

Good morning everyone, thank you for joining us for this informational session on the PennDOT Pathways Program. With us today are: PennDOT Secretary, Yassmin Gramian, and Alternative Funding Program Director, Ken McLean. We will have questions and answers at the end of the presentation today and you can submit them throughout the presentation. We will answer as many as we can in the time allotted on the topics that we discussed today and you will receive answers to any questions that we don't have time for today. So with that, Secretary Gramian, if you would like to kick us off. Good morning, thank you for joining us today. Transportation is critical to our communities and our economy. I'm joined today by Alternative Funding Program Director, Ken McClain, and we're looking forward to sharing with you on where we stand with transportation funding and also where we're going. Despite rising traffic and freight travel in our state, the funds available to maintain our transportation network have not kept pace with our needs. This is due to the eroding value of gas tax and uncertainty in future funding. Our investment needs are outgrowing our current funding and this gap gets worse every year. That's why we're launching a new program, PennDOT Pathways. Through this program, we will analyze new future-focused sources of funding for our transportation system that could better serve our communities and all Pennsylvanians for the next generation. We have a huge responsibility. We are responsible for supporting every mode of transportation in the state from roads and bridges to ports and bicycle lanes. But addressing our highway and bridge program is urgent. So how did we get here? PennDOT is responsible to make travel reliable and safe, that means maintaining, restoring, and expanding nearly Bridges. We have an enormous responsibility to the traveling public. Our network is one of the largest in the country. Our average bridge is over 50 years old. Pennsylvania has the 5th largest state maintained road system and 3rd largest state maintained system of bridges in the nation. Our system is far larger than any of our surrounding states and in fact is comparable in size to the state-maintained road systems of New York, New Jersey, and all of the New England states combined. So where do we get our funding? Well let's break down how we fund our highways and bridges. There are some revenues collected from licensing general funds and the general Federal government. But our largest source of revenue, that's 74% comes, from state and federal gas tax. We are dependent on gas tax. These funds are generated every time a driver in Pennsylvania refills their car's gas tank. So let's talk about why transportation funding is at risk. In 2019, the Transportation Advisory Committee produced the report that identified six major risks to our funding. The largest 2 at the time were federal funding and gas tax. And now after a global pandemic, we have new challenges that change the way people use our system. The bottom line is that our current and future funding is at risk. Gas tax - the good news, people are using less Gas. Fuel-efficiency is great for the environment and our pockets. The bad news - people are using less gas, which means we're collecting less gas tax revenue. What about federal funding? Much of the federal funding is based on gas tax and inflation is also a factor. The federal gas tax hasn't been raised since 1993, 27 years ago. To put this in perspective, an average cup of coffee was \$0.75 back then and now costs about \$1.59. Inflation caused the cost of a cup of coffee to go up and in transportation industry, it also raised the cost of construction materials. A dollar today buys less concrete and asphalt than it used to. In fact, the cost of construction materials has gone up Our dollars used to go farther 30 years ago. As a result, the Federal Highway Trust Fund does not provide the funding that is needed for national infrastructure and without a change, there is significant uncertainty in future funding availability for states. At the federal level, Congress has been supplementing the trust fund with general funds, but that bailout may not continue, it requires agreement in Congress. COVID-19 had a devastating impact on our economy and has also impacted our budgets. Vehicle miles traveled dropped 40% in the the spring, and while it has come back up to 85%, this may have a lasting impact on

our economy. Where and how we work and where and how we go to school and other activities. PennDOT estimates that the pandemic will contribute to revenue losses of up to tax revenues and other revenue sources. Our revenue declined and continues to decline. Gas taxes have become a less predictable source of revenue for transportation agencies across the country. Vehicles become more fuel-efficient and all electric vehicle technology continues to evolve, and we are seeing reduced revenues at the gas pump. In fact, auto manufacturers are in overdrive to push electric vehicles to market and plan on spending \$225 billion in developing new electric vehicles. In January, General Motors announced that they will go all electric by 2035 and this will continue to be a trend in the industry. In addition to passenger cars, trucks are moving toward electronic technologies. Some segments of trucking industry are also looking at this, which all combined is making our revenue challenges worse. So let's talk about how much are you paying. Another thing to consider is that we, as taxpayers and consumers, pay for quality of life services and needs in many forms. We pay our cell phone bill, which includes costs for the service we expect to receive, which also must fund the infrastructure to deliver that service, such as the cell phone towers, maintenance, and fiber optic cable. Transportation is no different. In Pennsylvania, a single driver pays on average \$380 a year in gas tax. That is pretty low considering how our reliance on the transportation system compares to these other services. Consider how the food is stocked in the grocery store and packages arrive on our doorstep, in addition to your travel to work and recreation. In fact, we pay less for transportation than we do for other important services that contribute to our quality of life and we get what we pay for. What are the consequences of doing nothing? PennDOT owns, operates, and maintains over About 2,500 of those bridges are rated in poor condition and Pennsylvania ranked #2 in the country for the the number of bridges in poor condition. We have come a long way from 2008 when we had an all-time high of Today our current highway and bridge funding need is about 15 billion. Considering our available resources, we have an annual highway and bridge funding gap of 8.1 billion. Put simply, we have investment needs that exceed our current funding and this deficit gets worse every year. We need to find near and long-term options for funding for a secure tomorrow. The budget shortfall impacts everyone. Individuals like you, businesses across Pennsylvania, and their goods and services on which we rely. Every year, driving on roads that are not in the state of good repair costs you \$550 million in fuel and car maintenance, up to and makes you late for dinner and other activities. Excessive detours, traffic jams, and out of the way driving routes impacts our air quality. Properly funded roadway systems make the connections we need to agriculture resources, job sensors, and manufacturing. It improves economic competitiveness and can provide higher standards of living. Also, every year the trucking industry is impacted by driving on underfunded routes. Pennsylvania has six of the top 100 bottlenecks for trucks in the United States; tied for number 5 in the country for the most bottlenecks. And it's impacting the bottom-line, costing truck drivers \$14.2 million hours of delays each year across the state. In addition, if funding continues to decline, national highway system bridges may need to be posted with weight restrictions and that's a costly item to the truck drivers and the trucking industry. In 2019 for example, we had 30 weight restricted bridges on those roadways. So these are some of the systemic and recent challenges our transportation is facing. Now Ken will talk about how PennDOT is moving forward. Thank you. Thank you, Madam Secretary, and good morning everyone. Thanks for taking the time out of your busy schedules to join us and learn a little bit more about funding in Pennsylvania and potential solutions that we're going to eventually study here in Pennsylvania to bring some emerging technologies to the state for the 1st Time. So what is PennDOT Pathways? So back in October of Funding Program Office that reports directly to her out of the Executive Office of PennDOT. I was appointed as the Alternative

Funding Program Director. At that point we launched what's called a, first of all, the PennDOT Pathways program. That's a branded Name; it's a forward looking moniker trying to identify different funding sources as we're forward looking and we're trying to find a pathway to sustainability here in Pennsylvania. So back in October we launched what was called a Planning and Environmental Linkages study. A lot of people refer to it as PEL for short, so that's what I'll refer to it through the rest of the Presentation, is a PEL, it's a Planning and Environmental Linkages study. What is a PEL? So a PEL is the programmatic document that we're working on with the Federal Highway Administration and what it basically does is, it's a document that brings to the table all of the different alternative funding alternatives we're going to be studying in Pennsylvania and then it's putting together a framework and an architecture for exactly how we're going to analyze and implement those potential alternatives moving forward. So I will cover future alternatives in the mid and long-term first. So we did launch our PEL study, like I said, in October of 2020; went out for an initial public engagement period and now we're starting to author and refine the report and getting ready for a second public engagement period sometime in April of this year. So, some of the concepts that we're looking at in a high-level, in the mid and long-term. I'll go through them and explain what they are one-by-one. So, first you can see managed lanes. What is a managed lanes concept? So a managed lane is being able to reconstruct an existing highway facility, let's say an interstate, and adding additional lanes for capacity; so these are typically roadways that experience some level of congestion. And then what would would happen is, with those managed lanes, you see them in some places down around the DC area they refer to them as HOT lanes or HOV lanes. We would end up putting a user fee or a toll on those particular segments of roadway and then those people would be able to pay that toll to use those new lanes to be able to get to where they're going faster and more predictably. While still maintaining the original lanes on the highway as a non-tolled option for people to, in some cases, sit in traffic a little bit longer than they could if they paid for the extra capacity. Congestion pricing. Congestion Pricing is another option that's out there; It could be putting a user fee on a congested road during certain times of the day. It is intended to alter driving patterns and behavior. So, many of the congested timeframes in Pennsylvania today, with the exception of probably a couple roads in Philadelphia and Pittsburgh, would be during the AM and PM peak periods, so that's morning and afternoon rush hour. You could use some sort of congestion pricing model to end up driving people to alternate routes through paying a toll or changing driving habits to have people drive during off peak times of the day to make traffic move a little bit easier on those congested roadways. Thirdly, you see the concept of corridor tolling listed. Corridor tolling is exactly what it sounds like; it would be putting a toll on an existing roadway corridor, without any improvement. That is something that the Federal Highway Administration does not allow us to do currently today, but knowing that there's been a recent Presidential administration change and a new federal DOT secretary in Pete Buttigieg, we don't know what's going to happen. We just know that with our work through AASHTO and some various other organizations that there are states across the country that are in the same situation as Pennsylvania. A lot of them are clamoring for additional tolling authority that doesn't exist today and we'll see where it goes, but that's something that we know that is being looked at and we included in the PEL in the event that the Biden administration does make a change. The 4th one you see listed, road user charge. Some of you may have heard this referred to as a vehicle miles traveled or VMT, or an MBUF, which stands for mileage-based user fee. So, basically that's a concept that is a long-term strategy that would help supplant much of the gas taxes or most of the gas taxes in their entirety. it's the only option up there that you see that has a long-term major revenue generation capability. So road user charges, there are pilots happening mainly in the western part of the country where some of

the states, like Oregon and Utah, are starting to look at various road user charge pilot programs. There are some barriers to entry here. The technology is not exactly where we need it to be right now. There are sociopolitical barriers to entry because people don't want to be tracked; they don't want big brother putting a transponder in their car and tracking their whereabouts and then sending them an invoice at the end of the year for all of the miles that they traveled. They just don't want to do that. So as RUCs, MBUFs or VMTs become more prevalent, that is a technology that PennDOT's going to be looking at quite feverishly into the future to help supplant gas taxes. The Biden Administration, through Secretary Buttegeeg, did make an announcement that they are looking to transition to a road user charge. The devil obviously is going to be in the details. We don't know what it's going to look like, when it's going to happen, but they did say that they would like a conversion to a road user charge by the year 2029 and coincidentally, that's 8 years, which would be 2 four-year terms for a president; I find it hard to believe that that's a coincidence but that's the target right now. What we've been lacking is federal leadership in this regard; it's very hard for a state to transition to a RUC on its own. You have drivers that travel, you use Pennsylvania for example, you have Delaware, Maryland, New Jersey, New York, Ohio, are all bordering states to Pennsylvania, West Virginia as well. So how do you track and differentiate the miles traveled within Pennsylvania versus those driven out of state and then how do you segregate that on an invoice. So that's something that would be a challenge moving forward but we're up to that challenge and we're hoping that the RUC does gain momentum under a Biden administration. The last one you'll see there, is fees and tax increases. That's one that is just a catch all; it could be just about anything that the state legislature would want to tax or put a fee on in order to increase transportation revenue. It could be taxes on cigarettes or alcohol or hotel stays or concerts; just about anything and everything that's been done and various things like this have been done in other states. Right now what you see predominantly making up the motor license fund in Pennsylvania is, gas taxes, car registration renewals and annual and four-year drivers license renewal. They're pretty much the three areas, with some other things, but they're predominantly the three areas in Pennsylvania that make up the motor license fund. Other states do have other fees and taxes associated with it and that's a catch-all. The secretary is working and made an announcement that PennDOT is going to look at working with the legislature in the future for potential legislative changes and increases; Act 89 was very very transformative for us. It was, I guess, legislated in it only gave us a percentage of what our needs were back in that time, back in the days of 2010 when the TFAC released their report of transportation needs. So it's obvious that there has to be cyclic investments in transportation and it's been quite some time since Act 89 was put into place. So now I want to talk about the near-term solution. So in near-term solutions, we tried to identify through the PEL a couple options that may have been able to be implemented within the next two to four years to have an immediate impact on transportation revenues in Pennsylvania and the idea of bridge tolling was born and that bridge tolling I will go into that a little bit more in detail in subsequent slides here; but it is the major bridge initiative on interstates and expressways in Pennsylvania. And it would be done through a P3 relationship and P3 stands for Public-Private Partnership. So moving on; as part of the PEL I did mention that we went out from mid-November to mid-December for a public comment period from the PEL. So it was pretty interesting; we had a lot of activity. It is a challenge to launch public engagement during a pandemic, all virtual, but you can see some of the statistics here that we received during that public engagement period. So we had over website visits to our websites. We received a total of Stakeholder emails – 516. We had a companion social media event that was going on with it, where we would just post things that were out on the website and those social media posts that we had had roughly on social media. We had a bunch of educational videos that we prepared to help

educate people on how transportation is funded today and what our needs are and what are potential options into the future. So, there were roughly over 1,200 views to those various videos that were out online, and on the left-hand side we kind of put the comments, those 375 comments that were received, into the top five themes and you can see those top five themes listed on the left-hand side of that slide. So what are the next steps? So here is the overall timeline schedule for the planning and environmental linkages document. You could see the area in the left in light blue, that was the initial public outreach 30-day period that we had. Like I said before, that was from mid-November; it closed on December 17th. We did receive those 375 comments and there was quite a large number of engagement that happened, as you saw on the previous slide. After that initial round of public engagement, we went back and we started to author portions of the PEL and we've been working with the Federal Highway Administration and the EPA as it relates to disadvantaged populations within Pennsylvania and we're planning to publish that draft report in mid-April. At that point, we will go through a second public comment period and that's shown in green on this timeline; that will also be a 30-day public comment period going from mid-April through mid-May. That way people will be able to comment on the draft report in its entirety. After that last round of public comment, we will update the PEL to include the public comment, we will make any changes that are necessary as a result of public comment, we will get it to the Federal Highway Administration for their review and then we are assuming at some point in July of this year that we will have approval on that PEL document. So once again, the first option coming out of the planning and environmental linkages document is the major bridge P3 initiative, which would be placing tolls on major bridges on interstates in Pennsylvania to pay for their replacement and ongoing maintenance for a 30-year period. So what does that look like? With Act 88 of legislation that would allow us to put place user fees on infrastructure in Pennsylvania, we would enter into a P3 contract with the development entity. So we would be inviting private equity to come in and invest in Pennsylvania infrastructure. So I liken this to the idea of getting a mortgage on your house, right? If you're going to build a house, you take out a mortgage, you build the house, the house in this case would be a bridge, and you would pay back the cost of that mortgage over a in this P3 agreement. So a developer would come in; would essentially loan the Commonwealth money to be able to replace these these bridges. That money would pay for the construction, the reconstruction of the bridge, and these are major bridges on interstates. It would also pay for the maintenance of that said bridge structure for a 30-year period. It would pay for programmatic fees associated with administering the program over that 30-year period and then what would happen is, user fees would be placed on the bridge, we would collect the toll revenues and then we would pay back that developer on an annual basis through what they call availability payments. Those payments would be paid back annually with interest to pay for that original capital investment. It is a very unique time right now where we are almost at historic low rates for interest, so we feel that this is a very good way to bring some established dedicated revenue to these much needed bridge replacements right now, where we don't have them otherwise currently programmed. Moving on, our proposed immediate solution. So you may ask, why bridge tolling? So, if you look across the country, bridge tolling is a very effective and proven method in creating transportation revenues across the country. So in the year 2019, there was a roughly \$20 billion of revenue generated on toll facilities in the United States. This was done through approximately they could be by-state tolling agencies like we have in Pennsylvania, they could be something like a Pennsylvania Turnpike commission, which is obviously in Pennsylvania. Other state DOTs have tolling portions or wings that fall under them; PennDOT does not right now, but through implementation of this program that would be our inaugural foray into the tolling industry. How many different toll

facilities are across the country right now? Almost 350. So 346 independent toll facilities that are being tolled, So what have we heard about tolling specifically? So we went out through market research and we asked people their opinions in Pennsylvania on tolling. It was a very diverse and broad representative sampling of citizens of the Commonwealth of Pennsylvania, it was across the state, it was different demographics, and it was It was pretty interesting the results that we got back. So, the number one comment we received from citizens of Pennsylvania was that it was very important to them that if a facility was tolled, that money generated at that toll be placed right on the toll facility that's generating the revenue. So they didn't want it going to pay for other things outside of transportation; they didn't want it being shifted to different parts of the state to pay for other forms of transportation, whether it be transit or other geographies within the state. So the secretary has made the decision that that's very important to this program. So, PennDOT is intending to spend those toll monies. We are required to, first of all, pay for the money that's been invested through private equity, so that would be for the construction of the bridge, that would be for the maintenance of the bridge, we would have to pay for all of the toll administration and then all the administrative fees above and beyond that so that all has to be self-sustaining with this program and the toll revenues generated on each particular bridge would stay to to pay for improvements in those four areas. If there is any excess toll revenue leftover, after all of those four criteria have been met, those excess toll revenues would be spent on transportation improvement programs in that PennDOT district and in that planning region where they're generated. So that was a very important policy decision that the secretary has made. Moving on to the the second comment that we received from citizens of Pennsylvania. When enacting tolls, we should not be unfairly impacting lower income communities and that's very important to the secretary and the governor and as part of the National Environmental Policy Act Provisions, once these bridges are starting to be worked on, we're going to go out and do additional studies, public Outreach, Public involvement. We will have to get a NEPA clearance as part of that NEPA clearance It's very important that that we look at environmental justice. And environmental justice is, are there any disproportionate impacts to disadvantaged communities or lower income populations or minority populations in Pennsylvania. If we discover that through this process that we anticipate that there will be those impacts we are required by federal law to mitigate those impacts and there could be various different ways to mitigate those those impacts. Other states have gone ahead and they've done commuter discount programs, lower income tolled discount programs; you could augment modes of transportation If you're in an urban center with additional bus routes to be able to help people get across the bridge without having to get in a car and pay a toll that may economically impact them. So there's just a couple things that other states have done, and through our environmental processes we move forward, we will be studying similar Initiatives. Lastly, if you look on the right-hand side of the screen, drivers generally, prefer bridge tolling to fees and tax increases. So I must preface this by saying that people in Pennsylvania don't understand how transportation is funded right now, but in other states, other states do use a series of fees and taxes; some of them could be property taxes or income taxes for people to pay for infrastructure that they may or may not use in Pennsylvania. So I think what this bullet is referring to is that people think that it's fair that if if you use the structure, you pay for the structure. So I can't think of any other fairer way than to have the actual users of a bridge actually be tolled for the replacement of that bridge and if you look at it, you could make a very strong argument that those users are going to be the direct beneficiaries of having a new bridge structure. These bridges were designed in the 50s, built in the 60s, they're coming to the end of their useful life cycle; they're 60 plus years of age and it's coming time where it's going to take some major investment to either rehabilitate or replace them. Some of these

are on some pretty poor roadway alignments. A lot of these bridges were built when trucks were much smaller than they are today; they weren't built to accommodate the size of a modern day truck. So with the replacement of these bridges, you will get modernized structures, structurally redundant structures, you'll have wider shoulders, they'll be much more predictable, sustainable, and safer bridges than what are out there today. So you're probably asking yourself what does tolling look like? Is PennDOT going to put a bunch of toll booths at the end of an exit ramp to an interstate? Well, no. If you've been paying attention to what the Pennsylvania Turnpike is doing, they're in the process of transitioning from their conventional toll booths to all electronic tolling and it's high speed tolling. This is actually a picture from one of the turnpike facilities in the state and you can see that there are two toll gantries that are mono-tube steel, with a bunch of toll apparatuses connected to them. There are easy pass transponders, there are still cameras and you can see the two signs in the picture that say "keep moving", these gantries are designed to be able to read tolls and E-ZPass and take pictures of license plates at normal highway speeds so people don't have to slow down; they don't have to stop, they don't have to throw change in a basket like you did in New Jersey years and years ago. If you look in the distance on the picture you'll see a small building. That's where a lot of the toll hardware is stored and then backup power generators in the event that there is a power loss, either locally or statewide, we will have electrical power back up to make sure that those tolls can continue to be collected. So E-ZPass is the primary toll collection methodology and you can see these are pass readers strapped to the gantries there, but for those people in Pennsylvania that do not have E-ZPass, there will be a Toll By Plate option. So Toll By Plate is simply, as they drive under there is a picture taken of the license plate, it gets sent to the back-office toll collection area. Somebody sits down, they analyze the picture of the license plate, they research who is the registrant of said vehicle and then a paper invoice is actually sent out through the mail to the people that are registered for that that car. I will say that there will be a difference in fees for E-ZPass versus Toll By Plate and if you think about it, the E-ZPass methodology is very seamless, all electronic, and when you get into the Toll By Plate it does take people to actually look at the data transfer of the license plate; they will have to sit there, review the license plate and go through a manual process. So the labor associated with calculating that toll and the process in general will be higher than the E-ZPass. So some people may say, "Oh, you offer an E-ZPass discount." No, it's not an E-ZPass discount, it is a Toll By Plate surcharge. The Toll By Plate surcharge is for the extra manpower and efficiencies or inefficiencies that it takes to actually process that toll. So it is in our best interest to make sure, and we're working with local toll collection agencies right now to identify what the respective E-ZPass penetration is, it's in PennDOT's best interest to make sure that as many people use E-ZPass as possible. That lower cost of administering the toll translates into more revenue actually being spent on the bridge. And then there's an inherent economic advantage to the user, so if they're using E-ZPass they're going to get charged a lower toll rate than a Toll By Plate corresponding rate. So benefits of bridge tolling, at a very high level. So the number one benefit of this program is that it creates a dedicated stream of revenue to replace these aging bridge structures in Pennsylvania. Right now, we don't have the money set aside to replace the ever-aging and growing list of bridges that we have on the interstate. So through that private equity that I talked about, that investment, that will come in; it will dedicate a stream of revenue, it will pay for the bridge, the bridge construction, the maintenance, the ongoing operations of the bridge for a 30-year period. Those toll revenues then would be above and beyond what our existing construction program is in Pennsylvania now, so it would be 100% on top of our existing programs. And it's just creating that additional revenue stream that we don't have right now to replace these major bridges. Secondly, this is more of an intangible, since we

don't have dedicated revenue streams for these bridges right now, we're going to have to pay for them some way or another. The interstate system in Pennsylvania is way too important to the statewide economy, The nationwide economy it constitutes vehicle miles traveled in Pennsylvania today so it's a very important network. We can't afford for bridges to be posted or closed on our interstate system. So, as these bridges age, we would be forced to redirect money from regional tips across Pennsylvania and defer some of the more regional projects that are currently programmed. Those could be smaller intersections, signal replacement projects, smaller road reconstruction projects. Those projects are very important to local communities that are the first and last mile of delivery of goods in Pennsylvania; they are the direct routes that a lot of people take to go to school, to work, to church, to recreation activities. It would be devastating if we had to defer some of those projects to pay for these major projects on interstates. You'll see the third bullet point, it goes to the fairness. So those that use the bridge would be charged the toll for the bridge and those people or those users would actually be the direct beneficiaries of that, I mean, there's no arguing that fact. One of the important things here is, it includes out-of-state travelers. So right now, we don't collect any revenues from out-of-state travelers. If you look at out of state travelers, the way we pay for transportation today is license fees; they live out of state, they don't have a registration fee to Pennsylvania, they don't have a driver's license fee to Pennsylvania, and if they don't fill up in Pennsylvania, they pay nothing toward our transportation. The others are electric vehicles, so electric vehicles right now don't pay gas tax; they do pay the drivers fee and the registration fee but they do not pay a gas tax right now. So if an electric vehicle travels over any one of these bridges, they would then pay their proportionate share of using that asset. Once again, the interstate system that constitutes 25% of our traffic, it's the economic backbone of Pennsylvania and the northeastern part of the country. We are the keystone State. Economic development – the first thing any developer looks at when they're looking to move a business to Pennsylvania is, how strong is the infrastructure. When Amazon was looking to relocate its second headquarters to Pittsburgh, the first thing they looked at were What are the airports? Are there any ports? What are the interstate systems? What are the local roadway networks? It's very important to economic development that we have a viable transportation system. And then lastly, federal statistics say that for every 1 billion invested in transportation you create roughly 10,500 jobs for a year. So the total cost of this program could be in upwards, and I'm talking just construction value of these of these projects, could be anywhere between \$1.6 and \$1.8 billion, so there would be a significant number of jobs created theoretically through the inclusion of this program and increased transportation revenues in Pennsylvania as a result of this program. What are our next steps? So our next steps, we plan to very soon announce the candidate list of bridges, so that's going to be coming up toward the middle of this month. At that point then our district executives and their teams are going to be able to go out, they're going to going to be able to perform the important public outreach that we talked about and that's federally mandated. We have to analyze the impacts of tolling, specifically on low income and minority populations in Pennsylvania, and we have to mitigate those impacts. We also have to look at the diversions. Many of you are probably thinking, how many percentage of people are going to jump off the interstate to avoid a toll and go through local communities and secondary roadway networks to avoid that toll? So we are working on looking at those diversion impacts now. For major through traffic we really don't feel that there is going to be a significant diversion, maybe more for local commuters but we have to look at that. We have some very qualified and experienced consultants that are assisting us that are going to look at those traffic models and diversion models and then if there are impacts to local roads and communities, we will have to mitigate those impacts as well. You could do certain things like add signals at intersections

or do some sort of additional lanes, but it is something that we take very serious and that we will be looking at as part of this program. Traffic and revenue analysis. So there is a very comprehensive economic model that's happened. We have a very high level one right now and we're crunching through the numbers to ensure that each one of these bridges is economically viable; that it will produce enough revenue to be able to pay for itself as part of this program. If we end up finding out that a bridge can't pay for itself, it will be removed from the program. The whole point here is not to have any other PennDOT funding streams end up having to subsidize this program. Each bridge should be able to economically pay for itself and be able to sustain itself; that's the whole purpose of the program. Next, we will be engaging with our elected and local officials, very important. They have a lot of constituents, there could be impact, there's going to be concerns. This is the first time this is happening in Pennsylvania so there will be some growing pains associated with it. We don't expect that certain demographics or many people would really like to pay a toll but it's incumbent upon us to continue to educate the public, educate them on how we're currently funded, why we have funding gaps, and what some of the options are for replacing those gaps. So if we do our jobs effectively, we should be able to influence people's buy in to this program. Lastly, we've made a commitment to work with our industry partners, so that's the architecture and engineering industry, as well as the contracting industry. We've done a couple P3 projects in the past year in Pennsylvania; not all of them were perfect, there's room for improvement. We have a list of lessons learned from a PennDOT perspective. We've sat down several times and engaged with our engineering and contracting communities. We're trying to understand and learn the lessons or the obstacles that they've encountered in past P3 projects and We're willing to sit down and continue to work with our industry partners to be able to develop the next greatest potential for a P3 contract moving forward. We've benchmarked with Maryland and Virginia and they're doing some different things with P3 than what we've done with our original generation of P3's in Pennsylvania, so we feel that there's a lot of room for improvement and we feel as we work with our industry partners, we're going to get to a place where we address a lot of our concerns collectively to get the best contract we possibly can moving forward. Website - so we do have a very robust website that's out there, very educational. I would encourage you to take a look at it. I would encourage you to share it with your friends, family, and neighbors. It does tell the whole story; it tells the story of how we're funded now in Pennsylvania. It tells the story of why our revenues are declining. It tells the story of what those declining revenues, what kind of gap we have, and then it talks about certain issues; these alternatives that we mentioned mentioned in the PEL. So, take a look at that website. We do have a dedicated email resource account, [PennDOTPathways@pa.gov](mailto:PennDOTPathways@pa.gov), so if you want to submit comments. And then for people that may not be technologically savvy or may not have computer or internet access, we do have a hotline phone number where people can call, leave a message, leave their contact information; they can give us their comments over phone and then we make sure that we follow up with them through an appropriate staff representative in the future. And that's all I have. I'd like to turn the presentation back over To Erin Waters-Trasatt. Erin. Thank you, Ken. Thank you, Secretary Gramian. So while we see if any of our attendees today have any questions for us, can you talk a bit about the criteria that that we're using as we analyze which bridges to include? Yes, Erin, thank you. That's a really good Question. So, when we first started this program, we set up a bunch of initial criteria that we were going to look at for bridges as a screening criteria. So first, size of the bridge. So is this a major bridge? Does it have a significant cost associated with it? Is it difficult for us to fund on our existing program? Secondly, we move into a structural evaluation. So what's the physical structural condition of the bridge? Is it in a state of decline that it needs serious attention within the next 10 to 15 years? Along with that, we

looked at various structural geek things, for lack of a better term. One of them is redundancy. We have several bridges on the interstate that are called fracture critical, which means there are held up by two main bridge girders. So if one of those bridge girders were to get compromised or fractured it could compromise the overall structural integrity of the structure itself and it could be susceptible to collapse. So do the series of other beams help to support that bridge? So we looked at issues like that. The bearings on the bridge - are they tall rocker bearings? Are they susceptible that if there was an earthquake or a crash on the bridge, that something could end up making those bearings fail and tip over? Safety was a third criteria we looked at. Shoulder widths, as I mentioned earlier in my presentation, many of these bridges were designed in the 50s, built in the are today. Many of them have very substandard shoulder widths. Many of them have poor roadway alignments. So we looked at those bridges and said can we, with the replacement of this structure, make for a less functionally obsolete structure? Will it be a more modern sized, safer structure? The revenue projections that I looked at before, it has to have comparatively the number of vehicles using the bridge versus the total cost of the bridge is it going to make sense economically? Can it pay for itself? So that revenue projection analysis was one. Project delivery - can it be delivered in that two to four years that I indicated as being very important as a short-term alternative here? There are a bunch of things we look at in the project delivery process of our bridges. Environmental complexity with wetlands lands, environmental justice, threatened and endangered species, archaeology, potential for diversion. Like I said, we're going to have to look at that. If there's a high potential for diversion, it may not be a good candidate. Complex utility relocations - it takes time to move utilities, it takes money to relocate utilities. Right of Way - each bridge, if it's on a new alignment, it may require us to purchase property. Where are we in the process with purchasing that property? How long would it take? Complexity of permitting - waterway permitting, stormwater management, things like that. So we had to make sure that whatever bridges we picked that we can deliver them within the time frame that we've identified. And then one of the last ones, but very important, is location. So they had they had to be geographically dispersed, as I mentioned earlier, you can't have too many bridges on one corridor or in one certain community We were trying to spread them across the state because those populations will be paying a toll but those populations will also be the direct beneficiary of that transportation revenue. So, they'll get a new bridge and if excess revenues produced into the future, they will get additional transportation improvements coming out of this program. So that was the initial screening criteria, Erin, that we used but there's going to be continued screening criteria. So as we move forward, when we announce these bridges, we will then go out and we will do the the detailed environmental analysis. We will do public outreach. We will look at the social justice. We will look at those diversionary impacts. We're going to shift from a macro-level financial model to a micro-level financial model so it will be very detailed to ensure that these bridges do generate the revenue to adequately enough to be included in this program. So all of that stuff will come over the next couple months, even after the bridges are announced. We do have a question about the availability of the presentation and sharing the time frame and yes, absolutely. If you received the invite for this webinar today, you're an important stakeholder in transportation generally and as we move forward through this process, so we will be sharing the recording today and you are free to share its content. That's including the time frame. It appears that we do not have any other formal questions at this time, so there is the contact outreach information on the [PennDOT.gov/funding](https://www.penn.gov/penn-dot/funding) website if you would like to reach out or reach out to your respective PennDOT contact and thank you so much for joining us today.