

Season Three: Episode Three eVTOLs & Flying Cars Launch Date: April 27, 2023

DISCLOSURE: All opinions expressed by host and podcast guests are solely their own opinions. The host, podcast guests, and/or Cambridge Associates clients and employees may maintain positions in the securities discussed in this podcast. This podcast is for informational purposes only and should not be relied upon as a basis for investment decisions. Please listen to the full disclosure at the end of the podcast for additional information.

Hillary Ribaudo: In 1903, the Wright brothers flew the first powered flying machine over the skies of North Carolina—opening the gates for an entirely new industry: Aviation!

Fast forward 120 years and we're still mesmerized by flying

Alex Innes-Whitehouse: What I love most it's the freedom, the sort of maneuverability

Doug Carlson: Being able to get into a plane and go up and pretty much fly anywhere you wanna go.

Hillary: And our imaginations have run wild with this idea—giving us one of the most iconic science fiction images of all time: the flying car.

Doug: Well I always think of The Jetsons.

The Jetsons: Well, at least the traffic's led up. I'll be home in no time now.

[Jetsons Music]

Doug: a futuristic, cartoon program where everything was an animated image of what people thought the future would look like. So people were speeding around in their private little flying cars.

Hillary: And though this idea of a flying car has been embedded in pop culture for generations, there have been challenges preventing them from becoming a commercial reality. But in this episode, we're taking you with us to experience something very close.

[THEME MUSIC]

Hillary: I'm Hillary Ribaudo, and this is Unseen Upside by Cambridge Associates, where we explore investments beyond the returns.

This whole season we are talking to innovators and investors who are helping to bring what once was thought as science fiction into the real world.

Join us as we check out a test flight for one of these contemporary marvels that could help change the way we travel.

Hillary at Joby: It makes you feel like a little kid. It's like so exciting.

Eric Allison AT JOBY: It's the magic of flight.

ACT I: STAKES PLUS VC FUNDING

[MUSIC]

Hillary: For decades, transportation has been one of the biggest greenhouse gasses emitters. And according to the International Energy Agency, in 2022 alone emissions from oil grew 2.5%, and half of that year's increase came from the aviation industry as they continue to recover from the pandemic. For example, a small helicopter uses 6 to 16 gallons of fuel per hour, but larger turbine-powered ones can use hundreds of gallons an hour. And a plane like a Boeing 747 can use 1 gallon of fuel every single second!

Andrew Beebe: Decarbonizing an incredibly carbon intensive industry, air travel, is extremely important to us.

Hillary: Andrew Beebee is a managing director at Obvious Ventures, a venture capital firm investing in early-stage entrepreneurs who are reimagining trillion-dollar industries.

Decarbonizing air travel is part of the strategy that will also help fix another big problem: mobility. Or in other words, how long we spend stuck in traffic, especially as our population continues to grow.

[City Traffic Sounds]

The 2022 Global Traffic Scorecard by the mobility analytics firm Inrix revealed that drivers in London lost an average of 156 hours to traffic, while those in New York City lost 117 hours, although these figures remain relatively low compared to pre-pandemic levels. So, a few companies -and one Obvious invested in – are working on a new development.

Andrew: A vertical takeoff and landing vehicle eVTOL, is just a new class of aerial vehicle. Most of the eVTOL companies today are basically taking advantage of a couple of different technologies that allow for them to be cost effective and very safe in flight.

Hillary: So here's our quote-unquote 'flying car'...it's more like a cleaner, quieter helicopter, that could end up operating like a taxi in the sky. Many of the companies working on "electric vertical take-off and landing" aircraft are utilizing drone technology.

Andrew: What eVTOLs generally do is they'll use that drone like lift to get up into the air and then transition into a forward motion, and then from that point forward use wings to fly and that's what gives them the opportunity to go a far distance. So that combination of winged flight with battery-controlled lift to get up and down in a vertical way is what's driven the eVTOL market.

There were a lot of great jokes about flying cars in the early days of technology investing in the late nineties too. I think it was Peter Thiel who said, "We wanted flying cars and you gave us 140 characters." And considering that my partner was the guy who gave us the 140 characters, when we started looking at the flying cars or eVTOL aircraft, it was wonderfully poetic for us to come to believe in a thesis that this was all gonna happen and we could finally deliver on those flying cars.

Hillary: Obvious Ventures was founded in 2014 by Ev Williams, Andrew's biz partner and the co-founder of Twitter; James Joaquin, who you heard in last season's lab-made Diamonds episode; and Vishal Vasishth (Vee-shal Vaseesh), a former executive at Patagonia.

Andrew: The reason we call it Obvious is because there are so many things that at first seem totally crazy. Everybody laughs at you. they ignore you for a long time. Then they fight you with everything they've got, and then it's obvious. And I like to invest in things that eventually my kids will say to me, duh dad, of course everybody you know was gonna use solar panels. Everybody was gonna use the internet.

[Mux: MEZ MEZ 0024 00601 Flying Crew APM.0-02]

ACT II: THE EVTOL MARKET / BEGIN JOBY VISIT

Eric Allison: I think when a lot of people think of flying cars, they think of, you know, you're driving on the freeway and you're stuck in traffic and you press a button and whoop your car can go up into the air, and, and fly away. And for many different reasons, mostly related to physics, but also partially related to regulation, that's not really possible.

Hillary: Eric Allison is Head of Product at Joby Aviation, one of the companies producing eVTOLs and paving the way for a cleaner, more sustainable mode of transportation that will change the way people move around both congested cities and rural communities.

Eric: I am focused on how do you build out the technology platform that will allow the Joby aviation aircraft, to be offered on demand to people as a form of transportation, anywhere around the world. So that people have another option to be able to move on a regular basis, through their cities in a way that they just can't.

By combining electric propulsion technology, meaning batteries and motors and really cutting edge design techniques, we've been able to make an aircraft that's dramatically quieter than a helicopter, more reliable, cheaper to operate.

Hillary: And the idea is that it will be relatively affordable for consumers, like you and me. Joby's strategy is to use the eVTOLs like you would taxis, or Ubers.

Eric: Essentially we're gonna have our own Joby app, and we're actually gonna have integration into Uber as well, as part of the commercial deal that we have with Uber. So the essential idea is that you open up Uber or you open up Joby, you're able to say where you want to go.

Hillary: And just like today, you enter your destination...

Eric: You select the trip, a car comes and picks you up and takes you to the nearest Skyport, then you direct all of those three or four people to the near skyport, arriving at roughly the same time.

Everyone gets, transitions, in a kind of seamless way, into an aircraft that's waiting, that aircraft takes off, flies to the best skyport, to get those three or four people to their final destination. We're using technology to dispatch the cars, to pick them up just essentially as they land. So you get out of the airplane, walk a little bit, get into the car, it takes you to your final destination. So it's a true end-to-end trip that's done on demand, just like you now except instead of just sitting in a car, you actually have three legs to the trip. But that can get you there 50 to 75% faster than you would sitting in a car.

Hillary: In New York City for example, you could potentially take a Joby flight from a Manhattan vertiport all the way out to JFK airport. A commute from downtown Manhattan that would ordinarily take more than an hour by car could be reduced down to about 7 minutes riding an eVTOL.

ERIC: A lot of companies in Silicon Valley and other places have been trying to build products against this idea that like, you don't have to own everything. You can get it when you need it on demand. And we think this is the perfect application for that idea, that when you need this type of transportation, you can just get it at your fingertips. You don't have to be a pilot, you don't have to know anything about it. You can just press a button and you get a flight. And we really think that's a very compelling view of the future that we are very excited to be building.

Hillary: And it's not just for the rich! The folks at Joby hope to make this affordable for the masses.

Eric: We think that we'll be able to launch initially with something like Uber black pricing, but it will be on a per seat basis as opposed to a per car basis.

Now that's not cheap, if you're gonna do it on a daily basis, but it's not helicopter expensive either. And so it is a lot more accessible on a semi-regular basis for people. Now that's a starting point.

Hillary: And then, as the popularity of eVTOLS grows...

Eric: We think that by exercising the network we can do two things, drive down our manufacturing costs as we build more of these things and drive down the learning curves, but also then, build operational and like network experience. As we actually start to operate the service, we think we're gonna be able to get to Uber X like pricing on a per seat basis again. It is possible to do it. Now have to do it on a regular basis.

Hillary: In addition to the partnership with Uber, Joby is also partnering with Delta Airlines; the plan is to integrate air transportation services—so theoretically you could buy a plane ticket that also includes transportation to and from the airport in an eVTOL.

Eric: So this idea of a home-to-seat...kind of elevated experience.

[Plane sounds - Michelle]

[Mux: KOS_KAR_1063_00101_Traveller_Guide_APM.0-02]

Hillary: I flew across the country in a large commercial plane after a very long Uber car ride to the airport in New York. I headed to check out Joby's manufacturing facilities in Marina, California, where they assemble their aircraft. It's one of three facilities they have in the state. And although I am definitely not a pilot, the team at Joby allowed me to fly the aircraft in one of their simulators.

[Simulation pod]

Hillary AT JOBY: It looks like the front of the aircraft, it's a seat with, it almost looks like a video game. And then there's these huge screens in front that are showing my guess is what you would see through the windshield of one of these aircraft.

JAMES AT JOBY: Yes. You can almost feel like you're in the cockpit, like a kind of a replication of this, and you can start flying. Uh, you wanna

Hillary AT JOBY: Yeah. I wanna try it.

James AT JOBY: Yeah, sure. Go ahead.

Hillary: My instructor today is James "Buddy" Denham, Chief Test Pilot at Joby. He gave me a short training on how to operate the aircraft, like I would if I were the pilot taking people from the airport to the city center. Joby's eVTOLs can carry four passengers in addition to the pilot.

James AT JOBY: So that's throttle. Okay. That's used to increase your speed and stuff. Okay. And this is to lift you up.

Hillary: He walked me through how to use a bunch of buttons and joysticks that looked like a giant video game console.

James AT JOBY: I think you're trained enough to start your flight.

Hillary: The simulator uses the actual software and some of the electronics that run Joby's real eVTOLs.

Eric AT JOBY: That's all custom stuff that we've built behind the scenes, and it's the same physics engine that we use to design the actual controls of the airplane. So it's as realistic as we can make it.

Hillary: And while it is very realistic, it's also very intuitive.

James AT JOBY: You're ready fly. You can just start pulling up.

Hillary: And after some tries I was able to take off and fly -in this case over the West Side of Manhattan-, and though the simulator is silent, the experience was...

Hillary AT JOBY: Oh my gosh, this is amazing!

James: And you can just leave it.

Hillary: Okay

James: And it just stays there. It hovers in the air. Yep.

Hillary: It was really easy to maneuver and I was able to control the aircraft just with simple inputs on the controls. A little movement of my hand resulted in pretty significant movement of the aircraft. Joby's eVTOLs typically fly at around 1,500 feet. To put that into perspective, 2,000 feet is where commercial jets put down their landing gear to get ready to land.

Eric: We fly at typical altitudes for small helicopters or airplanes. But you can fly up to 10,000 feet, but it's an un-pressurized airplane, so you don't wanna fly too high cuz the air gets thin.

Hillary: After I tried my hand as an eVTOL pilot in the simulator, it was time to go and see the real thing.

[Hangar]

Eric AT JOBY: We're walking over to this hangar here. This is where we have our flight test team based.

Hillary: As we walked past a security door we approached the actual aircraft.

Eric AT JOBY: Um and You'll see all the airplanes in there including our eVTOL test aircraft.

Hillary AT JOBY: Oh my God, it's beautiful!

[Mux: MYMA_SCOP_0038_00401_Upon_The_Horizon_APM.0-02]

Hillary: And as we go outside, we see the runway. Next to it there's a small platform with a chair, and it's the pilot station! And it is surrounded by a bunch of satellites and antennas.

[By the runway]

Eric AT JOBY: That's how they communicate with the airplane. So they actually are flying it with the controls just like you would be flying it in the simulator.

Hillary: For now, while Joby works towards its safety certifications, all test flights are flown remotely. But someday, these pilots will move from the test platform to actually flying from inside the eVTOL, which we see just in front of us...

Eric: It has a wing, it has a tail. but on that wing and tail, there's six propellers and all six of them can tilt.

Hillary: It kind of looks like a helicopter and a small plane had a baby.

While we stand on the tarmac, someone from the pilot station turns on the eVTOL. And it's getting ready to fly.

[THIS IS A CLIFFHANGER - WE'RE GONNA SEE IT FLY BUT NOT YET!]

ACT III: Doug / Alex / the future + hope

[Mux: CEZ CEZ 4359 00101 Community Ecology APM.0-02]

Hillary: In 2018, the investment banking company Morgan Stanley published a research paper that says that initially, eVTOLs may capture a portion of the market that's currently held by automobiles, airplanes, and public transportation.

But these aircraft also have the potential to unlock new business across multiple sectors. The research says that "these opportunities point to a total addressable market of \$1.5 trillion by 2040." But like Eric said, it's very unlikely that we'll have our own personal eVTOLs.

Doug: People having these things in their garages and they're using them to commute, to work in like the little private car that flies. That's an interesting idea, but it's really science fiction

Hillary: This is Doug Carlson, who you heard at the beginning talking about the Jetsons. He worked at Cambridge Associates for over 2 decades, and besides his work managing investment portfolios, he is also a private pilot out in California.

Doug: I learned on little trainer planes like Cessna Skyhawks and Piper archers, uh, which are basically four cylinder piston single engine planes that are fun to just fly around in.

Hillary: And we also sat down with my colleague Alex Innes-Whitehouse, who works in Private Equity out of the Cambridge Associates London office. Alex also happens to be a private pilot, but he flies helicopters!

Alex: I've been obviously a private pilot based out of Red Hill, which is just south of London. Very tight zone from an air traffic control perspective, so nothing like the wide-open space of California.

Hillary: As most of us know, in order to drive in the sky, you need to get certified as a pilot and you need to maintain a regular number of flying hours.

Doug: I only have about 350 hours, which is just enough to be dangerous.

Alex: I've got about 150 hours total, which is just passing probably the opposite end of being dangerous, you require 50 in your training to be able to pass the license

Hillary: I'm impressed. I have zero hours, so you're both beating me. Well, other than my time in the simulator, that is. I asked Doug and Alex what they think about eVTOLS.

Alex: I think it's a two-fold. One of the factors that people bring up quite a lot is governing environmental change and how you can affect it, but also I think it's an industry ripe sort of innovation. People have been thinking about this for a long time, but it's only really recently that people have started actually acting on that or coming up with ideas to solve that. And there is, I guess, a need for change and there's a potential for change. And then there is a lot of capital that is available to fund this change.

Hillary: The investment possibilities come not only from unlocking new modalities in getting around, but also from the actual manufacturing and the technology that comes along with it.

[Plant]

Eric AT JOBY: This facility is the former Fort Ord, so it actually used to be an army rotorcraft base.

Hillary: Every step of the eVTOL building process is represented here, from making the structural parts, to assembling them to actually flying the aircraft. And Eric took us on a tour along their production line.

[walking sounds]

[Plant]

Eric AT JOBY: So the entire airplane, or like something like 90 plus percent of it is made up of this carbon fiber material

Hillary: At this plant technicians cut and mold the parts needed to build these aircraft with help from large robots.

Eric AT JOBY: It's a very precisely designed, this is a one of the wing's fins.

Hillary AT JOBY: Wow. This what it's like building is one of the wings.

Eric AT JOBY: Exactly. It's um,

Hillary AT JOBY: And this is a huge robot. How tall is this thing?

Eric AT JOBY: Probably 25 feet tall. It's huge.

Hillary: All around this area there are technicians and computers that tell the robots what to do and where to cut. Joby is using processes similar to those used by other aerospace companies, and they're introducing new technology into the process.

Eric AT JOBY: And it's taking data the whole time too, so we can look at the process, we can understand working or not, and make sure we're maintaining quality.

[Mux: MYMA_JUST_0160_01301_Eternity_APM.0-02]

Hillary: Simulator, check! Manufacturing, check! Let's see this thing fly!

[Footsteps]

[TRANSITION – LET'S WATCH THIS THING FLY!]

[Hangar]

Eric AT JOBY: So what's happening right here is that we're removing both the charging cables and what we call conditioning. Um, so we basically cool it as we charge it in order to allow it to not be degraded as we charge it fast. And so they're doing kind of a, a quick preflight here,

Hillary: After some preparations, the Joby team moves the eVTOL over to the vertiport - that's the term for a eVTOL landing pad—It's also next to a real runway, because as part of the test process, another aircraft follows the eVTOL in the air. They call it the chase plane and today it's a blue Cirrus SR22, a single-engine small aircraft.

[moving eVTOL out, chase plane sounds]

So the chase plane takes off first, like the traditional plane it is, down the runway. It circles the airport, waiting for the eVTOL to lift. Helicopters need to warm up and get the rotors running before taking flight, but not this eVTOL...

[Runway sounds]

Hillary AT JOBY: So now the propellers are all going.

[eVTOL take-off sounds]

Eric: And so when it takes off the propellers point up and it takes off straight up like a helicopter, but then pretty quickly like almost immediately, the propellers start to tilt forward. And then after 30 seconds of converting from the vertical mode to the horizontal mode it's just flying forward using the wing for lift, just like an airplane does. So it really combines the best features in a way of helicopters and airplanes into a kind of a unique configuration.

Hillary: It basically turned on and flew away, and once it was moving forward, the chase plane started to follow.

Hillary AT JOBY: I couldn't believe, I mean, when the eVTOL, it was still very close to us and I couldn't hear it at all anymore. It's so quiet.

Eric: Noise is incredibly important, and it was one of our top design goals, not just because, it's good commercially but because it's good for the environment, right? So it's very much a core value for us that we are building things that are good for people.

Hillary: And you can actually check out how quiet Joby eVTOLs are in a video the company produced comparing them to other traditional aircraft.

So, you are going to hear the sound of the Cirrus SR22, which the aircraft Joby is using as the chase plane.

[Cirrus SR22 Sound]

Hillary: And this is the sound of a Leonardo AW109, a lightweight, twin-engine helicopter.

[Leonardo AW109 Sound]

Hillary: And this is how Joby's eVTOL sounds when it's flying just over your head.

[Joby's eVTOL Sound]

Eric: By combining electric propulsion technology, meaning batteries and motors and really cutting-edge design techniques, we've been able to make an aircraft that's dramatically quieter than a helicopter, more reliable, cheaper to operate.

Hillary: During tests, the team at Joby collects lots of data from their eVTOLs both on the ground and during flight to help them better understand the best way to operate and maintain the aircraft. This data will also feed the design department that is working on revisions for the next generation of vehicles. And they do everything through the lens of safety.

Eric: We test because we need to understand what our failure modes are, are we properly identifying and modeling and simulating all of the things that can possibly happen. So we expect failures to happen, occasionally, otherwise there'd be no point in testing and that's part of the FAA certification program. You have to fly the aircraft to its limits. You define the limits, you define an envelope that the aircraft has to operate within, and then you have to show that it works and then hit all the test points within those limits. So that is something that we will be continuing to do, as we move through our test program to bring the aircraft to market.

Hillary: The certification process has a few components.

Eric AT JOBY: There's the design certification, which is called type certification, and the FAA has to be in the loop for all of the design review and testing and showing that the design meets the intent and the safety.

Hillary: Once they have the certified design, the second part is the production certification.

Eric AT JOBY: You have to show the FAA that you can build it repeatedly and in a way that's auditable. Then the third one, for us is the operational certifications. So we are going to not just design them, build these aircraft, but we're gonna operate them as well.

Hillary: Joby already has the operational certification and they even have a flight school on site to train pilots.

Eric AT JOBY: So a lot of work to be done, but, everything's moving along.

[Mux: MYMA_JUST_0213_00801_Dreams_of_June_APM]

[TRANSITION TO ...

ACT IV: OTHER THINGS – IT'S NOT JUST EVTOLS, IT'S INFRASTRUCTURE!]

Hillary: Technology and certifications are not the only challenges. While cars need roads, aircraft need airspace routes while in flight. Joby is designing the aircraft to fit into the existing aviation system. Here's my Cambridge Associates colleague Doug Carlson again.

Doug: There are different classes of airspace depending on what type of aircraft are in it and how controlled it is and each of those classes has certain rules, and certain altitude parameters and so on. The most restricted ones have to do with approaches to airports-very busy airports--and those lanes are very busy with commercial aircraft coming and going, and they're tightly controlled.

Hillary: For example, when my colleague Alex Innes-Whitehouse flies in London....

Alex: The airspace here is already quite heavily constrained and also very heavily regulated. So, if you were to fly up the Thames, there are multiple air traffic control zones and each one is separate. Each one has a different channel, and each one can hold you in their zone until certain other things pass.

Hillary: And there are also massive infrastructure considerations. Here's Obvious Ventures' Andrew Beebe again.

Andrew: The infrastructure for vertiports is really critical. They are in many ways, just like a heliport. And then they're harder because you need a fair amount of electricity going into them. It's a, I think, another great opportunity for investment, to make sure that we can build out this electric infrastructure for vehicles that just roll on four wheels and for vehicles that fly in the air.

Hillary: And the fact that they can help the air transportation industry reduce its emissions is huge, not only for the planet but also for investors.

Andrew: Climate change is now felt, literally physically felt. So in virtually all corners we're effectively done debating its existence. We're really focused on what do we do about it? The financial support from investors is extraordinary because many of them have stated very clearly this is one of the biggest financial opportunities humanity has ever seen.

Hillary: Joby Aviation is targeting commercial operation for 2025, and as the industry moves to address the remaining challenges, we get to witness the transformation of an entire industry.

Andrew: I think, we're gonna democratize and decentralize air travel as well because it can become much more affordable with these vehicles. The vehicles can use all sorts of alternate landing spaces. The opportunity for people to commute into city centers from very distant ex-burbs to get well outside of suburbia and the city center to much more affordable areas, but also possibly areas much more connected to nature, I think will also be an exciting side benefit of these types of solutions. Something like 75% of the global population has never traveled by air. That's an economic disparity that I think could be righted with the lower cost technologies like eVTOL solutions.

[THEN TRANSITION TO THE FLIGHT LANDING – the third and final Joby section]

[Mux: PMY_PMY_0049_00501_Arriving_At_A_Conclusion_APM.0-02]

Hillary: At the test site, there's open flat land between the airport and the ocean which is where the eVTOL flies. And after about an hour of flying near the facility, the pilot controlling it from the platform next to us prepares the eVTOL to land.

Hillary AT JOBY: Okay, it's coming in for a landing out. It's very quiet. That other sound you hear is the chaser flight, but the actual eVTOL is incredibly quiet.

[eVTOL sounds]

It looks so graceful moving through the air. Wow, it's coming straight down for a landing. It's moving vertically down very quickly. It's so cool. And now it's down. And now the propellers have stopped. That was so fast.

Andrew: I think we'll be able to eradicate the use of fossil fuels in air transit, maybe not within 10, but maybe within 15 years, and that will be a really exciting future state. I really think we will be in an era of zero emission Air travel and that will be a very exciting period. We can transform an entire industry for the better, and we can show outsize returns at the same time.

[Closing Mux: APM_APMC_0166_04501_L_Is_A_Strong_Word_Rhythm_Mix_APM-02]

Hillary: If you want to learn more about eVTOLs, or venture capital, please visit us at "cambridgeassociates.com/unseenupside," or check out the show notes. Stay tuned for more upcoming episodes and if you like what you're hearing, leave us a review and tell your friends and colleagues.

At Cambridge Associates, our podcast team includes Michelle Phan, Luke Charest, and me, Hillary Ribaudo.

From PRX Productions, Sandra Lopez-Monsalve is our producer and Genevieve Sponsler is our editor. Production assistance by Isabel Hibbard at PRX and by Megan Nodolski at Goat Rodeo.

Our location producer for this episode is Bejan Siavoshy.

This episode was mixed by Samantha Gattsek. The executive producer of PRX Productions is Jocelyn Gonzales.

Thanks to our guests Eric Allison, Andrew Beebe, Doug Carlson, and Alex Innes-Whitehouse ... We also want to extend a big thank you to..., Oliver Walker-Jones, George Kivork, Michelle Seo, and the rest of the team at Joby.

And we should also mention that the team at Obvious Ventures have their own podcast. It's called "Obvious Ideas", check it out wherever you listen to podcasts.

Before you go, one of our colleagues has an important message about the contents of this podcast.

[DISCLOSURE]

This podcast should not be copied, distributed, published or reproduced, in whole or in part. The information contained in this podcast does not constitute a recommendation from any Cambridge Associates entity to the listener. The terms "CA" or "Cambridge Associates" may refer to any one or more Cambridge Associates entities. Neither Cambridge Associates nor any of its affiliates makes any representation or warranty as to the accuracy or completeness of the statements or any information contained in this podcast. The views expressed in this podcast are not necessarily those of Cambridge Associates, and Cambridge Associates is not providing any financial, economic, legal, accounting or tax advice or recommendations in this podcast. The receipt of this podcast by any listener is not to be taken as constituting the giving of investment advice by Cambridge Associates to that listener, nor to constitute such person a client of any Cambridge Associates entity.