

## 2020 Local Agency Investment Fund Webinar

November 3, 2021

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### Slide #1 - Welcome

**CHRISTINA SARRON:** Good morning everyone. Thank you for being here today. Before we get started, I wanted to go over our administrative details.

First slides: Slides are available for today's presentation in pdf format in the handout section of your webinar control panel to the right of your screen.

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Today's Agenda: So we have my boss, California Treasurer Fiona Ma as our Keynote Speech. At the conclusion of her speech we will be having a short question and answer with the treasurer. Next up will be Douglas Robinson of RCM Robinson Capital Management discussing economic trends. Then our investments division team with presentations the PMIA from our Director, Kristin, Assistant Director Jeff Wurm, Credit Manager Tracey and me with a little bit about LAIF. Finally we'll have a question and answer period. So with that, let's go ahead and get started.

**CHRISTINA SARRON:** First up is the treasurer. Treasurer Ma is the 34<sup>th</sup> State Treasurer. She was elected on November 6, 2018 with more votes than any other candidate for treasurer in the State's history. The treasurer as the state's primary banker processes more than 2 Trillion in payments within a typical year, is trustee for more than 120 Billion in outstanding debt, issued approximately 15 Billion in general obligation and lease revenue bonds last fiscal year and provides transparency and oversight for investment portfolio of more than 179 Billion approximately 35 Billion of which are local government funds. Thank you for being here today, Treasurer Ma.

**FIONA MA:** Thank you very much Christina. And welcome to everyone to this seminar. We are sorry we're not able to meet in person again. But hopefully, next year we will be able to again network and see each other in person versus virtually. So a couple of things, number one I got elected three years ago and time has really flown by and what a difference a year makes. The first year I got elected in 2019, the state was facing a surplus of about \$25 billion dollars. Two credit agencies upgraded our bonds and things were looking great. And then COVID hit and the governor declared an executive order on my birthday, March 4<sup>th</sup> 2020. I will always remember that day in my mind. And we all were supposed to stay at home. We did that here in this office however a hundred of our team members still came to the office, like many of you I'm sure, to make sure that our essential functions were still being handled and our bills were being paid. So I want to thank the team that came in every single day to make sure that the programs and services that so many Californians depend on did continue even during COVID.

So that year March 2020 we faced about a \$40 billion deficit. Many of us faced difficulties transitioning to home life, working from home. For some of us it is not as easy as it sounds and some of are very happy to be back in the office with some peace and quiet without dogs and doorbells ringing all the time. We in the Treasurer's office, we continue to sell bonds. And to California's credit, investors are very, very supportive and excited whenever we come to market. We were one of the first states to come to market in April of 2020. We have continued to sell our bonds both General Obligation and revenue bonds as well as for the CSU and UC systems. Over the past three years we have managed to sell \$4.9 billion over the next 20 years thanks to rates and our able team who have been looking for opportunities to refinance older bonds whenever possible. In 2020 also, LAIF offered special emergency accounts to agencies that received CARES Act funding. Some of you took advantage of that. That limit was also \$75 million cap similar to LAIF accounts, and we're still open and available to invest your money, and remember, your money is safe in LAIF. And our able team will be talking more about the details of your accounts and our investments over the past year.

Then in January 2021 to my surprise and maybe to your surprise, we faced a \$75 billion surplus; like that totally blew my mind. And the surplus came from individual income taxes, corporate income taxes and strong sales tax revenues even though we weren't going to work. We were all still buying online, and thanks to many who helped close the sales tax loophole, we're collecting and remitting to local governments their sales tax portion. Before that, it was only sales taxes for the state portions but now when we order online the state does collect both the state and local tax portions which you probably all saw a difference during this Pandemic.

And Now, the LAO is predicting another surplus for this coming fiscal year anywhere from \$8 to \$23 billion, so that is really good news I think for all of us. I know I had a hard time sleeping that first COVID year worried about our finances and making sure we're all processing the payments as taxpayers expected us to. And in our office, with three divisions, investments, cash management and public finance, we got on a call every morning at 8:00 a.m. It still continues to this day where we are just checking in and make sure everything is good, our staff is healthy, safe, and I think that has really done a lot to decrease my tension knowing that I have such an able team here at the State Treasurer's Office.

I chair thirteen active board commissions and authorities and, again, because we were open for business every day, we continued to meet according to our agenda. We never missed a day of work, never missed a deadline, all of your funding sources have gone out as expected. And I'm very, very proud of everybody who has stepped up to make our jobs here at the Treasurer's office as easy as possible for the public. Even though we were here meeting physically at the Treasurer's office, everyone else could meet virtually. Our board members and stakeholders and I do think it made a difference in opening up access to government because now people could log on and participate at home on their computers instead of having to come

up physically to Sacramento to testify or to get a better view of what's going on. I think that has been one of the, you know, the great points or highlights of COVID is this virtual world and being more accessible to our taxpayers.

We have a couple new programs that we are very, very excited about. CDIAC, California debt and investment commission, just released four webinars. They are free to the public. And they're really focused for elected officials and others who are not perhaps as savvy with what we do on a daily basis. And if you go to my newsletter, I hope that you have all signed up for my monthly newsletter. We talk a lot about this new series. I just want to highlight on page 3 that some of the issues that we are addressing is integration of long range strategic and financial planning with debt issuance and management decisions, making debt structuring decisions that are equitable for current and future taxpayers, actively engaging in policy and procedures for managing the risk of debt over the long term and practicing transparency in the decision making process and as a fiduciary putting the interest of the agency and community above their own.

So I hope that you will help socialize these four initial webinars to your bosses and to anyone else who may want to get a primer, better understanding of what some of those decisions that you're all making on a daily bases and being able to really educate them because a lot of elected officials that get elected don't have the same financial background that all of you do. So hopefully, these curriculum, this series of webinars will make your job a little bit easier as well or they will be asking more questions of you. So we hope that this series will be a success and we're going to be rolling out an additional five in the coming months. In total I think we will have nine webinars in this curriculum, and you will also be able to get some sort of credit, perhaps a certificate for also going through the module. So stay tuned for that.

In terms of housing, I chair the California Tax Credit Allocation Committee and the California Debt Limit Allocation Committee. And those are two financing agencies that help build affordable housing here in the State of California. I'm very proud of our team. We have approved more applications than ever in our state's history. We want to thank Governor Gavin Newsom for allocating \$500 Million in state tax credits over the past three fiscal years that has been a game changer for many projects that have had difficulty penciling over the many years and also help from the federal level. Congressman Mike Thompson as well as Jimmy Panetta have been successful in getting us about a \$100 Million each year in nine percent disaster credits to help build housing faster in those areas that have been devastated by our wildfires. In our California School Financing Authority, which I chair, we also are getting more into housing space. We issued our first ever bond to the Santa Rosa Community College district to help build student housing. We understand during this pandemic it's been very difficult for so many people. Seeing community college students either sleeping in their cars, couch surfing and even homeless has been heart breaking. And so I thank the team for being creative and thinking outside the box and helping more young people get through at least community college by providing student housing. We're looking for more available sites. So if you have community colleges in your school district that have excess land, please give us a call, and we would be more than happy to work with your team to provide more students and potentially more teacher housing.

Scholarship 529 is another agency that I chair. That is really to help our next generation stay out of high student loan debt. I came from the legislature, and I continue to sponsor legislation that relate to our office and we had one piece of legislation that was carried by Assembly Member Chris Ward of San Diego and signed by the governor. It would now allow us to use our scholarship 529 for apprenticeship programs and also to pay back some of our old student loan debt in case we have extra money in that. So we thank Chris Ward for carrying and sponsoring that legislation.

In addition, another program to help low-income children and also children succeed, we have launched

our CAL kids program through our scholarship 529 agency as well. In 2019, there was a seed deposit of \$25 million from the state General Fund to open up accounts for every newborn every newborn will now have their own account seeded with \$25 that may not seem like a lot. But it is really trying to incentivize parents to continue to put more money into their kids accounts once it is open.

Recently this year the governor and the legislature allocated \$1.9 billion for an expansion of this program. And for every first through twelfth grader they will also have an account open for \$500 in their own name. And if they are homeless or a foster youth, they will have an additional \$500 seeded into their own account. So, again, it's really to set it and forget it. And we hope that more parents are going to be contributing to these accounts so that they can help the success for their next generation.

And lastly, we are embarking on a big study with the California Dream for All program. And we are hoping by November of 2022, next fall, there will be an initiative that will create a fund, perhaps a General Obligation fund up to \$25 billion, that will go to help low to moderate income taxpayers afford their first home.

The state would like to create a fund to help pay the first homebuyer down payment. We would be a partner, a silent kind of partner for homeowners and the funds would get paid back if the equity increases, in the home and/or the homeowners decide to sell their home. Those would trigger repayment back to the state so that others could also receive a down payment assistance. So we're hoping that this is going to be a game changer. We know that buying your home means building equity. That is the American dream. I'm very, very excited for some of these endeavors we are embarking here and others that we are going to continue to help taxpayers become home owners, afford higher education, save for retirement, and I'm just very proud to be the Treasurer here in the State of California. So I hope you enjoy your day. Thank you for participating. Thank you for trusting us with your money. We look forward to seeing you in person very soon, or hopefully, before next year's LAIF conference, so thank you

**CHRISTINA SARRON:** Thank you Treasurer Ma. Do you have time to do question and answer?

**FIONA MA:** Sure.

**CHRISTINA SARRON:** Great! Lily, do we have questions for the treasurer?

## **Slide #2 – Q & A with Treasurer Fiona Ma, CPA**

**18:29**

**LILY OSORIO:** Yes, we received one from registration and they will like to know, Will LAIF be increasing the maximum held at LAIF?

**FIONA MA:** We knew that was going to be the question. We are analyzing that right now. I spoke to the California association of treasurers and tax collectors last month and that was the first question that came from the recipients and we are actively analyzing it and will get back to you.

**CHRISTINA SARRON:** Great. Are there any other questions?

**LILY OSORIO:** No other questions.

**CHRISTINA SARRON:** All right. Thank you Treasurer Ma. Have a great day.

**FIONA MA:** Thank you.

### **Slide #3 – Economic Trends in Negative (Real) Interest Rate World**

**19:05**

**CHRISTINA SARRON:** At this time, next up is economic trends in the negative interest rate world presented by Douglas Robinson. Mr. Robinson please go ahead.

**DOUG ROBINSON:** Thank you, Christina. It is fantastic to be a part of the LAIF's webinar this year in such interesting times to say the least. When I do these things, I have way too many slides and have to go through these kind of quickly. If you bear with me, we're going to be covering a couple important key points, the direction of the economy, Interest rates, fed action and I think the biggie that's going to run through most of this - inflation. We'll also take a look at one of my most favorite subjects, California demographics and what current trends they hold for this state. So, without further ado. What a great place to start but at the bottom of things.

### **Slide #4– Real Negative**

**20:05**

And let's see. I advanced a little too far. Excuse me. I'm in control so that's why it's going crazy.

Right here at the beginning or actually the basement let's call it. This chart shows us today we have very much a negative interest rate world. So what I did here was take the five year treasury adjusted for inflation using today's CPI from September of last year to September of this year. With CPI running at 5.4 percent, you deduct that from nominal yield maturity rate and in this particular case the five-year treasury and it's a big minus number, below a negative four percent. You can take this from any fixed income instrument along the curve and practically everyone is going to have a negative real rate. When you look at a chart like this, if you're an issuer, as Treasurer Ma was stating, as the state's going out into the marketplace raising money, this is a time or condition where you're practically being paid to issue. But if you're being paid to issue the other side of the ledger isn't so good. You have a great positive position compared to the potentially the buyer, well, you know, to each his own. So, what a wonderful time to issue is what this tells me.

### **Slide #5– 5yr Treasury Rates**

**21:36**

As we look around the world and this slide shows again the five-year treasury. I wanted to see where the U.S. is relative to other countries. The U.S. really is the shining light on the top of the hill. We have the highest rate in the world for our treasury securities. And it's only the UK on that side of the pond that is above zero. Practically the entire euro zone is below zero. There's only a few countries, Italy, Greece that have a positive nominal rate.

If you're going to factor in inflation in Europe running at 4.4 percent you get into a deep negative real rate return.

### **Slide #6– Global Negative**

**22:47**

When you look out across the globe, there's a little less than \$11.5 trillion of securities below zero. So when you look at a chart like this which has three specific tops of the maximum amount of debt in the world, it's somewhat encouraging that possibly we've peaked out. This is what could be called a triple top. And as negative securities begin to fall, less of them, you know, maybe interesting for us to watch. I suspect the world will come to its senses at some point and central banks around the world will have allowed the ship to right itself and go to some type of positive curve or at least all not negative rates.

## Slide #7– California vs U.S. GDP

23:28

From the bad to really, really good..... what a segue here.

When we look at GDP in the United States versus the GDP of California, I took the statistics beginning 2005, normalized it by indexing to 100 and let it rip. And you can see here, if you follow my curve, its basically neck-in-neck with California keeping up with U.S. and vice versa. But right around 2014 you notice there's an out performance here. Between 2014 and 2019 California actually added 21 percent to its GDP. When you look at other states the second fastest growing state was New York at 14 percent and Texas - everybody thinks every Californian is going to move to Texas and it's great and growing and it might be one of those things, but California has way out-produced Texas. Texas grew 12 percent versus 21 percent in California.

In fact if you look globally, California over that period beat all countries except for China. China had faster growth rate. The only place in the world other than outside of California that grew faster. So along comes COVID. We all see the drop off here. A quick sharp recovery. If you look at the national GDP number we got a few more extra quarters because it's more current. We have to wait a couple quarters to get the remaining for California. But the last recent GDP reading for September's third quarter is the 1st estimate out of national number was two percent. We all wanted to see it higher. But two percent could be from supply constraints, you know, we all know about trying to get stuff. You can't get stuff. Car manufacturers are in trouble finding chips and this supply chain issue is really slowing down delivery of these final goods. But the demand is there. So even though the auto industry analysts say if we can buy all the cars we want to today and transportation for these items, you would put another two percent on top of GDP we had for last quarter. So that potential additional two percent is out there in subsequent quarters.

## Slide #8– Highly Productive California

25:54

With California, it's a powerhouse of productivity essentially. It over-performs to the rest of the country and other higher growing states, you can see that... I love this slide because it comes from an article from Bloomberg titled "California Defies Doom with No. 1 U.S. Economy". So many articles written about the great demise of California, everybody's leaving and so on and so forth. But it is a very highly productive place. So you can tell here quarterly revenue per public traded company showing here is 50 percent greater from one million to one and a half of revenue generated per quarter for publicly traded employee. That is an incredible chart.

## Slide #9– California Population

26:45

Now, to basically define how you get that you sure gotta have the population, right? When I look back at the growth of California, I like to break it down into two phases. Starting in early 60's through right before the early 90's recession, California had a growth rate twice that of the United States. And from there a shift down, this is the period I'm talking about, still out growing the United States, still growing. The last several years things have slowed for United States but more so for California, but that's not necessarily a bad thing we're going to see later on. We have 39 and a half million people in California that's going to be 40 million in the not-too-distant future. So, let's talk about that.

## Slide #10– Natural Change in CA Population

27:35

One of my favorite charts here is seen in the top line. The bottom line on this chart is not so good but the top line is births. What we're going to get at is the national increase in California. Let's focus on this green line up here. Follow my cursor. You can see generations in this line.

On the far left this is peek of baby boom generation in the early 60's. Followed by a baby bust, sorry for the X generation but you're known as baby bust, bottoming in early 70's and from there we had run called the millennial generation. I also call them the echo boom generation peeking in early 90's. So 89-91 there's a peak up here. Also referred to as Y generation. I was thinking the other day, when putting this together, if you're like me, a peek baby boomer and you may have a late 20 year old or 30 year old living at home, financially dependent or both of those things, you have to ask yourself, "why am I still doing this?" and perhaps they will be saying "well, why not?" Banker dad and mom's cooking is still pretty good. Eventually we'll talk about that with these kids who will eventually get going but you have little bit of a baby bust after early 90's and then off starts this new generation. This other generation is called the Z generation and the birth of that come from early echo boomers. As we peaked in 2005, 6, 7 of this generation we're now starting back to the beginning of alphabet the A generation.

But you're looking at this downturn here and you don't want to draw a straight line. This is not going to drop and drop. Look back at where you have potential more births in the State of California. And it's going to come from the still living at home, late 20 year olds and early 30 year olds, they have great potential by getting out on their own and have first home and start having a family and start adding to this birth rate here. I would imagine that this is a temporary condition in the years ahead we're going to see this turning up.

But one line here you really can't change the path on unless they move out of California and that is this red line. So these are departures, no forwarding address, and we know that this baby boom generation which is quite large, pretty hard to, you know, keep extending the clock. So this line is likely to not decrease any time soon. So today the difference between births and deaths you have in California the lowest natural increase in about 45 years, you get to the lowest point in California, but again we've got hope coming from, you know, these more births, so let's plan on that. We all want to be grandparents in our later middle age.

#### **Slide #11– CA Immigration and Migration**

**31:05**

On to this next slide. Again one of my favorites. And it shows California's had spectacular immigration from people born in other countries and going back to early 60's we've never had a negative year. So the in-flows have always been positive. Whereas if we look for people moving interstate, from other states into California and netting that for people leaving, all the way up to the early 90's recession, essentially they were matching the incoming from foreign born. But things went the other way. From the early 90's recession big drop ran back up and we got positive right at the tail end of the internet boom. Right before that busted in 2000 and beyond. And then we really struggled with having a net increase from interstate people moving in net moving out ever since. And again, this isn't necessarily a screaming bad problem because you have to find out who's coming in and who is leaving. That brings us to this slide.

#### **Slide #12– California Population 2020 vs 2005**

**32:20**

What I did here is I took ... this is a histogram, look at yellow lines first. These vertical lines are the baby boom or excuse me, this is age distribution of these cohorts in California virtually today. And what I want to do who is coming and who is gone? I went back to 2005 that had the same distribution and pushed forward 15 years so we can see who is coming and who is left. Essentially you can see here, by the slide, a little less than 2 million baby boomers left but you had incoming and here's what's real important. You had basically the later Xer's, the millennial generation is right in here, the early part of them, and then here's your Z generation and now you have A's coming, so here's your kids right here. But what I really want you to look here is who is really leaving? The boomers are leaving. Is that such a bad problem? Not

really. Think about it. If you're somewhere in your late 50's, 60's or 70's and owned a home in California for many, many years, you have low cost basis and low tax basis. So as you sell that home and these young generations are purchasing a home, now you're stepping up tax basis typically in a sale of the home there's all kinds of things that go in to it, leveraging money, borrowing to do more things very stimulative in younger generation that the older generation has then moved on from. And when I look at this particular distribution if you look at this compared to nationwide there's a big drop off between boomers and the younger generation. But California, because we've had, the baby boomers moving out and younger people moving in, you're getting a smoothing effect that really helps California mitigate any kind of demographic cliff that other countries have and other states have in the United States so I just find that fascinating.

### **Slide #13– Senior Workers Finally Retiring?**

**34:45**

Now, again we're going to go back to the older generation and look at what they're doing and hopefully, they're finally retiring. We'll see.

This slide covers the massive increase in participation of seniors in workforce from 2000. So you're up here at 75 and older and here your cohorts going down. But since COVID came in there's been a lot of people leaving the workforce of this age group so it will be interesting to see if they return. You don't know but assumably some of the groups will retire, maybe for health reasons they don't want to come back and discovered they like doing other things than working, whatever the case you now have to rely on younger cohorts to pick up the jobs that will be open.

### **Slide #14– Who Earns the Most?**

**35:42**

But who could that be? And by the way, what do you want in your economy? People making the most amount of money, and that's going to be and this slide is going to tell you. If you're in your mid 40's to mid 50's you're making the most amount of money in your lifetime. Peek of your career, peek of your abilities, peek of your pay. But right behind that age group is the 35 to 40 year olds. These two are really close to one another So really you can say between 35 and 55, in that length of that those two big groups, are the big income producers and drivers and they're also peak spenders by the way. I don't have a slide here but you do reach peak of spending in mid to early 50's, depending on your how long you spend in school and so forth. Another interesting part of the chart is go down to the bottom you can see 65-year-olds, they make the same amount of money as a teenager to early 20-year-old. Again, to power home the point, it's okay for the seniors to move along free up those jobs, free up that income for the younger generation, as they move up the income ladder.

### **Slide #15– Home Price vs Rent**

**37:13**

So let's segue into everybody's favorite subject in California and Treasurer Ma was pointing out how expensive California is today, as it was expensive too in the past. I went back to 1990 and indexed the national median home price with California, and comparing a huge run up in 2005 and 2007 and everybody had to have one or two or three homes. And we know how that ended. You know, nationwide it also occurred to be a big bubble. And here in California right about 2012 ever since then it's really been up so after that bottoming process California has really worked it's way back up. So today, if a median home price in California is a little over \$800,000, but of course, depending on where you live or want to live in California that can vary greatly. If you get that great job in San Jose, you better be paid a lot because the median home price there in Silicon Valley is \$1.7 million, a little cheaper if you want to go to San Francisco \$1.4 million, L.A. area is \$775,000, a little bit below median, it's a big county. Sacramento is a deal, it's a steal. \$500,000 for median price home in Sacramento.



To kind of look at the comparison between prices and rent, this is the red line which is the owners equivalent to rent.

It's a survey done by the bureau of labor statistics to figure out what owners would charge for rent. I don't think it's a very good number to say what rent is. We should rely on the Zillow's of world or Realtor .com that gives hard core data or actual rental prices. But it is what it is. A very important number to CPI because this part of the index is about 30 percent. If you have big increase in what owners thought they could rent their home for, it's really reflective of CPI and vice versa. And another part of this slide, before I advance, is that you can see periods of time where we get way over-done compared to what rent is. I don't know if we're here today. This whole COVID effect of nesting and super cheap money has driven these prices very high. So one would hope we would have rentals catch up. And maybe there's an adjustment period there somewhere.

**Slide #16– California Real GDP vs Household Debt**

**40:13**

From a standpoint of an ability to borrow and debt service, this slide tells us that, at least back in the last bubble we had in real estate, we were way over-leveraged to what we were producing. Today we're much more in line and if I had the slide here, I would show you if you took disposable income today versus your debt service level that number is the lowest in 30 years because rates are so low you can have a lot of debt but your servicing of that debt is very low. We're not sure how long that's going to continue though, right?

**Slide #17– Fed Balance Sheet**

**40:49**

The Federal Reserve has a lot to do with where we are. The chief manipulator of our money system. Here we're looking at the feds balance sheet. Going through various quantitative easing's and financial crisis when money flooded into the system and moving along, it feels like forever this balance sheet has been building. And today we're up to eight and a half trillion dollars. In fact I think J Powel is actually speak right about now and what he may be telling us is that they'll beginning to taper. So by this month through May they will not be adding or adding less I should say. They're adding 120 billion per month and they want to get, I believe to zero by May next year. If that's going to happen, we'll still be close to \$9 trillion and that is not reducing the balance sheet that's just where it would stop at.

**Slide #18 – Money Supply**

**42:01**

So a lot of money..... I mean buckets of money have been added to the system. Money supply has grown 35 percent over the last year and a half. Staggering amount of money. You basically since 2000 money supply has grown 345 percent. That's seven percent a year which actually equates to the gain in the S&P 500, so lots of money gone into stock prices and real estate prices.

**Slide #19 – Velocity of Money**

**42:30**

But how quickly is that money moving through the system? This slide looks at the velocity of money which takes GDP divided by money supply has been cut and a half over 20 plus years. A lot of that is the math of equation. If you have higher money supply divided into GDP you're going to reduce this number. But some people think this is really negative. I look at this more positive because, oh my goodness, can you imagine if you got the economy moving money faster to where we were in previous periods, you can image the amount of growth you would get out of that.....the potential for GDP growth.

**Slide #20 – Inflation Cycles****43:13**

Coming back to all this money coming in and out. I love to look at long term cycle patterns and what I did here is I look back from 50's to early 80's we can see higher, the white line on here is CPI, as inflation grew interest rates rose. This is the ten-year treasury and peaking in early 80's and from that period to now, we had this inflation period. So 40 years of essentially inflation coming down, interest rates coming down up until this circle right here. This is the CPI from September of this year to September of last year. And we're going to have October's number coming out next week. And it's according to Bloomberg's looking for 5.8 percent year on year number. That is up from 5.4, so we'll see if that census works out. We'll know next week, but I don't know. When I was looking at this slide and putting it together for this update this is like a James bond movie here. It starts off like you can't believe and stay riveted to the screen. Let's hope it's not all about inflation. This thing is taking off like crazy, a real eye opener.

**Slide #21– 5 Year Treasury Channel****44:42**

And another way to express that is what five-year treasury has done over these decades and this disinflation period where five-year treasuries have gone to lower lows and lower highs and all the way down to 2018 we start to peak out downward channel. Didn't live there very long. Broke down in 2019. Here comes COVID. We didn't get to zero we got close on five-year. And then it took off here up until just recently this is really the four or 5 weeks we have an explosive rally on interest rates. Right this second we're sitting at 1.21 which is precisely what this chart says. This white line on top, if you can follow with me, that channel today is a 1.60 and this is downward slope if you get out to six months from now, to May that's 1.50. This isn't too far away from potentially where you can go. And we have to really keep an eye on this, so maybe the years ahead, who knows, maybe this downward channel becomes something upward.

**Slide #22– Commodity Price vs 5yr Treasury****45:53**

You can't put together a presentation without looking here when talking about inflation if you don't look at commodity prices, the price of stuff. When you look at the price of stuff, the CRB index relatively to the five-year treasury, you can see they should really rhyme. They should be correlated. And as we have gone through this peak 2018 we had three percent on the five year treasury, also on the two-year and on the ten-year we were right up there. Now, when COVID hit particularly everything collapsed and, of course, the supply situations because we still needed to eat and have things, here comes the CRB index. It actually exploded. Agriculture products, food stuffs, metals, and energy prices, you know, lumber was up 300 percent now its up 60 percent and it's (the CRB) still kept going. So the key take away on this slide is today's massive disparity between where interest rates are today to where commodity prices are.

**Slide #23– Fed Funds, 5yr and 10yr Treasury Rates****47:05**

This chart. I love this chart. Oops I went too far. This chart is kind of trying to pull it altogether including the fed. Keep your eye on this green line. This is your CPI year over year went back to 2016. You can see here as it moves along so are interest rates. Then the feds, you know, it's not -- feds being reactionary so as it's forced to move rates up along following the market in general when you saw up here back in 2018 last time interest rates peaked you can see prior to that you see CPI drop off. Well, the fed keeps moving along and peaks out here and first half of 2019 and starts to lower rates and here you go fast forward to COVID and slam, everything is down on the map.

When COVID hits early part of COVID that's when boom, CPI, look at this number. I've had this chart for a while I had kept changing the scale to fit this in. So, you know, but you see here as CPI advanced to this extraordinary level finally we're getting some reaction in the interest rate environment. Here's the five and ten-year and look at the Feds, they look like they're asleep. At some point they will have to awaken the fed funds number. Let's see maybe when that can be.

**Slide #24– 2yr Treasury vs Fed Funds**

**48:49**

I had people ask me, ok Doug, you talk about five year tell me about the two year treasury. So the last time the fed began a meaningful series of rate hikes when was that? So we look back at 2014 to 15 and 2-year treasury more or less ranged from 50 to 70 basis points which is right about here When I did this slide at 52, the basis points were right in here. So I would suspect that's your range, 50 to 70 bases points. You can see the fed raised rates in December of 2015 and then didn't do much for 2016 yet the two-year treasury spiked up to one. And trading right in that 70 basis points a little higher came back down to 50. That's a reasonable range if you're looking to make some purchase of the two-year part of the curve but wanted to look to see if can get a better rate, I would be looking at 60 to 65. But you don't know if the fed is going to start really catch up to this earlier than we think, then we'll have to see if we're going to be in multiple stair steps again.....we won't know until we're there.

**Slide #25– 5yr Treasury Retracement**

**50:15**

On my last slide so thanks for hanging with we me during this period. This last slide is important to me at least, and I wanted to see as COVID came in as five-year treasury collapsed what levels could it retrace or recover to? I had to wait until we found a bottom so we go from March of 2020 and we ended up bottoming and we didn't know when it was going to bottom but the summer of 2020 and right about the last winter, I started to say okay, we have a bottom and let's see what kind of retracement numbers we can get on recovery. You can do this on Bloomberg, anybody can. Set your start point and low point and it produces these numbers.

So what I came up with is I just thought your first retracing would be in this area here, 0.68-0.83, and interesting enough we hit it. And we hung around this area and fast forward all the way through going into the summer we did come back and retest it, broke back up again, and now we're coming into the first part of September and then, bam, towards the end of September, this explosive rise up and now were into the second retracement and we haven't really stopped.

We broke up here again we're sitting at exactly where I got that number, we're sitting at 120 and change. I would suspect ... I mean if I'm going to take a guess at where were going from here, you could consolidate just like you other really big moves, but if these inflation numbers keep coming at us so fast and so hard you're not seeing any ending of inflation rate but as we're here, but, you know, if a year from now and inflation is still running at three and a half, four percent, I can't imagine rates will be anywhere this low. Next number I want to look at after we complete this whole retracement of 100 percent, is about the 1.50 area. The five-year treasury spent a lot of time going back to 2013, 14, 15, some parts of 2016 right at the 1.50, 1.60 area. I want to call that neutral. I made that up. It's a neutral number. Between zero and going back to three percent like we saw in 2018. I think that is a good number to, you know, have a goal for. And then again if we're going to have start seeing more of this driver of, you know, between labor and the tightness of labor and particularly the inflation rate and, of course, how the fed is going to react to all of that. I think I made it through in 30 minutes I'm not so sure. But I think a good place for me to end and turn it over to LAIF team looking forward to what they have to say. Thank you very much.

**Slide #26– Index Definitions****53:28**

**KRISTIN SZAKALY-MOORE:** Thank you, Doug, and as Christina said earlier if you have questions for Doug please save them. He'll be around at the end of our presentation and you have him and us answer any questions you may have.

**Slide #27– Thank you****53:35****Slide #28– Staying the Course Through Uncertain Times****53:37**

Now, we're going to be moving to the investment team to join us and provide you with life program.

Good morning I'm Kristin Szakaly-Moore and I'm the Director of Investments and I will be working with Jeff Wurm, our Assistant Director and Tracey Paine, our Credit Manager to provide you with information of investment management of your LAIF moneys. And then Christina Sarron, our LAIF Administrator will give you an overview of LAIF operations and administration. Next slide, please.

**Slide #29– 30,000 Foot View****54:14**

My part of the presentation today is to provide you with what I call a 30,000-foot view of our investment program. Jeff and Tracey are going to dive down into (unintelligible). I'll cover what are the factors that guide our overall investment management, what drives our collection of (unintelligible) and what economic information we pay attention to, how that investment landscape continues to change and how our impacted the numbers related to portfolio and finally why regardless of all these changes you will be assured that your money is being managed (unintelligible). Next slide, please.

**Slide #30– How Your Money is Invested****54:56**

As most of you are already aware LAIF operates like a short term liquid investment pool. We are not a registered money market fund However we share a lot of similarity in our operations. Your LAIF deposits are combined with our state government funds which are then invested in a (unintelligible) of high quality investments. LAIF as you may already know is part of the (unintelligible) account which the purpose of which is to offer as (unintelligible) cash account. We manage investments of these funds as short term investment pools keeping our overall weighted average maturity under a year while making sure the investments are liquid to meet daily withdrawals by late participants as well as by (unintelligible). As part of our investment plan we emphasize government securities and by this I mean we largely invest in federal treasury bills which obviously are the gold standard for (unintelligible) while government code allows us a longer maturity we generally keep our notes for just three years or less. At least as this point in time. And we focus largely on (unintelligible). We also rely on government conservation fees such as federal home loan bank and (unintelligible) credit pay ... world bank ... IAD ...These options provide us with investments that are highly rated but that also have maturity dates that are more flexible than state treasury bills which mature on (unintelligible) and (unintelligible) meeting cash flow needs. Other capital market securities purchased (unintelligible) commercial paper, CDs, corporate bonds are all highly rated, top three ranking (unintelligible) agency and Tracy will talk a little more about that how she goes evaluating the banks and corporations that issue those.

Let me say that we do go through a very detailed and careful evaluation of these investments because we need to maintain (unintelligible) liquidity of (unintelligible) to ensure the money will be there when (unintelligible) to meet your withdrawal demands (unintelligible) state agencies.

We work very closely with the forecasting group of our State Treasurer's office to manage (unintelligible)

cash position and we try to find the best value in the investments that we purchase to provide a competitive return but ensuring safety in liquidity are foremost in our investment management process. Next slide.

### **Slide #31– Deposit Program**

**57:22**

In addition to the government and non-government securities that we purchase, the Treasurer's office operates a time deposit program. (unintelligible) which provides indirect support to local communities in California. The state operates this voluntary program for California Headquarters, community banks, credit unions, savings and loans (unintelligible) state funds at desirable rates for their use to provide liquidity community investments such as small business loans.

This program provides investment returns to LAIF and the PIA while also helping California communities prosper. And while this is a voluntary program our staff does view and does extensive credit analysis of the financial institution before lending the money to them and also to maintain activity in the program. The program currently stands at approximately \$4 billion and this is invested in over 50 community financial institutions. Next slide.

### **Slide #32– Treasury Yield Curve Info**

**58:26**

So now I'm going to turn to what types of information assist us in determining what investments to purchase. Many of us start the morning by reading the overnight economic summaries we get from various economists and various services that we subscribe to, seeing how the market is moving, observing what economic indicators have been reported such as inflation rates, job reports, GDP. We also review the treasury rates on our Bloomberg terminals, what the yield curve is and how it changed other night and where prices are at in specific short ranges that we typically made be interested in.

Yield curve spread may be something we look at the trend over time because it a (unintelligible) at predicting recession. And when these spreads go negative meaning the yield curve has inverted a recession typically follows in the next 6 to 12 months. This is particularly helpful to gauge the strength of the economy and incorporating this information into our the daily decision making process has been helpful from our perspective to determine where we want the average life of the pool to be and what types of investments we purchase as a result. Next slide.

### **Slide #33– Federal Reserve**

**59:34**

The actions of the fed statements by it's members and in particular (unintelligible) by chair Jerome Powell also provides information that guides our decisions. The fed has obviously eluded to a played a significant role in trying to curb the downturn the economy and encourage economic growth. And like you we are waiting on information today on the specifics of that tapering and potential hints that may leak out as to the timing of the rate increases and by the end of this webinar we should have a little bit of clarity on that information.

The feds (unintelligible) along with our continued concern other the past year and a half over the market (unintelligible) to meet the liquidity demands. (unintelligible) short end of the treasury curve where we do most of our (unintelligible). Focusing on keeping our portfolio very liquid and Jeff will share details on this with you shortly. Next slide.

So this slide, for those of you who may have been here last year may notice the background is very similar. I kept it that way purposely because once again the landscape is ever changing. The events of the past 18 months continue to affect our investment decisions significantly. The changes from August 2020 to August 2021 shows it. I chosen those dates to give you that comparison. The PMIA has increased over \$60 billion in this timeframe due to federal stimulus funds received and increases to income tax received from both businesses and individuals in the state. LAIF likewise has increased as local governments like yourself have deposited stimulus payments into it and also because LAIF tends to trail competitors when rates decline it is a more attractive investment opportunity. The PMIA average monthly yield bears the result of a changing rate environment going from three quarters down to about 50 percent. I've also included (unintelligible) rates that provide context to the pool yield that we see which affect the federal funds rate and one year treasury maturity. It has been a challenging managing such a large investment pool in this environment but we feel we successfully maneuvered incredible growth without compromising safety of liquidity and have also sustained a respectful yield in the current environment. Next slide.

**Slide #35– Reasons to be Assured Your Money is Safe with LAIF**

While the uncertainty over the economy and timing of interest rates remain (unintelligible). We want to make sure you are aware behind the management of (unintelligible). State government first of all provides specific restrictions to the type of investments, Credit quality, maturity length, and the amount available for us to invest. Beyond this our investment policy confirms these requirements and provides further restrictions. For example we are not required by law to have (unintelligible). And in our current practice is shorter. We have taken a conservative investment approach to maintain cash flow and do this through diversification investments and minimizing credit exposure by requiring only the highest rated investments from credit agencies. We spread maturities over the short run to minimize interest rate risk in a volatile market environment and we select investments and maturities to meet forecasts to (unintelligible) make sure liquidity meet your (unintelligible) as I said (unintelligible).

The staff managing your investments has broad and deep experience in investment and treasury management. We currently have nine authorized investment traders and I did the math with collectively 188 years of experience primarily in the state which averages 21 years per person. So we all look very young. We started when we were babies In addition to portfolio management we have staff with experience in forecasting, (unintelligible) and finance.

This has been particularly important and essential during the time period when most staff have been teleworking and we have to use an online meeting platform for the trading activity. I want to finish my part of the program by saying that the money deposited with us is guaranteed to you regardless of earnings. We operate an investment pool, a liquid cash benefit pool, but as a lay participant your investment will be returned to you when you need to withdraw it. And this is why we focus so much on the quality and liquidity of your investments. And also why you should be rest assured your money is safe with us.

Now I will turn presentation to Jeff to provide you with some more details on investment strategies and portfolio (unintelligible).

### Slide #36– Selected Investment Data

1:04:50

**JEFF WURM:** Hello everybody. Thank you for joining us. It's an honor to be able to talk directly to you I echo what the Treasurer said earlier. We look forward to being able to meet with you in person in an actual conference again very soon. I can have more fun having you guys right in front of me when I do my presentation. I always start my part with the first page of our monthly report. An overview of what the PMIA looked at June 30 the end of our fiscal year this year. Echoing what Kristin just mentioned, see right at the top, 70 percent of the portfolio is in treasuries and combine a couple of the agencies lines right below that. Thirteen percent agencies, so 83% of our portfolio in treasuries and agencies right in line with the PMIA investment policy First goal to be safe. Safety is number one, liquidity second and lastly we worry about yield. I am glad Kristin brought up the time deposit program it is an important part of what the treasurer's officer office represents. Trying to give back to the communities. This program is really meant for the smaller community banks and credit unions, smaller groups to give them much more liquidity and ability to be flexible to help their communities grow.

Other than that the size of the portfolio, as you can see, is rather large. The bottom line as of June 30th the portfolio was \$193 billion. A lot of that is money that came in June and I will discuss that again in a little bit. Looks as though the corporate side of the portfolio has shrunk by percentage, but if you look at total dollars it hasn't. Tracey will talk about that in a little bit here. Next page please.

### Slide #37– Pooled Money Investment Account

1:06:28

This is just a snapshot view of where we were ten years ago and where we are today and kind of what the ten-year average was in between. Treasury has been a big part of this. And this goes back to the original financial crisis and got us leaning towards more safety driven and now June 30th this year treasury are both safety and out of necessity because of how large the portfolio has grown. Another part that is different again, if you look at the CD and bank notes ten year average is around 17 percent of the portfolio. As of June 30th eight percent that is how large the portfolio has gotten. Not by choice of ours to alter the way we do business.

### Slide #38– Portfolio Composition

1:07:11

These are all familiar and I know you have seen this presentation before. Sticking with the same bar chart we always do here over the last ten years and not a whole lot has changed. And if you look at the last line, treasuries are larger than they have ever been. The second largest time frame was June 30, 2013 over 60 percent was in treasuries. If you see the agencies kind of shrunk at that time it was as lot harder to find them. Kind of like what is going on now. Those of you who do the same type of investing we do on a daily basis, it is hard to find agencies to work with in terms of a discount notes, especially Fanny and Freddy. We never see the names anymore and I know you guys are fighting and struggling for the same types of investments.

What I realized recently on this chart is what I should have done at the top is let you know how large the PMIA was for each bar. To see the percentage is one thing but to add the actual total dollars it's completely different. So I'll fill you guys in here: June 30, 2012, PMIA around \$60 billion. Skip to 2014 \$64 billion, only \$4 billion over 2 years. Now here is where things start to change, go to June 30th, 2016, \$77 billion at fiscal year end. June 30, 2018, \$89 billion at fiscal year end. And just last year June 30th, 2020, it was \$103 billion. First time we broke a hundred billion at fiscal year end. But then if you go to June 30th of 2021 it was \$193 billion.

So the speed at which the PMIA is growing is crazy. You can kind of correlate that with how much LAIF has also grown. Most of my career average \$20 or \$22 billion and hovered there. Now we are at \$35 billion. Same type of large increase, it is across the board and I think a lot of you are based on the same thing and your portfolio has grown also. Next slide.

**Slide #39– Treasury Maturity Schedule**

**1:09:06**

Using treasuries as cash management tool is really important to us. Many of you know there is a treasury market everyday of the year, almost 24/7. Foreign markets are buying treasuries all of the time. What was nice with this expansion from the fed to issue more treasuries they issued a four-month bill which kind of filled in more dates for us. Instead of just being able to buy treasuries on Thursday and or the last business day of the month, we can add Tuesday onto it. It has gotten a lot more clustered in terms of how many treasuries we are carrying at fiscal year end. It is a conscious effort on our part 1) because of safety and 2) because they are a very liquid security and gives us the confidence to know we can handle any large changes in cash flow direction. Right now I will pause the presentation and introduce Tracey to talk about the more fun part of the portfolio in the corporate world.

**TRACEY PAINE:** Okay. On the next slide.

**Slide #40– 6/30/2021 \$193.3 billion**

**1:10:05**

Beyond our treasury and federal agency positions, most of the remaining investments are in certificates of deposit and commercial paper. And recently we added a few corporate bonds. On June 30th these holdings totaled \$27 billion, which is about an average amount for these security types. Next slide.

**Slide #41– Commercial Paper Diversity ...**

**1:10:38**

And that \$27 billion consisted of 28 different commercial paper programs and 33 different financial institutions CD programs and each one of those programs is represented by a different color on these pie charts showing that we maintain a diverse mix of programs in order to ensure we are minimizing our risk and credit exposure to any single firm or institution.

Some of the larger holdings were with our domestic banks which are represented with their logos across the top, Citibank, JP Morgan, Bank of the West, and Union Bank. In total we do have about 100 issuers that are approved for investment in commercial paper, certificate of deposits and corporate bonds. And we do monitor the credit strengths of each on an ongoing basis to ensure the PMIA is protected and that we are meeting our number one goal which is safety. So how do we do that? Next slide.

**Slide #42 – Monitoring Approved Investments**

**1:11:56**

How do we monitor the approved investments? We collect data and information from the primary rating agencies S&P, Moodys, and Fitch as well as other reliable new sources and this information can include credit ratings, credit analysis such as the reasoning behind any credit rating changes, their financials, performance reports, industry outlooks and any other news that could have an impact on the issuer and would be critical for us to consider as part of our evaluation. Next slide.

**Slide #43 – Monitoring Approved Investments**

**1:12:40**

Then we use the selected information to at minimum ensure the investments are in compliance with government code and the investment policy. And from there we analyze how the ratings and financials



are changing in order to ensure the stability and financial strength of the issuers. And then we evaluate their performance and any news events and determine what kind of impact those might have for us and how we are going to proceed with that information.

At least weekly the critical information we have collected is consolidated, documented and discussed amongst the team. And then whether the information is positive or negative we determine if that will generate a change in our investment strategy. Sometimes a change in strategy can be subtle, such as how much we are investing or the length of time of an investment. And other times it will be more straightforward such as if we stop investing in them completely and for how long. Will it be until a deficiency is resolved or could it be forever? Any changes in the strategy can be a dynamic process and often dependent on the information that is available at the time. Next slide.

#### **Slide #44– New Programs**

**1:14:10**

In order to continue to enhance the PMIA's safety, liquidity and yield we continually look for new programs to add as approved investments. When looking for new programs they must be in compliance with government code and investment policy including the rating criteria to ensure that they are prime quality and rated by at least two nationally recognized rating organizations. Then like the information we collect to monitor our existing approved investments we collect information on prospective programs and complete a comprehensive credit analysis to help determine if the program should be added as an approved investment.

So that would include evaluating their financials, their performance and their ratings and looking at how all of those have changed over time and how they compare to peers. We also look for any news or current events and evaluate what impact those have. We look for larger programs, for commercial paper specifically, the portfolio holdings cannot exceed ten percent of the program's outstandings, so the program size has to be significant to accommodate the large size transactions that we do. And that concludes my part. Those are the highlights of the processes we use to ensure safe investments. Now I'll turn it back over to Jeff.

**JEFF WURM:** Thank you Tracey. All right. Let's go to the next slide

#### **Slide #45– FOMC Dot Plot**

**1:16:07**

Here is where we get to have a little bit of retrospective view timely with the fed meeting today prior to this time I had no idea what a dot plot was. Going back to 2016. Simpler times I put on the notes when rates are on the way up. Fed raise rates in December of 2015 and here we go, things are going to take off, right? This is what the dot plot looked like then. Rates they raised it one time. The Fed met and majority of them felt on average by 2017 after this meeting in 2016 the rates should be around one and a half. 2018 looking out further two and a half percent. Next slide

#### **Slide #46– Pooled Money Investment Account**

**1:16:44**

We'll look at how they did and they were pretty darn close. They did a good job, had a good plan and stuck to the plan and this is how it went. We have the PMIA the blue line. The only thing we can remotely compare the PMIA to is the S&P GIP index. They're not exactly... it's like apples and pears, not apples and oranges. They're a much shorter life portfolio investment securities. And you've got the fed fund rate there so we can show you how we're doing. Next slide

**Slide #47– FOMC Dot Plot 6/13/2018****1:17:14**

We will go to June of 2018. Fed meets again and the rates were around two percent And almost two and a half and they are looking forward and feel possibly by 2019 three percent even three and a half percent by 2020. Longer term back to three percent. Flip the page, next slide.

**Slide #48– Pooled Money Investment Account****1:17:35**

And we know what happened. What they predicted, didn't happen. As rates tumbled and again this shows the smartest people who have all of the information can't tell you what is going to happen next. The one thing I have been saying for the last few years, we can look back and have a plan for everything we have seen, we don't have a plan for what we haven't seen. We are going to stay the course and it seems the to work and we are sticking through this. The chart shows, something Kristin mentioned earlier, because of the average life we trail what the market does. If the rate goes up we are a little behind down a little behind. This time averaging a 180 days is only about six months behind. Next slide please.

**Slide #49 - FOMC Dot Plot 6/13/2020****1:18:17**

June of 2020 the Fed met and wholly cow they had no optimism what so ever that the rates were going to go anywhere at any time soon. And everyone was in agreement we are not changing rates at any time soon and two people said maybe in two years and we will flip the page one more time. So flip the page one more time.

**Slide #50 - FOMC Dot Plot 6/13/2021****1:18:34**

June of this year they met again and now we have a little bit okay things are looking better and we got a better idea of what is going on in the world and they are starting to get a little bit ... some of the hawks are starting to chirp a little bit and they are starting to have optimism that rates are creeping back up. So here is my opportunity and I did this last year with you guys. You are all going to be a dot on the Fed plot chart and we will do a poll question here and see where you guys think rates will be next year.

**Slide #51 – Poll Question****1:19:05**

Hopefully none of you have been watching the Fed meeting today, they are talking about it and you're cheating and getting a head start on us. Do we think rates are going to be no change which is still where the fed was talking this year. Do we think they will raise it one time, anywhere from .25 - .50%. Or will they be super aggressive and go one large increase at a time and do less frequently like they did last time .50 to 1%, or be over one percent next year at this time?

Wanted to have fun with you guys and give you a chance to play Fed voting dot person for a few minutes. Give us an idea where you're thinking and I will tell you where I have been thinking. I can't speak for everybody here. We have different thought asks that is why we are a great team. Have different opinions and different directions. Did I reach 30 seconds and give everyone enough time to vote?

**Slide #52 – Pooled Money Investment Account June 2010****1:20:06**

This is a Historical view. Long term showing back. Up and down with the curve of the PMIA trails. Nothing super exciting just wanted to show again in an overall view. As I mentioned earlier on average the historical average life of PMIA is about 180 to 200 days, like Clockwork forever and ever. And now the portfolio has grown, as of June 30<sup>th</sup> of this year, up to \$190 billion. The average life has crept over 300 days. Yes we know. Yes you have a reason to ask if you would like the call but I will answer the question now. I

think it is a product of the environment. I am going to show on one of the last slides why I don't think it is as much of a concern as it sounds like. Next slide please.

**Slide #53 – Treasury Yield Curves**

**1:20:48**

Two or Three different investment environments with the yield treasury curve . The one at the very top was 2018. June of 2018. Next one down was June of 2012. The bottom one was June of 2020. Kind of shows a different environment and a reminder as Kristen said earlier we tend to stay three years and in so that is the left part of the charts. Next slide please.

**Slide #54 – Fed Fund Rate**

**1:21:15**

Kind of show you how the Fed fund rates have move around. It has done this before. We get higher rates as it comes down and very reactionary and using the tools to help keep the economy rolling along and keep everything working as it is supposed to be done. Next slide.

**Slide #55– Poll Question Results**

**1:21:43**

Let's see how everybody voted then we'll talk about what the Fed talked about in September. So 16% feel there will be no change, 61% in the .25-.50% range, few more hopefuls and only 4% are in the over 1% range. I would hope so, but that's hoping. But I don't think that's really what's going to happen. I think we're going to get one rate hike but I am not sure if it is a quarter of a basis point or will they do 50 and see how it goes. Again it will be if inflation keeps going it will be a big determining factor of the quantitative easing. I believe rates will have to be raised to fight inflation and I don't think it is as transitory as we keep hearing. I don't like that term so much anymore. Transitory is said for how many meetings now and it hasn't been transitory as it keeps going up. That was fun thank you for participating in that. We'll go onto the next slide.

**Slide #56 – FOMC Dot Plot 9/22/21**

**1:22:40**

If the Fed met in September of 21 and they probably have the same thought as you did. They actually kind of lean more towards ... like half they feel they can raise rates next year. The other half are sticking to .25 or .50 basis points ... that was a month ago or two months ago. A lot has changed since then. They were leaning towards 2023 as the first time we would see a rate hike, but I don't agree with that. Next slide.

**Slide #57 – PAR Values Maturing by Date and Type**

**1:23:04**

This is where I'm going to point out where I'm not so concerned about the average life. The red circle on the bottom left. This chart is on the web site every single month on the PMIA page on the reports that we do and this is our schedule of maturities. Yes the average life has crept up to over 300 days and this part didn't change where 50 pact of the PMIA tends to mature within four months. If you add it up at the bottom it's like 49.7 percent of the portfolio will mature within 120 days. Our investment philosophy never changed as the portfolio has grown. We do stick to use the barbell approach and I'll show you a fun chart here in a minute. And always wait more on the short side within six months. We have a clear view to have the forecast to cash flows within six months. It is harder to predict past that, as you all know things change. Knowing where we need to take money makes it easier for us to be comfortable where we are investing the money within six months. That is where you are going to see we're confident that we're going to stay liquid and meet our participant needs and the state's cash flow needs with how we have invested even though the (unintelligible) needs have crept out. I think it is just a product of the environment and how large the portfolio has got and our barbell strategy. We got the \$27 billion in June

on top of tax receipts only about \$5 billion went out past a year. We stayed the course and did what we always do and kept it on the short end. Next slide.

**Slide #58 – Coronavirus Aid ...**

**1:24:35**

Typical things that cross our minds and we think about on a daily basis. We listen to the fed. As everyone here is tired about hearing about the drought and California fires. But it does affect what we do. And we have really tried to help you out with your cares money or stimulus money in terms of depositing within LAIF. Next slide, I am closing up and we'll give it to Christina.

**Slide #59 – Traditional Barbell Strategy**

**1:24:57**

**Slide #60 – Barbell Emphasizing Liquidity & Flexibility**

**1:25:00**

Here is the typical par barbell strategy and one more slide we are heavily weighted on one side. The poor guide is straining on his right side there. On the short end of the investment world that is how it looks and hasn't changed. There was days in June where you say we did the ladder approach and put a little bit across the board from zero to six months to one year, to two years to three. We had to. Out of necessity. The overall strategy of what we do hasn't changed and we are staying the course. I like to remind people, If you have questions feel free to call us, e-mail us and we love to talk to you and not have you worry about it and talk amongst yourselves and create anxiety. We're always open to everyone for the tough questions. If we don't have an answer for you we will get back as soon as we can. And with that I will close up and pass it over to Christina.

**CHRISTINA SARRON:** Thanks Doug. Thank you for all of that.

**Slide #61 – Local Agency Investment Fund**

**1:25:54**

Hello everyone. I also wanted to thank Doug because he gave me hope about my son moving out of my house. He's 30. One can always use hope in this environment. First off I wanted to notate our new not instead of but additional web address. LAIF.treasurer.CA.gov. It might be an easier way to find us and that is available now. If we can move to next slide.

**Slide #62 – 2020-2021 Growth**

**1:26:27**

I know Jeff and Kristin hit on this already but I thought I would give the visual about where our balances were. We started off in July 2020 at \$32 billion and at print it was \$36 billion for August but September was also at \$36. And then the PMIA down there. It was a year ago about \$109. And then in September it was \$179 and you can see where Jeff was talking about on June 30th where we hit the \$193 It was a real difference. But the big thing was that LAIF went from being 28 percent of the PMIA the to just under 20 percent. And that is all the COVID dollars and the growth of the P MIA overall is just huge. I went back and I know Jeff mentioned it but when I went back and was looking at 2016 the PMIA overall was in the upper sixties. It has gone up a lot. Can we have the next slide.

**Slide #63 – Emergency Accounts**

**1:27:52**

So I know Jeff talked about this also and we do have COVID relief funds available. Accounts, some of you have taken advantage of them. We have about ten. And not a lot out of the over 2,000 accounts that we have. This is a separate account from the regular account. It has got a \$75 million maximum deposit. And there is the address there. And Jay is the one who can handle those accounts. Her phone number is there and you will see her picture at the end of the presentation. It is an extra account. And it will help you and

you can manage the interest separately. I know some of the fed requires that the interest also be spent on COVID relief. So there is that separate accounting process available to you. And can we have the next slide?

#### **Slide #64 – What Happens When I Schedule a Deposit**

**1:28:43**

Another administrative detail. I actually got to help staff this April through June helping out staff with tracking deposits and one of the things that I came across was people didn't know after they scheduled a deposit with us that they need to contact their bank and schedule with the bank to send us the money. And that was fun and I would tell people and they would say I didn't know I had the to do that. And that was one thing and I also learned my staff is super picky about my notations and that was interesting and I got in trouble a lot.

Then the other things that we learned were that if you schedule your deposit with an effective date. That is the date we start to pay you interest. So if we don't receive the money. We have to go back and make adjustments so we can not pay you for interest that you didn't actually earn and it is really important and my cash management team would like to hear this. If you schedule for an effective date that we actually receive your money that date. And if I can have the next slide please.

#### **Slide #65 – Our Team**

**1:30:13**

So this is my team. There is me. There is Lily in the middle and she is the operations manager. There is Janice and she is our new accounts and takes transactions, of course, and has been with us the longest. And she knows everything. And there is Jaya and she handles bond accounts and also the COVID account. Laurieanne, is the magnificent one who put together the webinar. Thank you to her for today. And she handles transactions. There is CHAI she handles transactions and account updates. Thank you to CHAI you would call her if you need to add people or subtract people. If we can have the next slide.

#### **Slide #66 – Contact Information**

**1:31:07**

This is the contact information for the office. Kristin, Jeff, Tracey, and me. And that is the phone number we actually answer. Hopefully you will call us because all we have been getting are scam calls. Next Slide.

#### **Slide #67 – Q & A**

**1:31:34**

That brings us to the question and answer period and I'm going to turn it over to Lily. She is going to moderate the questions and I have seen a couple come through. All of us are here to answer it. Jeff, Kristin, Tracey, myself and Doug. He's still on I hope. Lily, if you could go ahead.

**LILY OSORIO:** I will start with the ones submitted during the webinar and we received one from Allen and he asked "Do we know what the effect of ZILLOW selling back on the \$2.8 billion on loaned will be?"

**DOUG ROBINSON:** Want me to take a shot at that?

**JEFF WURM:** Yes please, I will defer to you.

**DOUG ROBINSON:** That is interesting I read they are under water by about 25 percent of all of the purchases. I think you can see they are just try to sell what they have losses on and maybe readjusting their thinking of when they go back in. They did a big program to speculate to the ultimate fixer upper show. 7,000 homes to buy and fix up and then rent out and ultimately sell. The comment is you saw the

chart with real estate at the high levels and maybe they see the same thing and yet they still bought properties and will incur a loss at these levels. That would be my comment. Maybe take it as some kind of a sign. Anybody else?

**JEFF WURM:** I am not touching that.

**LILY OSORIO:** All right. The next one we have that was submitted during the webinar is from Jeremya, he asked "Will LAIF's interest rates be increasing with the increase in treasury rates. About where will LAIF rates end in December 2021 June 2021. June 2022?"

**JEFF WURM:** Crystal ball question. Doug can help to. Doug and I have these conversations every quarter and are they have awesome spread sheets and charts he likes to work with. He's been pretty darn accurate. What I can say is yes as treasury rates move the PMIA rate will follow. We will not be as fast. Heck when it was a \$60 billion portfolio we compared it to an aircraft carrier we are not going to turn as fast as the smaller boats or even the destroyer. We are going to trail everybody in terms of making the move and again the size of the portfolio will allow us to probably move. I think we can keep up within six months. If the fed moves one time a year I think we will be able to stay the course with them and follow in lock step. So I would say, if you listen to the fed and you hear they are moving rates and know the PMIA is going to follow that. I really don't know. This is the most kind of chaotic stretch I have seen with the fed meetings and trying to track and understand where they are going to go and when they are going to do it. And we can't do anything until they do The market is correcting itself already and pricing what they anticipate a rate hike next year. You look at what rates pick up the market itself is third quarterish next year and with those opportunities we get the barbell out and picking up yield we haven't had in a while. And Doug do you want to add in commentary?

**DOUG ROBINSON:** That was great Jeff. You saved us all with LAIF as the rates came down so quickly it was a wonderful place to be to avoid the bottom of where we probably have seen rates hopefully. The other side of that is what we are experiencing. The great thing is that because the portfolio is so short you will catch it quickly. And I will never forget I was in a conference with a local chapter meetings with the CMTA. It was in '94. Bill Shurwood was giving it and someone and rates were skyrocketing and so one of the questions was would LAIF have enough liquidity to meet the redemptions from people removing the money from LAIF and quickly Bill said what you said Jeff How much liquidity is instantly available under those kinds of conditions. I don't know if we are going to be a 94 coming up in the next year or so. We don't know. But as Jeff was saying. The Fed has one heck of a battle with interest rates being forced up by the inflation numbers and maybe we will see some employment numbers. I have 20 basis points plus the loan amount. Whatever the quarter to date amount is for LAIF and add three basis points for the loans that are out there. I noticed Jeff you up-ticked to 21 basis points on the daily and that is going in the right direction.

**JEFF WURM:** It is funny you brought up '94. Doug and I have know each other ... I have a 1994 portfolio right here. You want to guess on what the PMIA balance was in '94? \$26 billion.

**DOUG ROBINSON:** Wow.

**KRISTIN SZAKALY-MOORE:** Come loong way.

**JEFF WURM:** In 27 years it has changed a lot.

**DOUG ROBINSON:** That is remarkable. Wow. That is a lot of money. And your pay has gone up with that gain right?

**JEFF WURM:** Yes. Of course.

**LILY OSORIO:** “What was the reason for the decrease in LAIF value in July of 2021?”

**JEFF WURM:** From June to July that is normal early year cash flow. I will defer the Kristin on that. She has a much better background.

**KRISTIN SZAKALY-MOORE:** There’s a lot of payments that go out in July. That definitely effects balances and payments for health care incur, retirement funds the primary cost of what happens in July is volatile for us and why we have to be careful how we position ourselves and the money we take in July and that is the primary reason.

**JEFF WURM:** To support that if you go back years ago we used to have to get revenue anticipation out every year to get the balance out cash flow. Way more goes out in the beginning of the fiscal year and way more comes in at the end of the fiscal year. That’s a snapshot of what you’re seeing. I was showing fiscal year end portfolio \$193 billion and now October 30<sup>th</sup> we’re in the mid \$170. Looks like we lost \$20 billion but it’s more just the normal flow of the money and how it is going to go. Everything is larger now in what we do. There is way more cash that comes in every day and way more cash that goes out and we live in a world where there is a net. Whatever is left over is what we are investing for everybody.

**LILY OSORIO:** I have a few submitted during registration. Next one “Is there is a difference between PMIA and LAIF performance?”

**JEFF WURM:** No the LAIF performance is based on what the PMIA does. In terms of the earnings that is how the office is compensated for the work that goes into it. We don't charge fees to dispense LAIF or ... they come out of the earns and they are in lock step together and it depends on what those fees end up being and what is interesting now is the outside loans have more than paid for the fees where you are earning. And LAIF is getting paid more than what the PMIA actually earns because of the outside loans that have been attached to it. They are in lock step. LAIF earnings is based on what the PMIA does. It is one in the same, but very small amount different.

**KRISTIN SZAKALY-MOORE:** We invest (unintelligible)... every morning. We don’t have a separate pot. And that’s just for LAIF (unintelligible)

**LILY OSORIO:** Okay one last one. It is “Do you think inflation will max out at five and a half percent or will it go higher and for how long?”

**JEFF WURM:** Good Doug didn't hang up yet.

**DOUG ROBINSON:** That is a great question. Put it this way. If Bloomberg consensus is correct then next week we will find the October to October year end number and it is projected to be 5.8. That would beat the number you are looking at and that is with a half of a percent increase just in a month alone. If you annualize that is six percent and then you look at some of these UPS ... I just got a message they are going to raise prices 5.9 percent, so that’s close to 6 ... the day after Christmas ... kind enough to wait until then. Mandalease which had if you like ritz crackers buy them today. They are going up six percent next year. You are going to start to see, it is going to be very interesting. It is a great question because what if we change the outlook we have decades and decades of waiting for lower prices or at least stable prices what if it gets in everybody's psyche that you better hurry up and horde today because it is more expensive tomorrow. The number we are getting out of the government, they are back ward look, so if corporations

start to apply what is currently being stated and individuals demand more and more wages which it is looking that way. Maybe the 5.8 is just the start. And I don't know. Like Jeff was saying let's hope we get the one percent Fed funds this time next year that would be wonderful for the pool rate.

**JEFF WURM:** I will add a question and follow with you Doug. I have been thinking about this. Do you think a lot of the inflation is it more, what do they call it the transportation of the products and getting out to everybody. We have the ships and all of the product waiting to be unloaded or a production problem or a combination of the two? I have for years said we got so efficient if we need something it's made so quickly it would be hard to see inflation take effect on that side. Clearly I was wrong because here we are.

**DOUG ROBINSON:** It is a great point. All of these things coming together with the slow down of global supply chain and everybody has plenty of money to go out there and spend and buy things and all of the pent up demand is coming out. And it is interesting. When you look there is a chart I saw the other day on the components of stuff. There is few things that is fully assembled in the United States that don't rely on suppliers from all over the world to have things into the product. The other thing I read recently was we have been ordering from China a lot of products of course. China is ... here's a number ... 12 percent of the cost for final product is labor. Our cost for final product in the United States is three times that amount. So the article I was reading suggested that as China wants to bring people more into the higher median income levels they want to put pressures on the rising prices and it will be interesting if their labor costs go up and it is reflected on the final product we buy here. Let alone our labor market here is in short supply in the bottom part of labor. If you are social security ... Some of us guys are coming up on that and you are going to get a 5.9 percent raise and everyone working saying I don't want a three percent raise I want the five percent raise. And you look at the quits rate, this job data, people can quit easily and find another job. All of that. Makes you think the Fed has a big job to do. Sure they don't want to raise rates and break the asset bubble. So they are going to have a challenge next year I would think. And maybe that is enough said.

**JEFF WURM:** Thank you everybody.

**CHRISTINA SARRON:** Lily anymore questions?

**LILY OSORIO:** No more questions. That was it.

**CHRISTINA SARRON:** All right. Well at this time that will be the end. Thank you. To our keynote speaker Treasurer Ma and thank you to Doug for spending time with us today and thank you for participating and this will be on the web.

**DOUG ROBINSON:** Thank you team.

**JEFF WURM:** Great job.

**DOUG ROBINSON:** Thank you everybody.

**KRISTIN SZAKALY-MOORE:** Bye.