

INTRO: Welcome to Move the Era Podcast, I'm your host, Jeanne Acutanza. Join me for an interview with Mike Pillsbury, as we talk about strategies for funding and financing large transportation infrastructure. Mike is the Chief Operating Officer with Henniker Associates after a long career with the New Hampshire DOT. Mike brings unique experience working with large infrastructure projects that utilize public private partnerships known as PPPs or P3.

JEANNE: I want to welcome my guest today. His name is Mike Pillsbury and he worked at New Hampshire DOT where he retired as the Deputy Commissioner. He has his own small consultancy, Henniker & Associates, and he, for a time, worked for Louis Berger and still does some consulting for Louis Berger on what are called P3 projects, so he is a technical advisor. Welcome Mike!

MIKE: Hi, Jeanne. Thank you for having me.

JEANNE: So, tell us a little bit about how you got into the field and how we know each other.

MIKE: I got into transportation right out of college. I went to the University of New Hampshire and got a degree in civil engineering and began working for the New Hampshire Department of Transportation in the construction inspection field. I did that for about 10 years, left and had my own small contracting business for a few years, and then got back with the DOT where I made my way into maintenance work. I worked in the district maintenance office for a while, then was a state highway maintenance engineer, moved into the front office as the Assistant Director of Operations, and the last four years I was the Deputy Commissioner where I had responsibility for the state's budget legislative interaction. And also, I was responsible for the intermodal parts of transportation, which would include the aeronautics, rail and transit divisions. So, all of that to say I feel like I've spent my entire life in transportation, and it's been a great career. When I retired from DOT, I went to work for Louis Berger and, as you mentioned, we did a lot of work with concessions, technical advisory work, where we would look at the maintenance and operations and provide expert advice and opinions on the work that was being done. So, I have a pretty good familiarity with the P3s that are being done around the country as well.

JEANNE: And P3 we'll talk a little bit about in a minute. But P3 is a funding mechanism for funding large and maintaining large infrastructure and there's a lot of finance behind that, and with large infrastructure projects, it's almost impossible not to start to think of these financing strategies for infrastructure. And then you and I met a little over 10 years ago, believe it or not, and on a, on SCAN tour, that was a whirlwind tour and I so enjoyed knowing you since then.

MIKE: Yes, as I recall, I was keeping slips of paper in my pocket of what my hotel room number was because we were moving around the country so frequently, they all begin to look the same.

We visited, probably about a dozen states, visiting Transportation Management Centers to understand how to maximize the number of vehicles on a roadway without adding more lanes and what the best practices were around the country and then capturing those best practices and publishing those so that other states could have the benefit of the work that we did.

JEANNE: That's right. That's really interesting work, and I think that's something that we've heard a new administration talk about is how do we keep traffic moving but not necessarily, you know...or utilizing the facilities that we have so it's still relevant today.

One of the things I heard recently from this administration and the new Secretary of Transportation was about the unique challenges of recruiting and retaining a new generation of public service employees, and you mentioned starting your career in public service at a state agency and then going to consultancy and then back, from private to public back to public. What was that like, what were some of the challenges, and how could Secretary Buttigieg help young employees do that?

MIKE: Yeah, there's a bit of a challenge. I think it takes a unique individual. I'm not trying to put myself into that role, but I'm thinking back, especially in some of the frontline workers that to be a civil servant, you know, you're kind of always working behind the scenes, people don't necessarily appreciate what you're doing, because the old story you only get credit when it seems things are not working well...that's when people notice you. But the challenge that we found is, how do we get folks interested in coming to work in the DOT? I think, encouraging young people to be involved in STEM programs. And then, internships that some state agencies offer also is a great way of opening folks to the engineering and technician world. On the blue-collar side of it, really trying to find folks that have that trades background that like to work outdoors, that like the challenge of providing a service to people, and just touting the good work that is being done around the country. So, it's always a challenge. We kind of compete with the more glorious high-tech type jobs, but it's interesting, and I found it a fascinating and rewarding career.

JEANNE: I agree, I think we've seen that a drop in students in civil engineering, because of the push to go into computer science. And we've seen this a generation later and we're still seeing that impact. And also, careers in public sector may not be as glorious, glamorous, or as high paid so I think that's always a challenge. It's great that people are thinking about that and what a great career it is. I want to talk more about your P3 work, and that P3 stands for?

MIKE: Public private partnership!

JEANNE: That's great! There are some challenges in funding and financing infrastructure, and we've heard...and I think people are becoming much more attuned to the gas tax and how, A. that has not been raised in a long time but B. that it's not very sustainable source of funding so I wonder if you could tell us a little bit about that.

MIKE: Sure. It is a bit of a challenge to find a funding source that is sustainable for transportation. I think many of your listeners are probably aware that the gas tax, it's actually an excise tax on gasoline and diesel really has not been raised since 1993. And the reason it's not sustainable really comes around to several reasons. Probably the first is the fact that vehicles have improved fuel economy, so you know they're using fewer fossil fuels, which is a good thing for our environment, but hard on transportation funding. There's also an increased number of hybrid and fully electric vehicles that also reduces the use of gasoline and diesel. But probably the biggest part also is that the gas tax was never tied or indexed to inflation. So, when it is stagnant or when it is fixed as it was, and it's been a number of years... I think it's the inflation rate, it's gone up by 83%, since it was last raised. So, the challenge you have is the buying power for DOT's to be able to maintain and constructing highways. It really has been drastically reduced over the course of that time. In preparing for this I was just looking at a couple of interesting numbers and the last time that the gas tax was, was raised, as I said, it was 1993 when the cost of a pickup truck was just under \$20,000 and now it's just around \$40,000. So, you can imagine if you were still trying to maintain your own household budget and buying food and the mortgage or rent at the same that you were still trying to do that with what you're being paid in 1993. So, that's the challenge as far as

sustainability going forward. So for the states obviously, it's a challenge and they have the same difficulties that the federal government does and that most of their funding for transportation comes through excise tax and sometimes with vehicle registration as well. But primarily it's the vehicle taxes.

JEANNE: What about tolling? Tolling has a regionality about it and know and on the West Coast, we fund a lot of our bridges with tolls, but we don't have the same kinds of funded turnpikes that there are on the East Coast, so tell me more about that.

MIKE: Sure. You're right, tolling is a bit regional. It's interesting. If you look back at the history, there was quite a discussion when the interstate system was first planned to be constructed that perhaps they would be tolled, and the decision was rather than tolling all the interstates that they would go with an excise tax on gasoline and diesel. But the earliest roads, the post roads or different toll roads were constructed typically by private individuals and then to recoup the costs, there was an ongoing toll both to pay for the construction, and then also to pay for the ongoing maintenance. There's a number of toll roads usually constructed, and the funding mechanism is that they will go out and seek bonds to gather money in order to get the cash to build the roadway. And then, the toll rate is generally set to be able to pay off the payments to the bonds as well as to continue that ongoing maintenance, operations costs and upgrades that need to be done. I know in my own state and many states the toll authorities are very closely aligned with the state DOT. However, what a lot of folks aren't aware of is that the monies that are collected on the toll roads can only be used back on those toll roads. Sometimes folks misunderstand that the revenues that come in on the toll roads are able to be used on any roadways. Usually, the legislation that was set up to create the toll authority mandates that those funds have to go back into the toll road for those purposes. So, it is a bit regional in the way it's done but it has been something that has been used throughout the history of transportation.

JEANNE: I'll always remember the New Jersey Turnpike being a bit tidy and well maintained when there was snow or any other kind of mishap. It was the most well managed facility back in the day, so it's not hard to imagine that the funds that were raised within that whole facility were plowed right back into it and then you'd see parallel roads that you know we're not as well maintained.

MIKE: Yes! Similarly, in New Hampshire Department of Transportation, the Turnpike in New Hampshire was part of the DOT. It was a separate authority within the DOT and there was a lot of jealousy between some of the folks that had to maintain the roadways that, as you said, parallel to the turnpike. And when funding was short, they'd have to make do with what they had and it always seemed that it wasn't that they were flushing the funds, but that the users, because they were paying a toll, expected a higher level of service...a better level of service and so the toll roads and, you know, met those. Quite often the requirements for gaining the bonds and getting the bonds was that the condition of the roadway had to meet certain levels of criteria that were higher than you found on the adjoining roads well, so it was at times a bit of a tension between some of our co-workers.

JEANNE: That's interesting. So, how are these public private partnerships formed?

MIKE: So, public private partnerships have a big history in Europe and Canada, just starting to kind of become used in the United States. They really are intended as a way to expedite a large construction project and move it forward more rapidly. Traditionally DOTs use a process to construct a large transportation project that was called the design bid build. Typically, the DOT would employ their own engineers, or they would use an engineering firm to do all of the design work. Usually they would

get the design, through the about 20% to find out the purpose of need, to establish the environmental commitments, and then they would hire another engineering firm to complete the design to bring it to 100% of a design, create the specifications, make sure that the plans were all drawn up and determine all the quantities, and then they would invite the contractors to come in to bid on that. And the contractors would then, bid their price and low bid would win the award. The length of time that that took was often extremely long, and the state would have only a set amount of funds and so as they would work toward that it would end up sometimes stretching the project out for many, many years, sometimes 10, 12, 15 years. The P3 or the public private partnerships are a means to be able to leverage some of the abilities that the private sector has to raise capital, quickly, and to perhaps bring together teams of both engineers and contractors to expedite the design and the contract work and to actually get the project delivered and constructed much quicker. In essence, a P3 is really just a contractual agreement between a public and a private entity to provide for a transportation facility whether that is a roadway or a transit system, and often includes the continuing services maintenance of that facility. What folks need to know is that most states, or all the states that would want to enter into a public private partnership, there does need to be enabling legislation. Currently I think it's 33 states have that legislation in place. It allows the DOT, or the public agency to enter into those agreements, because the private side is expecting a rate of return on their investments, so the legislation needs to be in place. And these partnerships are usually used for extremely large projects that may have a price tag, close to a billion dollars. You know \$750 million, and up.

JEANNE: Thanks, so was going to ask, you mentioned public private partnerships, but also what you're saying also sounds like something else we use here called design build, and you mentioned the design bid build process but here we use this design build process, and as you mentioned, if you let the private sector take over a little bit, give them some room to innovate, they might think of better ways to do it. I've worked on projects like that, and in so doing, either cut the cost or reduce the time and this kind of innovation in design builds, is similar to a public private partnerships, it's a way of saving time and money and I just want to confirm that with you.

MIKE: You're absolutely right. Kind of on a continuum, actually design build process does become a bit of a partnership between the private entities and the public agency. There's a bit of a continuum, I would say that at the very beginning and end of that, that design build process is truly a public private partnership because the private entity really has a responsibility for coming up with that final design and actually seeing it built. What often happens as we think of that continuum of public private partnerships, it, when you start to add the financing aspect. So, there are many forms of public private partnerships. Probably the simplest and most understood was design build, but really, they also have design build and then asked the private entity also to operate and maintain it. They also though, and this is what I mentioned going into the financing, they sometimes ask the private entity to come up with the financing scheme. So, those are often characterized as design build finance operate and maintain. And that's the one that that most people probably think of when they when they hear the term PPP or P3, or public private partnerships, because of the nuance of bringing that financial piece to bear.

JEANNE: And that makes total sense to me. Are there any that are not tolled in some way?

MIKE: Yes, they actually are and, and this is the early financing P3s that were used in this country, tend to all be associated with toll. And that was the way that the, the private entity would get paid back, they would get access to those tolling funds. Many states and many, or I should say many public sector

groups are now moving to what they call availability payments and what is happening is the private sector is still designing the roadway. They're building it. They put together the financing and then they'll operate and maintain it, but rather than have access to the tolls, or in some cases it's a roadway that doesn't have tolls, the state then will make, there'll be a financial payment plan that as soon as the roadway becomes available they will begin paying the private entity on an agreed to amount per year, per month, however, whatever the agreement is and the source of those funds the state has a responsibility to find...it could be from their own highway accounts, it could be from general fund accounts. It could be that there's a tolling part but the tolls, go to the state and the state uses some of the tolling to pay it back but I like to say that each P3 needs to be read very carefully because they're all a little bit different. But I do know for instance, there was a project that I worked a little bit on, I-75 in Michigan, the state wanted to accelerate the construction or the rehabilitation of I-75 the northern parts of that or the western parts of that roadway had already been started construction - a traditional design, build type contract that you described. So, the state went forward with the design, build, finance and maintain, there was no tolls, and the once the roadway comes online, then the state will begin paying back over the course of the duration of the term which I believe that one, and I can't remember specifically, but they are usually around 25 to 35 years. And so, the private sector puts together a financial plan, the public sector puts together their financial plans, and they are able to make those payments. That's a long answer. The short answer is yes there are P3 opportunities being constructed where tolling, or fair revenue, is not the sole source of payment.

JEANNE: That makes sense and I know each state has a variety of different laws and regulations about how toll money can be spent. A number of states have their own revenue streams that are pretty substantial. Our state has one of the highest gas taxes in the country for our own investment in Washington State. What are some of the other projects you've worked on as far that are like P3? What are some of the other projects you've worked on as far that are like P3s?

MIKE: I've worked on quite a variety, so I have been involved with Brownfields where there were toll roads that were in existence, had been in existence for a while, the state determined that they were put together a lease agreement, and part of the lease agreement was an upgrade to several intersections so there was an investment in funds that the private side had to make and make some construction endeavors to upgrade the system and, then the private sector had access to the tolls. The toll increases on those roadways, just as an aside, usually a very regulated as far as when they can be when they can be increased. But it is it is within the contract and so versus sometimes the public sector has a challenge in raising tolls because of the impact to the constituents contractually the private sector has to kind of take those things into account and they will raise them when they can. But to go back to your question I've also worked on a Greenfield toll road which is a brand-new toll road that preceded where there were no existing roads prior. I've been involved with manage lanes where the public agency wanted the private concessionaire or the private investors to upgrade the existing general-purpose lanes and then take either high occupancy vehicle lanes or the median and turn those into variable rate tolling facilities to use a combination of either the tolls or availability payments as we spoke to take care of. It really is a host of different types, I have not personally been involved in any transit P3s, but there are a number of those. And actually there are some, they begin to call them social P3s, but there's a number of P3s set of being used to build a school buildings hospitals that type of a thing as well so the financial model really if we think of it as a way of funding a high cost project to get it underway and

being able to be used by the public more quickly than the public sector can do, and that's where the private sector comes in.

JEANNE: That makes sense it's like it's such a big investment, like your house, and it's not something you're going to have the money up front to pay for. It's a long-term investment. And like many of these projects are like you mentioned 25 to 35 years. Well thank you, this has been really interesting. It always reminds me that transportation and funding for transportation is very complicated. And just a little bit about the localized rules there's every state, as you mentioned has a different set of, you know, guidance and standards of what they allow and don't allow.

MIKE: That's correct, and for folks that want to get involved, most states have those criteria and how it's done. That information is available, because, you know, the more transparent we are the more folks understand it. And I would encourage folks just to when there are meetings about these things about the projects, definitely go and attend and ask questions. Having spent a lot of time at this and being used to the whole public information meetings, you know sometimes there would not be very many people that would come to the early meetings, but it seemed like once we began constructing there were a lot of people that were interested, so I would encourage folks to get involved as early as possible.

JEANNE: Amen. Well, I'm going to try to find a guest to talk about the environmental process and the permitting and regulations too so that's a great time to get involved. So, Mike, what's next for you? What's coming up for you?

MIKE: Well, as you mentioned, I started a small consulting business, just to kind of keep busy in my semi-retired age here, but I'm still involved in a number of concessions of looking at some performance maintenance contracts, helping folks with those types of things and the standards and requirements. But when one place that I've been very excited about working on is working with an organization called Continuing Employment Opportunities. This organization began in New York State and they now are around the country, in about seven states. Their mission is, they help folks who have just recently been released from incarceration. They work with them to give them transitional employment, they pay them daily while they're in that transitional employment. They help them with job skills, work with them to find full-time placement in good jobs. It's transitional work that they offer and quite often it is work that CEO partners with state DOTs to provide labor intensive low-skilled type work. And that type of work may be litter removal or graffiti removal, doing vegetation tree trimming, some bridge maintenance work, washing bridges, things of that sort. So, I've been involved with them because of my work with the DOTs and it's been really rewarding to help that and many of the DOTs, this gives an opportunity for them to meet some folks who may actually go to work for them and that's what happens is they see them working and these folks enjoy that kind of work and apply for full-time work with, with the DOTs. So that's been a lot of fun and rewarding and, you know, trying to make, make a little change in folks lives if I can.

JEANNE: Great! That sounds like a great organization, and we should talk more sometimes about that and I'll add a link to the organization in the show notes. It really sounds like a great opportunity and probably reduces recidivism and gives people an opportunity to work outside. I remember when I first started working there were summer programs for kids to clean up parks and it was a federally funded program and it was one of the things that got cut and ended and then these kids end up not having a summer job, picking up you know litter working in parks and, and then finding another job. And it was not not involved in legal things and it removed an opportunity to have a more honest job.

MIKE: It's needed. And they have shown that having that employment starts to break that cycle, having that job and that pay and just having a career path, a future and it really makes a big difference. It is needful things, and I would love to have a further conversation about it. We were able to speak with the director Jim Clements, recently, myself and several folks from CEO. Jim is Executive Director for ASHTO and certainly recognize the opportunities for the DOTs to partner with organizations like CEO, especially around equity. You know, social justice, things of that sort, so it's proven to be a good partnership between the DOTs and this organization.

JEANNE: That's a lot of work and it's good. Good work to do. Mike it's been my honor to talk to you, and we'll get together again soon to talk about CEO. So, thank you.

MIKE: Sounds wonderful! Good look to you and your organization and I look forward to chatting further.

Thanks so much for listening today. We hope you enjoyed this episode and if you did, please be sure to subscribe so you'll be notified when our next episode becomes available.