Eric:
Welcome. Welcome to the FTA TAM program second webinar of 2021, Making the TAM Connection Capital Planning and Investment Prioritization. It's exciting to see you all here today, and I look forward to hearing from our presenters. And I'd like to thank them for making the time to participate. But also, I'd like to thank our team at Volpi who have supported the organization and production of this webinar. We couldn't do it without them.

Today, we will be hearing first from Jim Morrill. Jim is the Senior Analyst in the Asset Management Unit at the San Francisco Municipal Transportation Agency. Jim joined the SFMTA as a capital budget programmer in 2018 before transitioning to the asset management unit in 2019 to lead the effort to improve the integration of TAM principles into top capital programming. Jim helps SFMTA asset maintainers identify opportunities to incorporate 10 best practices and works to change agency culture and perception of state of good repair by encouraging capital investments that prioritize reducing system failures and maintenance costs.

He is currently focused on capital project prioritization for the fiscal year 2023 to '24 budget, and he's developing a new project initiation form that will require project managers to identify a state of good repair trends and complete standardized cost benefit and risk analysis before projects can be added to the capital improvement program. Jim earned his masters in Business Administration from Union College in Upstate New York. He began his career in public service at the New York State Division of Budget working on transportation issues.

Following Jim, we will be hearing from Chris Ward. Chris is the maintenance asset manager for the transit authority of River City; TARC. He first joined TARC in 2002 in the Purchasing Department and has also worked in the Grants and Capital Programs Department and in Maintenance. His current position was created in 2017 to take lead responsibility for developing TARC's TAM program. Chris manages TARC's equipment register, the capital request backlog and condition assessments, and he champions continuous improvement efforts to maximize the use of TARC's enterprise asset management system.

Most recently, Chris has led risk assessment and investment prioritization team meetings with the director of Grants and Capital Programs to create a risk based framework for the capital prioritization in TARC's TAM plan by 2022. Chris earned his master in public administration from the University of Louisville, and is a certified project management professional. He started in his career in public transit in Virginia and likes to get back to the Chesapeake Bay as often as possible. Next slide, please.

Before we get started with the presentations, we'd like to give you a couple of quick FTA updates. First of all, please register for the 2021 TAM virtual roundtable. This will be our second year of doing it virtually. And we expect to bring together around 500 practitioners from across the country who are directly involved in the management of transit capital assets.

Invited speakers, include FTA's Deputy Administrator Nuria Fernandez, who will provide opening remarks, followed by an executive panel and discussion featuring Julie Timm, CEO of Greater Richmond Transit Company. Tom McHone, the Chief Administrative officer of Chicago Transit Authority. Henry Lee, the General Manager of Sacramento Regional Transit District, and Leslie Richards, the General Manager of SEPTA. You can register now on the TAM web page transit.dot.gov/tam or through the link that we will drop into the chat box right now.

Finally, we pleased to let you know that the permanent position for TAM program manager is now posted on USA Jobs open through June 1st. It is a Washington, D.C based position. So if you work in TAM and live in D.C. or have an interest in moving there, we'd encourage you to apply. It has been a privilege to be in this position on an acting basis since the beginning of the year, and I look forward to continuing to engage with many of you as I go back to my regular role in the region one after the roundtable. Again, thanks for coming. And with that, let's welcome Jim as he talks to us about SFMTA. Welcome, Jim.

Jim Morrill:
All right. Thank you, Eric. Hello, everyone. My name is Jim Morrill. I am a Senior Analyst at the Asset Management Unit or AMU at San Francisco Municipal Transportation Agency or SFMTA. Today I'm going to talk about incorporating a TAM practices into the capital planning process. I will run through an overview of our agency in the AMU, then I'll cover the basics of the capital planning process at SFMTA pointing out where our asset management strategy impacts the decisions and prioritization.

Finally, I will end with a case study on how the process worked to shore up our facilities program, and briefly touch on how we are using this case study to expand these practices into other capital programs. Next slide, please.

OK, so the SFMTA is the city and county of San Francisco's transit agency, but we are also the county's Department of Transportation. So this means we are responsible for maintaining and replacing, not only our transit assets like fleet, facilities, stations, tunnels, truck, overhead lines. But also our street and parking assets like traffic lights, poles, signs, and paint. Yes, SFMTA also offers six different modes of transportation each with their own unique assets and challenges. Most famously, of course, are cable cars. They are also by far the most expensive mode to operate and, of course, the biggest challenge to maintain. Next slide, please.

So I'll briefly share an overview of the magnitude of our asset inventory backlog and yearly budgets. So as of our most recent inventory update, the agency owns and maintains nearly $17 billion of capital assets. It takes a lot of funding, obviously, to keep these assets in a state of good repair, and we are always battling against our asset backlog, which is currently at $3.85 billion.

To give you an idea of the magnitude of funding it requires, our entire budget, which is operating and capital combined just for one fiscal year is about $2.5 billion. Now just to maintain our assets in its current condition-- a state of condition, this cost us about $632 million, which would be about a quarter of our entire budget. Now that level of funding won't even begin to cut into the current backlog. So as you can see, we obviously need to be very selective with the funds that we have available and prioritize our investments where they are needed the most. Next slide, please.

So the SFMTA has been working on implementing 10 principles for over a decade now. As with most systemic changes, this is a slow but iterative process and we focus on continuous improvement. We started with a simple asset inventory and we've moved now up to a dedicated team-- dedicated team focused on asset management full time. We have a growing condition assessment program. We are improving our data collection processes and integrating with our enterprise asset management system. We are improving the way we communicate and encourage asset management best practices throughout the agency.

Now one of the ways we do this is to get the message to the decision-makers. And we do that through our capital budget making process. This is one of the main reasons that we move to asset management from long range planning to the budget office about two years ago. Next slide, please.

So here you can see the process by which our strategic plan and agency values inform our budget decisions that determine the services experienced by our customers. I want to highlight the use of capital resources in the box to the right. Projects are selected from a list of financially unconstrained capital needs, which is contained in our 20-year capital plan. From this broad list of needs a more specific set of projects and programs are developed, prioritized and then added to our five-year Capital Improvement Program or CIP, which is constrained by our available resources.

I'd also like to point out that in our most recent budget, we combined the capital and operating into one consolidated budget. We did this so that we can measure the impact of our capital investments on our operating spending. Next slide, please. So here is a list-- depiction of all the capital programs we have. Now each one of these is managed by an individual who will ultimately propose the projects that go into our five-year CIP. These are the decision-makers that the AMU must provide the best data and help steer towards the right prioritization for our agency.

I should mention that these individuals won't work for the SFMTA forever. That's really important because it means that we have to have a system in place that must be followed by every decision-maker moving forward. So this way when a new capital program manager comes in, the same TAM principles will help inform their decisions tip. Next slide, please.

So here is our capital planning process workflow. So the asset management unit helps with the unconstrained 20-year capital plan, which is the top line there. By using our inventory to project the future replacement and refresh needs for all the capital programs. Here is also where long range planning would add any information or needs for expansion projects that we project will need to be added to the system over the next 20 years. Asset management uses our data and decision support tools to advise the capital program managers to make the most prudent use of our constrained resources. Now this moves into the bottom line the five-year CIP workflow process.

So in order to give them that data, we provide condition trend data based on state of good repair reports and condition assessments. So in our latest iteration of the CIP process as Eric had mentioned earlier, what we're working on doing is requiring all the managers to cite their state of good repair needs, provide a risk and cost benefit analysis, and explain how the project meets these needs and why it should be prioritized based on this analysis. This gives us a record of how and why each decision-maker chose program of projects that they did. Next slide, please.

OK, so I'm going to walk you through an example of how we would like to prioritize our projects across all of our programs. As I mentioned earlier, we are iteratively working up to that, but the facilities was a very good example of how we would like to move forward in the future. So a few years ago the asset management wasn't a team at the time, it was just a person that they were able along with the facilities program manager to identify an issue. While our facilities were operating adequately at the time, some of them were nearly 100 years old and around 70% of the assets were at or were coming to the end of their projected useful life.

We projected at that time about around $1 billion worth of investment was needed over the following 20 years. So the needs would have been identified in the unconstrained 20-year capital plan. But our resources were not being allocated accordingly into the CIP. In fact, there were no scheduled investments in the future after-- I believe 2015 or 2017. Next slide, please.

So the asset manager and the capital program manager knew that they had a problem too big to address with just a project or two. They required a whole new strategy. So that they went out and did was they refreshed the capital asset inventory down to the components. They assessed the condition of the facilities that were scheduled to reach the end of their estimated useful life. They collected the data that would be needed to determine the risks of inaction so they could prioritize investments over a longer time frame, and within the available resources. And they did a cost benefit analysis to help determine the most efficient use of the funds and minimize waste.

By minimize waste, I mean that there would be times where new projects or a project would be done at one facility to support overflow capacity that we could then use whatever work was done at that new facility moving forward in the future. Next slide, please.

The result was what we call our facilities framework. Now this laid out about a 20 plus year plan to adjust our facility use plan and prepare to replace a couple entire facilities while still keeping the agency's operations intact and without really interrupting anything.

The plan was scenario based, which allowed us to change which scenario we would go with depending on the availability of funding.

Now the ultimate use for this document is that it provides a complete record of how we prioritize the agency's needs, and it allows us to see step-by-step how we can plan for the future. And then we can replicate that process and continue it again in the future. That's both within the facility's capital program, which will need to undergo this process and refresh again I imagine-- but we haven't decided that yet, but I imagine probably towards the end of the initial 20-year plan. But it's also a great path for us to follow with the rest of those capital programs that I mentioned earlier. Next slide, please.

So ultimately, you can see the impact that the facilities framework had on our current five-year capital improvement program. We almost doubled the investment instead of good repair from five plus years ago. And we also have more funding expected in the years beyond this CIP. So we are currently as I said replicating this process with our other capital programs, and the first step is typically to expand on the condition assessments and to continue to gather risk and cost benefit data hand-in-hand with our capital program managers. And then to compile that data into an updated asset inventory. And with that, I thank you for your time. And I think we will turn it over to our next speaker.

Chris Ward:
Thanks, Jim. As Eric mentioned earlier, my name is Chris Ward from the transit authority of River City; TARC. TARC is located in Louisville, Kentucky. Can I have about TARC slide, please? We lie across the river from Indiana and the Metropolitan area extends into Southern Indiana, so we operate in both states. We are tier one bus only system. And in addition to our 235 fixed route buses, we recently had over 100 paratransit vehicles in operation. But we've since transition to a contracted service that allows us to reduce that number to fewer than 50.

We have two main locations, both are downtown. Each is about the size of a city block. And I'm going to talk about some of the individual buildings in those locations to illustrate the kinds of decisions we're facing. Next slide, please.

The order of the presentation is going to mirror the first few TAM required elements. Focused mostly on facilities, since capital projects for facilities are time consuming and messy and permanent. And then I'll talk about the software tools that we have and how we use them to inform decisions. Once you have an idea of what our resources and tools are, I'll move into policy and into the tensions that are involved in moving our prioritization criteria past what state of good repair measures can tell us. Next slide, please.

First up is TARC's primary administrative facility, the Union Station building. Union Station was built in 1890 and it serves the [INAUDIBLE] railroad. The building is on the historic register so I gave you a nice black and white print there. TARC took over the property in 1979 and restored the building for solely for administrative use. Since then, it's been two additional improvements, most recently a major building envelope and age back pre-work. So instead of a building that they used to breathe, it's a very closed off building now which was known the age back. Things like the plaster detail and the red oak-- oh, next slide, please.

Here's a plaster detail. Things like the plaster detail and the red oak doors and the four story high stained glass ceiling make renovation and repairs much more costly. So this building requires more than a purely functional administrative space wood. Next slide.

In contrast, just behind Union Station, we have a legal training and bus walk facility that was built in 2012. The features that make it a lead building are a green roof, solar panels, energy storage, graywater reuse. This was an era project and, of course, it has a term score of five for all the components. I point out these two buildings first because they're special for different reasons and they command special kinds of attention. Next slide, please.

However, most of the facilities decisions of the TARC will need to make in the near future. We'll deal with buildings that fall between these two in age and everywhere else. I think of these as UMTA buildings. They were all either built new or converted from industrial buildings between 1976 and 1984. So a lot of the equipment is original. And if one system in UMTA building begins to require attention, then the others will likely require similar attention before too long. Next slide, please.

I've already mentioned the mid '70s several times. TARC was created in 1974, so in 2024, it will turn 50. I will also turned 50. And unlike TARC-- unlike Union rather facilities are starting to show their age and every component group. I blew that joke entirely. HVAC replacements have been a big part of the last decade for us. We think that major equipment replacement and site work will be a big part of the next decade. Next slide, please.

One last bit of information on our assets, this one is much related to buses and it is facilities. TARC's entry into low and low emission vehicles was through the purchase of hybrid electric buses in 2004. Then we took a bigger leap in 2014, by purchasing 15 fully electric buses. Now, because all of those 50 electric buses use en route fast chargers, we have very little infrastructure related to those buses. In fact, if we're on the right slide, you are looking at our entire electric bus infrastructure. My point here is that any and future investment in electric buses will require commitment to much more infrastructure than we've had to date.

And that type of decision, it won't be guided by consideration of our state of good repair numbers. It'll be guided by factors like environmental benefit and performance impacts and it'll have to take into account some external resources. Before I go any further with that idea, I want to give you a rundown of our decision support tools and process. Next slide.

Our asset record resides in our enterprise asset management system called Ellipse.

Ellipse is-- it offers really powerful data management tools. But sometimes we need to use the data more readily and flexible, and for that, we're going to be using both TransTrack and Power BI within the year. And even with Ellipse and the new reporting tools, Excel is going to play a big part in our prioritization process, just because of its flexibility. Next slide, please.

The first step for every project is entry into a capital request screen and Ellipse and the EAM system. We expect that to remain true indefinitely because it acts as a constant record. Following that step, though, we move directly into Excel. First with the risk assessment group, and then for a separate group that's a project prioritization group. So two separate groups of people within time. Next slide, please.

This is a Risk Matrix that I borrowed from a breakout exercise from an NCI pilot course. We adopted the matrix without any significant changes. It has six risk categories that are considered by a panel of mid-level, representatives from eight different departments within TARC. And this is a new process this year. The most surprising result of this process so far, it is much more effective means of inclusion than anything else we've done so far.

The matrix and just the existence of the risk assessment team, they implicitly show everyone that risk is our first consideration because it's the first step. And then the color coded scores, those transfer in color to our prioritization worksheet. So risk is the only color that the prioritization team will see on the next prioritization worksheet. So a picture of a full white sheet with one red cell, it stands out. As a side note, since we began using this Risk Matrix, I've seen other versions that account for positive potential impacts. And I would like to move in that direction over time gradually. Next slide, please.

This is the worksheet that we use for scoring by individuals. We made it very simple to allow for easy aggregation of scores. The conversations that have resulted from having the eight departments represented, they brought up some barriers we didn't know we had and they've also brought up really valuable suggestions from mitigation alternatives. So things we hadn't considered to address the risks. Next slide, please.

No we haven't had our first prioritization meeting yet. We are going to have a group of six department directors. And even though we haven't had the first meeting, it has a lot going for it so far. First, the finance director wants to see capital requests prioritized prior to include inclusion in the budget. Also, our new executive director is enthusiastic about the whole process and its potential. I've already mentioned the inclusion benefit we've seen.

We do still need to improve on providing more information about projects to the evaluation groups. Also, we need to feel out when and how we package individual requests together. But so far, the energy from the risk assessment group is really promising. They can see exactly what we're trying to do and they have an appetite for it. The real trick for us is going to be making the transition from prioritization criteria that's based mainly on state of good repair and risk and cost toward additional criteria that make sure that capital projects align with less tangible goals.

So goals that may be more about the future of TARC. The facilities have been suits for us for the last 50 years. They might not be the ones that suit us for the next 50 years. And we have an aspiration statement in our mission statement to contribute to global social, economic, and environmental well-being. And that seems increasingly urgent every year, and especially this year and especially in Louisville. So that's something we're going to try to work towards still. And this is the detention-- oh, next slide, please.

This detention I mentioned at the beginning is state of good repair goals. You should see those stated on the right in our TAM policy. State of good to repair goals and aspirational criteria, they're not at odds with each other, but they aren't necessarily complimentary either. It's becoming clear to me as we go through this that they're coming from two different directions. Next slide.

So state of good repair information is collected through a bottom up approach and it's relatively easy to quantify and measure. It's also resilient to change since it's a defined data collection process. The more strategic criteria are generally top down. And as Jim referred to, I think they're more vulnerable to change the turnover. The strategic information that is more discretionary and it requires attentive use to stay relevant. And for us change has been pretty steady in the last few years. Next slide, please.

Just to show you what we're dealing with, we've seen turnover at both of the two executive positions almost the entire board of directors has changed. We've had career directors retire with replacements coming from other industries, workforce turnover. We've had significant workforce turnover due to both generational factors and the changes in retention tools. And this turnover can make for an environment that's receptive to change. So it's got that going for it. But it also requires a steady effort to keep everyone informed and trained and put in a position where they can reasonably take on something new.

So last on this list, I have our COVID response listed as an internal change. COVID was obviously an external factor, but our response to it was up to us. And TARC's response in terms of capital prioritization was to focus on some immediate remedies for some of the new demands. So for instance, we have created an existing parking lot to expand our capacity to provide extra training to operators in the midst of service cuts. That project was not on any list prior to COVID. And it moved up to implementation really rapidly and the expense of some other projects.

So the flexibility there was ultimately a good thing, but it demonstrates how changing circumstances can reorder your priorities. Next slide, please. Externally forces of change have been overwhelming this year. I'm not going to spend a great deal of time on the global or federal forces. TARC's might have spent any time on those. We can't make much direct impact on those forces. Regionally, however, growing our capital prioritization program could influence regional planning and expectations. Our MPO and our city government have their own mechanisms for planning. And if we don't present our priorities strongly enough, their mechanisms-- they could override our plans. Next slide, please.

As an example of this, our city government has a program called Vision Louisville. And Vision Louisville has a component called [INAUDIBLE] that address transportation. They published a plan in 2016 and the word cloud, you should see is one of the graphics. That to me, it suggests that their process leans toward perceived needs and aspirations which are obviously important. But financial realities dictate that TARC's process needs to begin with state of good repair and then move towards select financially sustainable projects. I'm going to read an excerpt from their plan, and this is regarding two service expansions to transit service expansions that they recommended. Next slide, please.

So the bullet points should match up here. The quote is, "These improvements require new funding. Since the existing funds generated by the local community for transit do not even cover the service currently provided. Each year TARC resourcefully finds rough finds roughly $10 million in grants or subsidies to continue providing current levels of service. To add the new services additional and sustainable revenue is essential. To implement the important premium transit recommendations at minimum, an additional $20 million in operating funds per year would be required." Next slide, please.

Having written that the additional services would require additional annual funding. One of their two projects began moving forward within a year of the plan's publication. And it moved forward with no additional funds for operations. And I don't say this to be critical. TARC has a great relationship and we have common goals with our regional partners, and we all want to see a strong transportation system. But the better TARC can insert a prioritize capital investment strategy into the conversation, maybe the less susceptible we might be to this kind of expansion of service that feels with regards to our planning processes like an ad hoc expansion.

Instead of reacting to change, we can be prepared to capitalize on the energy that comes with change. So that goes for every internal and external change that I listed earlier could contribute to realizing opportunities. Even COVID came with funding the ad characteristics that could help us. Next slide, please.

And we have tools under development in the next two years to inform the prioritization process a little better. We recently completed an operational analysis. We have a long range plan in development, and we have two studies that we recently contracted to help us plan for success in electrification. And in designing better service model for lower density areas. And all of this is happening while our MPO is working on updated MTP. So hopefully, there's some energy moving into that from us. Wrapping up the next slide.

I indulged in my own work of cloud inline with what I've been describing. Several of the smaller words shown here should be emerging and becoming a bigger factor for our evaluation process by the end of the year. For us, probably for you, it all necessarily starts with conditions course and life cycle planning and performance impacts. But the sooner we can start moving toward using prioritization factors that align with what we want to be in the future, the better chance we'll have of ensuring that we'll have the capital resources that will see us through the next 50 years. Next slide, please. And that's it for me.

Eric:
Thank you, Chris and thank you, Jim, for those great presentations. We've been getting some questions through the chat here. Please feel free to continue to submit those if you have anything on your mind, and we've been collecting them. So I'd like to start out and we'll maybe go back to Jim for a minute. Jim, we got some questions generally about what the SFMTA Asset Management Department is like? Could you talk to us a little bit just about how big your department is, where it falls in the hierarchy of the organization and what type of staff you have and their backgrounds?

Jim Morrill:
Sure, happy to. So the asset management unit currently lives within the budget financial planning and analysis section of the finance and IT Department of SFMTA. We have quite the hierarchy at SFMTA. My team is made up of four people currently. We are currently down a position at the moment. There is my manager who happened to be out today, so I had the pleasure of joining all of you and his replacement.

He is a planner, I think by trade. I myself have been a budget analyst for almost a decade now, and then I think the other two members of our team are both planners as well. Then I would say that that's important to mention that we were within the Budget Office. So the Budget Office is made up of all of our grants people than there is the actual budget programming office. And then we have really nifty new team we call the financial analyst office-- financial analysis office. And those guys do a lot of the kind of background work for us to actually crunch a lot of the numbers.

They're the ones that can pull all of the real data from the financial system from city, which is critical to some of the work that we do because that way we can see the real time impact and operating expenses that some of our capital investments have. We're still really building that out. A lot of this is new SFMTA has been through-- we have a new director of transit-- director of transportation, excuse me, as of one year ago, maybe a year and a couple of months now.

We have a new acting CFO. So we've been moving a lot of pieces and parts around. And asset management has really had a chance to plug-in to all of this. So it is really the acting CFO's vision as he's told it to me to have asset management really be a crucial decision point in almost everything that we do financially moving forward. So I hope that helps. But yes, a lot of people and it takes a lot of integration into the whole system.

Eric:

Thanks, Jim. That's really interesting to hear that you'll have a lot going on. Our next question is for Chris. And Chris feel free to address if you want to talk about your own department organization as well. But someone had specific questions about your electric bus infrastructure, as we see that you've been implementing some new electric bus infrastructure. I found that pretty interesting as well. We're curious, how are you preparing for life cycle analysis of electric buses, infrastructure, chargers, et cetera. Is there any particular guidance or research that you're using? And are you learning anything about electric bus infrastructure through the asset management process that is going to affect whatever your next deployment of vehicles chargers et cetera maybe?

Chris Ward:
I think they may have been misleading there. So you saw on the slides basically the entirety of our electrification system so far. And we have not made plans for the next stage yet. My point had been that if we do take that next step, it's going to require-- if we go to the extended range buses instead of the en route buses, it's going to require a much bigger investment and commitment. The chargers that you did see, we first got those in 2014.

Life cycles challenging with respect to those. And that they're already old they're already difficult to maintain, as far as getting parts and things like that. So yeah, it's a question I can't really address in terms of existing infrastructure, unfortunately. And we're not quite to the next step yet.

Eric:
Thanks, Chris. That's so really interesting to hear, I know everything is changing very rapidly. We did have another question that would apply to both of you, but perhaps we can start by going back to Jim. In general, how is the last year or so of the pandemic and subsequent approval to use federal capital dollars to offset operating expenses affected state of good repair projects and your overall asset management program? Have you had to postpone program meetings or have you felt some pressure to postpone them that maybe hasn't panned out? We just be curious to hear your experiences with that.

Jim Morrill:
Yes, when the pandemic first hit, we were actually in the process of finalizing our consolidated budget for the FY '21, '22 cycle. And it did impact our five-year CIP. Well, I guess the two-year capital budget that was attached to that-- to your operating budget. We were forced to pare back our CIP a little bit. I can't say for sure how much if at all of the capital dollars we ended up spending. We had a lot of operating in our capital budget. And I think most of that is what got pulled out, but we focused on reducing our expansion projects and really focusing on state of good repair projects instead.

The tough part is with SFMTA because we are that combines transit and DOT agency. We have a lot of streets projects that you wouldn't really consider state of good repair all the time. And a lot of our capital dollars have to go to these expansion projects. And many of them were already underway. But I think the way that our capital budget programmers looked at the problem was to maintain as much spending on state of good repair as possible. And that is something that we track each year in our CIP is what percentage of the dollars are actually going to state of good repair versus expansion. So that's how we looked at it.

Chris Ward:
Well, for TARC, our primary limitation year-to-year is local funding to the degree that some of our capital funds are put into line items, such as capital costs of contracting and capital maintenance. And honestly, some of the-- I even referred to this in the presentation some of the funds that were made available for COVID relief have the potential to help us use the capital dollars that are usually channeled a little more toward operations.

So we did have some impromptu projects that were safety and COVID related. I mentioned one of them in the presentation. Both of those projects that I can think of at the moment we're definitely state of good repair projects. They just were high up on our list prior to COVID. So the answer for us is it may have helped us move along more quickly.

Eric:
Thanks, it's great to hear both of your perspectives on that. One question we got for Jim coming from [INAUDIBLE] was, what was the process? You mentioned that there was a point when the operating and capital budgets or programs were combined. Did you just mention-- what was that process like internally and what effect did that have on your investment prioritization process?

Jim Morrill:
That's a great question. Thank you for asking. So first, I would say that that process is still ongoing. We absolutely did not nail it on our first attempt, which was just this past budget cycle that I just described. But the process is that the capital projects that are submitted are supposed to go through both a cost benefit and risk analysis as it is discussed before. But they should also tie directly to either some cost increases or cost savings on the operating side.

Now it could be that the implication of the project or the impact of the project is not going to be felt in that same two-year window. But we are still reporting and asking for the potential impact that we should be able to measure in the future on things like maintenance and operations due to, let's say we replace fleet or line of buses.

What usually ends up happening with our maintenance costs at the end of the fleet cycle is that they go through the roof because sometimes we have to make the parts ourselves. So one of the things that we focused on trying to do with fleet in particular was to try to smooth out our replacement cycles so that we hopefully didn't get to that point, so that we kind of have a rolling stock. I guess that's a long way of saying that the idea was to tie say parts procurement to that fleet rolling stock replacement project.

And that is how we have done it so far, but again, we have a lot of trial and error to figure out how well this is actually working. And really, we can't even measure it for many of the projects until we would see the impact in the future.

Eric:
Thanks, that's fascinating and I look forward to hearing more about what you all learned through that process. I agree that's incredibly important to understand how these capital investments can affect operating expenses. Our next question coming from Sati. I'm going to be sort of redirected to both of you all and just ask, what are your thoughts on the upcoming next year's TAM plan update in regards to investment prioritization. Is there anything, specifically that you're trying to accomplish through that TAM plan update over the next year? And we could start with Chris.

Chris Ward:
The first thing that comes to mind is that we completed the-- so the condition assessments are supposed to be on a four-year cycle and we finish that in the first three years. And so I was hoping to use this next year as a chance to step back and look at all those conditions scores and make sure they're consistent and make sure that we understand what the whole picture is, and look for anything that needs to be investigated more fully. And then with regard to revising the plan, we have-- for us this gives us an opportunity to repitch it to a lot of the new folks I mentioned and simplify where we can. And that's about it.

Jim Morrill:
Thanks, Chris. So for us, I think one of the things that we-- well, certainly, we are going to work on improving our data collection. But I really want us to focus on some of those metrics I just mentioned, and how we can make sure that the investment choices that we are making have resulted in changes that benefit the agency and the public. And as Chris just mentioned, it's about like ingraining that idea into the minds of our capital program managers, in the minds of the decision-makers at the agency and really making the process itself stick to the whole agency's capital system.

What we have trouble with I find is that kind of gravity will just pull things back to the way they were. And I think one of the ways that we can prevent that from happening is getting these metrics on paper, getting these metrics into our system and being able to point back to them in the future and say, hey, this project was supposed to accomplish this. Let's look to see that it actually happened. And making people follow that process from the beginning will allow us to have that accountability later on. So I think that'll be probably the biggest new focus for us in the next TAM plan.

Eric:
Thanks, that's great to hear. I think we have time for one more question and then some quick closing remarks. Chris, you had mentioned something about a service expansion project that didn't go, that was a bit difficult to deal with. Could you talk for just a little bit more about that and give us your thoughts on how better capital planning and

investment prioritization through TAM might have made that project more realistic or successful?

Chris Ward:
Sure. Actually, it was successful. It's just that it was-- so that expansion was the result of a TIGER Grant, and the TIGER application was not managed through our grants department. It was managed through our metropolitan government. And while they did have input from us in the early development stages, it wasn't the kind of project that was fully known throughout the organization until all of a sudden it became real.

So as I mentioned, we have these great relationships and this was a good expansion. It's just that it may not have been the priority for our resources if we had been the lead agency. Resources are finite. It's just that simple. And we're going to have to be additionally resourceful to make sure that the service that was implemented as a result of that TIGER Grant has operating funds moving forward.

So yeah, I'm not really sure how to go any further with that. We want to just make sure that our priorities are as known as possible to other transportation stakeholders in our community, so that we can steer as much as possible.

Eric:
Thanks, that's a great perspective to have. I just want to make sure I give-- I'd go back to Jim. And Jim, if you want to offer any quick closing remarks followed by Chris and then we could wrap it up.

Jim Morrill:
I feel like I've said a lot already. I'm trying to think of anything else that I'm leaving out here. Guys, it's just really-- for us, we are really focused on culture change and we know that we will get pushed back at every step, but we need to be resilient and we need to come up with the tools that allow the people that we need to change to make the changes that they need to make. And it's going to be an iterative process and it's going to take us a while. And we may only bring some people along at first, but eventually we'll get there and the whole agency will be on board.

Eric:
Over to you, Chris.

Chris Ward:
That was that for me, too. I'm sorry, actually, I really like what he said. I'm just going to stick with his answer because if we can do all that, that would be a real success.

Eric:
All right, well, thank you Chris and Jim. It's been great having you all here today. Attendees, again, we encourage you to go sign up for that TAM webinar. Registration is open for the-- I'm sorry, the TAM Roundtable. Registration is open right now, and

hopefully I'll see you there and if not, then at our next webinar. So thank you all very much. Have a great day.