

INTRODUCTION: Welcome to the We Are Wake Tech podcast with your host, Wake Tech President Dr. Scott Ralls.

SCOTT RALLS: Hi, I'm Scott Ralls, host of the We Are Wake Tech podcast. And this month, we're interviewing perhaps the busiest person at Wake Tech. Now, there may be a few people who would take issue with that, but, if not the busiest, at least in the top five, because we're interviewing this month Jeff Carter. Jeff is vice president of facility operations, and there's a lot of facility operations going on at Wake Tech, a lot in our current and a lot in, I hope for, our future. We're gonna be talking about that today with Jeff Carter. Jeff, thanks for joining me today on the We Are Wake Tech podcast.

JEFF CARTER: You bet.

RALLS: Jeff is everything I, if we didn't say vice president of facility operations, I think you could be the vice president of places because you're responsible for all Wake Tech places – how they operate, how they get built, everything related to the physical plants of Wake Tech, which is now five comprehensive campuses, building the fifth comprehensive Campus, two specially campuses – public safety and health care, our Perry Health Sciences Campus – and we also have two training sites – one very big training site, the Beltline Education Center. So, it's a big physical responsibility, and it takes someone who really knows his stuff. And we're very fortunate Jeff Carter does.

Jeff, talk to us a little bit about how you came to Wake Tech because you've got a great, a great history in facility, multiple aspects of facilities, that cuts across different sectors. So, first, thanks for joining us today, and tell us about how you got to Wake Tech.

CARTER: Thank you, Dr. Ralls. Well, I came to Wake Tech at about three years ago, kind of the, toward the end of a, of a long career of facilities maintenance and construction and design. I started out with the Navy back in 1980, spent 25 years with the Navy building, designing and maintaining facilities virtually all over the world. Lot of support for the Marine Corps, a lot of support for the Air Force, I was Navy but provided very little support for the Navy. It was more Marine Corps and Air Force that I worked with.

I really enjoyed myself, love the military. I had a great time and then decided that, after 25 years, it was time to make a career change. So, I ended up at Penn State for about nine years there, working at the health care, at the, the medical center in Hershey, Pennsylvania. Did the same thing: facilities maintenance, construction, design work for them. And then I got smart and figured I needed to come to North Carolina to get away from that northern weather.

RALLS: Just like everybody else.

CARTER: There you go. So, I was with the Rex Healthcare for about, almost six years, built the new Heart Vascular Hospital over there, designed a few more facilities, worked at, very heavily on the design for the, the hospital in Holly Springs, as well as the new cancer center in, right across the street from the main hospital on Lake Boone Trail.

So, did a lot of maintenance and construction throughout my entire career. It's a very rewarding practice that I, I really enjoyed doing, building facilities as well as maintaining and upgrading old facilities. There's a lot of old infrastructure that we have that we really need to upgrade over the years to keep it rolling and keep it in good shape for our students to be able to have a, a decent aca, academic environment. So, three years ago, when the opportunity opened up here and I found out, oh my gosh, we have an \$349 million bond that we're working on, plus a, a bunch of other work that's going on. We never really knew living in, in, in the North Carolina, in the Raleigh area for six years, I never really knew how expansive the Wake Tech campuses are.

RALLS: Best-kept secret.

CARTER: It is. And so, I, I was very fortunate to, to be able to, to start here and, and am really enjoying my time here. We, we've had the opportunity to increase our staff to keep up with the work. We've had an opportunity to not only increase the number of staffing that we have but increase the caliber of staffing that we have. We have a fantastic team. We've made a lot of changes over the years to try to increase the amount of work that we had done, the quality of work that we get done to, again, to refresh the facilities and to build new facilities to support all programs that I know Wake County needs.

RALLS: Well, we were fortunate what you came to Wake Tech. You brought a lot of expertise in this field, but you also, you brought great leadership, and you mentioned your team. I love the facilities team. They're so, I mean, it's just a great spirit, and just a couple weeks ago, I saw you all out there team building. I mean, you're painting, you're painting, you know, an area of the, our original campus here at Southern Campus, which needed a little, little pick-me-up. But it was also a good team-building effort and just, you know, the smiles and the laughter of your team, and they just remarkable people. So, we appreciate your leadership as well.

CARTER: You bet.

RALLS: So, let's talk about what's going on, and this is a good month to talk about it because we are, we have just announced a relocation, a campus relocation. I mentioned we have five comprehensive campuses, two specialty campuses. One of our campuses, though, is a leased facility, which we have just purchased, started the, the process, put down the initial money to purchase land to relocate our southwestern campus. And so, there's a lot of conversation about, you know, our geography, but also we're heading into what we hope will be our next successful bond campaign. The voters in Wake County or residents of Wake County will vote on that in November.

So, it's good for them to know, you know, our stewardship of their resources, what those resources do for them, what we have done with recent bond funding, and what we can accomplish, primarily in our workforce-forward focus, as we say, moving forward. So, maybe we'll talk a little bit about that and, and before we get into that, or as part of that, one of the things that you've taught me, and I have been taught by others coming along, is that, you know, we spend a lot of time talking new, but you have to be very careful not to ignore the maintenance of what you have. And today I was walking through some of our older, more than 60-year-old buildings, cause we inherited them, and that's a big part of the funding, the recent bond funding and the future bond funding, is maintenance and repair, and I know, even with

COVID, you've done a lot of specialty things around that. And so, that's a particular emphasis that we wanna keep going to. I don't wanna rush past that before we get to the bright, shiny, new, but that's a big part of what you do.

CARTER: It is, and one of my very first mentors in my career had an old saying that, if you're not gonna take care of what you currently have, stop building new.

RALLS: Yeah.

CARTER: And we really need to do that. We've got some facilities that, I think, have been well maintained over the years but are now starting to age out on us. Even some of our newer campuses are experiencing some equipment that is, is beginning to age out. We're making plans, long-term future plans, to replace that equipment, things like chillers and air handlers and heating systems that last about 20 years. However, the facilities expected to last 50, 60 and 75 years in many cases. So, we do get a, a very, have a generous funding amount from our county to be able to take care of our buildings, and we have come up with some very strategic plans to be able to do that.

In fact, on our North Campus, which is one of our newer campuses, we're now looking at some long-term replacement that'll be a multi-year-type project to be able to increase not only the capacity but to, to replace the equipment with newer, more efficient equipment, better energy efficiency on it and better performance on a lot of the equipment. Here on the South Campus, we're looking at renovating some of our older facilities, not only the equipment areas, but also in the, the, the classroom areas, the lab areas, increase our esthetics, bring it up to date, to, to today's standards.

RALLS: Now, the recent bond has helped us address many of those things that we couldn't have dressed otherwise, but a lot of it is things you wouldn't see. Is that correct?

CARTER: A lot of it is behind the walls.

RALLS: Yeah.

CARTER: Or down in the basement.

RALLS: Yeah.

CARTER: And a lot of it is, if it doesn't work, it'll shut the building down. So, you know, we need to make sure that we're maintaining that equipment and cycling it through as it's needed. So, portions of the, of the funding that we get go toward, just toward that, the behind-the-walls things and the, in-the-basement stuff. And then a portion goes toward upgrading the facilities to bring them up to date, but also to accommodate some of the new or more expensive programs that we're running.

RALLS: Well, that's one of the things I really appreciate about you and your team, is that focus on maintenance and maintaining, and, and I think it's something that the, the residents of our county would want to know as well because, when they make investments in us, they want to know that we're, we're

not just out, everything's new. It's, it's really also making sure what we have maintains its operations for now and for the future.

CARTER: That's right.

RALLS: I'm just, but let's switch over some of the new stuff, and there's a lot to talk about there and, particularly thanks to the support of Wake County and the, and the bond, recent bond funding, let's talk about some of the recent projects. And I, you know, I think, sometimes, you and I are good yin and yang because I remember someone, I guess it was when I first became a college president 20 years ago and the former president at that college said to me, knew me and said, "You know, you're programs guy, and I'm a facilities guy. So, we probably think differently." And he gave me a piece of advice. He said, "You always need to have a good facilities guy around you," because he knew I'm, I'm kind of a program partnership person, and it's not that I don't think about facilities, but think about them in a different way. I'm thinking about in terms of, you know, how they wrap around the programs they enable, the partnerships, corporate partnerships, other educational partnerships that we that we wouldn't have otherwise. But in terms of turning on the lights and where things are, even how they how they look, you know, you're you've, you, you and Gayle Greene, who's our executive VP, you guys do such a remarkable job. I just sit in the background and listen, but I'm always interested from that program standpoint.

So, I think we're a great yin and yang. So, let's talk a little bit about some of these facilities. When you talk about the building, I'll kind of share a little bit about what those buildings have enabled. So, let's, let's hit a few of those. Let's talk here, and we're on the Southern Campus right now. And so, a few years ago, we were able to move into a new Center for Building Technologies, which is, when we're talking about facilities, has a lot of relevance because that's our, where we train the facilities people of the future for our county. But we've also been able to take our older facility where they were located, Ready [Hall], and to go in there and do some renovations and expansion for the future in a lot of key programs. So, we're talking about program areas. We're talking about HVAC. We're talking about electrical, where all the electric, electricians receive their education in the new facility. We're talking about building automation, which is the new type. But we've also been able to go behind and do some renovations and expansion in the old. So, tell us about what's happening on this campus as it relates to building technology.

CARTER: That's right. Well, the, the Center for Building Technologies is a little bit different for us. That was mostly county-funded; a little bit of state money helped with that as well. And that building, as you said, does have the new HVAC, the new electrical programs in it, building automation. And when we relocated some of the programs from our existing Ready Hall, we were able to go back in with another project and renovate that building over a two-phase type project. Most of it is dedicated toward the new welding programs, or the expanded welding programs that, that we really have a backlog on. But in addition, there's electric programs going in, there's a new makerspace that'll be up on the second floor of that building. I'm really looking forward to that. There's refrigeration that will be in the building.

RALLS: And that's new for us, refrigeration, for commercial refrigeration.

CARTER: That's right. I think it's new and it's, there's some of the legacy programs that are being expanded with it. So, a lot of excitement over those. We've had some great partnerships established with that new building with some of the corporate sponsors and some of the commercial partners that we deal with almost every day in a lot of our construction and a lot of our facilities maintenance. So, just a real robust program there. Once we get the second phase of the Ready building done, we'll have a, the other programs that operation as well.

RALLS: Yeah. So, I, I think one of the things there is, you know, a lot of people spend a lot of time waiting for the electrician because there's not nearly enough electricians.

CARTER: That's right.

RALLS: So, that's part of our big role is to expand from electricians and HVAC and welders and others, and that's happening here on the Southern Campus. Also on the Southern Campus, you might make note, is you're getting ready to move into a new facility as well.

CARTER: We are. we are. Long time coming. We are consolidating our current facility staff, which is spread among four or five buildings on this campus, as well as some over at the North Campus and one or two that are at, spread around some of the other campuses, consolidate them into a brand new facility around 55,000 square feet, which will also have all of the storage and warehouse area for pretty much most of the college, getting our business office folks, our shipping and receiving folks out of some of those old, you might call them shanties or, or butler buildings or shacks, but they are old, old facilities that really need a lot of work, and they, they don't house our material very well. They're not, they're not conditioned spaces, so they don't take care of things like paper very well. That is very, that is affected very much by the environment that it's in, things like some of our equipment that comes in and needs to be stored in warehouse, needs to be stored in a conditioned space.

So, we're consolidating not only the facility staff but the shipping and receiving portion of the business office as well as our, our, our furniture staff, as I'll call them. So, some of those folks will be in there as well. And it creates better synergy, I think, with all the programs, to be able to be in one location. When you're spread out, you know, we've, we've done a great job.

RALLS: Yeah.

CARTER: We've done a great job during this pandemic. We're keeping things going on the computer with Teams and, and with Zoom meetings in that. But there's nothing like sitting around a table ...

RALLS: For synergy.

CARTER: ... throwing out a bunch of drawings and, and coming to a conclusion and working through problems that way.

RALLS: Absolutely. Let's move around Wake Tech. But as we move around Wake Tech, we're moving around the county as well. So, let's head west to Research Triangle Park Campus. And so, what's new

there, we, we did the ribbon-cutting. great ribbon-cutting last year for the new Lilly Center of Science and Technology. Can you tell us a little bit about that?

CARTER: Sure.

RALLS: And I can help fill in as we want with the programs that are taking place there.

CARTER: That is, that's about 63,000 or 64,000 square feet, was completed last year. It's been occupied for just about a year now, and our program started up kind of late in the Fall and much more heavily last Spring semester and now are completely ...

RALLS: Booming.

CARTER: ... booming with, with the high school students in there who, who occupy pretty much the majority of the second floor, as well as some of the other labs on the third floor. We have the, the biotech labs that are on the third floor and other teaching spaces on the, on the second floor so, I'm sorry on the first floor. So, a lot of good space in there. We even have a lunchroom for the students to be able to use during the day while they are between their classes. So, mostly, I think, the, the, the high school students are there at lunchtime but our college-age students as well are, are intermingling with some of those programs.

RALLS: So, the programs that are there, you know, with many unique things, you know, our analytics program, which is unique, is on the first floor. But the, I guess, the two features that we have, the fourth early college high school partnership, Wake Early College of Information and Biotechnologies, which has started this August, and that's the second floor. And then the third floor is the hub for our biotech program that complements our biopharma program. That's the program where we're training the, the, the lab technicians and others who are working with the biotech companies in gene therapy, cell therapy, those kind of things. And does that floor, that third floor, remind you any of your old health care days? Because when I walk around there, you just, I mean, it, that is, a high, you have an aseptic training suite and the co-lab. That's a high-tech floor.

CARTER: It is, it is. And it, it, it does remind me of a lot of the hospital work that I've done in the past and a lot of the research that work that I did with Penn State – building clean rooms and building laboratories that they can work in. So, I think it's a, it's a pretty high-tech place and a great place to be, and it's really kind of gotten us to where we can morph into some of our future work that, that we have going on in our new events as well.

RALLS: Absolutely. It's amazing to what's happening around that RTP Campus. I think that building also is illustrative of how buildings can help further and even catalyze sometimes our, our corporate partnerships because you walk into that building, which is named the Lilly building based on donations from Eli Lilly, on the second floor, you see the Fujifilm Diosynth Biotechnologies Early College suite, and then the third floor, you have the Amgen Co-lab. So, lots of our corporate partners who were, who provide opportunities for the students coming through Wake Tech are supporting the, the naming rights in that facility.

So, speaking of that, let's keep moving. Let's move north up to our Northern Campus. Gosh, what an amazing facility there and a ribbon-cutting like we never had before ...

CARTER: Oh yeah.

RALLS: ... and probable never will have again like that. The Hendrick Center of Automotive Excellence, totally devoted to automotive technician education and training. Now that is a one-of-a-kind facility.

CARTER: It is, and it I think it complements that campus very well with all of the other programs that we have going. But the Hendrick Center has, as you said, all types of, of automotive programs in it, from body repair to automotive engine repair and even automotive welding, which is a different type of welding than, than what you might associate with the standard type of welding training we're doing. So, a lot of great programs in there. Mr. Hendrick was kind enough to give us a sizable donation, and, and it really turned out to be a beautiful building with, with the programs that we have to have in there.

RALLS: It, it's also illustrative of how facilities help us meet workforce challenges because this fall, we had 260 automotive technician students, which is double what we were able to have prior to that facility. And we'll have 300 next fall as we continue the expansion of the program areas. So, you know, I think a, a theme for all our buildings is that they reflect, they mirror the workforce needs, but they're also helping to unlock some of the capacity challenges that we've run into.

We, we frequently with automotive had twice as many students as we could take, and now, hopefully, you won't have to wait as long for a car repair in Wake County as a result of that work. And what great partners we have from Hendrick to Capital to, to Leith and Crossroads and Advanced Auto. So, great partners who've joined with us and with the county bond funding, and that's what makes all that possible.

CARTER: You know, you talked to a little bit earlier about the, the trades training that we have going on in the buildings here. Industrywide, we are struggling with automotive mechanics. We're struggling in all the automotive departments. We're struggling in electrical and HVAC. So, all of these facilities that we are building are dedicated to teaching those type of trades-type training that we so desperately need within this county to be able to keep up with the growth that the county has going.

RALLS: OK, I'm glad you mentioned that because one of the things I think makes Wake Tech unique as well, if you look at the Hendrick Center, that's a building that you take a picture of if you had a postcard. You know, it's not, in the past, a lot of times, when we did what in the old days might have been called vocational training, and that's an old building in the back of a place that's not well lit. And, and then we wonder, "Why do students not wanna go into these careers?" At Wake Tech, we're just the opposite: Let's make, let's put that, let's make those places, we want those students to feel like, you know, workforce heroes when they're coming through us, and we want them to be attracted to these programs, and we put them front and center in nice places.

CARTER: And many of the places they'll go to work after they complete their education are upgrading their facilities as well. So, to be able to train in state-of-the-art buildings on state-of-the-art equipment is very, very important for the long-term career aspirations that they have.

RALLS: Absolutely, and we'll talk about that when we get to the health plans in the future. But, before we do that, let's move to the next project that is underway. If you're driving out from Raleigh to I-95, and you see a hundred acres of dirt and stuff going up in Wendell, that's us. That's our new Eastern Campus in an area of the county that we're glad to now be a part of and to serve and we think needs us. And boy, that's some project going on in Wendell.

CARTER: It is. It's actually four separate projects, the first of which was to break ground and to establish a campus out of greenfield acres, as we call it – nothing was ever built there before. It was always farmland. We were very fortunate to be able to land right on the intersection of Rolesville Road and the interstate there, I, the new I-87.

RALLS: Amazing accessibility.

CARTER: Yeah, so it's a lot of great stuff going on there. But the first project is, pretty getting pretty close to being complete. We've got the majority of the roads, the infrastructure that's built or that's going in. We've got a new central energy plant, very excited with the amount of geothermal energy that we're gonna be using on that entire campus. We, we drilled nearly 300 wells that are about 500 feet deep, each of them. So, we'll pump groundwater through our plant to be able to, to heat and cool the rest of the campus. We've got solar photovoltaic panels going in on virtually every building that we're putting out there. They'll get us maybe to 12 to 15 percent of our electric load will be generated through those solar panels. So, reducing our carbon footprint, reducing our energy costs long term to reduce the maintenance, reducing the amount of equipment that we have to maintain and replace over the years really goes a long way toward making that a very sustainable campus.

RALLS: You know, before we talk about the other programmatic aspects of the buildings, the four buildings that are being built out there, let's dig into that just because that's a, really a, a Wake Tech way. It's, you know, sustainability, and for us, sustainability is, is being kind of environmental stewards. But there's also, you know, when we say it's green, it's also green in terms of money because it saves money. And it's also green for our students because, when they learn these advanced energy-saving technologies, their opportunities are even greater. So, those facilities are unique because, first off, they help us save money for the long term because, I don't wanna, I don't want to overlook that, those geothermal wells will heat and cool our buildings out there, correct?

CARTER: They will. They will for a for a very long time as well, and they will reduce the amount of operational funding we have to attribute toward keeping the buildings in operation where we can turn that operational funding back around and push it back in toward student programs.

RALLS: Yeah, the bond funding up front saves the heating and cooling costs for the future. And then, the solar, which we have quite an expertise with our programs, our electrical program is solar, but that's, that's gonna cut our electrical bills. Is that right?



CARTER: It will. It will anywhere from 10, again, 10, 12, 15 percent our electrical bill would be cut, and I just listened to a, a podcast yesterday. One of the, my favorite financial podcasts, they are now predicting that, by the end of this year, there will be more renewable energy-related jobs in America than the fossil fuel-related jobs. So, the ability to train on that equipment, and we set up each of our buildings to be able to train on that sustainable equipment. In fact, the first building that's going out there, the Central Energy Plant, will have a small training facility integrated right within it to where the programs can teach on equipment and also go up onto the roof and teach on those solar panels that are on that building's roof right there.

RALLS: So, and that's also a Wake Tech way. I mean, if you look at the energy plant at Northern [Campus], which is, gosh, what a great-looking energy plant, but in it, you'll find a classroom when you go. We talk about the Center for Building Technologies. One of the things I love about the episode is you see cutouts, you know, I guess if you want ...

CARTER: Out of the ceiling.

RALLS: .. out of the ceiling. And some folks might wonder, "When are they gonna fill that in?" But that's part of the mission because our students are the ones who are gonna need that, use that expertise and so the buildings themselves, like the solar on top of those buildings, just like it is in our Public Safety Campus, become labs for our electrical students. So it's kind of a unique Wake Tech way of who we are.

CARTER: It is and it provides, I think it provides a lot of that hands-on, real world experience that they maybe can't get at other colleges.

RALLS: Yeah, yeah, absolutely. And I don't wanna bypass this, but we talked about jobs, and we're, we're a jobs college. That's who we are at our core is Wake Tech and the jobs in the future. This energy-efficiency opportunity, we're seeing that in multiple ways, and we're a big role in that. You mentioned the Hendrick Center, but that's also where you're gonna see our role with electric vehicles, but also out at Northern and close proximity to our great partners at Siemens who make the plugs that you plug electric vehicles in. So, we're working with them in terms of facilities that will train for those kind of jobs for the future as well.

CARTER: Yeah, Siemens is working with our, our academic programs now to develop the training programs that they'll need to be able to train workforce that they can employ long term right out there in Wendell.

RALLS: So, a couple more projects out there, and you talk about the real world, I mean, that's another way you could look at Wake Tech, the "college of the real world." Maybe another catch phrase, but, but the, the real world is really real for our first responders, you know, and Wake Tech is unique in that we're, I think, the state's, the largest training provider for first responders, law enforcement, fire science, rescue, EMS. And at the Northern Campus is a one-of-a-kind facility, certainly for North Carolina, probably for a broad region around here, and that's gonna be the public safety simulation facility. Can you describe that building and what's gonna happen inside of it and around it because it's unique.

CARTER: Yeah, it's about 76,000 or 77,000 square feet, and inside the building, we'll actually have a full working street scene that our law enforcement and our, our EMS programs can use to simulate rescue or simulate law enforcement situations. In addition to that, we'll have training on, Department of Corrections will actually have some, some cell type, some, some, I call them jail cells, right? The jail cell type facilities that they can train in. There is a, a townhouse that, simulated townhouse inside that building. There's also a simulated hotel and bar type area, along with classrooms that can be simulated to use for our high, our local school system to be able to use for our, our rescue forces to be able to go in and train in those type of situations as well.

On the exterior of the building is a 600-by-600 driving pad that will be set up for law enforcement driver training, EMS driver training. Fire trucks can get up on there. We'll have some CDL training on there, as well as motorcycle training. So, we've got different courses that will be laid out and different configurations that they can use both inside and outside the building. And that track will, that outside track will actually lead right into the interior portion of the building, and we'll be able to take simulations right off that track and into the street scene inside and do some rescue or some law enforcement simulations in, say, the townhouse or, or the hotel spaces. And there, we'll have the all the movable-type walls where we can set up different type of simulations. Right outside that facility is a two-bay ambulance garage. We'll be able to, to teach on ambulances that are both in that ambulance garage and next door to it, and then inside, we've got a simulated ambulance that'll be up on the second floor. So, those are all of the, the law enforcement, EMS, fire training type programs that are in that building.

In addition to that, our partnership with Elizabeth City State University, we'll have a very extensive drone or UAV training program that will be in there. So, we'll have a sizable laboratory that they'll be able to have the training right inside the building, and they'll be able to see and train on the screens that'll be up on the walls, as well as, in the future, be able to take literally take a drone out and fly it inside a cage that's gonna be built over on the eastern side of the campus. just a little bit away from this facility. But they'll be able to, to walk over there, fly drones inside a contained area, be able to train on them to where it's a safe environment for the students and, and the campus, too.

RALLS: It's gonna be one of a kind. I'm really kind of looking forward to when we get into that building because, you know, generally most facilities in my mind's eye I kind of imagine it, and this I kind of think of this as a little city within a building. But that one's gonna be interesting to walk through and actually see because it's gonna be unlike anything else we have.

CARTER: And the second phase of that project on the northeast portion of the campus, right around 10 or 11 acres, and we're getting ready to go under design here within the next few months to be able to design that area to be a fire rescue training area. So, we'll have some burn towers, some climbing towers, maybe some smoke groups and some rescue areas that the fire departments all around the county, as well as our EMS and our law enforcement officials can all train in those areas and be complementary to the simulation center.

RALLS: Well, we love our public safety committee, our first responders, and I think, for the folks who listen to this podcast, that's what the residents should know when they support bonds with us are

supporting our public safety community because they're going to be able to have simulations, they're gonna face situations, God forbid they face, you know, some situations in the future. But when they do, they will have had an opportunity to at least simulate it prior to getting there in a facility that is one-of-a-kind for our state.

CARTER: That's right.

RALLS: All right, let's quickly, we'll wrap up North Campus here. Couple other buildings that, to make it a campus, we, we need a general education building that has all our campus services, libraries, but also classrooms, science labs and others. Anything unique about that building?

CARTER: That's, you know, that's more of a traditional academic building. It's the largest facility out there. It does have a library in it. It's got some food services, sizable student academic advising type facilities in there, a lot of classrooms, a lot of computer labs, as you have mentioned, bio, biology labs, chemistry labs, physical labs will be in there. So, that's the, the, the facility that the student will be able to work out of to get the basics done for the degrees complemented by the other facilities that are out there.

RALLS: One program of note that will be out there that's a unique feature for us, a great partnership is our partnership on Associate in Engineering, particularly N.C. State University, but also ECU, A&T and others. But that'll be hubbed at that building as well. So, that and, and that will segue to the next building where there's going to be a lot of applied engineering. I've really enjoyed just sitting back in the design meetings that we do by computer, and I don't really have any input that I give anymore, but I love listening to it because the teams are just mapping that out that facility for what we call 4.0.

It is beyond advanced manufacturing, beyond, it's how technologies all come together, but in the physical production world. So, mechatronics, robotics, automation, architectural design has an aspect there. Biopharma, which is booming in our community, and we have such an impact, will be headquartered there. Biopharma tech degree. So, that's gonna be a very unique building as well.

CARTER: That's right. Another 80,000-square-foot building, a large makerspace on the first floor, probably a one of the largest in the area, I think. And it is, it'll have some, some pretty high-tech equipment in it in itself – a wood shop inside it, a metal shop, a 3D printing type facility will go in there, and then, as you had mentioned, the other programs, mechatronics and the robotics programs on the first and second floors, and then the third floor, the biopharma area is very exciting. It'll be a, a live, teachable area. We'll have all of the same type of areas in there that you would experience in a, a, a real-life biopharma workspace. So, again, that takes me back to my health care and, and research days with the way we designed those.

But, you know, a very strong design team on that building, very strong teams on every one of the facilities we have out there. Our, our partners in the design and construction world are some of the strongest in, in, in the Triangle area. We select them through our State Construction Office procedures, and I think we've got some very, very good teams out there who are all working together and have a lot of synergy back and forth between them. They're sharing ideas, they're, they're cooperating and

collaborating, even though they might be two different companies that compete with each other someplace else, they're in a partnership on this campus.

RALLS: Yeah.

CARTER: Because to bring them all together and to bring this campus together as quickly as we had, we've had to be able to have teams out there that that were willing to collaborate and had a strong relationship with each other.

RALLS: One thing that happens, too, is this [undecipherable], you know, we're so work, jobs focused, but a lot of times, our design teams have niche in those job areas. I mean, thinking about the public safety simulation design, you know, it was, the architectural experts in that area were very, that's their world they live in, just like some of the ones who are designing biotech. That was their world. So, it's kind of unique how that plays out for us because we don't build just general buildings, we build workspaces where people learn how to do that work.

CARTER: And our buildings vary so much that it's, it's difficult to use the exact same team over and over and over again. So, we do, again, we, we solicit and bring in the teams that we think are gonna be able to be the strongest on these projects, and we've had some of the partners and consultants on these teams are as far west as Utah.

RALLS: Yeah.

CARTER: Indiana, all over North Carolina. We, we try to keep as local as possible, but there's some expertise across the nation that we've been able to tap into as well.

RALLS: And thinking about just launching the very unique design of this, what we call our Tech 4.0 Building, our Technology 4.0 Building for right now, you know, sometimes I'll hear the question because one of the things we're seeing this year is the, just advanced production manufacturing popping up all around us and also within Wake County, particularly in the biopharma space within Wake County, the EV batteries and other things all around us. And so, one of the things people say is, "How in the world community college could educate and train all these folks?" Well, that's kind of the answer. There's these facilities to be able to, for people who reside here, to go through the programs in those facilities and walk into these very futuristic workplaces that are part of, now, our community.

CARTER: That's right. And, and again, the partnership with the firms that we have that are helping us with all this is extremely important because they have experience and they have knowledge from other work that they've done in other places. So, they can, we can pick and choose a lot of the successes that they've already had and implement them into our campuses and come up with a few innovative ideas ourselves that other people are now using.

RALLS: Yeah. So, let's talk about that future just so we'll end on our future. And so, we will in November, or on Election Day, we'll, we'll be on that ballot, and we do very much hope that folks vote yes for Wake Tech, as they have in the past, because when you vote yes for Wake Tech, you're voting yes for our future

workforce and how we're going to prepare and where we're going to prepare them. And this is also very much about not just our future, but also our present, because in an area that's going to be our priority in terms of the funding, in terms of the largest amount of funding, is gonna be health care. Our Perry Health Sciences Campus, where we're going to be able to build for what we need right now but also have the campus facility for the future, 10 years, 20 years out as expansions needed. And, you know, health care for us in Wake County – Wake County's now the third-fastest-growing community, county or metropolitan region, however you wanna look at it, in the United States, but not only are we growing bigger, we're growing older, and Wake Tech is the largest health care training provider in this county and certainly one of the largest in the region. We don't train doctors, but we train about everybody else, but we need to expand programs. We need to grow a few programs, and we're gonna have to grow that campus, and we have a unique opportunity right now that the bond opportunity will allow. But you've been working for a couple of years with our great partners that's gonna make something exciting happen. Can you talk about that future at Perry Health Sciences Campus?

CARTER: Sure. And, and those partnerships are critical to, to bringing those programs up. We've been able to partner with both Wake County and with WakeMed, and we, of course, are adjacent to the WakeMed campus. We do, we already had a lot of partnerships established back and forth to train staff that will go to work at WakeMed and many other hospitals in the in the Triangle as well. But to be able to partner with those two entities, so, as we call this our, our, our “Wake-cubed” design and construction group, where we've been able to kind of blur the lines, the official property lines, and say, “What really works? What, what do we really need to do?”

RALLS: Yeah, it's kind of chockablock for all of us out there right now.

CARTER: But don't wanna get, we don't wanna pigeonhole ourselves in because of, “Well, this is our property line, and that's your property line.” It's more of, “How do we reestablish or replan that entire campus?” With the advent of Wake County kind of the, in the lead role moving their health and, and, and human services to another facility around the campus, but still adjacent to it, we've been able to expand and, and come to some agreements with, with WakeMed to be able to take some of their property, some of our properties, some of the county property, kind of shuffle them around and expand it in the, the most efficient way that we could, saving, obviously, construction dollars, but also making the programs and long-term efficiency and the adjacencies that were, were very important.

Our new facility, the first one that we had planned for, which is in this coming bond, we'll have a simulated hospital right inside it. So, WakeMed can bring their staff right across the street and train right in that hospital. We can train folks. We can train nursing staff, we can train other medical technology type folks to be able to train in there and then move right over to the hospital. So, you have a simulation center right next to the real-world center in the hospital, where the active patients in that hospital that, that everyone can, can train on.

And we have some old facilities that are, are very, very old. We inherited them from the county, and we need to, we need to cycle those facilities out. We really do. Those are becoming more of a maintenance, cost and, and, and resource nightmare that we'd really like ...

RALLS: Some of them were old when we inherited them. I mean, what was the old nursing dormitory back in the day, you can still see the locker in there from those days, right?

CARTER: That's right. And we train high school students in there today. We train some of our nursing staff in there, and we have some administrative staff in there as well. So, the opportunity to be able to take those old facilities, remove them from the inventory, thereby we are not spending a lot of money every year trying to keep them upgraded, keep them running efficiently, and be able to replace those with, again, new state-of-the-art training facilities that, I think, will attract a lot of student participation. And, as you know, our health programs are, are exploding with the, as you said, the population increase in the county and the Triangle area and the aging population that we have.

RALLS: Yeah. The challenge is, I mean, we have way more students interested in these programs than we can take and way more job demand that is coming for our program. So, as our county grows and as we grow older, we've got to figure out how to grow more, and that's what this is going to allow Wake Tech. I know, right now, there are six new programs that, you know, we would like to add in the next several years, assuming this happens, as well as looking at expansions for nursing and imaging programs. So, the, the growth of programs in our Wake Tech future over the next decade will be concentrated in health care, assuming we have this ability to expand, and that's what we're, that's why the bond is such a priority for us. But that's why health care is the number one priority in our funding for the bond.

CARTER: Right.

RALLS: But there's another opportunity there, and just this month, we announced, which is a really unique opportunity for us to deal geographically with what's been, I think, our biggest geographic challenge of our campuses. We mentioned our campuses, one of our campuses and one of the fastest-growing areas is not the same as all the others. It's the leased facility in a shopping area that is a great little facility, but it's small, not as noticeable, not as easy to get to off the road, and certainly parking's a challenge. So, we're we have just purchased, well, you tell the folks what we've, what we've accomplished and what we've kind of celebrated here this month because this helps, we think, unlock our strategic future in that important part of southeastern Wake County.

CARTER: You bet. Well, where [N.C. Highway] 540 currently ends in the, right on the, almost the border of Apex and Holly, Holly Springs, and, of course, they're extending 540 around, NCDOT is, we've been able to find 34, anywhere from 32 to 34 acres. We still haven't come to a conclusion on the exact size yet, but we've been able to work a, a partnership with a, a local developer who will be developing other areas that will be adjacent to, to the campus that, that we are gonna build long term as part of this bond.

We'll have, ultimately, the plan is to have three buildings out there in this next bond. There's, there's two buildings slated for that, but to be able to relocate those programs from our existing campus in Cary into, again, a new building that is more in tune with the type of programming and the type of, of academics that they need to, to teach in there. As you said, the, the existing facility in the shopping center is not, it's, it works for what we have today, but it's not what we need for our future.

RALLS: It sort of works. I was out there trying to park yesterday. [Indecipherable]

CARTER: Yeah. So, we'll be able to alleviate a lot of those challenges with this facility. Again, we've strategically located it right off of a major interstate, right off of 540.

RALLS: Yes, it's right where [N.C. Highway] 55 and 540 come together, and then U.S. [Highway] 1 a hop, skip and a jump from there.

CARTER: So, easy accessibility. We'll, we'll work with the, with the GoTriangle folks and the, and the GoWakeCounty folks to have bus service there for, for folks that need it. We'll have ample parking and commuter-type availability, which is really what the majority of our students are, right? They, they commute to the campus and then they go back to work. So, we need to make all of our campuses in tune with those type of students and that type of training.

RALLS: Yeah, yeah. The other thing it allows for there, so our long-term future being in that area, I mean, if you look at right now, Cary's the seventh largest city in North Carolina, Apex is one of the fastest-growing places in the United States in terms of above 50,000, and then Holly Springs has become the hub for biopharma manufacturing with Seqirus' expansion, that's been there for a while; the big Fujifilm Diosynth Biotechnology; Amgen locating there; and then not too far down the road, down U.S. 1 in Moncure, in another county, but right down the road, is gonna be this new big EV Vinfast facility, and we've been asked to really help support that as much as we possibly can.

So, one of the things that will happen at that site will be the relocation of our existing facilities, campus facilities, hub for entrepreneurship programs, opportunities for all our university transfer and campus services. But it's going to allow us to do more workforce development that we cannot do in that area right now. So, more biotech, biopharma, more flexible industrial training, more IT and even maybe a little game development will tie in there. So, excited about how that unlocks for us what has been a little bit of a strategic challenge.

CARTER: Right. And then you talk about the strategy, but the building the campus in, in Wendell is moving to the east where a lot of things are, are moving to as the county, and that's the trying to expand. So, this campus is moving toward the east, where all of that expansion that you just mentioned is moving to. So, we need to be where the action is, right? We need to be right in with those, those corporate partners that we can establish the programs with, as well as provide an expanded footprint for our settings to be able to access.

RALLS: And access, you said, because we need to be where the action is, but we also need to be where you can access us from where, so as 540, comes around, you know, as you said, in the east, we're right there on I-87, here, we're right on 55 but right where 540 hits 55 and not far from where you just jump off U.S. 1.

CARTER: That's right.

RALLS: So, it would be hard to find a better spot where we are. OK, last project as part of the bond is going back to RTP and what will be a new facility and, wrapped around a parking deck. And one of the

things that's unique there, it'll allow us to keep moving our life science technology. We're going to do a lot in terms of our cyber programs, yeah, one of our fastest-growing largest programs, partnerships with some university partnership there. But what I think so unique, and maybe we end on this: Every project for us, bond-funded project, is not just a Wake Tech type thing, it's a, it allows for corporate partnerships we wouldn't, it allows for educational partnerships. In East, we mentioned Elizabeth City State, but we also have such, are partners with ECU and with North Carolina State. One of the things that's happened at RTP has been this, you know, a technology education hub because now we have the new early college, but we've, you've been working so closely with our great partners at Wake County so, at Wake County Public Schools, where we sold some land which will allow for a new high school to essentially be a part of that campus as well. It'll be its own campus, but will be contiguous to us and create that great synergy in that area. So, you know, tell us a little bit about what's happening there.

CARTER: Yeah, exactly. The, the, the high school partnerships that we have and we're continuing to build, obviously, has started this year with our high school programs that are in the, the second building out there. So, being able to carve out a space for the high school to actually build a high school on, on the, on the campus, or really adjacent to our campus, really enhances the partnerships back and forth. And we'll have a lot of great connectivity between the Wake Tech campus and the Wake County Public School campus, as well as working with the town of Morrisville to upgrade some of the areas into a parks and recreation type area as well. Still working on some plans for that, still working into solidify with the town what, how that will end up feeling in the future. But to have the high school, the college and the park right there, all within just walking distance of each other is really, really exciting.

RALLS: Yeah. And we've, you've been doing a great work with our friends in public schools and with Morrisville and the county of how we reconfigure our space, move out of some space to be able to accomplish what is going to bring that synergy. But also, that's another area where our bond's going to be important because we gotta unlock some, you know, we have to do a few things a little differently than we would have done otherwise. And the bond will also allow us to grow, keep growing as we have always been in our technology footprint, which is making a difference in terms of the, the job opportunity pathways in this region.

So, you know, I guess, bottom line, again, is what we want folks to know is that we're good stewards of their funds. We maintain our buildings, we build buildings that make us workforce forward and, and we're preparing for a future in a county that really needs Wake Tech, and that's why I often say, "Wake County runs on Wake Tech," and Wake Tech kind of also runs a lot on our facilities folks because, boy, they do a remarkable job, and they're, they're great leaders. Jeff Carter and what a great team, how fortunate we are to have you at Wake Tech and to lead this team. Any last parting words for us before we go?

CARTER: Well, it's, it's this is, Wake Tech has been the, the highlight of my career, and I, I have really enjoyed being here, and I've, I've really enjoyed the team that I've worked with that not only in the facilities but across all the departments in the college. Probably one of the best collaborative environments that I've been in and just a, a fantastic place to be and, and as generous as our county is, not only our county legislature, our county government but our county constituents who so favorably vote positively on these bonds to enable us to be able to expand these programs and, and to bring these



learning opportunities to the residents of our county. As you said, Wake Tech, or Wake County runs on Wake Tech. It's, it's very important for us to continue those partnerships.

RALLS: Well, thank you for thanking them because thanks to the rest of Wake County who support us, it's a great time at Wake Tech. It's a great time if you're looking for workforce opportunity in our region to find not only the jobs, but find the, the pathways, or as we say, the ladders, to jobs. Man, it was good timing when you came along when you did because this is a time of, of opportunity and, and to be able to do something that is unique in time, and we're thankful you're here and thankful for your team.

CARTER: Well, thank you.

RALLS: This has been our We Are Wake Tech podcast. You can find our podcast in all the places you normally find podcasts: Apple, Spotify, all the many areas. So, please, seek out our podcast, rate our podcast and join us next month for another edition of the We Are Wake Tech podcast. I'm your host, Scott Ralls, and I look forward to seeing you next time on We Are Wake Tech.

[music plays]

LAURIE CLOWERS: I'm Laurie Clowers with an exciting announcement from Wake Tech Workforce Continuing Education. Wake Tech is now offering free, accelerated workforce training in high-demand fields. Wake Tech Propel includes 50 programs in career fields such as IT, health care, biotech, public safety, construction and more. There's no income cap, and the steps to enroll are easy. Just visit [waketech.edu/freetraining](http://waketech.edu/freetraining).

Six Wake Tech instructors have been recognized by their peers with the Exemplary Course Program Award presented by Anthology. The award recognizes faculty and course designers who develop engaging and innovative courses at colleges and universities around the world.

Three cheers for the Wake Tech Foundation, which is celebrating a record breaking year of support. The foundation raised \$7.7 million for student scholarships, technology upgrades and faculty professional development.

Wake Tech is part of a coalition awarded a federal grant from the Build Back Better Regional Challenge. For its part, Wake Tech will receive \$2.6 million to prepare new biotech instructors at the BioNetwork Capstone Center.

Wake Tech is excited to welcome Chris Weeks as the new director of entrepreneurship. Weeks manages an entire ecosystem of small-business programming, which includes Startup@Wake Tech, LaunchWakeCounty and the Main Street Entrepreneurs Accelerator Program.

If you live in the town of Morrisville and you like to play esports, you're in luck. The town's parks and rec department is teaming up with Wake Tech to offer a new esports program in a new esports arena at the college's RTP Campus. Play alone or field a team, play for fun or compete in tournaments. Contact the

town of Morrisville for more information. Wake Tech is one of only a handful of institutions to include esports as part of its intercollegiate athletics program.

There's still time to enroll in an accelerated eight-week course this fall. Get your application in today and get started in October, or be ahead of the game in time for the spring registration window. Visit [waketech.edu/apply](http://waketech.edu/apply).

And that's the latest Wake Tech news.

[music playing]

KEITH DAVIS: My name is Keith Duval Davis with Unlimited Lawn Care. I'm here to help you out with some helpful tips for sowing your yard in the fall to prepare you for the spring season.

A lot of people have a misconception about sowing grass seed. Most people start sowing grass seed in the spring instead of in the fall. But what happens is the roots don't get established enough to survive through the hotter months. So, that's why we start in the fall.

Some of the helpful tips that you need to consider for a healthy yard is getting a your yard aerated. What it does is it helps your yard breathe and allows oxygen to escape from your yard for better results. It penetrates into the ground and pulls up plugs so the seeds have a, a little bed to sit in, and it also disturbs the soil enough that it loosens it up for better growth.

After you aerate, you wanna get a good a bag of seeds because, when your yard is open and it's acceptable for the seeds, you need to get a good seed down so you can have a good established yard. A blend is recommended in North Carolina than a straight seed.

Starter fertilizer is another tool that you're gonna need when you start your yard. It helps establish a good root base for your new seeds, and it also promotes good green growth.

Aeration is the key to a healthy lawn, and there's nothing that can take the place of aeration on a fescue yard, a Bermuda yard. But what you wanna do is you wanna make sure you do the things that it takes to promote a good, healthy growth, and that's aerating in a way that releases the oxygen and mixes up the soil so the conditions on your yard are at its best.

For more helpful tips like these, contact your local hardware store or a local landscaper like myself, and they'll get you started on working on your yard to be healthy, strong and be able to last through the summer.

[music playing]

CONCLUSION: Thank you for listening to the We Are Wake Tech podcast. Join us next month for more insightful conversations about the programs and people of Wake Tech and how the college changes lives every day. Be sure to subscribe to your favorite podcast app to have each episode delivered right to your

computer or mobile device. For more, find us at [podcast.waketech.edu](http://podcast.waketech.edu). To learn more about Wake Tech's exceptional educational opportunities, visit [waketech.edu](http://waketech.edu).