

In 1969, Steve graduated from A&M with a bachelor of science degree in petroleum engineering. He continued at A&M to earn a master's degree in the same discipline.

Steve began his career with Shell Oil Company in Houston, Texas. Much of his work over his 5 years at Shell was focused on designing and pumping large hydraulic fracture treatments to stimulate production from the deep, low permeability, geopressured gas reservoirs in South Texas.

It was his work with hydraulic fracturing that inspired him to return to Texas A&M and that set him apart from his peers as a true legend in the oil and gas industry for the advancement of this critically important technology.

One day in 1970, Steve was riding the elevator at work and met Ann Friddle, who was also working at Shell. Steve and Ann were married 6 months later, on January 9, 1971, and they had been married for over 48 years when he passed away.

He and Ann returned to College Station, and he pursued a Ph.D. in petroleum engineering, which he completed in 1975. In 1976, Steve joined the Texas A&M petroleum engineering faculty and, as if he didn't have enough to do as a young father and as a new professor, he started his own consulting company, S.A. Holditch & Associates.

S.A. Holditch & Associates quickly became a worldwide powerhouse in the petroleum engineering space. Over the years, Steve earned a reputation for being able to solve the most difficult petroleum engineering problems, especially those dealing with low permeability reservoirs needing stimulation, typically through hydraulic fracturing.

He was distinctly proud of the work Holditch & Associates did alongside the Gas Research Institute to advance understanding of low permeability sandstones, shales, and coalbed methane.

After over 20 years of success, Steve chose to sell Holditch & Associates to Schlumberger, where he stayed on as a fellow, the highest technical designation in that organization. As a Schlumberger fellow for 5 years, Steve traveled extensively to help solve some of the world's most difficult petroleum engineering problems.

In 1995, at age 49, Steve was elected to the National Academy of Engineering, the highest honor that can be given to an engineer. After many years of service to the Society of Petroleum Engineers, or the SPE, Steve was elected to the board of directors, then vice president of finance, and finally president of this global organization with over 70,000 members.

He was awarded almost every recognition that SPE has to give, including three of the society's top awards. He was elected as an SPE honorary member in 2006, the highest award that SPE can bestow upon an individual and was officially named a Legend of Hydraulic Fracturing by SPE in 2014.

While Steve enjoyed many professional successes in the commercial re-

gime, many of his greatest accomplishments were at Texas A&M University, where he served on the faculty for 37 years. During his tenure, he taught 97 courses and served on over 150 graduate committees.

From 2004–2012, Steve worked as head of the Harold Vance Department of Petroleum Engineering. During this time, he revitalized the Crisman Institute for Petroleum Research, and saw the number of students in the petroleum engineering department more than double. Under his leadership, the department quickly earned a reputation as the number one ranked university petroleum engineering department in the world.

It was during his time at Texas A&M that he created his second legacy for America's hydrocarbon industry; the thousands of Aggie petroleum engineers who work around the world every day utilizing Steve's teaching and mentoring to solve the world's greatest energy challenges. Their work, alongside the work of other industry legends, like George P. Mitchell and Michel T. Halbouty, along with Stephen Holditch, have contributed significantly to America's energy dominance that is changing the world today.

In 2013, Steve retired from the faculty after many years of dedicated service to the Texas A&M community. Throughout his life, Steve often credited Texas A&M University as the foundation from which his success grew. He praised the values instilled in all Aggies and, in 2014, was named a Texas A&M Distinguished Alumnus, an honor he richly deserved for a life of service and devotion to his beloved university.

In thanking the Aggie community, Steve said: "You will look back at your years at Texas A&M as one of the best periods in your life. Always remember the Aggie Code of Honor."

In 2016, Steve was inducted into the Corps of Cadets Hall of Honor, an award which made him prouder and happier than perhaps any award he had received in his life.

While in retirement, Steve enjoyed spending time in Bryan-College Station with his wife, Ann, their two daughters, and their five grandchildren. As a season ticket holder to a variety of Texas A&M sports, Steve continued to support the Aggies, but Fighting Texas Aggie football remained closest to his heart.

Steve contributed a great deal to the Texas A&M community, and can be described as a model Texas Aggie, who was true to his core values of excellence, integrity, leadership, loyalty, respect, and selfless service. One of my favorite phrases that Steve often used was: "I reserve the right to get smarter." That is what he did best, always pushing to find solutions to the world's toughest oil and gas challenges.

Madam Speaker, Steve's life was defined by his dedication to his family and his friends, his world-changing accomplishments in energy, and his true

love of Texas A&M University. He will be forever remembered as a true pioneer in his field, a devoted husband, a father, a grandfather, a teacher, a mentor, and a friend.

My father has a saying: "Go make a hand."

Madam Speaker, Steve Holditch truly "made a hand" for his family, his university, his community, our country, and our world.

My wife, Gina, and I offer our deepest and heartfelt condolences to the Holditch family. We also lift up the family and friends of Steve Holditch in our prayers.

I have requested that the United States flag be flown over our Nation's Capitol to honor the life and legacy of Dr. Stephen A. Holditch.

As I close, I would ask all Americans to continue praying for our country during these difficult times, for our military men and women who protect us from threats abroad, and for our first responders who keep us safe here at home.

Madam Speaker, I yield back the balance of my time.

THE PENDING DEBT TSUNAMI

The SPEAKER pro tempore. Under the Speaker's announced policy of January 3, 2019, the Chair recognizes the gentleman from Arizona (Mr. SCHWEIKERT) for 30 minutes.

Mr. SCHWEIKERT. Madam Speaker, as I get set up, in past years, when I used to have to sit up there, it was because the Speaker was annoyed with me. I am sure that would never happen in your case. You don't have to say anything.

Madam Speaker, I try to come to the floor every week and sort of talk about what we see actually happening in the economy, what is happening in jobs, and those things. But it is more of a global discussion. And part of that discussion is we see the stories, we know the facts; we are about to be buried in a debt tsunami. And it is not Republicans and Democrats. It is demographics.

There are 74 million of us who are baby boomers; 74 million. We are halfway through turning 65, moving into our earned benefits. And it is such a difficult subject around here because, the fact of the matter is, as soon as you use the word Medicare or Social Security in any type of discussion, even when you are passionately trying to protect those programs, in our modern politics of rage, you just wrote an attack ad saying, well, he talked about Medicare; he must be meaning to do something. That is absurd. If we are not talking about it, we are not going to save them.

Here is the thought experiment. Next 5 years, just the growth of Social Security, Medicare, healthcare entitlements, but mostly Medicare, just the growth, equals the entire Defense Department.

Last week, I was here with some boards walking you through, showing

that almost all the 30-year debt, almost every dime of it, is just Social Security and Medicare. It is demographics. And my passion is, I believe there is a way we keep our promises, by using a calculator, by using, actually, economic modeling, using the tools we have around us.

The problem is, in this body, it is complex. Our ability to do simple things the last year has been just incredibly heartbreaking because everything is right now about political gamesmanship, one-upmanship, trying to get the lead, instead of dealing with the reality. It is complex.

So I put up this slide almost every time I come speak, trying to make the point that if you can grow the economy through tax policy, through trade policy, through smart regulations, population stability, getting the immigration system correct, family formation, the adoption of disruptive technology in healthcare—and we are going to talk about that a little bit today—incentives to stay in the labor force.

We are having a miracle right now, mathematically, of the number of our brothers and sisters who are in the labor force and moving into the labor force.

Last Friday, the number of folks who moved from not even looking that entered the labor force was stunning. I know that is geeky, but it is really, really, really important.

I have sat on the Joint Economic Committee now for years, and it was only 3 or 4 years ago we would have these really smart economists come and tell us that labor force participation was going to crash; this type of full employment economy was impossible.

It is here. These types of wage gains, as you know, we just had to recalculate. The productivity numbers turned out to be much higher in 2019 than we thought they were.

How do we take what is working right now, expand those concepts so we hit a level of economic stability and growth that gives us a fighting chance not to be buried in debt? And how does that become partisan rage around here?

I accept my brothers and sisters on the left live in an economic folklore of, well, we will tax rich people, and that will take care of it. And my brothers and sisters with me on the Republican side, we often will get behind microphones and say things like, well, it is waste and fraud. None of those are true.

Let's just, for once, try to tell the truth about the math. The math is stunningly ugly. Simple concepts.

And even last week, I think I brought this board here. If you take the next 30 years, and you pull Social Security and Medicare out, that next 30 years—and I have a 4-year old; I would really like her to have the same type of future I got to experience in my life. But if I strip Social Security and Medicare out of the next 30 years, we have \$23 tril-

lion in the bank. We are \$23 trillion positive. Not inflation adjusted; that is the raw number.

If I pull Social Security and Medicare back into that 30-year window, we are \$103 trillion in debt. And if you want to do constant dollars removed, then drop the number by a third.

□ 1300

You cannot be intellectually credible, honest walking behind these microphones saying you are going to protect Social Security, you are going to protect Medicare, and then not be willing to talk about the actual math. Because I think there is a way that we keep our promises; it just means we have to do everything.

So one of the first things I want to walk through today is a concept, and I am desperately trying to sell and have this sort of become intellectually sort of socialized.

The ACA, ObamaCare, if you really strip it down, what was it? It was a financing bill. Take it down to its most basic. This is hard for a lot of us to accept, but it was who got subsidized and who had to pay.

Our Republican alternative, if you really strip it down, what was it? It was a financing bill. It is who got to pay and who got subsidized.

We almost never have an honest argument around here of what to do to crash the price of healthcare. We have lots of discussions of little incremental changes, and all those incremental changes are important, whether it be HSAs, whether it be disclosures of cost and these things. Wonderful. But they are dishonest when you start to understand the scale—the scale—of what is coming at us.

Back to that 5 years; make it 10 years. Just the growth of Social Security, mostly Medicare, healthcare entitlements, equals the entire discretionary budget. Just the growth portion.

So what do you do to disrupt the cost of healthcare? And my argument is we need to legalize technology.

I am not going to show it today, but in the past, I have come here and shown that we now have the technology; it is in its final stages of hopefully being perfected. It looks like a big kazoo. You blow into it and it instantly tells you you have the flu. It instantly could bang off your medical records on your phone, instantly order your antivirals.

The algorithm we know right now is incredibly accurate, except that technology is illegal in today's conscript. Think of that.

So how do you disrupt healthcare prices? Well, one, I am going to take us to something a little bit different.

Did you know that almost a half a trillion a year—actually, over half a trillion a year, 16 percent of our entire healthcare cost, is just people not following the rules for their pharmaceuticals. They don't take their hypertension medicine. They take too much

of this. They don't take this. That is an adherence problem.

Sixteen percent of our entire healthcare cost is the failure to follow your pharmaceutical protocols. That is not drug pricing; that is not prescription pricing; that is not a PBM; that is not a benefit. That is just you and I, as Americans, we are not following the rules for the pharmaceuticals we have.

Well, it turns out the fastest thing you and I could do to actually have an immediate pop-down on the price of healthcare is actually change pharmaceutical adherence.

Well, it turns out we have technology for that, and here is the thought experiment. We have pill bottle tops that tell you when you open it up or if you didn't open it up, and it will ping you.

So we know right now the adherence of taking your hypertension medicine is one of the most powerful things we can do to actually crash the price of healthcare, but you have got to take it. How many of us forget?

Well, the fact of the matter is, for a few dollars, we could issue that pill bottle with a cap that starts pinging your phone, pinging your family, pinging whoever the hell you want to ping that you didn't follow the rules.

We have actually brought the display here before. It looks like a little dome. It actually distributes pharmaceuticals into a cup.

So, if you are my grandmother, rest her soul, and you have a couple pills you take in the morning, one for digestion at lunch, and a couple before you go to bed, it actually will distribute those at the proper time, in the proper amounts, and then tell you, reminds you, reminds the family if that little cup with the pharmaceuticals hasn't been touched.

It turns out it is a technology solution, and it is a half-a-trillion-a-year issue. Yeah, it is a little hard to explain, but 16 percent of our healthcare cost is just not taking our pharmaceuticals properly.

Is this Republican or Democrat? It is just what we are. And the fact of the matter is a bunch of really creative entrepreneurs, these small, disruptive tech companies, are coming up with a solution.

How do we make that part of what we are trying to move forward? How do you make it reimbursable? How do you actually take Medicare part D and say, instead of the rules right now where someone is supposed to be trying to call, actually, widen up that definition so they could also be providing the technology to make sure someone is taking those pharmaceuticals in the proper fashion?

I am begging this place to open up our minds and think a bit more creatively about what do we do to disrupt the price of healthcare, because, remember, that 30-year debt curve, it is mostly healthcare. And, guess what. Technology is about to help us disrupt it if we could just make that technology legal, reimbursable, part of our plan. We can do some amazing things.

And, actually, in this hyperpartisan environment, this technology hasn't been made Republican or Democrat yet. I am sure we will find a way. What will happen is one of the corporate executives will write someone a check, and we will decide they are all left and right, and we will beat the crap out of each other, but right now, this is an actual solution.

There are other really amazing disruptions coming, and I think this one may have been shown at the consumer electronics show. I am not even sure I understand all the things it does, but this, in many ways, is a doctor visit in your pocket. It does about a dozen different things where it can actually do a number of different tests, and it is in your medicine cabinet.

How do we encourage this type of technology? Because, day after day, we will have individuals coming to us and saying: We have a crisis in the United States. We don't have enough primary care physicians.

They are absolutely right.

So, how do we help those primary care professionals? By saying we can have some technology where it is the type of thing where you can blow into it, you can prick your finger, or it can do this, this, this, this, and it is incredibly accurate. And it is available to you instantly because it is in your own home medicine cabinet.

Let me give you one. What would happen if you could have a major, highly accurate disease detection technology, and it doesn't have to be in your medicine cabinet, but it could be at your local CVS Pharmacy? It turns out this technology looks like it has been perfected.

Your lungs throw off—forgive me, I am going to try to get my technology right. Your lungs actually become part of your body that your blood circulates completely through, I think, every couple minutes. Your breath actually has thrown off proteins and other things that can be detected.

I showed this a couple months ago. Some researchers, I think, are actually working on it, an extension of that flu kazoo that can pick up 20 different types of dead cancer proteins and let you know you have them.

Well, it turns out this technology, actually, now exists today, and the ability of it to actually look for dozens of different types of ailments, a number of different types of cancers. What you do is you just breathe into it for a couple minutes.

Why aren't we running as fast as we can to make this part of our community?

We talk about access to care. The fact of the matter is that supercomputer you hold in your pocket you call your phone, its algorithm, tied in with these types of sensors, whether it be the oxygen sensor I played with last year—I am a severe asthmatic, and we just played with it, and it was helping me dial up and, for the most part, dial down my inhaled steroids. Now, tech-

nically, it was illegal because it is prescribing to me, and it hadn't been approved.

From that flu kazoo I just described to you that is unreimbursable and, ultimately, illegal because the algorithm is writing a prescription to something like this that can do a stunning number of diagnostics if you are just willing to breathe into it for 10 minutes, the miracle is here.

Is this Republican or Democrat? It is neither. It is the future. But, in so many ways, Congress has become the barrier, stopping, holding back the technology disruptions that actually could help us crash the price. And, instead, we seem so much more comfortable having debates about, "Well, who should get subsidized?" "Who should we finance?" "Who should be regulated?" "Who should be controlled?" instead of, "Let's set people free."

We have technology that can help you manage yourself, know what is going on, detect blood cancers through breathing. Why aren't we running as fast as we can to get these things to market to disrupt the price of healthcare?

And, look, it is not a complex premise. We can make the economy grow like crazy. We have seen the expansive effects of the tax reform and some of the regulatory reforms. We have to get the immigration system correct, moving more to a talent-based system. We have to do the incentives for labor force participation. There is a whole bunch of things we need to do, and we just know the economics there.

The hardest part is, as a society, none of that is going to matter unless we have a disruption in the price curve of healthcare delivery. And I am going to argue there is a path, and it is here.

Can I give you sort of a thought experiment? Should Congress have slowed down the internet a decade ago to protect Blockbuster Video?

Think about it. If Blockbuster Video had gone out and hired an army of lobbyists walking around the hallways here, Congress is somewhat in the protection bracket, should we have slowed down the internet to keep that Netflix from putting them out of business?

Of course not. That is absurd, isn't it? Yet Congress does that with all sorts of rules, whether it be reimbursement, the cynicism toward algorithmic health and sensors and these things that can help our medical community, because we will often get certain lobby groups and others who will come in the door and say: This will be really disruptive to our business model. Can you slow it down?

And every day we slow these things down, you are crushing my little girl's future, but you are also crushing the rest of this country because the debt curve is crashing down on us if you actually look at the debt that is going to come out this year.

There was a 4-month report from Treasury yesterday that basically said,

hey, receipts—and I am blessed to be on the Ways and Means Committee—receipts. We don't call them, actually, revenues, but receipts and tax are really healthy.

Last year, we grew over 4 percent, but we spent over 8 percent, and then we will beat up each other, saying: "Well, you wanted to expand this program," or, "You wanted to expand that program."

The fact of the matter is the expansion defense, the expansion of other programs is a fraction of that growth. Almost all that growth in spending is demographics. It is the reality. Those of us who are baby boomers are moving into our earned benefits and we never set aside the money for it, so, if you can keep the promises.

Are you willing to do the combination of things—and you have got to do them all because, it turns out, if you do the labor participation incentives to enter and stay and get involved in the labor force, to do that well, you actually need to be doing things over here in technology that make it available for those who may have certain barriers.

Over here, for certain people with barriers, you have to have regulations that actually work rationally with our brothers and sisters who may have those barriers. It all has to come together.

Can Congress do something that is complex, because it turns out there is no simple solution. There is a complex one, and there is a path.

And the scary part—understand, when we do the math, and this is something I have been doing for a couple years, we still think we hit about 95 percent of debt to GDP. My goal is just to hold us there and not blow through that. It is possible. Can Congress become creative?

So the next one I want to go through, and this is actually sort of fun for me. This is actually one of my older displays. It is from a year or so ago, because I have this fascination with something they call carbon capture.

So a couple years ago, they finally built an electric facility outside Texas, La Porte, Texas, wherever that is. I am sure it is a lovely place. But imagine—and there are two of them. There is a natural gas and a coal-fired power plant, and they don't have smokestacks.

On the natural gas one, they came up with this crazy idea. I think it is called the Allam cycle. You blow up the natural gas, and you actually use the carbon, the burnt, and slam that through the turbines, and then at the other side, you cool it and capture it.

□ 1315

You go, oh, God, we haven't been doing that?

We, last year, in the Ways and Means Committee, perfected, and now we are going to try to do it more, something they call 45Q, which is the incentive to capture and then, over here, to sequester that CO₂. Great.

You get some of those who are cynical saying, well, it can't work, or it is going to be too expensive. We are going to have a little fun with the "too expensive."

The best technology we had last year was a facility, I believe, that is going up in Canada. The Gates Foundation and others are investing in it. Their best number was about \$100 a ton. It is \$100 a ton for substantially pure carbon.

Everybody who geeks out on carbon change and those things, you know you can do lots of things with it. You can, through a chemical process, turn it back into clean-burning fuel. You can do what they do in Texas and other places, which is to pump it in the ground and use it for enhanced oil recovery. But \$100 a ton was sort of our best bet.

I beg of you, if you are someone who is interested in the technology of carbon capture, I want you to go grab your phone and look up the news stories from last October. I want you to put this into your search engine: MIT ambient carbon capture.

Some researchers at MIT last year had just this wonderfully elegant breakthrough. They have a really nice video, if you are not particularly technical, sort of showing how they did nanotubes and electric plates, where they can power them up, power them down, power them up, power them down. They can do this in an ambient environment, so on the roof of your home or on top of a smokestack.

In part of the articles, if I am reading it properly, it wasn't \$100 or \$150 a ton. It is down to \$50 a ton. Their model says it is down to \$50 a ton. You do realize that is almost the market price today?

It turns out, if you are someone who cares about the issue of CO₂ in the environment, we have just had a major breakthrough. And how much discussion does it get? This has been since October. How much joy have you seen in newspapers and articles, talking about a revolutionary breakthrough? And we can be doing mining, because we have to deal with this reality.

The United States has gotten dramatically cleaner in the last 15 years. Good. But a whole bunch of the rest of the world hasn't. Unless we are arrogant enough that we think we are going to turn around carbon-use policies in a bunch of the rest of the world, we are out of our minds.

It turns out we can grow our economy; we can continue to use hydrocarbons; and we have a technology that not only would mine our own CO₂ but would help us on everything else that is being generated in other places in the world.

I am going to digress for just a second. This isn't that same sort of theme. I have come here behind the microphone before and talked about plastic in the ocean.

Before I got this crazy job, I used to love to scuba dive, and we talk all the

time about plastic in the ocean. Here in Washington, D.C., we do lots of virtue signaling. We made paper straws. Of course, how much U.S. and North American plastic actually ends up in the ocean? Substantially none. Ninety percent of the plastic in the ocean comes from 10 rivers, 8 in Asia, 2 in Africa.

If you cared about plastic in the ocean, you would go to the 10 rivers that are 90 percent of the plastic—8 in Asia, 2 in Africa—and you would do something. You would create a value for the plastic.

As Republicans, we are trying to do that. But it blows up some of the folklore around here of, well, if we do paper straws in Washington, D.C., we make an effect. Come on.

Look, I understand we live in a world where everything is political, and the virtue signaling makes us feel better. Wouldn't you really prefer to do something that makes a difference?

Back to this concept, a major breakthrough in how you capture carbon, you can do it right out of the air. Now, that is one of the amazing things in this article. It works in ambient air. It doesn't have to be on top of a smokestack.

A couple of days ago, there is an article—one of my personal fascinations, as those of you who claim to pay attention to this know, is the math on methane. As you all know, a couple of years ago, we had to recalculate methane's half-life, so a lot of the old formulas were all wrong. Now, we think methane is about 9 years. But the accepted ratio right now is 1 ton of methane equals 84 tons of carbon.

Okay, so the picture alongside me, because it was the best picture I had, is a flare in remote Texas. They are doing their best to burn off that methane. Someone just came up with the idea: Why don't we just back up a truck, chill it, super-chill it like we do with liquefied gas? We get a valuable commodity, and we capture all of it. And remember the ratio 84-to-1? Well, we incentivize this.

We are already doing the 45Q to create a tax incentive to capture carbon and sequester it or use it in some other things. Wouldn't it make sense to do that same sort of model with methane?

We came behind these mikes a year or 2 ago and showed just the math possibility that a major pipeline to capture methane from oil country, just that single pipeline functioning, it got you just to the Paris accords, slightly below.

The blowback I got was crazy. "Oh, I don't like pipelines." You are saying: "But did you see the math that just this one thing actually had this huge"—"but I don't like pipelines." We need to stop dealing in absurdity.

It turns out, we may be able to do it without the pipeline. Now it is a truck, backing up, chilling it, capturing it. We need to understand things like this. If a portable LNG truck capturing the methane is a solution, is that Republican or Democrat?

Well, in this environment right now, maybe it is Republican, because some of my brothers and sisters on the left hate these technologies. Sorry, that is unfair. A number of them are skeptical of technologies that allow us to keep using hydrocarbons.

My argument is, embrace, love the science, love the technology. It will set you free. Because these things make a difference.

We live in the time of miracles, whether it be healthcare technology or whether it be the single-shot cure for hemophilia. You all saw the article a couple of days ago that we think we might also have a cure for hemophilia, not only A, but B also.

The cures, whether it be for curing people in the chronic population, technology for our environment, or technology to crash the price of healthcare, they are here.

You know, one of the biggest barriers to the disruption that could help us continue to grow the economy, could help us have enough robustness in that economy so we can keep our promises and at the same time get a cleaner environment and healthier economy is this body and its inability to stop the arrogance and thinking that we are so smart, that we think we know what tomorrow's technology is.

When I first got elected, we had a family joke. "When are the two times in life you think you know everything?" "When you are 13 years old and the day after you get elected to Congress." And the family would laugh and then make fun of me.

Now that I have been here a few years, I worry. We have lots of good people, lots of really smart people. And all day long, we are pounded by folks who are trying to protect their business models or their bureaucracy models.

I am begging us, we need to understand the tsunami of debt that is on the horizon, and it turns out, technology is about to provide us solutions that don't bankrupt us and actually provide the solution and don't put government in charge of every aspect of our lives.

This should be a story of incredible hope and excitement. But can we break through the politics of arrogance that we have around here and start being willing to push the envelope of the actual solutions?

Madam Speaker, thank you for tolerating me. I appreciate it. I yield back the balance of my time.

ADJOURNMENT

Mr. SCHWEIKERT. Madam Speaker, I move that the House do now adjourn.

The motion was agreed to; accordingly (at 1 o'clock and 24 minutes p.m.), under its previous order, the House adjourned until tomorrow, Friday, February 14, 2020, at 11 a.m.