

## 2023 Ivory Prize

**Duration** 00:34:16

Speakers Corey Aber, Vice President of Mission, Policy & Strategy, Freddie Mac Multifamily

Steve Guggenmos, Vice President of Research & Modeling, Freddie Mac Multifamily

Abby Ivory, Director, Ivory Innovations

Kent Colton, Chairman, Ivory Prize for Housing Affordability Advisory Board.

Corey Aber [00:00:00] Steve, I got a question for you. What do I have in common with Nostradamus?

**Steve Guggenmos** [00:00:06] Oh, boy. Let me think on that one. I think it must be that you both were born on either December 14th or 21st.

**Corey Aber** [00:00:14] That is a really good guess. And it shows your deep knowledge of Nostradamus. But that's wrong. It's actually that we can both predict the future.

**Steve Guggenmos** [00:00:23] That one I'm not so sure about.

**Corey Aber** [00:00:25] No, no, it's true. Last year, I said we were going to announce the winners of the 2023 Ivory Prize for housing affordability. And this year we're doing it.

Steve Guggenmos [00:00:36] Yeah, I think you may have just jumped the gun last year.

**Corey Aber** [00:00:39] No, no, no. I'm pretty sure I predict the future. And someone can check the record. It's all online, but that's fine. Let's just agree to disagree.

**Steve Guggenmos** [00:00:46] Do you really think that's appropriate here.

**Kent Colton** [00:00:49] Gentlemen? There's no need to argue over this. Let's just say that today's show is about the future and the present of housing affordability.

**Steve Guggenmos** [00:00:58] I like the sound of that. And Kent, it's great to have you back, which means only one thing — it's time to talk about the 2023 Ivory Prize for housing affordability.

**Corey Aber** [00:01:08] Yeah, I predicted you'd say that. Hello and welcome to this episode of the Freddie Mac Multifamily podcast. I'm Corey Aber.

**Steve Guggenmos** [00:01:18] And I'm Steve Guggenmos. I'm really excited to talk about the 2023 Ivory Prize for housing affordability. This is the fifth annual prize, our fifth annual episode and our fifth time welcoming back Kent Colton to talk about the prize. Kent is the president of the Colton Housing Group, the former CEO of at the NAHB — National Association of Home Builders — and the chair of the Ivory Prize for Housing Affordability Advisory Board. We are also joined again this year by Abby Ivory, director of Ivory Innovations. Kent and Abby, it's great to have you back.

Abby Ivory [00:01:53] Thanks for having us.

**Kent Colton** [00:01:54] It's great to be here.

**Corey Aber** [00:01:56] All right. So five years, five years of the prize. Lots of lessons from five years on this fifth anniversary. So why don't we start a little bit with what you've learned over these five years?



**Kent Colton** [00:02:06] Five years ago when Clark Ivory, Clark's the president of Ivory Homes, started the Ivory Prize for housing affordability, we thought there was a lot of innovation going around the country, but we didn't know. Now we know. There's been over 500 nominees from all over the country for the Ivory Prize in 42 states. We also know that we have a very serious housing affordability challenge throughout the country. Many call it a crisis. We just released a five-year report on the Ivory Prize and the lessons learned and depending on which report or study you look at, we have a housing shortage of between 3 to 5 million units. As a result of this shortage and many other factors discussed in the report, including the COVID-19 pandemic and inflation, Americans now face the least affordable housing market in history. However, with all the challenges, we also have hope, and the hope comes from the innovation which is underway.

**Abby Ivory** [00:03:13] We're really excited this year to talk about the Ivory Prize and a few different themes that we've seen in innovation. And just to tee that up there are three different categories or lenses that we use to look at innovation and those three areas are financial innovation, public policy and regulatory reform, and then construction and design.

And this year, you know, every time we take a step back and look at all of our different nominees that come through — and this year with our biggest year with 200, over 200 people coming in, or companies, nonprofits and government entities as nominees — we've seen a lot of different themes of what's happening in the world of innovation, and a lot of it is similar to what we've seen in past years. But one thing I think is a little different is that this year we've seen a lot of companies who come through — specifically companies in our Top 10 that we'll discuss a little more today — but that are focusing on helping very specific niche communities.

And so we'll see a group called The Kelsey that's very dedicated to helping people with disabilities. Frolic is targeting, is a specific company, targeting people facing issues with gentrification. There's another group called the Dearfield Fund for Black Wealth, and that group is specifically, obviously targeting the black community and trying to help build wealth. We've seen a lot of these really amazing models, but the cool thing about it is I think a lot of these models could be repurposed for different communities across the country depending on their needs. And I, and I really liked that.

Other teams we've seen our equity overall is a big theme in housing and it's really important to make sure that we have that to combat, you know, past things that have happened. We see a lot of, we see a big shift towards environmental ways to build or like more environmental ways to build just overall sustainability in the housing space and that is an important shift as we grow and change. And the cool thing about that, too, is hopefully it'll help with affordability in the end and for changing and diversifying some of our supplies like lumber, obviously it's been super expensive and if we can find a substitute or something that can come in and switch things up, hopefully that will be helpful.

Other big themes obviously is off-site construction is taking hold in the world of innovation and we really like to see that. And it's been interesting to watch. Some of these companies have done really well and some of them have had issues and bumps along the way, and it's very capital intensive and so we're along for the ride, but we do believe that there's a lot of innovation that can come through taking construction off-site.

Corey Aber [00:05:50] Certainly from our perspective, we followed the prize with you all for the past five years and it does feel like we're at a really important moment, moment in time or five-year moment in time in some ways where there is a tremendous amount of innovation and a tremendous amount of focus in ways that, you know, maybe we haven't seen as as much in the past and this like clear focus and now you're seeing, you know, 200 groups applying like that, that's really fantastic, but it's also a lot of focused energy on some of these themes that you've talked about. But let's get into some of the categories. You talked about financial innovation, public policy and regulatory reform, and construction and design. So



maybe we'll start with the, with the financial innovation and talk through that and some, some of the finalists there, what they're doing and how those finalist tie to these themes that you've highlighted.

**Abby Ivory** [00:06:42] Absolutely. And so financial innovation, I think has been really interesting, and as you mentioned, it's been an interesting year in finance with rates just changing the way that they have been. It's become a little bit complicated and we've seen a lot of companies that have come through in the past, you know, have to pivot, find new models, find new ways to be successful, widgets within a new environment, a new interest rate environment. But they're innovating as we love to see, and they're adapting and they're changing. And so that's, that's been an awesome thing to see this year in the finance category.

We have three amazing finalists that are in our Top 10, and the first one is our Dearfield Fund for Black Wealth, they're based out of Denver, Colorado. This has been launched by Gary Community Ventures, and it's in partnership with the Black community in Denver. And they provide up to \$40,000 in down-payment assistance to first-time Black and African-American homebuyers to help build generational wealth. And they're aiming to close the racial, or the racial wealth gap and accelerate black homeownership by generating, on average, \$100,000 in net worth. And they're targeting like a group of five to 600 families that they want to help with this model. And they've done a great job in building everything out. And as I mentioned before, I really think this model is so amazing that it is replicable across the country and other communities — areas where people are struggling with homeownership specifically. And we've, we've enjoyed partnering with them guite a bit. So that's, that's Gary.

Our second finalist in the finance category is Frolic. And Frolic is working with multifamily housing cooperatives to — they're essentially building housing co-ops in cities outside of New York and D.C., where it's somewhat common to have housing co-ops. They provide financing for these co-ops to be built, and they're targeting communities that are facing potential gentrification. So really looking to help renters gain a share of ownership so that they can stay in their communities. And that's a theme that we've seen actually across the board for the last couple of years is how do we help renters as we've seen so many people come in as renters and fewer people have the opportunity to become homeowners, how do we help renters create wealth in the same way that a homeowner can? And so this is, they're looking at that and they're specifically targeting opportunities for BIPOC (Black, Indigenous and people of color) families that have generationally rented and looking at helping them get a share of this homeownership that is, that is important and it's historically been very helpful for people.

And our third finalist in finance category is a group called Renofi. They're based out of Philadelphia, Pennsylvania — sorry, I didn't mention Frolic is in Seattle, Washington — but Renofi is like a one-stop marketplace for financing a home renovation. So this is just hitting on the newest trend of like how if we can't — like with interest rates, if we can't build a new home, if we can't afford to get into a new home, how do we renovate existing housing? And we definitely think that we'll see a lot more of that as we move forward. And so this is kind of a cool way to finance that. And it's, with this group, homeowners are seeing on average an 11x increase in borrowing power with the Renofi-powered loans. And so they've been very successful in helping their clients see a good return on investment and all that. So that is our finance category.

**Steve Guggenmos** [00:10:30] That's fantastic and it's really cool how, I think that you started this by talking about that it's not an easy environment for finance, and yet these companies are finding ways to innovate. I think a lot of these problems that, that, you know, people are talking about affordability becoming more and more of an issue and that it's, you know, really hard to manage and that there's so many contributing factors, but there's these firms out here who are just taking a crack at it, right? And pushing the ball forward and, and I think that's really fantastic. So it's really great to hear what's being done on the finance side. Maybe transition from there to public policy and regulatory reform?



Kent Colton [00:11:11] One of the things about the public policy and regulatory reform is I think people have really recognized over the last five years how important this is. You can have great ideas in construction finance, you can have great ideas in development and how that works, but the reality is, is you can't make it happen unless you can get it approved at the local level. And much of the costs of housing really come from regulatory issues. Twenty-five percent related to single-family housing of the costs of a total house come from the regulatory issues. Over 30% in the area of multifamily come from regulatory issues. So what's happened with the Ivory Prize is the first year, quite frankly, the lowest number of nominations came from the, came to the area of regulatory and public policy. And this year and as time has gone on, the greatest number of applications are coming from regulatory and public policy. And I think that illustrates how important that is in terms of being able to do affordable housing. This year, we actually have four of the finalists who relate to regulatory and public policy and let me just quickly run through those.

The first one is Housing Navigator in Massachusetts. This is an interesting idea, we have a lot of concern about developing and we don't have enough low-income housing, but another question is access. What they've done in Massachusetts is they've developed a system — and this is a system available to everybody, but certainly low-income individuals — so they can get access to all of the low-income housing, if you will, housing which is income assisted. And so what they've done in Massachusetts is develop a computer-based automated system. People go online and they literally have a 194,000 properties throughout Massachusetts from 276 cities from which they can choose. And so individuals can have access to those 194,000 properties and sort through them. It's really it's, it's a fund, they're supported by nonprofit fees, they get government assistance as well. But it really is a way of making affordable housing available to the people who need it the most in many respects. It's available 24-7 and it really is a way of of getting people into properties with less stress over time, because the question is, where can I go? What's available? What's happening? So that's Housing Navigator for Massachusetts, it's for the state of Massachusetts. They're anxious to share their technology with other people, if you will, in terms of helping other states to do this and they're located in Cambridge, Massachusetts.

**Steve Guggenmos** [00:14:08] That's really fantastic. And I think that, you know, it can be surprising because we talk about how much their need is there — how much need there is for affordable housing. So you would think that they would always be 100% full and obviously, we need those units to be 100% full, but the transaction of somebody getting in there and filling a unit is, can often be really daunting. And so this one is really fantastic.

**Kent Colton** [00:14:31] It is. And there's always a transition process. So units are available or they can get into the queue depending on the way the that the landlord does it so that they can have access in the future.

The second one in the regulatory/public policy area is the National Zoning Atlas. Clearly, over the last couple of years, you finally see a lot of concern about zoning and the recognition that that zoning can really be a major, have a major impact on affordable housing or the lack thereof. And it can also be discriminatory. What they've done with the National Zoning Atlas — and this is run out of Cornell University's Legal Constructs Lab, so it's in Ithaca, New York — it really provides an atlas, if you will, of zoning around the country and what different states are doing. So people can compare, they can look, they can see. It really sort of started in Connecticut. They developed a Connecticut zoning atlas as a part of something called Desegregate Connecticut. In fact, Desegregate Connecticut was a 2022 Ivory Prize finalist in the Top 25 and now they've taken this — at the lab in Ithaca and in Cornell — and they have really tried to expand that to a whole series of other states. And so they have 18 different state teams that are out looking at states. It takes them an effort of three to 18 months to develop the information with respect to the zoning in that particular state. Their, you know, their goal is 100% every state. They're 25% of the way on that in terms of jurisdictions with zoning. And their goal is to have this national atlas completed in five years. So this is really an important way of, of looking at what's going on and and what



the zoning is and as people look at it, they begin to think about what they can do or what other people are doing to make housing more affordable because of the zoning. So that's, that's an interesting idea.

The third one is a private-sector initiative, and it's a, it's a company by the name of PermitFlow. They're in San Jose, California. What they've tried to do — if you talk to any builder around the country and you say what what are the issues that they're dealing with that are of greatest concern as far as affordable housing, zoning is always at the top, but permitting is at the top. How long will it take me to get my my project approved? What is the permitting process? PermitFlow has said let's go out and try to automate that process for a variety of different jurisdictions and then we'll make that available to public or nonprofit builders/developers so that they can go through that process in a more, a more effective way. They talk about we're the TurboTax for building permits to help people to navigate that process. So they'll take a particular city — they focused initially, they're in the Bay Area, they're in Los Angeles, they're doing this in Miami. They're certainly looking to expand this around the country, but they're, they're basically digitizing that process for that particular jurisdiction and then working with private builders, nonprofits as well, who want to come in and and use PermitFlow to help navigate that process. And so they really are streamlining — the benefit, if they can streamline that process, that means permits can be approved quickly or faster, and if that if that's the case, then it can bring down the cost, because the cost often comes from the time it takes to get these projects approved.

The final finalist in the public policy and regulatory area is called The Kelsey. And The Kelsey has, Abby mentioned it earlier, they do some very unique things with respect to helping people with disabilities. And they really have a two-fold model in terms of what they try to do. First of all, they are literally at the cutting edge of housing design standards for accessibility and inclusion. They published a document on that. It is now kind of the, the guidebook that everybody tries to use if they're doing, trying to do projects, housing projects for people with disabilities. And that's very important in terms of what to do. But they're also at the cutting edge between design, if you will, and development. And so they're, they're actually out now and they're doing a variety of projects. They'll partner with people at the local level, but they've, they've built over 240 homes that are now in development which are really focused for their disability. So they have practical experience. They're doing very creative work. Their goal is actually obviously to take to try to do this as much as possible. They're at the cutting edge of both how you do development and then being an advocate, if you will, in terms of those who are in the community who require housing for those that are disabled. So they're doing some remarkable work. They're based in San Francisco, but obviously their design book is applicable throughout the country and their advocacy is throughout the country. They work with over 950 community leaders who help them understand what's going on in terms of the disability needs and in terms of what needs to be done in order to approve housing for those that are disabled.

**Corey Aber** [00:20:42] Now, that's fantastic a really great set of finalists here. And The Kelsey actually, as you might know, was a, they were on the podcast earlier. Allie Cannington from The Kelsey joined us last year to talk about what they do and some of the things that they're seeing. So certainly...

**Kent Colton** [00:20:57] They're doing some great work.

**Corey Aber** [00:21:01] Absolutely. So let's take a look at the last category here. You know, we spent some time on permitting and zoning, and that has a lot to do with your last category here: construction and design. Especially with so much new innovation that has, that ties into the permitting and the zoning. So tell me what you're seeing in the construction and design category.

**Abby Ivory** [00:21:21] Yeah, absolutely. So construction and design has been very interesting and it was a good year for us to look at a lot of new, new things. And so as I mentioned initially, sustainability is a big theme, especially with new products.

And so one of our Top 10 is a group called Plantd, and they're based in Durham, North Carolina. And this group, they're producing — they're pre-products right now, but they're going to get there. They have such



an amazing runway — durable carbon negative building materials. So it is essentially a structural building panel and they are using grass instead of wood and so this is how they've created their product. And currently they have a bunch of farmland where they are raising the grass that is being put into use in these panels and using these specific, in this specific product. And the whole goal of this company is to change the supply chain a little bit, make sure that they're disrupting it, and they are planning to use a really great manufacturing technology that should help lower cost, reduce carbon emissions and produce a very high-performing material that can be used as a structural building panel in homes. We're really interested to see how this comes out. We're really pumped on this, you know, theme of sustainability and changing products, and we think that this should be something that's very interesting and everyone should keep an eye on this group as they move forward. We, we definitely saw a lot of this in terms of applicants and nominees, whether it was like taking or reusing like the waste products from an old paper mill and like building a new material with that, or it could be a bunch of different things.

And coming into the new materials, I would also kind of put Diamond Age in that group. So Diamond Age is another finalist. These guys are using robotics to build homes. And so a lot of people call it 3D printing, but they don't like to call it 3D printing because they, this is a robotic system. It's on-site, it is not off-site, but they do have factories off-site where they're building the robots that will then come on-site and build the homes. And so the people who are running this, there's a couple of former Tesla people that have been up there for a minute and they really understand the nuances of like a car factory, you know, how do we build cars and run them through the factory and how robots have contributed to that and they're trying to bring that into housing. And so they do use like a similar machine that we would see on a 3D printing site to pump out concrete that's going to be the, you know, the framing essentially of the, of the home. But their robots can do a lot more than that and they have a lot of different pivot arms. Their robots pretty much do everything except build the ceiling, place the floor and then, you know, there's a couple other things that they can't do, but it's it's a cool way to see housing evolving. They prefer the on-site construction because they only have to bring like they bring something to the site and it's not a huge like modular unit or anything like that, and they can roll through. They're most productive on-site if they can build over 60 units. And so right now they're starting in Arizona, they've been doing a lot down there. We went down and checked out the subdivision that they're working on. And it's really interesting to see and definitely a way that we're pushing, they're pushing innovation. They're trying to give careers to a lot of former military that are coming in here and guiding and working on-site. They're doing a bunch of different things with tech and robotics and everything, and they're hoping to kind of incentivize this young workforce to come into construction by pushing tech. You know, like we have tech jobs, we have some of these engineering jobs that are, you know, and framing it in a different way so that we see a younger, the younger generation become a little bit more excited about going into construction or homebuilding or any of that stuff. So we're excited about what Diamond Age is doing as well.

And then our third finalist in construction and design is a group called Inherent [L3C], and they're based out of Chicago, Illinois. And their founder, Tim is just such an incredible person when you talk to him and get to know him, and he is so passionate about helping change some of these communities in Chicago that really need help. And so he's pushing homeownership. He's working with a lot of people, this program works with a lot of people upfront to prepare them to become homeowners and then walks them through the process. They also build their own homes and they, they like help these people get in housing. But then after becoming a homeowner, there are a lot of challenges that can arise for first-time homeowners. And so I think part of their process is making sure that they're with, you know, with them at the beginning before they can get into housing and at the end, when they do have a new home and they're not sure what to do when something breaks or they need some help on maintenance or any of that stuff. And so we've seen them be super helpful for this great community in Chicago, and they're technically a nonprofit and so it's something that I think would be awesome to see that replicated in other cities as well. So that's kind of our, our mix. These are all very different finalists in the construction/design category this year.



**Steve Guggenmos** [00:27:01] That is, yeah, that's fantastic. And it must be so fun to be a part of the selection process. Just thinking about you going to Arizona to see these home sites being worked on by robots, that must be quite an experience.

**Abby Ivory** [00:27:14] It's super fun. Getting on-site is my favorite thing to do.

Kent Colton [00:27:18] And, and it's worth saying that, you know, Abby has got so much enthusiasm, but one of the great things about the Ivory Prize is that it's not just people giving paper applications. It's really a process which, number one, involves students of the University of Utah working with Ivory Innovations to go out and, and not only get the nominees to make their own application, but to work with them, encourage with them, get to know them. So you also have the vitality of this wonderful group of students that are involved, headed up by Abby Ivory and Jenna Louie and, you know, just a wonderful team that that creates this energy. So the judges have this great opportunity to look at all of these great options and at the same time to hear the students and others talk about them. Look at videos that they've developed, and then in the end, they'll go out and, and meet with them and talk to some of them. And so it's a wonderful process and it really works to help filter out great ideas and see which ones are the best that that we want to replicate and show other people.

**Corey Aber** [00:28:28] So that feels like a great segway to talk about who the winners are this year in 2023. So I of course know the answer because I can predict the future, but for everybody else who can't, why don't you tell us about the winners?

Kent Colton [00:28:43] And the winner is ... you're going to tell us right?

Corey Aber [00:28:46] Put me on the spot there. Only sometimes!

**Kent Colton** [00:28:49] Abby why don't you start in the finance area?

**Abby Ivory** [00:28:53] In the finance category, our winner is the Dearfield Fund for Black Wealth and we're really excited to see them come through as winners this year.

**Kent Colton** [00:29:01] And the winners in the public policy/regulatory reform area are: National Zoning Atlas and PermitFlow. We are very pleased to have two winners in this area. One from the academic/public sector and one from the private sector.

**Abby Ivory** [00:29:20] And in the construction design area, the winner is Diamond Age with their awesome robotics and amazing animation.

**Corey Aber** [00:29:32] I was guessing that one because, you know, just the the idea of, you know, let's not bring in a bunch of materials, let's just bring a robot to the site and it'll take care of it like that. That's pretty cool. Really interesting...

**Kent Colton** [00:29:43] They still have people running the robots.

**Abby Ivory** [00:29:47] Absolutely.

Corey Aber [00:29:48] Now, it's really fascinating too as you look at some of the innovations in in construction and design and and how that fits in with with the regulatory framework, how it fits together with the finance. And, you know, looking beyond those three categories, what you just talked about with with people running the robots, it changes the kind of jobs that are in the construction and design industry. And, you know, so I loved what you said about trying to make that part of the industry more exciting to a new, new set of workers. And it's such a fundamentally important part of of the nation's need for for housing that that that construction industry is really critical to that.



So, again, Kent and Abby, thank you so much for for being on the show to talk about the finalists and the winners. Can't wait to see what's in store next year. But any parting thoughts? You know, looking back at the winners or maybe you want to predict the future for next year? Do you think we'll have the same three categories next year?

**Abby Ivory** [00:31:51] We will absolutely have the same three categories. But I think one thing that we've been focusing on a little bit more is like looking at some of these early stage ventures. This year we've seen like a variety, we've seen some super early states, some people who are a little bit more advanced. I mean, Diamond Age is raising their next third series A-round and so we're in different stages right now, but I think it's fun to see some of these new, really young companies. And like Kent mentioned, the other fun part of our job is pushing students to learn more about this area overall and we're really hoping to see some of our students start some companies that eventually will come through the Ivory Prize and I have one company that's getting close, they're getting close to come through. So we're just keeping an eye on them right now.

**Kent Colton** [00:31:37] And I would just say, I guess in wrapping up, the challenges are so great, but for us each year — and it's easy to get kind of weighed down by the challenges related to housing affordability — but for us each year and the people who are working as the judges, it's uplifting to see all of this wonderful innovation which is underway. And what is clearly now a national recognition that housing affordability is a major issue. And if people want to grapple with or, you know, they'll be a obviously, you know, we've just had the winners announcement, but we released this five-year report and and people can go online at Ivory Innovations, they can get a copy of that, we're really excited about talking about not only what the issues are, but what some of the solutions are as we go forward addressing this very, very important topic.

**Abby Ivory** [00:32:29] And just to mention what Kent was saying, if anyone is interested, there will be — we're partnered with [NAHB] and HUD (U.S. Department of Housing & Urban Development) is doing a big showcase on innovation in housing in June in Washington, D.C. So if anyone's interested in coming out and seeing the innovations in person, there will be a lot of people just on the mall actually showcasing and will be working on helping get the word out on that as well.

**Steve Guggenmos** [00:32:53] Yeah, that's great to know about. And I think that, you know, close to home for us. So I think probably Corey and I will will rally and find a way to make a, make a, a chance to get down there and. Yeah and just Kent as you said that, you know, seeing you know the just the energy that's brought to this through through the groups that make applications, you know, it just makes me think of, you know, how great it is to have the two of you on each year and, and the energy that you bring to this. And I think that I'm excited for for what can happen in innovation and I think that giving these discrete examples each year and rewarding and bringing attention to this list of nominees you know the finalists and and everything and the final winners is is really a high point of the year for for us on the podcast. So thanks for being here.

Kent Colton [00:33:45] Thank you.

**Abby Ivory** [00:33:46] Happy to be here. Thanks for having us.

**Corey Aber** [00:33:49] The Freddie Mac Multifamily Podcast is produced and supported by a team of our Freddie Mac colleagues, including our production leads Jenny Nguyen and Raquel Sands and audio producer Dalton Okolo.

**Steve Guggenmos** [00:34:00] To listen to more and keep up with the latest episodes be sure to subscribe wherever you get your podcasts and check our website mf.freddiemac.com/research for the full catalog of podcast episodes and original Freddie Mac research.