Paul Robling: I was pretty much told that the only way you’re going to get ahead in life is with a college degree.

Phil Roark: Everybody was being pushed to go get a college degree, be a lawyer, be a doctor. There’s nothing wrong with that, but at some point, we have to realize everybody’s not doing that and what happened to our ability to actually be able to make things?

Stephen Smith: There’s a new push for apprenticeships in the U.S. Employers need skilled workers. Apprentices gain a ticket to middle class jobs. Some workers who’ve have been left out, want in.

Lynn Shaw: Why don’t women do these jobs? The pay is already equal. Like, ‘Let’s be electricians! Let’s be plumbers!’

And apprentices are showing up in new fields. Some apprentices are going to college.

Mitchell Harp: What if I told you I could get a job before you even started school or maybe the first semester in school?
Coming up, an APM Reports documentary: Old Idea, New Economy: Rediscovering Apprenticeships from American Public Media. First, this news.

PART 1

Stephen Smith: From American Public Media, this is an APM Reports documentary.

(Sound)

This is a machine shop in Charleston, South Carolina. It's part of Eaton Corporation's Aerospace Group. They make metal parts that have to be really precise.

Roark: So these go in hydraulic piston pumps for motion control on aircraft that controls a lot of the wing flaps and landing gear.

That's Phil Roark. He's the plant manager.

Roark: You can see they work underneath a microscope a lot.

There's no room for error. And not just anyone can do this work. It takes a lot of training. And that's put Phil Roark in a tough spot.
Orders have increased 30 percent in the past year, but he's having trouble hiring enough people to keep up.

Roark: Be honest with you, we didn't expect it to be as hard as it has been.

Roark tried all kinds of ways to find experienced machinists who could do this kind of work. The company advertised. They asked employees for referrals. They raised wages and they lowered the required years of experience. But Roark still couldn't find enough people with the necessary skills.

Finally, he brought the idea of an apprenticeship to his bosses. They'd train their own machinists. An experienced machinist makes $25 an hour but the company would pay an apprentice $15 an hour plus benefits. They'd assign an experienced employee as a fulltime mentor. And they'd cover tuition for night classes in machining at a nearby technical college.

Roark: We calculated a payback for our investment and it was like six months.

South Carolina also sweetens the deal with a thousand-dollar per apprentice tax credit.

Roark says the apprenticeship idea was an easy sell to his bosses.
Roark: They looked at it and they were like, “Wow,” you know, “can you get five?”

We’re like, “We have one toolmaker to teach right now so you know, he can’t handle that many at one time but as we mature, we’ll continue to grow the program.”

(Music)

From APM Reports, this is “Old Idea, New Economy: Rediscovering Apprenticeships.” I’m Stephen Smith.

Back in the 1700s, Benjamin Franklin was an apprentice printer. And George Washington was an apprentice surveyor. In the 1950s, a guy named Elvis Presley was an apprentice electrician. As you know, all three of them went on to other careers. But if Elvis hadn’t gone on to making records and movies, his apprenticeship would have landed him solid work in the building trades.

For centuries, getting an apprenticeship was a ticket to a good job. And it still is. Today, more than half a million Americans are apprentices — for good reason. Working alongside a master carpenter or a master chef is an effective way to learn a new set of skills.

But a lot of other countries rely on apprenticeships far more than the United States does. In Germany, more than half of all young people launch their careers with an apprenticeship.
In the U.S., the percentage of young people who enter the workforce through an apprenticeship is in the single digits. Still the number of apprenticeships is growing. It's jumped more than 40 percent in just the past five years.

In the coming hour, we'll meet some people who went looking for jobs in the new economy, and they chose an apprenticeship instead of college — or in addition to college. And we'll meet some people who are trying to open the doors to apprenticeships wider, to move beyond the days when apprenticeships were arranged by fathers for sons, or by uncles for nephews.

Correspondent Sasha Aslanian continues our story in South Carolina, where there's been dramatic growth in apprenticeships over the past decade:

Sasha Aslanian: Paul Robling took a couple of runs at finding a career after high school. First, he joined the Army.

Robling: Three years, six months, 23 days, 12 hours. They kept track.

He knew the tally, but the hours didn’t seem to point to a career.

Robling: Infantryman is not a marketable skill. It is a job that does need to be done and somebody has to do it, it’s not very marketable.
So Paul did what most young people do. He went to college.

**Robling:** I was pretty much told that the only way you’re going to get ahead in life is with a college degree. And so I just joined in like every other college student. I chose something that interested me but it just didn’t suit me.

Paul was pursuing an associate degree in information technology. That degree would’ve prepared him to work at a helpdesk. Paul realized too late he wasn’t what he’d call “helpdesk material.”

**Robling:** When it comes to computers, I’d say 7 out of 10 times, the problem exists between the chair and the keyboard. It’s not necessarily the computer’s fault. So, I’d probably end up saying something I shouldn’t. Then lose my job. Then say some more things I shouldn’t. Yeah so, it wouldn’t, it just – it didn’t seem like the best way for me.

Paul admits he should have done more research into what to study in college so he’d be trained for a job he actually wanted to do. Instead, he racked up $20,000 in student loans and didn’t finish his associate degree. That’s pretty common. About a fifth of Americans 25 and older have some college but no degree.

Paul spent five years installing cable in people’s homes. He was making just under $20 an hour, but, by now, he was married with four kids. And he saw no way to move up.
Robling: I started looking into, well, what can I do in this market. And I had no idea.

None whatsoever. I YouTubed a lot.

Paul watched YouTube videos to learn about different trades.

YouTube Clip: A person that would do well at this job would be someone who likes working with their hands…

He learned there was a big demand for machinists in Charleston, and he liked making things. But he’d need to go back to school. This time, he did his research.

Robling: I couldn’t make the same mistake twice. I had to find a way of doing something with very little college required. And that’s the apprenticeship program.

(Sound)

And that’s how Paul ended up at Eaton Aerospace working for Phil Roark, the guy we met in the first scene. Paul's the only apprentice… for now.

Robling: Eh, better than the first time.
Paul’s cutting a small, rectangular piece of metal. It'll be used to make measurements, so it has to be just right. His mentor, Alan Wickline, is coaching him.

**Alan:** Remember you gotta take about 6000ths off of there so –

**Paul:** Okay.

Paul’s now 34 years old. He has a long red beard and a sturdy build. For 8 hours a day, he works one-on-one with his mentor, learning to make precision tools. Then he heads to night classes at Trident Technical College. It was the college that set Paul up with the apprenticeship.

**Mitchell Harp:** What I told Paul, I said, you know, “Give me your life for a couple years, I promise you I’ll give you a career that will change your life.”

That's Mitchell Harp, the dean of apprenticeship programs at the college. Mitch has a small, windowless office on the Trident Tech campus in Charleston. You’d never guess, he’s running kind of a powerhouse matchmaking service.

**Harp:** And I actually have a board here in my office which I’ve had for years and right now I have about 75 companies that are what I call ‘active’ meaning that they actually have apprentices in them.
Traditionally, apprenticeships have been strong where unions are strong. But South Carolina’s a right to work state where workers can opt out of paying dues and union membership is low. Without unions to take the lead, the South Carolina state government has stepped in to promote apprenticeships through its 16 technical colleges.

Mitch helps employers in the Charleston area set up apprenticeships. He hears from a lot of them that they can’t find enough skilled workers.

**Harp**: If you can hire an individual in their first semester of their training, put them in your apprenticeship where you grow them and mentor them, more than likely, they’re going to stay with you and you’re going to get a lot of good talent, like Paul.

Mitch helps companies create a roadmap that spells out how the company will train the apprentice, what the apprentice will learn in class, and what skills the apprentice will have at the end.

He says apprenticeships are a chance for people with no experience to move into jobs quickly.

**Harp**: I often tell people who come to me for apprenticeships, I say, “You’re coming to Trident Technical College to get an education so you can get a job. I mean, that’s what
you’re paying us for. Well, what if I told you I could get you a job before you even started school or maybe the first semester in school?” And their eyes just open up.

Mitch tells students that having an apprenticeship is better than just learning on the job, and better than just going to school.

He gives an example from the health field he was trained in: phlebotomy.

**Harp:** Look, I can teach you to draw blood in like 5 minutes. It’s a very simple procedure. But until you do it 100 times, you’re not going to be good at it. And that’s what an apprenticeship is. You can learn something in a college or laboratory setting and still get the skill. But if you go to work, and you’re doing it 100 times, you’re going to get really good at it. And you’re going to be able to apply what you see in the classroom in the real world.”

Economist Bob Lerman applauds the way South Carolina has worked to get companies on board with apprenticeships. Lerman’s a fellow at the Urban Institute. He’s researched and written about apprenticeships for decades. He says the U.S. needs to do a better job of preparing people to join the workforce.

**Lerman:** Still about half the people lack any post-secondary degree and many who do get a post-secondary degree are mismatched. So, as an economist, I saw that we were
spending a lot of money on higher ed, post-secondary ed, and even sometimes secondary ed, and we weren’t getting the results we needed.

Lerman noticed other countries were solving this problem with apprenticeships. And he saw apprenticeships could be particularly valuable for people who learn best by doing. He says classroom learning alone doesn't work well for those people.

**Lerman:** We really are disadvantaging a lot of people who might perform very well in the workplace but don’t like to sit through large numbers of classes for many, many years.

In countries with robust apprenticeship programs, like Germany and Switzerland, apprentices begin in high school. In the U.S., apprentices are typically in their late 20s. Some are in their 30s, or even older. At that age, life can get complicated.

(Sound)

It’s late afternoon and Paul Robling’s three year old daughter is waiting for him on the driveway outside their small rental house. After an eight-hour work day, Paul has a 90-minute pit stop at home before heading to night classes.
It’s a heavy lift.

(Sound)

He spends a few quiet minutes alone with his wife, Barbara, standing in the garage, smoking a cigarette and catching up on the homefront:

**Robling:** How did they do in school today?

**Barbara:** They did good.

**Robling:** Have they done their homework?

**Barbara:** I’m about to find out.

(Sound)

Paul steps inside, takes off his work boots and collapses on a living room chair. For the next 90 minutes, it’s a flurry of holding the baby, helping his 7-year-old daughter with her math homework, roughhousing with his 9-year-old son and trying to decipher what his 3-year-old daughter is so urgently trying to tell him. Paul says it’s been an adjustment for his kids to have their daddy gone so much.

**Robling:** They wanted daddy to go to school, they wanted daddy to get a, you know, better education and work a different job, and they wanted daddy to make some cool
stuff. So, and, well, that’s what daddy’s doing he’s making cool stuff, going to college.

It’s a bit tougher on my wife. We, we’ve discussed that and how we can work around
that. I’ve had to leave school early because she was you know just having a rough time
with the kids, I’ve had to skip a day of school just because of helping take care of the kids
so I mean there’s some give and take to it, but she’s a trouper, she’s doing good, I can’t
complain.

Child: Bye da-da.

Robling: Bye boo-boo.

All: Bye.

Robling: I love you more, bye...

The pit stop is over and Paul heads off to five hours of class.

(Sound)

Teacher: I’ll go ahead and we’ll get rolling guys.

A handful of guys gathers around a table and the instructor introduces a new project. Paul told
me he wanted to dropout of high school in 10th grade. He could have gotten his GED and
become a welder. But he was persuaded to stick with college prep. When he went to college the
first time, he wanted to enjoy the college experience, more than he actually wanted to go to college. This time, it’s different.

**Robling:** Last time I went to school, when I left, I had a GPA of between 2.0 and 2.5. So, low. Now, I’m on the dean’s list.

(Music)

South Carolina has more than 17,000 apprentices, which is up there for states, but it still can’t produce workers fast enough.

Charleston’s an attractive area for businesses to relocate. It’s got a port, mild weather and it gives companies incentives to move there. Suzi Raiford of the Charleston Metro Chamber of Commerce says there aren’t enough locals to fill the new jobs:

**Raiford:** We started realizing with the companies coming to town that we have to find a way to train the workforce here, in our region, so that they can move into those jobs. And they needed to get them in the pipeline sooner. A few years ago, a German manufacturer in Charleston asked to start a youth apprentice program to train 16 and 17 year olds like they had back home and that got the ball rolling. In 2014, the Chamber began funding youth apprenticeships for high school students.
It’s 7:00 a.m. at Burke High School in Charleston, and Sheniah Everson is sitting in the first row playing clarinet.

Band is one of the few high school activities she gets to do anymore.

She’s the first youth apprentice at her school. And she’s busy. She’s got her hair tucked up in a scarf for speedy prep in the mornings.

**Everson:** After I leave band practice, I go to breakfast, and I come back down this hallway and I do my Trident classes, my work, my online work...you know, just so I don’t kill time.

Sheniah has to be super organized. She’s 17 and a high school junior, but she only takes band and history here. The rest of her classes are over at Trident Technical College. She’s in the Certified Nursing Assistant/Pre-Nursing program.

**Everson:** I always knew that I would end up taking a couple college classes. But I never thought that I would be graduating with my associate’s degree before I get my high school diploma.
Sheniah will earn that associate degree next spring for free. The Charleston Metro Chamber of Commerce is paying her tuition at Trident. Her apprenticeship is at Roper Hospital in downtown Charleston. Health care’s a new and growing field for apprenticeships, but it’s still pretty unusual for a high school student.

(Sound)

One day a week, and during the summers, Sheniah helps care for patients. She’s suited up in maroon scrubs and taking the vital signs of a patient.

Everson: I heard you were supposed to be leaving today, is that –?

Patient: That is. I’m actually moving on up to the rehab floor...

Everson: A lot of people my age don’t get that opportunity to go in the hospital and actually shadow a doctor or, you know, work with nurses, so I actually, I was really encouraged by the nurses that work there and it made me want to go into the healthcare field.

Sheniah’s mother, Undryell Everson, also works in health care, and she’s proud of her daughter’s apprenticeship at Roper Hospital.
Undryell Everson: Ohh, I was thrilled because I too have been trying to apply there and it seemed like it just takes so much to get in there. I told her, I said, “Girl you really have gotten yourself into a great position here.”

Everson also hopes her daughter will avoid the kind of student debt she racked up getting her own bachelor’s and master’s degrees.

Undryell Everson: ‘Cause I think I have about like $80,000 worth but, but I stress to Sheniah that you don’t want to have that type of debt.

Sheniah’s mom is on board, but some parents aren't. Apprenticeships sometimes suffer from an image problem among parents. Ellen Kaufman is the youth apprenticeship coordinator at Trident.

Kaufman: A parent would hear the word “apprenticeship” and say, “Oh no, no my student, my student’s going to a four-year, so that’s not for them.” And I would have to explain that our apprenticeships very often do go on to get a four-year degree and the nice thing is they have a company helping them pay for some of that tuition. And on the other side of the spectrum, I would have parents saying, “Well, my student doesn’t really like school. You know, doesn’t do very well. Can you get him an apprenticeship?” and I’d say, “That’s not what these are about. They’re going to be in college classes. It’s rigorous. It’s demanding.”
But Kaufman says a lot of parents do get how apprenticeships work, and a growing number of them are looking into apprenticeships for their teenagers — partly because of the high cost of college.

   **Kaufman:** As soon as I mentioned, you know, this is a way to get an education and avoid student debt, every parent sat up. They were listening in a way that I didn’t see a few years ago.

There are about 90 high school apprentices at Trident Technical College now, working in fields ranging from engineering to culinary arts. This idea of reaching high school students isn’t just happening in South Carolina. Wisconsin, North Carolina and Colorado are among a number of states investing in youth apprenticeships as a way to connect young people with careers.

Ellen Kaufman says at least half her youth apprentices are on free and reduced lunch, a marker of poverty. For a student like Sheniah, getting two years of college paid for is a nice jump start on her nursing career.

   (music)

   **Stephen Smith:** That was Sasha Aslanian. You’re listening to Old Idea, New Economy: Rediscovering Apprenticeships, a documentary from APM Reports, I’m Stephen Smith.
South Carolina is held up as a national model for how the U.S. could expand apprenticeships. They’re a new way to do community college with a good job already in hand.

In South Carolina, apprenticeships are registered through the U.S. Department of Labor. About half of U.S. states do it this way, others have their own state registration systems. But in both cases, apprentices earn a nationally recognized certificate, so they can work anywhere in the country. But the Trump administration is working to create an additional system of industry-recognized apprenticeships to spur more growth. Critics worry these would weaken worker protections and erode the quality of apprenticeships.

Just ahead, we’ll travel to California where women and ex-offenders are prying open the pipeline to apprenticeships in construction.

Delfino De La Cruz: They’ve been incarcerated for more than half of their life. How are they going to have any experience like that?

Christian Garcia: I mean, I feel like construction, they don’t really judge you on your past. They just, they judge you on your work.

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Part 2

Stephen Smith: From American Public Media, this is an APM Reports documentary Old Idea, New Economy: Rediscovering Apprenticeships, I’m Stephen Smith.

(Music)

Apprenticeships go back to the Middle Ages.

Film Clip:

Man: When a boy was 16, around your age, he was apprenticed to a master workman.

This General Motors film from the 1940s described the history of apprenticeships.

Film Clip:

Man: For 7 years he lived with a master and worked under his direction.

Boy: That certainly was a good way to learn a trade.

Man: None better for those times.

The film skips over one important point: to get an apprenticeship, you had to know someone.
Chris Hannan: My father was in the trade. He had a really good career.

Chris Hannan grew up in Orange County, California. His father was a sprinkler fitter. He actually wanted his son to do something different. It was the 1990s. Go to college. Chris did that. But he was still drawn to a career like his father’s. His dad came home dirty, but Chris felt he had something to show for his day’s work

Hannan: I was persistent, finally my dad said, you know, “I got a letter from the union hall, they’re taking helpers in. Why don’t you go down there and find out for yourself.”

So that’s how I found out about the apprenticeship.

If you want a union job in the building and construction trades, an apprenticeship is the way in. The trades still account for the overwhelming majority of registered apprenticeships in the U.S.

Union workers and contractors both put money into apprenticeship training. Apprentices spend several years learning the trade by working under supervision until they graduate to journeyman level and get more money and independence. Then, some money will be set aside from their paychecks to support the next apprentices. Since apprenticeships are a gateway to jobs with good earning power, they’re sought after.

Deirdre Royster: Apprenticeships have always been the sort of, it’s almost like the Ivy League college if you’re a non-college youth.
Deirdre Royster is an associate professor of sociology and public policy at New York University. She wrote a book called Race and the Invisible Hand: How White Networks Exclude Black Men from Blue-Collar Jobs. She says apprenticeships were jealously guarded.

**Royster:** Those were very desired opportunities and so the folks who are able to get them and at times hoard them have something of significant value to pass on to their sons, brothers, nephews, neighbors.

Royster says white men were the beneficiaries. And that left a lot of people out. Nationally, less than 3 percent of registered apprentices in construction are women.

Today Chris Hannan, the sprinkler fitter, works for the Los Angeles/Orange County Building and Construction Trades Council, a group of unions. He’s trying to make sure it’s not just sons of tradesmen who get to do this work.

**Hannan:** Our membership needs to represent the communities we work in. So if we want to reach communities and populations that we haven’t traditionally reached before, we really need to do something different.

The unions Hannan works with are trying to broaden who gets in. Part of the reason is economic necessity. Projects that use public money can require a certain percentage workers who live in
the area, or who come from economically challenged neighborhoods, or are women, or are disadvantaged, like they’ve been to prison. These are folks who've been shut out of these jobs in the past and sometimes they need help making the transition.

Sasha Aslanian brings us to Los Angeles to see a couple of "pre-apprenticeship" programs. that give the workers a boost with the skills and habits they'll need to make it as a union apprentice.

**Aslanian:** Lynn Shaw just wanted the same nice paychecks she saw the guys were getting.

It was the mid-70s. She’d quit her waitressing job. She was job-hunting and something bothered her:

**Lynn Shaw:** Wow the jobs that men do pay more than the jobs that women do. Digging a ditch is not harder than being a waitress but it pays so much more. Maybe I should explore that.

Shaw liked being outdoors. She liked working with her hands. As a kid, she and her carpenter grandpa had built a birdhouse out of a blueprint that came in a Bazooka bubble gum wrapper and she thought that was cool. She couldn’t picture herself doing the jobs most women did.
Shaw: I just wasn’t really suited to like sitting in an office wearing nylons. I’m like the kind of woman I put on a pair of nylons and they like get a run immediately and I no matter what I do, I always seem to have dirty fingernails.

She found work that didn’t call for nylons. She’s been a miner, steelworker, longshore worker and electrician. As we sit in her living room in Long Beach, she lays out some mementos on the coffee table.

Shaw: I love this picture, look at this. This is me at a Christmas party when I was a steelworker and these are the other electricians I worked with. So this probably was like ‘79. I look very ‘79 don’t I?

Aslanian: You do. You’ve got big hair and kind of a silky shirt on and almost all those guys look like they could be your dad.

Shaw: Yes! That’s exactly right, Or my grandpa. He looks older, right?

Aslanian: Yeah.

She’s the only woman in the photograph and she was almost always the only woman on the job site. They referred to her as “the girl.” There were the uncomfortable moments – the raunchy calendars of women in bikinis straddling power tools that she had to ignore – but when it came down to doing the work, she could hold her own. And some of the guys had her back. She remembers when a sympathetic foreman gave her a crucial piece of advice:
Shaw: And he’s like Lynn, I know you get here at seven o’clock every day and you’re never late, but you really need to get here like 15 minutes sooner because before you get here, all the guys have coffee together and they kind of bond and talk about the job and you’re missing that and it’s important that you’re there if you want to integrate yourself into the workplace. And that was like such a valuable tip for me that really helped me become really part of the group of workers and I think that’s the kind of a thing that if you’re a son or nephew you learn, so luckily I had people helping me that way, and it made it better for me.

Shaw thought of something else that would make her job better: female co-workers. She started giving talks to other women. She had one big selling point.

Shaw: I took one of my paychecks – or I found the woman who had the biggest paycheck, you know, the dollar amount, and I blew it up into like winning-the-lotto-sized paycheck. Big giant paycheck. And I’d hold it up at a talk. And they would be amazed. And really that’s what won my family over. It was like, “Yeah, look at this paycheck, dad. Look at this paycheck, mom.” They’re like, “Oh, yeah, maybe that’s not so bad.”

In 1996, Shaw founded an organization called WINTER which stands for Women in Non Traditional Employment Roles. It would promote these careers to women, and teach them how to succeed.
Tyra Good: It is now seven o’clock and we are locking the doors, getting ready to start our bootcamp program at WINTER.

It’s just after sunrise and I’m in a small storefront in East LA. Instructor Tyra Good locks the door behind us.

Good: There we go, we’re locked in and whoever is not here, they have to wait ‘til the next session.

In the back of the WINTER office, is a shop with work tables and tools, and a partially framed structure built by a previous class. 13 women dressed in work boots and jeans sit on benches, waiting to begin WINTER’s pre-apprenticeship training program. They’ve passed the first test. Be on time. Actually, be early. If you show up at the start time you’re late.

Good: Good morning, ladies, good morning. My name is Tyra Good and I will be your instructor for the next 11 weeks. This is week zero, boot camp, and we are about to start. Do you have any questions?

Good is a carpenter by trade. She’s African American and in her late 40s. She’s super-strong looking in her slim jeans and Rosie the Riveter t-shirt. All the women are low-income, women of
color. Winter does outreach to prisons, shelters and halfway houses. The program is funded through donations. For the next 11 weeks the women will get an orientation to the different trades they can go into and get in shape.

Salina Carrillo is 23 years old. She’s got a buzz cut and restless energy. Salina was studying criminal justice in college but she grew disillusioned that justice in America was about who had the deeper pockets. She decided to give construction a try.

Carrillo: My dad was in construction so I was practically born on project sites.

Aslanian: And how are you feeling about what’s ahead of you?

Carrillo: Oh, so excited! So fun. Can’t wait to learn some things, especially the math because the math is very interesting to me when we make the cuts, the angles and all that. I like math.

A handful of women are in their 20s like Salina, but there are women here that are into their late 50s. Angel Tapscott is 39. She’s a bigger lady in a hot pink sweatshirt. She sits in the front row but she seems hesitant about being here. She tells me she hasn’t had a job in 15 years.

Tapscott: I was in a domestic violence relationship

Tapscott just left an abusive relationship
Tapscott: Somebody told me about the WINTER program. So I’m trying it. I hope I get through. I’m scared.

Alexandra Torres Galancid: We target women at risk because we feel that they’re the ones who really need our help.

Alexandra Torres Galancid is the executive director of WINTER. She took the reins from founder Lynn Shaw 15 years ago. When she applied for the job, she’d been running rape crisis centers and domestic violence shelters.

Torres Galancid: Because I remember saying, “What?” when she asked me, “What do you know about the unions,” I said “Nothing.” In my interview. She goes, I said, “Women in construction?” She said, “Yeah, women in construction.” I go, “I know nothing,” and I said, “But wow! That’s the solution to poverty.” And it is has been the solution to poverty for women.”

Torres Galancid went around to introduce herself to every apprenticeship coordinator for the 14 trades in Los Angeles. She asked them all the same question.

Torres Galancid: What do you want from our people that we’re going to send you, our women. What are the skills that you want for us to teach them. I thought they were going to say, “They don’t have skills. They don’t know how to do this.” They all said the same
thing: “I want somebody that can get here on time. I want somebody that has a good attitude.” And I’m like, “What else?” That’s it. That’s it. I was very surprised.

Torres Galancid says anyone who can make it through the WINTER pre-apprenticeship will find work But it isn’t for everyone. Day one is pretty daunting.

(Sound)

**Good:** We’re going to line up down here, facing this wall.

Tyra Good leads the women outside, to a narrow cement alleyway that runs alongside WINTER’s building.

**Good:** One. two. three. four. don’t think about it.

They’ve got their backs against the wall, doing squats


Good has to play two roles out here: she’s rooting for these women and shouting encouragement, but she also has to prepare them for what it’ll feel like when the foreman yells on the job site.
**Good:** No sitting down ladies, no sitting down. That’s another 10. There’s no sitting down in construction.

About an hour into the workout, they’re picking cinder blocks up off the ground and lifting them above their heads. A 58-year-old former metro bus driver in a droopy grey sweatsuit seems to be struggling.

**Good:** What’s going on Miss Green?

**Green:** I give.

**Good:** You give? Miss Green, you can’t give up.

**Green:** Yes I can.

**Good:** No! No, Miss Green. That’s not an option. That’s not an option. Come on, you got it Miss Green. Come on Miss Green. You got this Take your time, it’s okay. It’s okay.

But after a few more minutes, Miss Green calls it quits.

**Green:** Somebody’s got to do it. You ladies could handle it.

**Good:** Ok, Miss Green. Good luck to you.

**Green:** Thank you.

Now you might be wondering as I was, whether it’s realistic for all these women to try for careers in construction.
Some of them don’t appear to be in great shape. Or they’re petite. And they’re racing with 50 lb sandbags over their shoulders.

**Aslanian:** So she’s carrying how much right now?

**Good:** Right now she’s carrying at least 100 pounds.

The boot camp is kind of a hazing, so they’re ready for whatever strenuous tasks they might encounter on the job. But there is something on the job site that still might be hard for women to handle. The unwanted sexual attention.

WINTER’s executive director Alexandra Torres Galancid is pragmatic about it. She says WINTER teaches sexual harassment prevention. Dress like all the other workers. If someone bothers you, say no with a straight face, no giggling. And, if they won’t stop, here are the steps to report it.

I’m struck she isn’t talking about how the culture of construction needs to change.

**Torres Galancid:** I gave up on that. I think it’s a mistake to think you’re going to change a whole industry that has been the same for hundreds and hundreds of years in
this country. What I want the women to still be women and be respected as women, but I
want them to be workers more than anything.

And WINTER wants women to stay, stick it out, succeed and help the women coming behind
them.

If a WINTER graduate isn’t getting the same training as a man on the job site, rather than
complain, WINTER will track down someone with the skill the woman needs to learn, and set up
a session for the two of them after hours or on a Saturday so she can learn it. Torres Galancid
says it solves the problem, and the woman doesn’t come off as a complainer.

Torres Galancid: And then they go back and it changes the way people see them. And
they’ll say, “Oh where did you learn how to do this?” “Well, the WINTER program.”
“Very good.”

(Sound)

Aslanian: I’m at a construction site for Metro, just east of downtown Los Angeles. We’re
next to a freeway. There’s an enormous pile of dirt. And on this worksite, there are 116
people and nine of them are women. And the woman that I’m going to meet is driving a
forklift at the moment.
Kat Norve: Yeah. I’ll be right there.

Kat Norve, who’s driving the forklift, is one of WINTER’s star graduates. She’s 41 years old and 5’5”. She's wearing sunglasses under her hard hat and an orange safety vest. This light rail transfer station has been under construction for two years, and still has four years to go. It’s steady work for Kat.

Norve: I was the first female on this job site, I’ll be the last female walking out.

Kat did the WINTER pre-apprenticeship in 2012. Then she joined the laborers’ union as an apprentice. It only took her 18 months to put in her hours to get to journeyman level because she worked so much.

6.9 percent of the workers here are supposed to be women. Metro has adopted the federal goal for its construction projects. When I visited in March, they were at 4.6. There aren’t financial penalties if the contractor doesn’t make it, but the numbers are posted on the Metro website to promote transparency. Union jobs like the ones on this project with their pensions and benefits are the minority in construction.

An analysis by the Los Angeles Times found a steep drop in union membership since the 1970s. As contractors and their corporate clients tried to save money by avoiding union labor, wages dropped, and the industry became more reliant on Latino and immigrant workers. Non-union
contractors now dominate home construction but, in California, unions have hung on to large public works projects. And that’s where people like Kat can find real opportunity.

Before she went into construction, Kat was supporting her four kids doing office work at a PR firm. Her income doubled in construction.

**Norve:** A big bump.

It’s not a very flexible job as far as picking kids up or going to school performances, but Kat’s happy with the tradeoff. Her kids have everything they need. But when she first told her parents she wanted to go into construction, they weren’t supportive.

**Norve:** My dad said, “I don’t think you’re my daughter,” I said, “I don’t think you’re may dad either.” And my mom, she’s like, “I don’t know what is wrong with you.” I mean, I got a lot of that from my parents. Other than that, everybody’s like, “She’s a hell of a woman.” That’s what I get a lot of.

**Aslanian:** And how do your folks feel now?

**Norve:** They’re very proud of me. They’re very, very proud of me. I bring my dad along wherever I – any kind of event I’ve been invited to, I bring him along so he can experience what I’ve been experiencing and he’s very proud of me now.

(Music)
If you’re wondering why the percentage of women in construction is still in the single digits, Lynn Shaw, the founder of WINTER, believes the resistance Kat got is part of the reason. Shaw is now Professor Shaw. After she handed off the reins on the day-to-day running of WINTER, she went and got her Ph.D. She had a burning question she wanted to research.

Shaw: Why is this happening – women not choosing these careers? And many of the schools and apprenticeship programs and community colleges spend a lot of time and effort on these career fairs where they bring in students and have them build little tool boxes or get information about all kinds of careers. But it seems like that is not really, according to my research, what changes people’s minds. What helps people choose careers are the influencers in their lives. Like their parents. Like their teachers.

Shaw is now working on career education for the California Community College system. That system includes more than 2 million students at 114 colleges. She says there’s a big focus on measuring outcomes, and making sure students get jobs. Apprentices are way ahead of the game.

Shaw: Well, they’re actually our stars because we look at several metrics but one of them is, do they get a job and is it a living wage and do they get a job in the field they were trained for? And apprenticeship ticks all three of those boxes.

(Music)
It’s not just women who want to get into these apprenticeships. Across town, another group of people is trying to get shape for the trades. Like the women at WINTER, they might not have connections. They too want to lift themselves out of poverty. But they face a different kind of hurdle. The 20 men and three women here all used to be in prison.

They’re here through an organization called the Anti-Recidivism Coalition. Like WINTER, the anti-recidivism coalition created a pre-apprenticeship program to prepare people who need some extra help. Victor Blas is one of the “elders” in the group. He’s 39.

**Blas:** I was 20 years inside, I’m a former lifer. I never thought I’d be out.

When he was a teenager, Victor was locked up on a gang-related murder charge. He says in the late 90s when he got locked up, there wasn’t much hope for lifers. But the tide began to change in 2009 with prison overcrowding, new laws and court rulings and a shift in public attitudes. In 2017, Victor was released on parole. And he began to plan his first career. His resume? A clerking job in prison.

**Blas:** Ha, I started off at 15 cents an hour and I maxed out at 24 cents an hour. Yes. and those were great jobs that I had. I was a maintenance clerk for like eight years, and then I
was a GED, TA tutor, clerk for about four years so most of my incarceration time I did as a clerk

Aslanian: How much were you able to earn?

Blas: Total? It’d come out to about $36 a month. So compared to what I’m going to be hopefully be making in about five years I’m going to be averaging $80,000 a year.

$80,000 year as an electrician. Victor’s spending 12 weeks here to improve his chances of landing an apprenticeship with the electricians’ union.

This pre-apprenticeship program is the idea of Scott Budnick. He’s a film producer. A pretty famous one. He produced comedies like The Hangover and Old School. In 2004, Budnick was invited to juvenile hall to speak to a creative writing class. He says he was blown away by the teenagers’ life stories:

Budnick: The kid sitting next to me was 15 years old and just got sentenced to 300 years in prison and he wasn’t even the person that touched the weapon during the crime.

Budnick told them he would stay by their sides and follow them through prison and back out into the community. He became an advocate for prison reform. In 2013, he launched the Anti-Recidivism Coalition. It’s a support network for 600 formerly incarcerated people. A key focus is reintegration to society. Scott saw that their employment prospects were pretty dismal.
Budnick: I hit on apprenticeships because it actually leads to a living wage career very quickly.

He pitched the idea of getting ex-offenders into union apprenticeships. A union leader told him that hadn’t worked so well in the past:

Budnick: People would relapse, people would get re-arrested and it just wasn’t a stable, dependable population.

So the Anti-Recidivism Coalition created a pre-apprenticeship program to screen candidates and train them. They wanted to ensure that the people they recommended to the trades were ready. These would be people who could show up on time, work hard, have a great attitude and pass a drug test.

The unions said they’d place 30 people. If those people did well, they’d take 100 the next time. Then 200 and 400. Word spread. Guillermo Bohorquez is one of the participants here today.

Bohorquez: I heard about this program in prison. Scott actually came by to Avenal, and he spoke to us about it and I was like, “I have to be in that program.” So as soon as I got out, I got out December 16th, and I just kept bugging him for two weeks straight. Like, “Dude, you have to get me in. Please. You have to get me in. Like, “Remember that program you talked about? I’m here. I’m here for it.”
The guy who does the day-to-day work running the pre-apprenticeship program is Isaac Lopez. Isaac has long hair in a ponytail and wears native American bracelets and rings in turquoise and silver. He’s one of the few staffers who’s not an ex-offender. He has a law degree and was a teacher. But here, Isaac is a life coach. He’s trying to get them ready for what they’ll need to do in their new working lives. Things like getting around.

**Isaac Lopez:** What we’ll do is we’ll get on a train, alright. A lot of folks, some folks have been home for one year, two years, three years. They’ve never taken public transportation because they don’t feel comfortable. Too much going on.

Isaac leads them on weekly hikes to reconnect with the outdoors. They run along beaches and see other Californians going about their lives on a weekday morning. The education portion of the pre-apprenticeship happens here, at LA Trade Tech. They’re brushing up on the math they’ll need to use on the job, and they’re getting a jump on some of the safety information they’ll need to know.

**Teacher:** So, while I’m setting up, did we all sign in first of all?

**Class:** Yup.

Being in class is a welcome change for Christian Garcia. He’s 21 years old. He only made it to 10th grade when he was sent to prison for armed robbery. After serving six years, he’s eager to
rebuild his life doing something positive and away from gangs. He likes being a student at LA Trade Tech:

**Christian Garcia:** It’s a good experience like actually being at a school campus for a reason to learn and to get stuff done because before in high school like, or in middle school, you go to sell drugs and just not pay attention, you know? So, it feels good to be at school with a purpose and we fit in, you know?

(Music)

The weak link with pre-apprenticeship programs can be what happens if participants don’t make it into apprenticeships.

Bob Lerman, the economist from the Urban Institute has that concern:

**Lerman:** Sometimes people can set up a pre-apprenticeship program – they can rent some space, hire some teachers, recruit some students – but the hard part is getting employers to offer apprenticeship slots. And if there are a lot of slots that are going begging, then that’s a great opportunity for a pre-apprenticeship program. But very often, we have waiting lists to get into apprenticeships and so lengthening the waiting list may not be all that productive use of funds.
The laborers’ union in LA for example, has a waiting list of two thousand people. Even so, opportunity can sneak through. On a day I visit, the pre-apprentices had just gotten some surprising good news. The Laborers' union was inviting 10 of ARC’s pre-apprentices to join a laborers boot camp the following week. Usually the Laborers take two or maybe five people, but 10 is unheard of. The group rushes up to Isaac, the life coach, to share the news.

**Isaac Lopez:** “So Monday, huh? Two groups.

(jumble of voices)

**Lopez:** you’re going too? wow!”

But the good news has come almost too fast. The union boot camp will start before the graduation from the pre-apprenticeship program next week. Their families won’t see them graduate. Christian Garcia, the one who said he liked being on a college campus, is torn:

**Garcia:** I’ve never graduated nothing in my life. I want to graduate man.

It’s a rare rainy day in Los Angeles, and the group is standing under one of those big white tents on central campus, the kind you’d rent for a wedding or something. There’s fake grass underneath so they can workout. As rain pelts the tent, Isaac makes a call to the union rep, Delfino De La Cruz, to thank him:

**Lopez:** Delfino, you made it rain.” (laughter) Man, all these guys are super excited man.
I go down to the union hall to meet De La Cruz. He’s wearing a suit and we sit in a big boardroom. Delfino knows the chance he’s giving the pre-apprentices, because he knows the world they’re coming from.

De La Cruz: You know, a lot of people tend to feel different towards somebody that’s been incarcerated or has made mistakes in their life. I say we’ve all made mistakes in our lives. I mean, I myself, I was incarcerated too.

De La Cruz says becoming a construction worker in 1994, helped him see there was more to life than the streets. And he feels good to be able to give this chance to others. Apprentices start at $18.10 an hour. In two years, he says, they’re making $33 an hour and that economic stability changes everything for them:

De La Cruz: Now I’m going to buy a house. Now I’m going to get married. Now I’m going to raise a family. Not just have a family. Raise a family. That’s a big difference. ‘Cause In the past you would think, “Yeah, I want t have kids,” and the mentality was, “so when I die, I have something to leave behind.”
The reason the Anti-Recidivism Coalition pre-apprentices can jump the line is because they’re in demand. De La Cruz explains contractors need disadvantaged workers to fulfill the hiring goals in their contracts:

**De La Cruz:** Anybody that’s had a challenging life. Meaning they don’t have a high school diploma, single parent, male or female doesn’t matter, incarcerated, or even disadvantaged as not being able to find work. So that’s been a key driving force for what we have right now, the diversity in our unions right now.

The Anti-Recidivism Coalition has placed more than 100 people in union apprenticeships so far, and its gearing up to expand. Budnick says it costs $8,000 to put someone through ARC’s 12-week pre-apprenticeship program. The funding comes from the county, the community college system and philanthropic support. $8,000 is about a tenth of what it costs to lock someone up in California for a year. The people I met were the 4th group to go through, and they’ve done pretty well.

Guillermo Bohorquez, the guy who was so eager to get into the program when he got out of prison, is a laborer building the new Rams stadium. Victor Blas, the former lifer, got an apprenticeship with the electricians’ union. Christian Gracia, the 21-year-old who’d never graduated from anything in his life, got his certificate from LA Trade Tech and hopes to join the painters’ union. With jobs like these, they’re far less likely to wind up back in prison again, but Budnick says that’s setting the bar too low.
Budnick: I set the bar at, are they in a union job and making beyond a livable wage? Are they able to get out of poverty and buy or rent a nice place for their family? Are they able to graduate college or university? To me, those are the outcomes we should be looking for, not just did they not go back to prison.

(Music)

Construction is booming right now, but Scott Budnick worries there could be a downturn. That’s why he’s trying to create pre-apprenticeships in other areas, like firefighting and health care.

Lynn Shaw, the founder of the WINTER program says every time there’s a construction boom she hopes blue collar women will finally make the gains professional women have made in fields like law and medicine. She points out construction jobs are good paying jobs that can’t be exported to other countries.

Stephen Smith: That was correspondent Sasha Aslanian. I’m Stephen Smith.

Getting women women and formerly incarcerated people into apprenticeships is part of a number of efforts around the country to help underserved groups benefit from apprenticeships. There’s bipartisan support for increasing apprenticeships as a way to connect more workers with skilled employment. Proponents say the workforce of the future will need to continually retrain to keep
up with technical advances. And the apprenticeship model produces people who have learned how to master a skill and keep going.

(Music)

You’ve been listening to Old Idea, New Economy: Rediscovering Apprenticeships, a documentary from APM Reports. It was produced by Sasha Aslanian, with help from Emerald O’Brien and Josie Fan. The editor is Chris Julin. Web editors Dave Mann and Andy Kruse. Fact checker Betsy Towner Levine. Music help from Liz Lyon. Our theme music is composed by Gary Meister. Mixing by Craig Thorson. The APM Reports team includes Catherine Winter, Alex Baumhardt and Emily Hanford. Special thanks to Chris Farrell. The Editor-in-Chief of APM Reports is Chris Worthington. I’m Stephen Smith.

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