more than 74 users (or lenders) and 141 producers (or consultants, data providers and others including attorneys), many of whom are active EBA members, have been working together to review and improve the current ASTM E1527-13 standard. Upon initial review, focus groups were developed to address key areas of the standard that we determined warranted revision. The following article summarizes the work performed to date. This is an ongoing process, and additional review and revision will be incorporated in 2020 based upon comments to the initial ballot received in 2019. Please know that these are proposed changes, and nothing will be final in the updated standard until 2021. The input of Users, especially lenders, is wanted and needed, so please get involved…now is the time!

Why is it important to get involved?

As savvy EBA members know, the ASTM E1527 Phase I Environmental Site Assessment (ESA) standard is the guidance document by which our industry most closely adheres to ensure that high quality, thorough, consistent due diligence is performed to assess risk at commercial properties. Two interrelated trends in our industry are occurring simultaneously. These include the requirements of experienced lenders for more rigorous debt underwriting, concurrent with the demand for consultants to review increased volumes of data in less time and often without additional budget. Strengthening the standard, while leveraging technology, offer solutions to ensuring more effective due diligence.

Where does the standard originate?

ASTM International, formerly known as the American Society for Testing and Materials, is a global membership organization of industry experts (www.astm.org), comprised of more than 30,000 members from 140 countries, which has developed over 12,000 ASTM Standards by voluntary consensus. The goal of all ASTM standards is to enhance performance and build confidence for consumers to help our world work better, including such diverse consumer products as concrete and consumer protections such as continuing obligations (also known as Activity and Use Limitations, AULs). As such, these industry standards are reviewed, updated and renewed regularly.

Where does the E1527 Phase I ESA standard fit within the ASTM organization?

The ASTM E1527 standard resides within Technical Committee E50 Environmental Assessments, Risk Management and Corrective Action; Subcommittee E50.02 Real Estate Assessment and Management; and Task Group E1527. The original Phase I ESA standard was produced in 1993 and has been updated several times in subsequent years, resulting in the following versions: ASTM E1527-93, -94, -97, -00, -05, -13, and pending -21
.

What is the time horizon of reviewing and revising the standard?

ASTM standards are generally updated on a 3 to 7-year cycle, which once begun, takes approximately 2 years to complete through consensus and balloting, then EPA approval and publication. The following is an overview of the pending status of ASTM E1527-21 and timeline to get there.

- E1527 Task Group reconvened in February 2018
- Compiled industry issues from users and producers (October 2017-April 2018)
- Legal review and Focus Group Compilation (2018-2019)
- First Member Ballot of Redline (September 20, 2019 to October 20, 2019)
- Address Negative Comments (October 2019-January 2020)
- Second Member Ballot/Address Negative Comments (March to October 2020)
- Submit to USEPA (January 2021)
- USEPA Approval (December 2021)

What are the main areas of review of the proposed revisions?

One primary objective of the proposed revision is to "clean up" the current 1527-13 standard by addressing some "housekeeping issues." These include: clarification of various definitions; improving the Physical Settings section (to add site-specific sources when identified); State and Federal Database Review (names cleaned up, search distances are unchanged); requiring photographs from reconnaissance (documentation of field observations is a critical component of strengthening the standard); consideration of PCBs Building Materials that are part of the building structure (although they are "non-scope considerations," discuss with clients who are considering renovation/demolition); clarification of Site vs Subject Property vs. Property (the work group came to consensus that Subject Property is the appropriate way to reference the target property of the assessment).

What are the substantive issues in review?

Substantive issues include the addition or clarification of notable definitions:
Responsible Charge (new – the Phase I ESA must be under the direct control or supervision of the Environmental Professional, EP);
Significant Data Gap (new – EP must comment on the relevance or significance of the data gap);
Historic Recognized Environmental Condition (HREC - new pathways must be identified, if any);
Controlled Recognized Environmental Condition (CREC – do the current onsite conditions satisfy the current regulatory risk-based closure standard?);
AULs/Environmental Liens in Title Records (this is a User Responsibility that EPs often take responsibility for their clients, the "shelf life" of these title records should be reviewed and clarified).

What is new pertaining to site visits?

Site visit and interviews have been a key area of focus for the working group in the proposed revisions. Although many would prefer that an EPA-defined Environmental Professional conduct the site visit and interviews, at a minimum, these activities must be performed by an assessor who is under the Responsible Charge of an EP. In future Phase I ESA reports performed under the proposed updated standard, it may be expected that clarification be provided in each report of who conducted the site visit and interviews, such as EP vs. Responsible Charge, with explanation of the training and experience of the onsite assessor, such as a specialized knowledge of industrial or agricultural properties. Observations and negative observations must be documented with photos and described in the body of the report. Another important definition is to remind the user that the Phase I ESA report represents a Point in Time of observations, historical records and database review, all of which have a brief 6-month "shelf life." In addition, there is recognition that increasing use of Aircraft or Drones may

present an opportunity to evaluate rural and/or large tracts of undeveloped land, which also presents security/privacy issues, safety concerns and pilot licensure requirements.

What is new pertaining to Historical Research?

This key focus group was tasked with the goal of strengthening historic sources, widely considered to be an area of weakness in the current standard. Vapor encroachment case studies of retail properties with former "one-hour cleaning" tenants demonstrate why thorough historic research is so critical to understand potential risks associated with these operations. The Big Four of Historic Sources: Aerial photographs, fire insurance maps, city directories, and topographic maps, should be reviewed, and/or a detail explanation provided as to why these sources were not pertinent and/or additional sources were utilized, especially for geographic variations. Key objectives of the historic source review process include understanding developed use back to 1940 (including agricultural/fill for subject property AND adjoining properties, which many EPs evaluate presently); identifying past occupant(s) or structure alone may not be enough to stitch together the property history to paint the whole picture; historic sources can include person, place, or entity with knowledge of the history of the subject and adjoining properties. All historic sources must work in concert to understand the former use and occupants of the subject property, and the EP is encouraged to utilize multiple sources to corroborate the site history. This focus group has endeavored to establish what is good and customary commercial practice, and encourages EPs to document their sources, ensuring that they are reproducible by the User during their review of the Phase I ESA report.

What is new pertaining to Findings, Opinions and Conclusions?

In this key area of the report, EPs are encouraged to document and explain how they arrived at the conclusions presented in the report. Conclusions should include recognized environmental conditions (REC), CRECs, HRECs, and Significant Data Gaps. The EP should present the logic, reasoning, and rationale for identifying RECs as well as CREC, HREC, significant data gaps, and de minimus conditions. The EP should include their opinion regarding the need for additional investigation, and further explanation pertaining to the specific need for additional investigation may be warranted. Although some Users prefer that Findings and Opinions be presented in a separate document, they may be combined in the Phase I ESA report at the EP's discretion. Significant Data Gaps may impact the validity of the Phase I ESA reports, so the EP should comment on potential for release and likelihood of conclusion if missing information available.

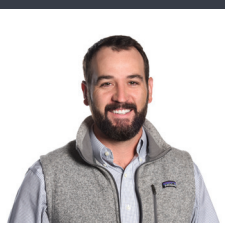
What is new in the Appendix to Standard E1527?

The proposed changes to the Appendix might include enhanced definitions, as well as inclusion of emerging and natural contaminants (PFAS, 1,4-dioxane, methane). Additionally, the committee is proposing an illustrative REC Logic Flow Chart and Example Case Studies, as well as a Suggested Table of Contents/Formatting to guide conformance of the standard for Phase I ESA report deliverables.

The changes proposed above are an important start, though by no means the final step, in the path toward producing the next version of the ASTM E1527 standard. Future committee ballots throughout 2020 will provide additional clarity on final additions and changes. ASTM guidance documents evolve based upon industry best practices, and benefit immensely from the investment by actively engaged members of our community who are contributing to this process. The full work group and focus groups meet frequently – your participation is encouraged and most welcome! ■

ESG Considerations in Environmental Due Diligence

Authors: Mary Ann Grena Manley, Deputy Editorial Director, Bloomberg Environment and Dylan Bruce, Managing Editor, Bloomberg Environment



What is ESG?

Recently abuzz in many practitioner circles is the acronym **ESG**, which refers to **environmental, social, and governance** information surrounding a company, a security instrument, or an asset. Although traditionally analyzed through the sustainable investing lens, recent trends indicate that ESG metrics are being looked at more broadly and in a variety of scenarios, including in more general risk management contexts.

Common ESG metrics include pollution or greenhouse gas emissions, resource and energy consumption (both fossil fuels and renewable energies), workforce diversity, supply chain oversight and cumulative impact, corporate governance ethics, as well as community and social impact, just to name a few. Interestingly, in the U.S., the investment community, shareholders, and consumers, rather than regulators, have driven corporate reporting and disclosure of ESG information. More recently, evidence of stronger financial returns correlating to strong ESG performance also have bolstered this trend toward greater ESG transparency. Regardless of drivers, it is becoming increasingly important for stakeholders, including lenders, to identify and better understand the full scope of ESG-related risks and manage them effectively.

ESG Considerations as Part of Environmental Due Diligence

The environmental due diligence process is intended to comprehensively identify current and/or potential environmental liabilities and risks on or near property. While traditionally such inquiries focused primarily on statutory liability and state-law counterparts, environmental due diligence also may contemplate related other "non-scope" risks such as lead-based paint or asbestos, as well as business risks that could inform a change in pricing or impact how a deal might be structured. As such, it is important for lenders, consultants, and other stakeholders consider whether ESG factors such as climate risk due to greenhouse gas emissions, or flooding during extreme weather events, are factors that should be considered as part of environmental assessments. Doing so would help identify, and if necessary, mitigate existing and potential ESG risks. Already, ESG considerations have become core to the critical due diligence processes that companies go through for mergers and acquisitions of other businesses or corporate assets.

In addition to identifying and evaluating immediate risks, another core purpose of environmental due diligence is to determine where long-term value is vulnerable to environmental factors. Focusing on the "E" for example, climate risk (to include factors such as a property's carbon footprint as well as physical risks related to extreme weather) is inextricably and increasingly a factor in the constellation of environmental factors that may affect a property. Therefore, a logical conclusion is to incorporate climate, and possibly other ESG risk considerations, when evaluating potential immediate and long-term environmental risks to the subject property/collateral.

Why Now? Beyond Sustainable Investing

To date, the investment community has been the leader in evaluating ESG related risks and opportunities which has resulted in increased corporate transparency and reporting/disclosure of related metrics. While that market continues to mature, there are indications that ESG factors are being considered more broadly and are getting increased attention from other sectors including regulators, rating agencies, the insurance market, and financial institutions. Federal Reserve officials have also warned of the economic risks of climate change, which could affect bank lending practices and real estate value, among other consequences. Climate change is a threat that risk managers can't ignore, Federal Reserve Bank of New York Executive Vice President Kevin Stiroh told a risk forum Nov. 7, 2019. ''The U.S. economy has experienced more than $500 billion in direct losses over the last five years due to climate and weather-related events,'' Stiroh said.

Financial Institutions. In the investment community, companies and entities engaging in ESG and climate-risk considerations often look to voluntary frameworks that have developed to help guide their efforts and to create consistency in the market. ESG frameworks help companies identify relevant climate and environmental risks and provide guidance on how to measure these risks and how to communicate these risks to the investment community and consumers.

Similarly, more than 100 financial institutions, including Bank of America, Citigroup, JP Morgan Chase, and Wells Fargo have signed on to follow the International Finance Corporation's Equator Principles. According to the IFC's website, the Equator Principles are "a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in development projects."

By signing on, these financial institutions commit to implementing the EPs in their internal environmental and social policies, procedures and standards for financing projects and will not provide Project Finance or Project-Related Corporate Loans to projects where the client will not, or is unable to, comply with the EPs." Therefore, climate and social risk identification, valuation, and mitigation planning are built into the lending agreement.

This type of action by major lending institutions is a signal that the banking industry is and should be paying attention to climate and other ESG risks as part of lending decisions.

The practice of climate risk analysis, of institutions looking inward at their performance and outward at their impacts, serves multiple purposes. Primarily there's the purpose of measuring and mitigating their exposure to climate risks, but by doing just that these institutions are also creating and encouraging the opportunities afforded to institutions that are perceived to be proactively doing so, i.e., effectively managing reputational risk.

Rating Agencies. In response to increased demand for ESG data by investors and regulators, ESG considerations also have received a fair amount attention from the Big Three rating agencies. Fitch Ratings, Moody's Investor Service, and S&P Global Ratings, along with various other smaller or regional credit rating agencies, have signed onto the United Nations Principles for Responsible Investment's ESG In Credit Ratings Initiative, which aims to enhance systematic and transparent consideration of ESG factors.

In January 2019, Fitch Ratings initiated a scoring system that illustrates how ESG factors impact individual credit rating decisions. These relevance scores are sector based, entity specific, and currently are publicly available. Fitch intends to keep these scores updated on an ongoing basis. In June 2019, S&P released its first ESG evaluation with an emphasis on how ESG factors impact overall corporate performance. Although Moody's does not currently have a scoring system, it too has indicated that ESG performance is being factored into ratings.
As further evidence of the increased interest in and demand for ESG data, both S&P and Moody's this year purchased companies that evaluate ESG data. It is clear that the analysis of ESG data is becoming more and more mainstream.

Regulatory Lens. In the federal regulatory context, public companies are required to disclose information to the Securities and Exchange Commission that could materially impact a company's performance. Regulation S-K governs required disclosures of reporting companies, and includes two sections that are particularly relevant to environmental disclosures: Item 101: Description of Business and 103: Legal Proceedings. Item 101 requires the disclosure of any "material effects" that compliance with environmental laws and regulations may have on capital expenditures, earnings, and competitive position. For many companies this could include estimating the effects and costs of very new or changing environmental regulations irrespective of substantial uncertainties as to the effect and cost of these new laws on a company's business. Item 103 applies to pending legal proceedings and requires disclosure of "material" litigation, i.e., other than "ordinary routine litigation incidental to the business." Instruction 5 to this item designates an environmental penalty of $100,000 or greater as not being "ordinary" litigation. Although not directly relevant for ESG disclosure purposes per se, it is worth noting the SEC has proposed rules that would increase this threshold amount to $300,000.

While these SEC nonfinancial disclosures have traditionally focused on straightforward environmental compliance and litigation factors, the SEC issued a concept release in 2016 seeking stakeholders' input on ESG disclosure, indicating it is trying to determine whether its approach needs to be modernized to account for climate and other ESG risks. In fact, companies are increasingly including climate risk statements in their 10-Ks, but there is very little

guidance or structure around how that information is most accurately reported.

Therefore, it seems likely that with the continued attention to and better understanding of climate and other ESG-related risks, we will see increased regulatory scrutiny of the disclosure and reporting of these risks in the future. As the regulatory framework evolves and modernizes, understanding and determining the materiality of climate and more general ESG-related risks should be paid attention to by all interested stakeholders.

Risk Categories

One particularly core ESG consideration that should be front and center in a real estate transaction, and that largely falls outside the scope of, traditional environmental due diligence, is climate risk. Several key risk categories are discussed below, but keep in mind that climate risks do not occur in a vacuum and often are inextricably and intricately connected.

Physical Risks. Climate risks to real property are myriad, but the primary risks are physical, including but not limited to flooding, sea level rise, drought, and exposure to wildfires and extreme weather events. Especially vulnerable properties are those that are located close to a coastline; located on a river, estuary, or delta; located in a drought prone area; or located in an area prone to severe weather events.

Transition Risks. Climate and other ESG risks are not merely physical though, and often carry more nuanced pitfalls. One such risk can be aptly called "transition risks." Transition risks may refer to changing policies and regulations, changing costs of doing business, and resource risks. Transition risks that impact real property may come from the cost of moving toward lower emission technologies, costs of infrastructure improvements, and other general costs of transitioning to a lower carbon economy. In the context of real property, transition risk is often borne of existing or growing physical risks – e.g., stormwater management or damage remediation, waste and wastewater management, spill management or remediation, rising energy costs, and unforeseen construction costs. Like physical risks, the cost to insulate that risk is more than the cost of doing nothing, but if a damaging climate event comes to pass, the cost of insulating that exposure after the fact is exponentially higher than if something were done before.

Reputational Risks: Another more indirect climate risk is that to reputation and brand. As previously mentioned, the burgeoning ESG market was engendered by consumers and investors, not by regulators and companies. Investors and consumers sought to move away from investment vehicles that are overly vulnerable to environmental, social, or governance risks, and disconnect from securities or companies with poor ESG/sustainability performance. In the world of ESG-driven investment, companies known for sustainable, long-term value win out over the companies that only value the greatest immediate returns irrespective of ESG impacts. Ironically, the company that ignores climate risk invariably creates reputational risk by doing so.

In the environmental due diligence context, the real estate transaction that quantifies and mitigates climate risk exposure, and prioritizes long-term beneficial use with minimal environmental impact, will create greater, more sustainable investment value. The entities (lenders, consultants, seller and purchasers) involved in that transaction receive not only investment return, but also reputational return.

Litigation Risks: Finally, there is the risk of litigation. Currently, there is substantial uncertainty over the future of climate-related litigation. Nevertheless, litigation risk related to climate impacts on vulnerable real property, especially where this risk is foreseeable, is not likely to decline. Exacerbating uncertainty is outdated, inadequate, and backward-looking weather data sources; building codes that fail to incorporate energy efficiency and resiliency mandates; and lack of coordinated federal and state regulatory efforts.

As such issues are resolved, industry standards are established, and regulatory bodies clarify and codify compliance requirements, it may only be a matter of time before we see increasing negligence and tort claims, as well breach-of-contract claims brought by lenders, buyers, sellers, and industry professionals who perceive themselves as damaged by rising tides, extreme weather events, wildfires, or other events tied to climate change.

Measuring Risks: A common refrain heard and repeated throughout the ESG and sustainable investment community is that you can't manage what you don't measure. In the context of real property, this axiom couldn't be truer, and unfortunately the risks involved are uniquely profound. Where actionable, measurable data is key to managing risk, it is important to always consider the reliability, amount, and ability to normalize your data. It an era of big data, it is imperative to understand the data source as well as the context in which it was collected, applied, and analyzed. This is especially important when you are comparing data

sets – if the data points are not normalized, you may be unintentionally comparing apples to oranges. Another thing to keep in mind is the speed with which data delivery and technology is evolving. Next generation, digitally-driven ESG data is emerging and being delivered via new tools such as satellite imagery and blockchain-verified tracking of supply chains. Data increasingly will be more available to the public as well, making it more important than ever to verify all data touchpoints you are using for risk assessments and determinations.

Incorporating ESG into Environmental Due Diligence and Risk Management Strategy

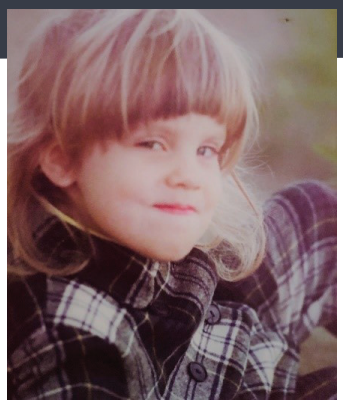
For reasons discussed throughout this article, it will become increasingly prudent for parties, including lenders, to consider expanding the scope of environmental due diligence to include ESG-related risks, such as climate-related risks, into their assessment and risk management processes. Depending on the property or facility, factors like location, carbon footprint, operational resiliency, and supply chain risks could potentially pose a more significant material risk than traditional environmental risks related to legacy hazardous waste or the more traditional environmental compliance-related risks. While the focus of this article has emphasized the risks that fall under the "E" of ESG, certainly social and governance risks will continue to evolve and demand increased scrutiny, and should be on the radar of lending institutions.

With that in mind, we offer some potential steps that might be help parties get started in integrating ESG factors into the environmental due diligence process.

- Consider an incremental approach. If tackling the universe of ESG-related risks all at once is daunting, consider an approach that focuses on the risks that seem most impactful or relevant to your business, and build out your ESG due diligence/risk management strategy from there.
- Look at both short-term risks (physical) and longer-term risks (impacts related to source availability, supply chain interruptions, operations resiliency) of your entire portfolio to ensure the full scope of potential risks is on the radar.
- Decide how your organization will identify, track, and be prepared for the transitional risks. Transitional risks might be among the most difficult to identify, measure, and quantify because they are likely to evolve or change over time. Therefore, coming up with a strategy on how to manage these less-tangible risks is important.
- Consider a policy/strategy regarding reputational risks. Although this article focused mostly on ESG risks, consider that although there are potential negative impacts to lenders and other stakeholders who ignore or don't fully account for ESG risks, there also is a huge opportunity to adopt favorable policies that will strengthen your brand. Being proactive in this space can make you an industry leader in sustainable lending practices.
- Be aware of ongoing litigation. The potential for litigation is always a wildcard. As noted above, in a climate of legal and regulatory uncertainty, conditions are ripe for litigation in this emerging area. Therefore, it is important to be aware of any emerging legal trends related to ESG risks and impacts that could potentially give rise to new liability, and as needed, build that into your environmental due diligence and risk management strategies.
- Incorporate priority factors into due diligence screening or risk management process. As you build out your strategy for managing and mitigating climate and ESG-related risks, it may be wise to incorporate the relevant ESG risk factors into your overall due diligence and risk assessment processes. This could mean creating a supplemental "ESG" non-scope items checklist, updating current risk management policies, reviewing availability of environmental insurance to protect against these emerging risks, or some hybrid approach. Regardless of how it's done, it is prudent to start incorporating ESG factors into the broader due diligence process. This will ensure that all potential ESG-related risks and opportunities are assessed and factored into each relevant piece of due diligence and the overall transaction process. ■

My Path to Leadership & Lessons Learned Along the Way

By Holly Neber



In a home video taken in Jackson Hole, Wyoming, I am 5 years old and standing on a big round rock in the middle of a babbling creek. The Rockies shine in the background and the pine tree breeze ruffles my hair. My mom hands me the microphone as she begins the recording. I think she expected me to talk, as my brother did whenever he was on camera, but instead I leaned down with the microphone and held it to the surface of the water. I said “listen… isn’t that pretty?”…. And then I just held the mic there for a few minutes until Mom finally turned off the video. I guess I was kind of an odd little kid.

Although I was quiet, I was very sure of myself and full of confidence. I grew up around strong women. My mom was an activist and showed me how to get involved and speak up. We protested nukes and marched to save the whales and lived off the grid in a teepee for a time. She was and remains an unconventional person who speaks and lives her truth, even when, as a teenager I was immensely embarrassed by the ways in which we were different. My grandmother was more conventional in many ways but had also been rebellious, being among the first women to study architecture at University of Kansas.

While I had these influences in my background, I felt very uncertain in my 20s. I dimmed my light and became quieter. I didn’t want to be controversial or stand up or stand out. I wanted to fit in. Have you ever noticed the unfortunate side effect of fitting in? Turns out, it’s impossible to truly belong if you’re only sending an imitation version of yourself into the “in”, wherever that may be.

So how did I rediscover my spark and my voice?

My AEI family has been the center of that journey. The founder of the company, Craig Hertz, entrusted me with opportunities to shine from the beginning. He seemed to see something in me that I didn’t know I had. He put me in situations that were a stretch for my abilities, and he was there to help if I missed a step. My co-workers became my best friends as we grew together. My job wasn’t just a job to me. It was my home and where I found my tribe.

Environmental Bankers Association (EBA) has also been a big part of my leadership story. I remember the first time speaking at EBA on a panel organized by Georgina Dannatt at the Chicago conference. Here was

another instance of someone in a position of influence, in this case Georgina, seeing potential in me. I was not the most amazing speaker that day but I survived and several supportive people provided suggestions to help me grow as a speaker. Through this experience and Julie Kilgore's hikes, EBA Gives Back and lots of good times, EBA became another tribe for me.

Then Commercial Real Estate Women (CREW) entered my life. CREW is an association for advancing women in commercial real estate-related fields, including environmental/engineering, architecture, finance, development, brokerage and law. True confession: I didn't feel like I would fit in with a group like CREW. My nature girl ways put me more in hiking boots rather than high heels. Luckily for me, a client basically forced me to join. Again, someone saw potential in me and pushed me along. I walked into my first meeting expecting to suffer through it. That's not what happened.

I met women who are strong, imperfect, fearless, ambitious and courageous, and some who even love the outdoors and nature as much as I do. Nobody made me feel like an outsider. In fact, they inspired me to stand up, stand out, and serve, and this year I enjoyed one of the biggest honors of my life so far – to serve as President of the global CREW Network organization.

Leadership transforms the leader. The pressures and opportunities reveal the essence of who you are. Three things I've learned from my mentors throughout my leadership journey are:

1) Executive presence is simply presence. Presence is showing up and allowing yourself to be seen.

I used to compare myself to the other CEOs in our industry. Some of you might be reading this. I know you get up super early, work out, have a healthy breakfast, and are always on, always brilliant, always 20 steps ahead. Some of you are definitely not introverts like I am. You recharge by being around others, and you're always being strategic and dynamic. Your energy is contagious and you are a true thought leader. I used to think you were so much better than me. And you are. At being you, you are.

So I learned to nurture the ways in which I'm me and focus on owning my strengths. I've learned that I'm happiest when I'm learning new things, working with people I love and respect. I've learned that being a quiet leader has its own rewards. My strengths are the ability to listen deeply and respond thoughtfully. My peaceful, calm demeanor is someone else's swagger, and that's ok.

2) Curiosity and gratitude are super powers. Use them to connect to others deeply. Above all else, connect.

I learned to "change my certainty to curiosity". If someone brings me feedback or criticism, I shift automatically – Tell me more. And how can we use this to improve? I am exceedingly grateful for anyone with the courage to speak uncomfortable truths, especially in the service of making us better as a company, as an organization or for me, as a person.

I learned above all else, connect. Human to human. People will remember how you made them feel long after they forgot what it was you said. People simply want to be seen, to be heard, and to feel like they matter. That's so simple to say, and so difficult to really do every day. But every day is a new chance to try. Gratitude is the fuel to keep trying.

3) It's not about you. But as a leader, you make a difference. Use your influence wisely.

As a leader, you will have good and bad days. You will experience difficulties. You also have no idea of the impact you have on other people. If you are lucky, you will hear how you inspired someone or made a difference in their life. You will never know the extent of your influence. But don't doubt for a minute that you make a difference wherever you are. The question is what kind of a difference would you like to make?

In closing, the leadership lessons I've learned along the way have helped me regain my spark, own my voice and my strengths, and find joy and gratitude in the opportunities I have to do good in the world.

For the first time in a long time, I feel like I'm back at that creek in Wyoming, bending down and saying 'listen – isn't that beautiful?' We each have a chance every day to show up fully, to connect with one another and be curious, and to find grace. Our work is such a challenging place with personalities, time constraints, distractions, and demands. That babbling brook is the peace we create when we find our village, our tribe, our people who choose to accompany us along our journey. I am thankful to my friends within the AEI, EBA and CREW communities for being part of my story.

My leadership invitation to you is simple: Be that person that sees the spark in someone else. Invite them to try something they don't see themselves doing. Use peer pressure if needed. Push and cajole and encourage. We all had someone that turned the light on for us. Let's pay it forward.

Onward!

Holly Neber is CEO of AEI Consultants, an international, employee-owned property consulting firm. Holly served as 2019 President of Commercial Real Estate Women (CREW) Network after having served as President of the East Bay Chapter in 2014 and on the CREW Network Board of Directors from 2016-2018. She is a frequent attendee of EBA conferences and former editor of the EBA Journal.

PFAS Are Creeping Into Due Diligence Reports

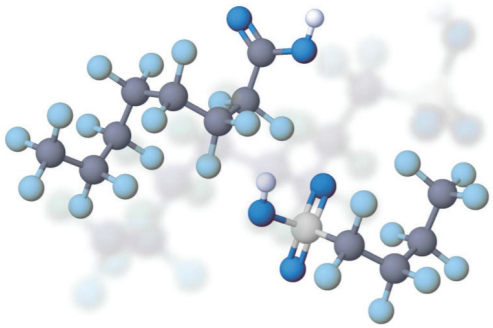
Authors: Victor DeTroy, REPA (AEI Consultants), Lindsay Glassman (AEI Consultants), and David Bausmith, PE (AEI Consultants)

PFAS are still not classified as hazardous substances under CERCLA. The EPA issued an Action plan in February 2019 which included the process for classifying two types of PFAS [perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA)] as hazardous substances. However, it is unclear when this classification will be finalized. Regardless, some states have taken the reigns and are implementing their own state-specific requirements and regulations. PFAS are highly mobile in the environment, generally resistant to natural degradation, and are being assigned very low cleanup levels (over an order of magnitude lower than many carcinogenic compounds). Below are a few examples of sites where PFAS have made their way into due diligence reports:

Newark, New Jersey

The State of New Jersey now requires that an LSRP evaluate potential PFAS contamination if a site is under active remediation. This does not necessitate that PFAS sampling be conducted, rather, research may be conducted to rule out the potential for elevated PFAS contamination originating from a property. According to the NJDEP "when the site or area of concern under remediation is currently or was formerly occupied by facilities that manufactured, stored, handled, or used contaminants of emerging concern, LSRPs must consider these contaminants during the investigation and remedial action."

A Phase I ESA conducted on a historical brewery and industrial property determined that the site met the NJDEP definition of an "industrial establishment." As such, the site was subject to the



New Jersey Industrial Site Recovery Act (ISRA) regulations and the property was actively undergoing remediation and working on a Response Action Outcome (RAO) for several Areas of Concern (AOCs). In New Jersey, a Preliminary Assessment (PA) is required to be conducted by any prospective purchaser to qualify for liability protection under the New Jersey Spill Act. The PA conducted in conjunction with the Phase I ESA evaluated the potential for contamination originating from the on-site use, storage, and handling of PFAS. It was ultimately determined that although consumer-grade products may have contained PFAS, no industrial processes were identified that would contribute to site-specific elevated PFAS contamination.

New Rochelle, NY

During the research conducted for a Phase I ESA, it was identified that an adjacent property was enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program. The primary contaminants of concern found in groundwater at the adjacent site and the surrounding area sampled included petroleum-related volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), PFAS and metals. The petroleum-related compounds in site soil and groundwater were found primarily in former UST areas, while PFAS and metals were more widespread across the site.

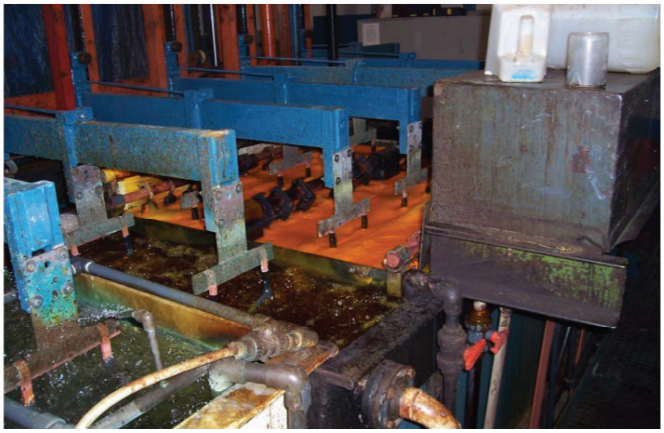
The NYSDEC recognized certain PFAS (PFOA and PFOS) as hazardous substances effective March 2017, but provided an allowance for continued use of firefighting foam that may contain PFAS-containing foam to fight fires (but not for training or any other purposes) on or before April 25, 2017 even if such use may result in the release of a reportable quantity (RQ). Although regulated as a hazardous material, and requiring testing at properties within a NYSDEC-regulatory program, the NYSDEC generally has not required remediation if PFAS source material has not been used, stored or discharged at a property. However, given the persistence of PFAS and widespread presence, it will be interesting to see if low levels of PFAS uniformly found in soil and groundwater at sites may be handled similar to "background" metal concentrations. Sites with a low risk of point source PFAS contamination from on-site operations may detect uniform impacts to soils from air dispersion, standard commercial product usage, or other off-site factors.

Plating Facility

A Phase I ESA was recently conducted on an active plating facility that has been in operation for over 40 years. According to the National Association of Surface Finishing (NASF), beginning in 1995, the U.S. Environmental Protection Agency recommended the use of PFOS as a fume/mist suppressant in the chromium electroplating process. The surface finishing industry voluntarily phased out the use of PFOS as a fume suppressant. The NASF proactively approached EPA and began a process that led to the industry itself requesting a national, industry-wide ban from EPA on the use of PFOS in chromium plating operations, which was finalized under a new federal Clean Air Act rule in 2012. The ban came into full effect in 2015. Although not currently classified as a hazardous substance by the EPA, PFOS has been identified in waste streams at plating facilities (particularly chromium plating facilities). A 2009 study by the EPA investigated potential PFOS contamination from plating facilities. The study found ten out of the eleven facilities had PFOS detected in their wastewater in concentrations ranging from 31.4 to 39,000 parts per trillion (ppt).

Conclusion

Although evaluation of PFAS is still outside of the scope of the ASTM E1527-13, state and site-specific cases have deemed discussion of PFAS in Phase I ESA reports a prudent course of action when applicable. Currently, 15 states have guidance/interim regulations related to PFAS and more states are expected to follow suit. As the science and regulatory environment continues to evolve, a gray area continues to widen for Environmental Professionals. Ultimately it is the responsibility of the Environmental Professional to determine on a case by case basis what approach is the most appropriate for their project. ■



U.S. Debt Funds Carve Bigger Slice of Lending

Author: Jim Costello, Analyst, Real Capital Analytics

The U.S. commercial mortgage market was as competitive as ever, the latest Real Capital Analytics review of lender composition shows. Investors requiring debt have many options today and can shop around. Debt funds, in particular, have continued to gain market share and for the first half of 2019, represented a larger share of the commercial mortgage markets than the life insurance companies.

Coming out of the Global Financial Crisis, life company lenders were, for a time, the only game in town for many commercial property investors. The agency lenders did provide debt liquidity for the apartment sector, but for all other property types, sourcing debt was nearly impossible unless one had maintained a long-standing relationship with the life company lenders.

Non-bank lenders have been a growing feature of the U.S. lending market over the last four years. Real Capital Analytics groups these so-called debt funds into our financial/fund category. Traditionally, this category encompassed the mortgage REITs and hard money lenders. Into this cycle though, the debt funds have been a growing presence in the market across all investment styles. Notably, these debt fund lenders are now more than 20% of both construction loans and loans to investors with value-add investment strategies.

The debt fund lenders are typically leveraged lenders and need a higher rate of return on loans originated in order to make good on commitments to investors in the funds. This return requirement has pushed these funds into higher risk lending such as lending on value-add and opportunistic investment styles.

Looking at trends in construction loans as a proxy for lending into opportunistic investment styles, clearly the debt funds have taken off over the last four years. In 2015, these lenders captured only a 7% share of the construction lending market, but this climbed to a 20% share by the third quarter of 2019.

The fact that a loosely regulated class of lenders is gaining more share should not inspire the fear that the market is starting to take on the same sort of risks that the CMBS originators had in the last cycle. The debt funds are taking on new types of risks. Importantly, these groups have skin in the game that the CMBS market did not in the last cycle.

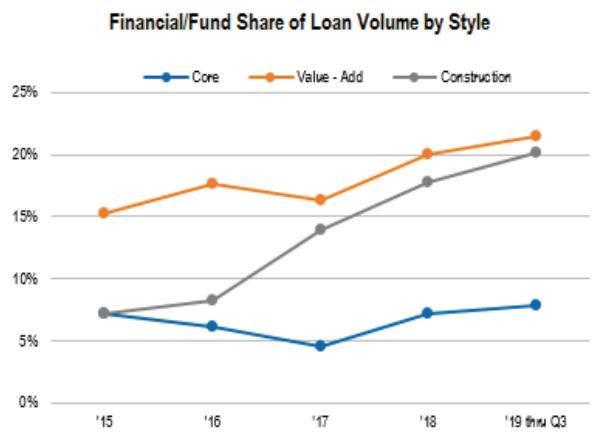
Life insurance companies still represent a larger share of lending for core investment strategies than do debt funds, but the levels are close. Into the riskier investment styles, however, debt funds captured more market share than insurance company lenders in 2019. Still, the debt markets

remain intensely competitive with most categories of lenders capturing at least a 10% share of lending activity.

The competition in the debt markets has provided an important element of support for pricing over a time of growing uncertainty. A year ago, the 10yr US Treasury yield was climbing rapidly and investors were nervous; this year, the 10yr UST has been testing previous lows and investors have been nervous. Despite all the jitters, the RCA CPPI continues to climb.

Rather than test the waters in the sale of an asset, investors can refinance assets in the current market. Indeed, tracking total capital flows to commercial real estate, the value of refinancings represented 42% of the capital flowing to commercial real estate in the first half of 2019 versus a 38% share for the acquisition of assets. The remainder represents the capital flowing to construction opportunities.

Competition in the lending markets is clearly good for borrowers, but how much is too much is a good question. To date, lending standards in the form of LTVs seem healthy, but there is evidence that these figures are creeping higher. ■



Year	Core	Value - Add	Construction
'15	7.2%	15.3%	7.2%
'16	6.1%	17.7%	8.2%
'17	4.5%	16.3%	13.9%
'18	7.2%	20.0%	17.8%

Stronger Retail Banking: 3 Survival Lessons from Banks Hit By Natural Disasters

Author: Dan Hixon, Senior Program Manager, EBI Consulting

At least ten wildfires are burning in California as I wrote this. And the rest of the country is already grappling with lives lost and over $1 billion in damages, all the result of extreme weather events.

One industry strengthening its resilience as it confronts natural disasters is retail banking.

As we continue exploring the risks and effects of climate change on commercial real estate, we look at how retail banks utilize the calm before the storm to employ a higher due diligence standard, and how this helps them avert the negative effects natural disasters have on bank stability.

How The Urgency for Banks to Restore Service Helps Drive The Shift

Retail banks are hit two ways when natural disasters strike: first, they must check in on the safety and availability of their employees and remedy damage to their own buildings and systems. Second, banks are under added pressure to get up and running in order to assist customers who need their banks now more than ever.

Banks that lack a clear, well-thought out and tested emergency response plan can jeopardize borrowers' financial solvency and decrease their bank stability, despite receiving backup from potential insurance payments and public aid programs.

A recent study shows significantly lower bank z-scores, higher probabilities of default, higher non-performing assets ratios, higher foreclosure ratios, lower return on assets, and lower equity ratios in the two years following a natural disaster are all common following the devastating impact of extreme weather events.
For this reason, the retail banking industry is taking the initiative to prepare, test, and deploy comprehensive Emergency Response and Disaster Preparedness plans that go above and beyond standard business continuity plans.

Taking Action In The Calm Before the Storm

Florida bankers know the value of preparedness firsthand.

"Unfortunately, living in South Florida doesn't allow us the luxury of becoming complacent," says Rick Kuci, president and CEO of Miami's Grove Bank & Trust. "We're struck by a tropical storm or hurricane almost each and every year in some fashion. It is part of our landscape, our history, and our future."

Banks in regions prone to extreme weather, like South Florida, are thinking about disaster response readiness far in advance, by addressing worst case scenarios during their own property acquisition process.

An increasing number of retail banks are taking property acquisition due diligence to higher standards by investing in:

- Acquisition Property Condition Assessments (APCAs) that exceed the standard ASTM-level property due diligence; and
- additional assessments on building façades, parking garages, and the presence of asbestos and mold, as well as seismic risk assessments.

These assessments empower banks with information on potential issues and costs that may weaken their stability should a disaster strike. As a bonus, they can also serve as the ultimate negotiation tool as banks acquire new property to expand consumer banking operations.

Efforts specific to disaster readiness are also on the rise. Retail banks experience faster and more cost-effective response to extreme weather events when they invest in comprehensive Emergency Response and Disaster Preparedness Plans.

Additionally, disaster response consultants can also be brought in to assess the sustainability of a bank's existing preparedness and business continuity plans, as well as to help employee teams run through, test, and fill in gaps in their disaster response plans.

The Days and Weeks After: What Effective Emergency Response Looks Like

Consumers who have a strong relationship with their local banks can react quicker to disaster scenarios, and be better equipped to initiate their personal recovery efforts.

Similarly, retail banks with existing relationships to construction monitoring consultants as well as environmental health & safety consultants are best positioned to not only get their own business operations up to speed, but to contribute significantly to charitable support efforts that strengthen their local communities.

A capable construction monitoring consulting team should understand a bank's operational needs and act quickly to aid in property rehabilitation, fire and storm damage repairs, structural evaluations, and so on. This is precisely what reduces delays in disaster response otherwise caused by vetting and contracting service providers after a storm hits. ■

Key Takeaways:

- The negative effects of extreme weather events on retail banks extend far beyond immediate remediation costs, and can continue to affect a bank's stability for years after the event occurs.

- The smartest way for banks to ensure a fast and effective disaster response and their readiness to lead in community rehabilitation is for banks to lean on capable consultants who already understand their operational goals and needs.

Members on the Move

EBA welcomes two first-time EBA conference attendees to the Winter conference, both of whom just graduated from the EDR/ LightBox Developing Leaders mentor program.

Amie Jacobs, *Environmental Engineer, Apex Companies, Denver, Colorado*

Amie grew up in the metro Denver area and graduated from the Colorado School of Mines four years ago. Since then, she has built up four years of experience with Vertex, and later with Terracon. At Apex, her primary field of expertise is in conducting Phase I Environmental Site Assessments, as well as gaining experience in site characterization and monitoring. Amie recently passed the Fundamentals of Engineering Exam and became an Engineer in Training. Her next target is to become a Professional Engineer. EBA members may recognize Amie's name as she co-hosted several EBA RMC calls in 2019 with her mentor, Dennis Firestone.

Chelsea Halley, *Project Manager, ATC, Charlotte*

Chelsea received her bachelor's degree from the University of Delaware and then worked for the Delaware Department of Natural Resources for two years. She then moved to Austin, Texas for her master's degree from the Jackson School of Geosciences at the University of Texas. She started her consulting career in Austin with AECOM and then with Golder Associates. Chelsea realized her goal of relocating to Charlotte to continue her consulting career when she accepted a position with ATC Group. In her new role, she primarily focuses on due diligence and remediation of sites with dry cleaning solvents and petroleum. Chelsea is passionate about being an environmentalist, and feels fortunate that she can channel that passion to create business solutions for her clients. She is looking forward to her time at the EBA conference to learn, as well as to put the networking skills she learned from her mentor, Elizabeth Krol, to good use!

Please be sure to say hello to Amie and Chelsea in Phoenix, and make them feel welcome at their first EBA conference!

NJ's Site Remediation Reform Act: An Update

Author: Jim Klinder, Project Manager, LSRP, EBI Consulting

In May 2009, the Site Remediation Reform Act (SRRA) was signed into law by New Jersey Governor Jon Corzine. The act established the Licensed Site Remediation Professional (LSRP) program in the hopes of reducing contamination and returning contaminated or underutilized properties back to use. The LSRP program created licensure guidelines for qualified remediation professionals. SRRA made it a requirement that LSRPs provide direct oversight of remediation. SRRA also created the Site Remediation Professional Licensing Board to license qualified professionals to perform remediation. The Board oversees the performance and conduct of LSRPs.

SRRA has been extremely beneficial for statewide remediation and contamination cleanup, making processes more concrete and clear. On August 23rd of this year, NJ Governor Phil Murphy signed a bill (SRRA 2.0) that makes several amendments to the original regulatory framework for the first time in 10 years.[ii] The provisions include:

- Public Notification Requirements: Responsible parties are now required to notify the public prior to the start of the remedial investigation phase, rather than prior to potential remediation work. This allows the public and NJDEP to know when there is a question of potential contamination even if the investigation determines no contamination.

- Direct Oversight: SRRA 2.0 clarified that direct oversight of a remediation site remains the same throughout the project, with a few exceptions. The NJDEP can modify direct oversight if:

    - the person responsible for conducting the remediation cannot afford the remediation,
    - there is a public emergency that results in a delay in meeting the determined time frame or another situation that affected direct oversight, or
    - they determine that the oversight modification is in the public interest and benefits public health and safety.

- Green and Sustainable Practices: SRRA 2.0 encourages the use of green and sustainable practices during the remediation of a contaminated site.

- Surety Bonds: The updated legislation introduced a new funding source for remediation called surety bonds, which are now an option for property owners.

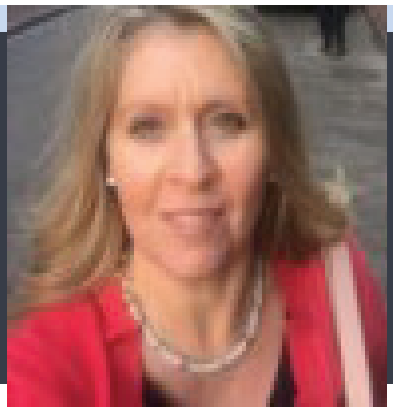
- LSRP Credentialing Requirements: Included in SRRA 2.0 were a handful of updates to the require ments of an LSRP. These included:

    - at least 3 years of full time professional experience in the state of New Jersey within 5 years prior to the submission of the application,
    - those who have been convicted of or pled guilty to crimes involving breach of trust or similar crimes are excluded from becoming an LSRP, and
    - those who have had a professional certification revoked or have surrendered a professional license or certification in response to a disciplinary investigation in the last 10 years are also excluded from becoming an LSRP.

- LSRP Remediation Management Guidelines: Additionally, SRRA 2.0 prohibits a non-LSRP to perform remediation unless the remediation is managed, supervised, or periodically reviewed and evaluated by an LSRP. The LSRP can only manage, supervise, perform, engage, or participate in the remediation if they were retained by the person responsible for the remediation and the NJDEP was notified or if the LSRP was retained by the person responsible for the remediation and the NJDEP was notified.

- LSRP Notice Requirements: The amendment also clarifies that if the LSRP obtains knowledge of an immediate environmental concern and knows the person responsible for the remediation, the LSRP must inform the person responsible to notify the NJDEP of the concern.

These changes may seem minor individually, but they will make a positive impact moving forward. A number of these rules have already been in place unofficially, so signing them into law makes it that much easier for proper remediation to take place. ■



THE CRE LENDING MARKET: A Look Back at 2019 and Ahead to 2020

Dianne P. Crocker, Principal Analyst, EDR LightBox

As the decade comes to a close, we can reflect on an epic run for commercial real estate—and explore why the 2010s will be such a tough act to follow. Here are five trends in commercial real estate and lending that characterized the past year, and what you can expect to see over the near-term.

2019's MIXED SIGNALS

Looking back over the past year, the macro economy continues to experience slow, consistent growth, coupled with record-high job growth. At mid-year, the U.S. economy officially entered the longest growth cycle in U.S. history. One factor that really distinguished 2019 from prior years, however, is that the long list of positive market barometers were, for the first time, balanced out by growing areas of concern (e.g., growing trade tensions, political uncertainty, slowing growth in global markets). Uncertainty, the longer the recovery drags on, combined with global factors, began to weigh more heavily on the market—and on lenders' and investors' sentiment.

What makes 2020 so hard to predict is that lenders are experiencing late-cycle anxiety and a sense that they should be pulling back on the reins out of an abundance of caution, yet, given that economic and real estate fundamentals are still strong, can't point to a definitive reason to scale back on originations. Factors that are clouding the 2020 forecast are the growing political uncertainty, especially as we head into a Presidential election year.

NEW LENS FOR LOAN UNDERWRITING

Because of the mixed signals in the market that were a defining element of 2019, lenders began to scrutinize commercial real estate deals through a news lens now than they had just a few years earlier. In 2019, the Fed cut interest rates for the first time since 2008. While cheaper capital encouraged borrowers to seek out more opportunities (as well as refi's), late-cycle anxiety and concerns that the market could pivot over the near term injected new levels of caution on the part of lenders when scrutinizing originations. It is critical that for any loans going through the approval process, lenders ensure that deals will pencil out under different assumptions for the economy over the course of the loan. For instance, there is no guarantee that the value of a particular retail center or office building will be higher five years down the road. If it's a construction project, lenders need to consider whether the developer can confidently finish the project on schedule, and whether the projections of leasing the building are realistic even under a potential lower-growth/recession scenario at the time of completion.

In today's more risk-averse climate, lenders are also testing loans under different scenarios, and assessing which ones may be most at-risk in the event of a recession. Others are shifting lending activity from riskier asset classes like retail to more recession-proof sectors like warehouse or education.

The recent Urban Land Institute/PricewaterhouseCoopers survey of top real estate and financing organizations provides quantitative evidence of rising caution on the part of commercial real estate lenders. In 2020, 35 percent of respondents expect more rigorous debt underwriting compared to 30 percent in 2019. It is worth noting that back in 2015, only 10 percent expected debt underwriting to tighten.

INVESTORS SEEKING ROI IN SMALLER METROS

In the early stages of this recovery, the gateway markets dominated investment and lending activity where properties were widely available, and an increase in property value could reasonably be assumed. Capital investment was concentrated in primary coastal metros like New York and Los Angeles. Fast forward to 2019, however, and a different picture emerges. Investors and developers are venturing further out

on the risk curve and into smaller metros to find viable deals in less competitive, but emerging secondary metros that are starting to experience growth spurts of their own.

Using Phase I environmental site assessment demand as a proxy for where commercial real estate investors and developers are focused, some of the highest growth over the past eight quarters reflect the strength of smaller markets like San Diego, Orange County, Las Vegas and Richmond. Adaptive reuse in these smaller metros is another popular trend. Construction activity is a signal that some of America's older urban centers are in the process of re-inventing themselves, particularly as tired retail centers or factories are transformed into innovative live-work-play redevelopments.

Metros Sustaining Highest Long-Term Growth in Phase I ESA Volume (by Metro Size)

		Total Growth in Phase I ESA Volume (1Q18-4Q19)
Primary	Las Vegas	49.7%
	Los Angeles	40.5%
	Orange County	32.1%
	Houston	31.3%
	San Diego	25.3%
Secondary	Memphis	50.1%
	Richmond	42.8%
	Columbus	32.2%
	Milwaukee	26.8%
	Cincinnati	26.0%
Tertiary	Louisville	44.8%
	Rochester	42.2%
	Birmingham	40.3%
	Buffalo	39.9%
	Fort Myers	38.9%
MicroMetros	Lexington	115.8%
	El Paso	91.0%
	Syracuse	66.7%
	Wichita	39.5%
	Little Rock	33.7%

NOTE: Percentages shown reflect each MSA's growth in Phase I ESA activity over the past eight quarters (1Q18-4Q19).
SOURCE: EDR LightBox ScoreKeeper model.

DEBT FUNDS CAPTURE BIGGER PIECE OF THE LENDING PIE

Another notable trend in commercial real estate lending of late is the emergence of new lending sources. Perhaps the most dramatic has been the emergence of non-traditional lenders, particularly debt funds, entering the lending sector and competing with banks for loan originations.

National and regional banks still dominate construction lending with traditional names like Wells Fargo, Bank of American and Goldman Sachs at the top. Joining these big-name banks, however, on the list of 2019's top construction lenders are such heavyweight debt funds as Blackstone Mortgage Trust and MSD Capital (see related article earlier in the Journal).

THE FORECAST—MARKET WILL BEND BUT NOT BREAK

Although the 2010s were the decade of economic expansion, the forecast needs to account for the fact that over the past few years, the pace of growth in commercial real estate started decelerating, and this trend is expected to continue over the near-term. Most forecasts call for lending and investment activity in 2020 to approach recent highs, but fall slightly short of 2019 levels.

One barometer worth considering as you develop your own forecast for the coming year comes from the Mortgage Bankers Association. In September 2019, the MBA forecast that commercial and multifamily mortgage bankers will close a record $652 billion of loans backed by income-producing properties in 2019, 14 percent higher than last 2018's record volume ($574 billion). For the coming year, MBA expects 2020 lending activity to experience a still-strong, but less robust, growth of eight percent above 2019 levels. MBA's optimistic forecast is driven, in part, by continued-low interest rates and favorable market conditions.

As 2020 gets underway, the good news for commercial lenders is that we have yet to see any major indication of an erosion in commercial real estate fundamentals. Unless the economy falters more than we expect, there will continue to be attractive opportunities for redevelopment in metros that offer the potential for strong demand and returns on investment. The upcoming Presidential election will add uncertainty to any forecasts and could spur a "wait-and-see" attitude on the part of some lenders, developer and investors in 2020 as economic growth decelerates further.

The overall theme of the near-term outlook for commercial real estate lending is one of moderating—but still positive—growth. The U.S. commercial real estate market still offers opportunity and sources of debt capital are poised to continue lending to viable projects. It is critical, however, given the late stage of the market cycle, that lenders evaluate loan applications not only on current metrics, but also on how market conditions for a particular property might look different over the course of the loan. Property due diligence needs to consider whether there are any property conditions that could adversely affect the value of a property, particularly at this stage of the market cycle where price increases are no longer the near-sure bet that they were earlier in this recovery. ■

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