

START OF RECORDING

Attendance List: William Grippin
Jim Fish
Devina Rankin
Ed Egl

Title of Meeting: UBS Management Series Conference Call with Waste Management Senior Leadership

Hosted By: Jon Windham

Coordinator Management Series Conference Call with Waste Management Senior Leadership, hosted by William Grippin. My name is Lisa, and I'm your event manager. During the presentation, your lines will remain on listen-only. [Operator instructions]. I'd like to advise all parties the conference today is being recorded.

And now I'd like to hand the call over to William. Please go ahead.

Will Thanks, Lisa, and welcome, everybody, to our latest installment of the UBS Management Call Series. This is Will Grippin, your host for today. I work with Jon Windham, who heads up Alternative Energy and Environmental Services Equity Research for UBS. Today, we're very pleased to have with us Waste Management. Joining us on this call are CEO, Jim Fish; CFO, Devina Rankin; and Senior Director of Investor Relations, Ed Egl.

We like to use these calls as an opportunity to dive into a specific topic in order to deepen our understanding of each company's strategy. Today we'll be discussing Waste Management's People First focus.

Before we get started, I just have a few quick notes. First, there are no slides for today's call. The format of the call will be a brief introduction by Jim, followed by a moderated Q&A session. As always, we encourage listeners to ask a question on the line. However, if you prefer, you can email me questions directly and I will ask them anonymously for you. My email address is william.grippin@ubs.com.

With that, I'd like to thank Jim, Devina, and Ed for being with us today. Jim, I'll now turn the call over to you.

Jim Great. Thanks, Will. I told Ed I feel like I'm getting on an earnings call here, other than I'm not reading my script here. What I really thought I would walk through this morning is a bit of discussion around this People

First concept that we have discussed. It's a cultural change that we're trying to effect here. There are certainly some business reasons for why we do this. This is not just altruism on our part; it has to be good for the business.

I have talked about another CEO many times, a guy that I never met, and never will get to meet because he passed away a couple of years ago, but I felt like he was a bit of ahead of his time when it came to People First, and that was Herb Kelleher at Southwest Airlines. He would do a lot of things to drive that People First culture, with ultimately the end result being that Southwest, to this day, well after Herb is gone, is thought of as a company that has superior customer service within that industry, they're thought of as a company that has much more active engagement on the part of their employees. I was always impressed with the fact that their pilots would pick up trash during stops, and sometimes get out and load bags, and things like that.

I felt like that, whether you read Herb's book, the *Nuts!* book, or whether you just were a customer of Southwest, that their People First culture, which really began way back when he founded the company in the early 1970s, was in part because of Herb's love for people, and I would tell you it's the same with me. But also in part because he felt like, and said it many times, that in order for the company to be a long-term success, he had to put his people, his Southwest Airlines employees, first, and then they in turn would put customers first, and then when customers were happy, then shareholders would be happy. And if it wasn't in that order, then it wouldn't work.

I have always been a big subscriber to that theory. It's why when I was asked that at another Investor Day or investor call several years ago, what do I want my legacy to be at Waste Management? I think a few people in the room thought maybe I would say I want us to be—my ultimate goal is for us to be a top decile total shareholder return, or something along those lines. And my answer was much different. It was that I want, when I leave, if people at Waste Management say, "Jim helped make Waste Management a great place to work," then I think we will in fact be a top decile shareholder return company over a long period of time and I think we will have a stellar reputation with respect to customer experience that we provide each and every day to our customers.

But again, back to the priority that Herb established when he first started, People First is in fact at the top of the list. And then everything else falls in place. Just to give you a little bit of insight into what that means, because there have been some questions here—I understand that Jim's very engaged with the employees and he's out there a lot. I've visited over 50 sites this year and a similar number last year. That may sound excessive

to some of you on the call, saying, why is this CEO out visiting operating sites? Why is he not working on strategy in his office?

I would say, look, we spend a huge amount of time on strategy—and by the way, part of our strategy is in fact working with the operations folks within the field. But, as I think about what People First ultimately means and what the end manifestation is of those two words, it ends up showing up on our bottom line when we think about things like turnover.

All of you know, or most of you probably know, that we paid out the Trump tax cuts a couple of years ago, we paid out a \$2,000 bonus. That was in 2018 and every employee that was with us at the beginning of the year received a \$2,000 bonus and then those who joined us throughout the year also, if they stayed a full year, received a bonus. The idea was that typically when you stay at Waste Management for—we say once you stay there for two years, you'll stay there for life. All of our turnover—or, not all of it, but the lion's share of it, takes place within year one and a fairly significant portion in year two as well. Once you've been with the company for two years, then our turnover drops off significantly, so the idea was, let's take some of the tax money and return it to our hourly employees.

The interesting part about that was that we didn't choose to do that again this year. We had a long conversation about it, and should we make this something—there's a risk that if you did it again this year, that it would start to feel like it was an obligation of ours to give them something every year. But, we still had a long conversation about it. We looked to see what happened to our turnover numbers. Every company, particularly through a trucking company, talks about turnover. There are companies out there that have turnover of 100%. There are a lot of companies that we acquire, small companies, and we find out that their turnover is 60% or 70%. It's a huge cost for companies like Waste Management and Republic and Waste Connections, not just the small guys.

So, we looked at that as we assessed whether we should re-up on the bonus, and we chose not to. The interesting part about that is that our turnover, without the bonus in 2019, has actually improved by about 2% points, so you think about 22% being the number for drivers last year, and that number moves around a little bit, but call it 22% driver turnover in 2018. It's now down—the last time I saw, it was slightly south of 20%. That's very interesting to us as an SLT, as we think about the fact that we're not paying that bonus this year and yet, somehow our turnover's improving. That's valuable to us.

So, when we think about People First, part of the impact that we hope to gain from putting our people first is that we encourage them to stay with

Waste Management. We think that the number for turnover is somewhere on the low end at about \$12,000 per turned over employee. Then when you start factoring in some of the indirect costs of turnover such as safety—and you might ask, well, why is safety a cost? What does that have to do with turnover? A big majority of our safety incidents take place with two-year and under employees. The theory there is that if you're able to change the culture so that people want to stay at Waste Management and they do in fact stay at Waste Management, that they become safer, and they become better with their customer experience numbers which we track.

So, you might say that the high end of that number, if you factor in some of these indirect costs, could be as high as \$20,000; \$12,000 being more of the direct cost, the training costs, the travel cost, all of that, and then a piece of that ends up being efficiency. We're much more efficient when you look at a 15-year front load driver than when you look at a six-month front load driver.

All of that is part of this People First culture that we're attempting to create, and my going out and spending a lot of time in the field and going to 50 different sites is not just so I can go out and meet people, or not so I can go out and learn the business—I feel like I have a pretty good understanding of the business at this point, having spent eight years in the field myself. It is really to start to convey this People First culture. The first thing that comes up when we think about the financial side is turnover. That's the first thing, and we walk through it.

There's some other things that we're doing with respect to turnover where we have a bit of a crossover with technology. We've talked a little bit about this on earnings calls and we've talked about it at the Investor Day—and that is, arguably, the best example of that is the pilot that we're doing with Caterpillar. It's now coming up on a year into—not quite a year, but it will be a year once we get into 2020, where we've been piloting remote operations of heavy equipment. That is interesting with respect to People First because it starts to redefine the heavy equipment operator job.

The heavy equipment operators at Waste Management are—the average age of our heavy equipment operators is over 52 years old. As we've probably heard, as you may have heard—we've certainly heard it here—Millennials don't want to drive trucks and they don't want to operate heavy equipment. That potentially is a financial risk for Waste Management.

And so part of our strategy, part of this People First strategy, is how do we change that narrative? How do we change the fact that, okay, I understand that Millennials, that may not be their first choice, but if we change the definition of a heavy equipment operator position so that instead of being a job where I am driving my car out 50 miles away from my house because

most of these landfills are outside of the metro areas, so I'm driving out 50 miles away, so it's a 100-mile commute for me every day and my car's going to get dirty every single day. If I'm someone who likes to keep my car clean, it's never going to be clean again. If I'm somebody that has back issues, for example, I'm getting bounced around on a piece of heavy equipment all day long for eight to ten hours a day. So you can imagine that that job is a difficult job, and a job description, as you're trying to hire for that job, is not easy to write.

A much different job description, if we're talking about hiring somebody into a remote operations center. And that also is a long-term objective here, when we pilot with Caterpillar remote operations of heavy equipment, right now we're running this heavy equipment from a mile and a half off of the working face. It's actually on the landfill. It just happens to be a mile and a half away, back where the landfill office is. But we are operating, I believe now, four pieces of heavy equipment at that landfill and interestingly, the heavy equipment operators that do the best at it, not surprisingly, happen to be Millennials. We have two young gentlemen who are running that heavy equipment. We also have several folks who are not Millennials, who are more my age, and they pick it up as well.

But it is, as you can imagine, a different job description to say—and by the way, I didn't finish my thought there, but eventually we may move all of these positions into a big remote operations center somewhere—a well-lit, very 21st-century looking building, probably looks like some of your offices, with a big bank of HD screens and a big leather easy chair—and that's by the way, what it looks like in Denver, if you were ever to go there. But having that replicated across all of these positions, we have well over 1,000 of these operators today, so ideally, as we transition those 52-year-old average age heavy equipment operators to a remote center, you can imagine that the hiring of those is much different. It's a much different job to be hired for, and—back to my very first point, you can imagine that the turnover ends up being substantially different, in fact, substantially better. So, a couple examples there, Will, of what we're doing with this People First culture. One of them works in the technology component that will help, I think, ultimately change our financials for us. That's why I use that Herb example, that addressing of People First, which then ultimately impacts customer—we didn't really talk about the customer in those examples—and then ultimately impacts the investor, is why this is an important strategic imperative for us.

I could go through a few more things on here that probably are—you may have questions on. There are things like, really, we're bringing Tamla Oates-Forney in, she came to us from GE, and she is going through this HR transformation, as she calls it, and putting really world-class succession planning in place and performance management. Those things

that you might have thought were already here with a company that's approaching 50 years old, why wouldn't we have world-class succession planning already in place? But, I would tell you we've been a little bit successful in spite of ourselves from that standpoint. We have not had a world-class HR organization. So Tamla comes in really as somebody who has been in a world-class HR organization and is starting to put some of those things in place.

For those of you who saw her speak at Investor Days, you heard some of that from her, and that includes, by the way, some very interesting plans to pilot with inner-city schools, for example. Going to an inner-city school, as you can imagine, in downtown Houston and saying, look, your graduation rate here is 50% or less. Waste Management wants to partner with you, and we will guarantee you a couple of things coming out, but you have to get your high school diploma. So, the school is all in for this. And then when you come out, we'll guarantee you a position with Waste Management potentially in a driver position, where we would train you in a heavy equipment operator position, maybe in a recycling position. You have to make the commitment to us and that commitment might be four years, maybe five years of employment with us. And by the way, one of the things we've talked about is maybe paying for their college education, if that's something they want. A lot of companies do that.

So as we've talked to some of the administration officials here in the city of Houston, they are over the moon excited about this. That's something that Tamla has brought in. And, by the way, not just the People First component of that transformation, again, but that ultimately benefits our shareholders again, because we—not only from turnover, but one of the things that we've experienced significantly here at Waste Management is that as our workforce ages, so too does our cost for healthcare.

Our average employee at Waste Management, I think, is about 45 years old. And when you look at the cost of healthcare and when you graph that, all of us notice from probably our own experiences, but when you're in your 20s and your 30s, particularly before 35, you're not spending a lot of time at the doctor. What happens, though, is that healthcare curve really turns up sharply when you get to 40, 45, certainly when you get to 50. We all start breaking down a little bit at that point. Our healthcare costs as our workforce has aged has really turned up. We've talked to other companies out there, and part of their strategy is to make sure that they're hiring in at the lower end so that it keeps that healthcare cost in check.

When we talk about hiring high school graduates into some of these positions like recycling positions and asking them to make a career with Waste Management, make a commitment of five years, that not only helps

us potentially with the turnover issue that I talked about, but also with healthcare costs. Healthcare for all companies is on a straight line up.

So, that is a little bit of insight into what People First actually is. There's a lot more to it, as you can imagine, but, Will, maybe we can take some questions from here, or I don't know, Devina, whether you want to add to that. You can give your own view of it as well.

Devina

Yes, just really quickly, I think Jim summarized all of the different investments that we're making very intentionally across the organization to put people at the beginning of the value chain. What I think is important is that as an organization we've always talked a great deal about return on invested capital being a top priority for our organization. When we talk about putting people first, we continue to think about return on invested capital and the priority that it is for us and for our shareholders.

Return on investment capital is not just a goal or an objective for financial capital, but it's an objective for human capital as well. We're certainly seeing places where—Jim mentioned earlier improved turnover and all of the benefits that we see from a financial performance perspective in improving turnover, but I do think there's something about the empowerment and engagement of our workforce that really becomes an intangible and something that you're not financially as able to specifically quantify. But there's a level of momentum, enthusiasm within the organization that we're working hard to be sure that we think about in terms of the mathematical return on invested capital, but also what we can do to start to really leverage our human capital more effectively so that we bolster the financial returns of the organization long-term.

I think all of that is showing itself in various ways. Turnover is certainly an important one, but the productivity, the engagement, the contributions, even those people in more traditional back office roles who have a renewed sense of what it is that they can accomplish by contributing to and engaging within Waste Management as a place not just for a job, but for a career, we think will create long-term value for the enterprise.

So all of that comes together to create shareholder value that we think we're just starting to break through with. I think that there's a platform out of which we're going to continue to see growth and contribution over the long term.

Will

Great. Thank you, Jim and Devina. I guess with that as a backdrop, Lisa, could you please provide instructions for participants who would like to ask a question? And then I'll kick it off with a few.

Coordinator

Thank you. [Operator instructions].

Will Perfect. Jim, you mentioned you went to 50 different sites. I'm curious what you have seen as far as the competition for labor and talent and how that varies across some of Waste Management's key markets. And maybe how does the approach to recruiting and retention in some of the different major markets, how does that differ across those?

Jim There's a couple of differences that we've talked about for years here, which is that union versus non-union. Our unions tend to have lower turnover. So, if I go to Los Angeles, for example, where we're heavily unionized or I go to Oakland or Seattle, we have pretty low turnover there. But I really try and set those aside.

And what I've noticed in the visits to the field, and I'll use maybe last week as an example—or two weeks ago I was in Kansas City, and we acquired Kansas City through the Deffenbaugh acquisition. Really, Kansas City had not been a great story for us in terms of performance. When we look at the performance metrics out of that big hauling site, and it's one of the biggest—actually, I think it's our second biggest in our entire company now behind Oakland and then Dade County in Miami, but the second or third biggest, and yet not performing nearly as well as those other two big sites.

And we, for a couple years wrote it off to, well, it's integration and we have to make sure we get this integrated, and it's a little bit of cultural change there. Deffenbaugh is a different company. But at some point you have to say, no, it's not them anymore. It's us. What I've noticed, if I set aside union versus non-union, what you really find, not any surprise to anybody on this call, is that it always, always comes back to leadership. It always comes back to leadership.

So, we put a director of operations with probably a familiar last name, her last name is Rooney, and her uncle was actually a past CEO of Waste Management a long, long time ago. We hired her. She came from actually, from ADS, right before we announced the acquisition, so she came over from ADS. She has come in and in five months' time changed our second or third biggest district from one that was dramatically underperforming to one that is really starting to shine.

What I told the drivers and the mechanics and the helpers and all the management team there was, look, you're going—the reason I came out here was not to come out and see a place that's falling flat on its face. It was to come out and see a place that has now the reputation for one that is really turning the corner and stands to be a shining star for us across the entire entity within the fairly near future.

So you have a group of people there, because of the change in leadership, that are very excited about what they're doing and you're now seeing communication between our operations team and our maintenance team. When we would look at the communication between those two previously, the route managers who were running our day-to-day operations were having no conversation with their counterparts in maintenance. Similarly, the drivers weren't. All of that ends up with a maintenance cost that was extraordinarily high there.

Under Kelly—her first name is Kelly—but under Kelly's leadership just in five months' time, some of the metrics that we track, things like downtime per route and things like that, have improved measurably in a very short period of time and a very big district. I think it's a pretty good indicator of what I see when I go out in the field.

Again, I said earlier, I'm not going out there to try and learn the business. I know the business. What I'm trying to go out and see is what is causing Kansas City to really show significant improvement when for three years it didn't. We just weren't seeing the metrics, were not performing the way they should have.

And, by the way, use that as we think about the ADS integration coming up here in the next, whatever, three, four, five months. Once we close ADS, it's kind of a bunch of Deffenbaughs, because this is all such a local business, we will be getting a bunch of \$150 million in revenue-type districts coming into our network. You might think of it as \$1.7 billion or whatever coming in, but it's not \$1.7 billion coming in, it's ten \$170 million coming in. That's what it is. How do we learn from our \$170 million Deffenbaugh acquisition, where we really didn't do very well for a period of three years and now we're doing well? I don't want to spend three years trying to integrate ADS. So, how do we learn from that?

I think what it always comes back to, every single time, it doesn't come back to the pay; it doesn't come back to benefits; it doesn't come back to equipment. Those are nice. What it ultimately comes back to every time is leadership at these sites. When you have the right leadership, then those leaders are the ones that get your processes fixed. They're the ones that establish communication lines. They're the ones that literally got a standing ovation, as Kelly did when I was out there, from the drivers. That is what is valuable. That is what ultimately is going to fix that hauling company. That's what's going to enable us to integrate ADS more quickly. I don't want to spend three years integrating.

Will

Perfect. We talked about differences across geographies. I guess pivoting to maybe differences across roles, how does the strategy differ for, say, a

route driver versus a mechanic and a landfill operator? And are employees encouraged to make lateral moves if they want to try something new?

Jim

I would tell you that in the past the movement was—we had a couple problems with employee movement. It wasn't necessarily encouraged, which was problem one. And then when it did happen, it was less because we were taking somebody who was a high potential and saying, let's give them an alternative swim lane to gain some experience in. It was more about, well, Jim's kind of a marginal performer and not really doing great in his current role. Let's move him over to the business development role, or let's move him over to a marketing role, or whatever.

So, we really had two problems here. First of all, we didn't really encourage that and didn't do a great job of identifying our high performers or high potentials. And then when we did, we didn't necessarily encourage them. Part of that was a little bit of selfishness on our own parts, saying, gosh, now, I don't want to move Ed because Ed's so good, and we don't want to hurt the company, when in fact Ed wants to move. He wants to do something else. We just didn't do that.

And the irony is we wouldn't move Ed, but we would move Jim, who really probably shouldn't even be here—not me, of course. I think we have started to do a better job functionally of identifying what it takes to be great in these roles, and that is not only identifying what it takes to be great, but also identifying who's not great and are they just simply in the wrong role? That can be the case sometimes, but it's not all the time and we tend to default to all the time. And, if they're not right for the role, then maybe they're not right for the company and let's go ahead and move on from them.

I think we're starting to, in each of these roles, start to understand what are the characteristics that we're looking for that ultimately make great leaders? Interesting what you find, is there's not a big difference functionally. A great leader in finance has a lot of the same characteristics, leadership traits, as a great leader in maintenance. Now, their functions are totally different, but the leadership traits are very similar. So, how do we identify those really good leadership traits? How do we train for those through leadership development? How do we identify those people who are not ever going to get it and move them on?

I think that's in part credit to what Tamla has brought into us. She understood that, certainly, coming out of much bigger, much more advanced organizations.

Will

Thank you. With that, let's pause. Lisa, do we have any questions on the line?

Coordinator There are no audio questions at this time. [Operator instructions].

Will Thanks. I guess I'm curious to hear about current training programs or upcoming maybe new training programs that you might be putting into place to help give front-line employees a clear path to career progression or the skills that they might need to try something new.

Jim Yes. There are a couple things I'll mention here in terms of front-line programs. Obviously, you heard us talk about the new training center that we built in the Phoenix area. That's been hugely well received. We are now sending all of our front-line drivers and technicians through one of two training centers. One is in Florida and the other, of course, there in Arizona.

That's been very successful for us, not only just in terms of basic training, but the end result is that our drivers that have gone through the training center have better safety records. They have better customer records. They have better retention—all of those things that I talked about early on that are very meaningful for us. Not, probably, a big surprise to anybody, that if you give really good training that people tend to be better at their jobs.

So, that's what we're doing. Really, that's the biggest step I would tell you that we've taken with front-line employees and in terms of training those front-line employees.

When it comes to leadership development, what we're doing is we've started this at a fairly high level, which is doing individual assessments. We have a couple of different third parties that are actually helping us do these assessments, looking for various traits, doing some of the assessments, depending on what level. I mean, if we're interviewing vice presidents and determining whether in fact they are high potentials for an SLT type role, that is a much more in-depth type of interview. It's very much an industrial psychology type interview; whereas isolating where we have really good route managers who have the potential to become DMs [ph], senior DMs, maybe even DOs, those are less involved.

But in each case, what Tamla's team is doing is identifying those traits that make really good route managers and then training on those traits, but also looking at—one of the things that we've said many times is, all high potentials are high performers, but not all high performers are high potentials. It's kind of the old Michael Jordan example—great player, not necessarily a great coach.

What we've tried to do is break a little bit of a mold here, which was that my successor as a district manager is my best performing route manager.

And that has always been the way we thought about it. Part of what we're doing is breaking that mold by understanding what constitutes a high potential. We know what constitutes a high performer, because we have a whole lot of metrics that tell us that a route manager is really good at his or her job. But, that does not necessarily mean that they are going to be a high potential for a district manager position.

So, what constitutes a high potential? We're going in and identifying those specific traits and then looking to cull—not cull, cull would be a bad thing—but looking to pull those people out and put them through leadership development type training programs. I think ultimately that gives you an example or a couple of examples of what we're doing both at the front-line level, but also at the manager level, where we're looking to move people up within the organization.

Devina

One of the things, though, that has been really a cornerstone on the front lines for many years now, for those of you who have followed the company for some time, you've heard us talk about service delivery optimization, and service delivery optimization is about improving the way that we work in the collection line of business. We've expanded that now and use that same model that gave us such success in improving efficiency in collections and expanded it to our maintenance practice as well. So now, we're talking about maintenance service delivery optimization and taking the original collection-oriented SDO and expanding it to focus on managing 100% of the workday or M100.

Really, the foundation for all of these operating programs is coaching, and coaching that is based on an empathetic leadership style and one that is encouraging transparency, collaboration, communication for the good of the driver and the good of the team. I think what we are seeing in that is a more coaching-oriented culture and therefore one that feels like we're focusing on the driver and the front line much more proactively in our day-to-day engagement with our employees.

Then, in the back office, one of the things that we've done a lot of, particularly in finance, but I know that some of my other counterparts on the senior leadership team would say the same thing, is when you're in a decentralized organization where so much of the focus and attention is in those local markets that we serve, you can sometimes suffer from fragmentation in processes. What we know is that we have an opportunity to be more deliberate about learning from each other, so that we establish best practices and leverage those best practices across the enterprise.

So, finance and other functions are working much more intentionally together to align and to integrate our functional expertise so that as we develop expertise, whether it be in financial statement analysis or in

coaching and learning and development, that we're better leveraging those best practices across the organization. I do think that culturally you're seeing coaching and development as a much more consistent part of the Waste Management employee's experience.

Will

Great. Jim, you touched on this earlier in the call a little bit, but I wanted to jump in a little bit more to how the programs are progressing on recruiting veterans or underserved portions of the community and how that can provide mutual benefits and maybe help ease some of these labor challenges.

Jim

Certainly, our intention was to really hire veterans, and that has really manifested itself nicely, and I believe one of every 13 employees at Waste Management is now a veteran, one of 13, one of 14, something like that.

That was by design, and so even when I was out in the field, I mentioned Kansas City, Little Rock a week before that, a number of our management employees are veterans. So, that has been hugely valuable for us and I think it's been a great two-directional partnership here. They feel like it's been a huge value for them.

Then, with respect to some of the other underserved areas of the community, I mentioned the one example that Tamla was working on. There's some other things that we are also looking into, particularly with the city of Houston, just because that's where we're based and Houston being a big city has its share of the underserved.

We have a program that Tamla brought in, that is looking at the homeless and are there folks, and we're working with a company out of Dallas that screens those coming out of the homeless community, and so often we drive past folks in our own cities who have cardboard signs up that say, we'll work for food. I often think, gosh, I'd love to offer them a job, but there's just not that many—I'm sitting at a stoplight. This is not the right place to offer somebody a job, and what's the right mechanism to get that person into some type of system that ultimately can in fact give them employment, if in fact that's what they're looking for.

That's what Tamla has designed, and so far it's been very successful for us. It's mostly looking at front-line employees. Part of what this firm does for us is that they screen employees. We all know that a portion of the homeless community have substance abuse issues, a portion of them have mental health issues. Some of them are in those homeless communities because they've come out of prison and they have serious felonies that they served their time, but those types of folks we would expect to get screened out. It's not that we're not sympathetic with their plight. It's just that we can't hire them.

But, with that said, there are also a significant percentage of those folks who do come out who are employable, who just—there's never been any program or mechanism for them to reach out to WM, and holding up a cardboard sign in front of me when I drive past is not it. That's an area where Tamla has really dug in. It's in its infancy. I think it's been going now for maybe five months. We've had some nice success with it, and I believe the first place we did it was in Dallas and so far we've had some nice success with it. We've hired—I don't know what the exact number is of folks that we've hired out of that Dallas homeless community is, but suffice it to say we were pleased with the progress we've made so far.

Will Thanks. I guess, Lisa, let's do one more check on the lines. Do we have any questions in queue?

Coordinator There are no questions at this time.

Will Okay, no problem. We've talked a lot about recruiting, retention, etc. I'm curious what Waste Management is doing to look at driving efficiencies out of the existing workforce and maybe how that could help mitigate some of these challenges.

Jim There's a couple of things. Devina touched on one, which was SDO, and we've been very pleased with the progress we've made with SDO. There's a big department of that that's technology-related.

SDO is really two things: it's technology and process. Ultimately, SDO really is a benefit to us, not just financially, but it kind of goes back to that direct and indirect cost. The direct cost is, I think, fairly obvious. The indirect cost is when we have these processes and they're consistent across the entire organization. Then, that consistency actually ultimately is something that the employees like. It does help us with employee retention.

That might seem like a little bit of an odd byproduct, but in fact these programs such as SDO, such as MSDO, which is maintenance SDO, we're doing sales SDO, those have all started to develop a level of consistency across the entire organization. And it shows up in the form of lower maintenance costs, for example, on the trucks where we have our best MSDO, and that's really process-driven as much as technology. I would tell you, MSDO, we haven't bought a lot of technology to it, SDO we have. MSDO is really 95% process.

So the other one that we've talked a lot about which will change the makeup I think of the recycling business is some of the new technology we're bringing into the recycling line of business. We talked about the recycle plant of the future a lot, and that is taking in material right now in

Chicago. We're not fully through the windup phase there, but that has potential to significantly reduce our labor costs there due to technology coming in and ultimately replacing labor.

Then we're at several other plants. We talked about this also I think on earnings calls. We have put robotics in place. We've tested—I think Brent Bell in our recycling group have tested probably three or four different robotics manufacturers and ultimately decided on one. So we bought—I don't know, Devina, how many of those robots we bought.

Devina

I think it's about eight.

Jim

Eight.

Devina

So high-single digits.

Jim

Yes. So if it's it eight, then call it two at each one of these single-stream plants that we're testing at this point, but we've gone through a couple of different phases of the test which is testing not only which one of the robots works the best—and I think we have identified the one that we at least think works the best—but now how's it doing on a long-term basis?

So far I think I've heard Brent's been pretty optimistic about it. He feels pretty good about these robots and we also think that the cost comes down over time with those just like any other form of technology. Those will obviously change efficiency significantly.

The one thing about recycling that's made it a little different about collection is that as everybody knows we've struggled with contamination at these recycling plants and the technology that we're bringing into the recycle plant of the future and the process change—it's really 180-degree different process there. It's positive sorted as opposed to negative sorted and if I need to explain that, I can. But that will ultimately not only improve the efficiency and then these robots obviously improve efficiency—we think they're as much as three times more efficient than a human sorter—but it improves the quality of the material at the back end, and that is hugely valuable to us because part of the reason that commodity prices have fallen off the table over the last two years is because the quality at the back end of the process is no good.

China, who had been our biggest purchaser of our materials and was buying close to 30% of our recycled materials and now is buying 2%, I often get asked the question, did that have anything to do with the tariffs? Nothing to do with the tariffs ultimately. It had to do with the fact that China didn't like the quality of the material coming from the United States.

These process changes, not only are they better for us from an efficiency standpoint and the equipment that we're putting in, not only is it better from an efficiency standpoint, it's better—potentially it has the potential to raise the price to us and to us only because we're the only ones that are able to produce that clean of a back end recycle strain.

Devina

I would also speak to—was not talking about this as part of our workforce but it's a very important part and it's the call center representatives who serve both our field organization and also our true customers of the organization. What you would learn by spending a day in the life of a waste management employee is that they really care about serving our customers and getting things right for your customers.

What we're doing is investing in technology that gives them a better platform off of which to provide that service. Today many of our CSRs, they sit in front of multiple computer screen monitors and split between 9 to 15 different applications in order to answer our customers' questions. What we're trying to do is advance the technology that they have at their fingertips that will position them to better serve the customer ultimately.

So all of those things, they may seem like investments in technology, but ultimately they're investments in our people because it's positioning them to more effectively execute upon their job responsibilities, and that matters a whole to them because they all care about serving our customers and our community.

Will

Thank you. So yes, we just talked quite a bit about technology and I did want to dive into that a bit more. We talked about the recycling plant of the future, obviously the customer service technology and the Caterpillar pilot that you're running. I'm just curious, what sort of a timeframe do you expect to be on specifically with the Caterpillar pilot but also some of these other initiatives to actually deploy some of this technology at a larger scale kind of across the organization?

Jim

I think the Caterpillar project probably has a little bit longer timeframe to it just because the intention is not to go lay off a bunch of our heavy equipment operators. The intention is to use that as a replacement tool as they age out and I mentioned 52 years old is the average age. So we need to build some critical mass there.

Obviously we have to make sure that the technology is performing as we expect. So far I think it's performing pretty well. We had a few bumps in the road that we had to work our way through with Caterpillar and more than Caterpillar was really the connectivity between the center and the equipment.

So it was not the actual machine itself, the dozer or whatever. It was the connectivity and making sure that I have 99% up time. And then I would imagine that as we look to move that to a centralized center, also going back through another pilot of that connectivity because there may be a difference between being a mile and a half away and being a thousand miles away.

It shouldn't be that big of an issue. It shouldn't be insurmountable because we all have cell phones, and those work whether you're calling from China to Austin, Texas or whether you're calling from next door. So we should be able to overcome that, but I think it's going to take a little bit of time. Then of course the other thing is we have a lot of heavy equipment and really this involves buying new heavy equipment. It's a big enough change that it's pretty hard to just retrofit current equipment. So I would tell you that if anything is driving this, the size of the people, it's the life of the equipment.

As we phase that equipment out, our heavy equipment might have a useful life, maybe even a little bit longer since we do tend to rebuild some of that than our front line trucks. Our front line trucks run somewhere between 8 and 10 years. Heavy equipment when we rebuild it can run sometimes up to 15 years. So it's going to take a little while to get that rolled out, but we think that'll be very successful for us once we get it rolled out.

Then some of these other things like the recycle center, those types of technologies or what Devina talked about which is really bringing technology to these call centers, I've aspirationally set a goal out there of reducing our inbound calls in our call centers by half. We take 12 million calls, cutting it down to 6 million. The average call cost, fully loaded, including some facility type costs, is about \$7 to \$8 per call. It takes a little while to get that out because you'd have to cut your facility costs back and that doesn't happen overnight. But as we bring technology to our customer experience centers, we think that that will over time really bear some real fruit, not only on the cost side, really that's the secondary benefit. The primary benefit is on the customer experience side.

So I think probably the fastest one to roll out will be the first one we talked about which is change in recycling. By the way, it's just purely based on necessity. That's one where we have the biggest need right now because it's in the toughest spot financially.

I think you'll see if we feel comfortable with this recycle plant of the future and if we feel comfortable in particular with robotics, I think you'd see us start to roll robotics out pretty fast. Recycle plant of the future, we're not going to rebuild a recycle plant every year, but some of these recycle

plants, again, it kind of comes back to the useful life of the equipment in the plant.

When I was in Philadelphia we built a brand new murph [ph] there in Philadelphia. It still seems like it's new to me, but that plant is becoming a little bit tired. So we won't have to build a building, we'll just have to replace the equipment here in the next couple of years.

Once we've tested this recycle plant of the future and robotics, we may combine the two, by the way, and come up with truly kind of the Next Gen recycle plant of the future. All of that I think will happen faster than the Caterpillar heavy equipment center or reducing down to 6 million calls.

Will Perfect. So as we are getting close to the top of the hour here, I just have one last question and then I think we'll start to wrap it up. So acknowledging that it is probably difficult to quantify, how should we as investors look to gauge Waste Management's success against this People First initiative?

Jim I mean, that's a great question. We talked at the top about how some of this shows up in the form of lower turnover and we have quantified that. By the way, it's a big number. Take whatever the number of drivers is that we have, 17,000-18,000 drivers at a \$12,000 cost and you can come up with a pretty big number.

So I think the way this ultimately manifests itself and shows up to you as investors is in a number of different avenues, one of them being turnover and potentially one of them being lower healthcare costs. Then there's the softer ones that are harder to really put a dollar value on which is things like leadership development, but I did mention that leadership development has a big impact on turnover.

But having better leaders, having leaders that think more strategically, that one is a little bit more difficult to see in the short-term. But definitely over the long-term I think what it does is it separates us from the competition and further separates us. I believe we're separated already, but having the best leaders. I would say I think we have the best leaders in our industry right now.

What I said at Investor Day is I don't want to compare ourselves to our industry. I want to compare ourselves to other industrial companies that are not necessarily within the waste industry. So all of that is an outcropping of People First. It takes a little while to see the real financial results from that.

Will Got it. So I think we can wrap it up there. I just want to say thank you, Jim, Devina and Ed and to all the investors for joining the call. Our next call in this series is on Thursday next week at 11:00 a.m. which will be with Waste Connection senior management.

With that, I just want to turn it back over to Jim for any closing remarks.

Jim Yes. I think I've covered pretty much everything today, but I do appreciate everybody dialing in and hopefully this—we've had so many questions internally about People First and honestly, it's refreshing to get some questions from the analyst community about what People First actually means, and hopefully we did a decent job of describing it to you.

Will Excellent. Thank you. Have a good day, everybody.

Coordinator Thank you. That concludes your conference for today. You may now disconnect. Thank you for joining, and enjoy the rest of your day.

[END OF CALL]