California Debt and Investment Advisory Commission

Webinar Transcript

The Public Investment Portfolio: Differentiating Mutual Funds from Money Market Mutual Funds and Understanding Investment Pools

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Local governments typically need to invest a certain portion of their portfolio in investments that provide safety and liquidity. The most commonly used investments when liquidity is a priority are money market funds and local government investment pools (LGIPs). It is important to understand the difference between the investments that have a stable principal value and those with net asset values that fluctuate from day to day.

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Title Slide – The Public Investment Portfolio: Differentiating Mutual Funds from Money Market Mutual Funds and Understanding Investment Pools

Linda Louie: Good morning, everyone, and welcome to the California Debt and Investment Advisory Commission's webinar, *The Public Investment Portfolio: Differentiating Mutual Funds from Money Market Mutual Funds and Understanding Investment Pools*. I'm the education manager at CDIAC. Thank you for joining us for CDIAC's last broadcast in a series of nine webinars on the public investment portfolio. Before we proceed with our broadcast, I'd like to share some information and housekeeping tips. If you're experiencing any technical problems, please *[call]* GoToMeetings at 1-800-263-6317. Or you can try the website at the address on your screen. *Differentiating Mutual Funds from Money Market Mutual Funds and Understanding Investment Pools* is part of the money market component of this nine-part webinar series on public investments we have run through the summer of 2015. Each of the nine webinars in this comprehensive public investment series has focused on a category of statutorily authorized investments in a way to help viewers understand many of the features and risks and the assessments of these investments as they may or may not fit a local agency's investment needs or policy objectives.

The presentation slides for today's webinar are also available at the CDIAC website at the address on the screen. We have a number of different resources and recommended readings as well that are available on the website. You may visit them on the education web page. In 2000, CDIAC conducted a research study on investment pools in California. This publication is listed in the recommended readings to supplement your education. In addition, the 2015 edition of the CDIAC *Local Agency Investment Guidelines* and the *California Public Fund Investment Primer* are currently linked on CDIAC's main web page and at the address listed on the screen. If you'd like to view live captioning during the program, you can paste the address on the screen onto your browser or click on the link in the chat section at the bottom of your control panel. If you're looking to receive a certificate of attendance for CPE credit, you must be registered and logged into the webinar under your own name for the full term of the broadcast. CDIAC is now on Twitter, so follow us. You can follow the progress of our seminar opportunities, new publications, updated legislation, and new regulatory events, notices and much more. During the webinar you can submit questions to the faculty by using the box marked "Questions" at the bottom of the control panel. The speakers will address some of your questions during the presentation and some may need to be held until the Q&A session at the end. We'll certainly try to emphasize your questions during – to emphasize any education. If we run out of time during the Q&A session, we will certainly post any post answers on our website. All right.

Slide 2 – Disclaimer (03:04)

Linda Louie: Before I introduce our experts, we ask that you take note of an important notice on your screen. It's a disclaimer that basically shares with you that today's presentation is informational and doesn't constitute investment advice or recommendation or judgments. There are many risks, policy, portfolio, and suitability factors that have to be considered by an agency prior to making investment decisions. The posted replay of the webinar will not reflect any changes in market conditions or investment authority either. So today's webinar is designed to provide you with in-depth *[inaudible]* type of money market instruments and the types of local agency investment pools and the relevant California government codes. This will help you understand the differences and the important effect brought by on the SEC changes to the money market fund rules and the valuation of these instruments in the public investment portfolio. And finally, the speakers will provide a brief discussion with regard to analyzing investment pools, which includes money market funds as investment pools. With these thoughts in mind, let us introduce our presenters for today's webinar.

Slide 3 – The Public Investment Portfolio: Differentiating Mutual Funds from Money Market Mutual Funds and Understanding Investment Pools (04:13)

Linda Louie: Their complete bios and contact information are also on the education website, by the way. CDIAC has the great privilege of introducing Deborah Cunningham. Debbie Cunningham is the executive vice president and chief investment officer for the Global Money Markets at Federated. She is also a senior portfolio manager with additional responsibility for the

Tax-Exempt Money Markets and Municipal Investment Groups. Ms. Cunningham joined the firm in 1981 and has 29 years of investment experience.

Next, we have Nancy Jones. Nancy is a managing director in PFM’s San Francisco office. Ms. Jones joined the firm in 1989 and is responsible for investment advisory services in California. She's conducted numerous workshops and seminars for clients, staff, and board members on subjects such as investments permitted in California as well as the development of investment policies and internal controls and oversight to ensure safety of principal invested.

We also have Kim McCorstin. Kim is the administrator of the Local Agency Investment Fund, known as LAIF, as well as the operations manager of the Investment Division and an authorized securities trader for the Pooled Money Investment Account. She began working with the State Treasurer's Office in 2003. Prior to joining the Investments Division, Kim spent ten years working in the Conduit Financing and Investor Relations Section of the Public Finance Division. This included managing conduit bond sales for various state agencies and authorities.

And finally, we have Sarah Meacham. Sarah is the director of PFM's western region asset management practice. She joined the firm in 2005. Sarah manages client relationships for public agency clients located throughout California. Her responsibilities include providing a range of investment advisory and consulting services, developing investment policies, monitoring guidelines and strategy implementation. She provides clients with training, technical, and analytical support with respect to their investment portfolios. So with this great team of presenters, why don't we begin our presentation and turn this over to Debbie.

Deborah Cunningham: Thank you, and welcome, everyone. So glad you're able to spend a little bit of time with us here today to go over this very important topic of differentiating and understanding of the various investment opportunities from a public investment portfolio perspective.

Slide 4 – Mutual Fund Definition (07:00)

Deborah Cunningham: If you start with the very basics, the very basics entail some definitions. We thought that would be a good backdrop to begin this presentation. When you think of a mutual fund – what is a mutual fund? Mutual funds in the United States began, you know, in the middle part of the 20th century, and effectively, they're a vehicle for taking a group of pooled investments. So investors coming from individual and smaller entities that on their own would not have the capability of being in the securities market, but because the mutual fund takes those investments from the individuals and the others, they're able to pool those and come up with some buying power that allow them to collectively, for many investors, invest in various securities. And there are all sorts of mutual funds. There are equity mutual funds. There are fixed-income or bond mutual funds, and there are money market investment funds or mutual funds.

Slide 5 – Money Market Fund Definition (08:03)

Deborah Cunningham: Going on to the next page, the very specific definition of a money market fund. It's a subset of a mutual fund. So it's a type of mutual fund. And it's in the fixed income world, so it essentially is purchasing securities that have debt characteristics, not equity characteristics. And specifically, what differentiates a money market fund from a longer-term fixed-income or bond fund is the characterization of their securities as having very, very short maturities, 397 days or less, and having minimal credit risk. So essentially being the high quality asset class that if you're looking for a liquidity vehicle, which essentially is another part of the definition of a money market fund, is necessary. Short maturity, lots of diversification, minimal credit risk.

Slide 6 – California Government Code §53601(l) (09:02)

Nancy Jones: Linda asked us to let you know what gives local governments in California the authorization to invest in mutual funds and money market funds. The screen that is up now is from the code section, and the reason we wanted to go through it with you is that if the appraisal you put together pays, and so Sarah – if you have a printed copy, you really ought to just write down what Sarah is about to show you about how to get through this section.

Sarah Meacham: Sorry. I have a little bit of lag here. Okay. So what we did with 53601(l), which is the section of California Government Code that describes the rules for California local governments to invest in mutual funds and money market funds, we have broken it down into its parts that apply specifically to mutual funds and to money market funds separately. What's up on the screen here in the green and orange text, sections 1, 3, and 5, are what part of 53601(l) applies only to mutual funds. What I would point out and what is specific to mutual funds is that, you know, mutual funds globally can invest in anything really, but for them to be allowed for purchase by California local governments, those mutual funds have to limit their investments to the investments allowed by California Government Code, which are – that's what is showing here, subdivisions (a) through (k) and (m) through (q). Those are the different sectors that are described as permitted investments in 53601.

So a mutual fund to be allowed by code has to limit its investments by sector type and also maturity, so that maximum five-year maturity that we all operate under when investing local government portfolios in California also applies to the maximum maturity of a security within a mutual fund. The other requirements are that the fund has to have either two of the highest credit ratings, so two AAA ratings by ratings agencies, or it can have retained an investment advisor registered or exempt from registration with the Securities and Exchange Commission. That advisor has to have at least five years of experience managing those types of investments that are allowed by California Government Code and also has to have at least $500 million of assets under management. Pretty much any brand name mutual fund manager will fit this bill of (3)(B) having this experience and having these assets under management.

Now, number (5) of 53601(l) applies to both money market funds and mutual funds in part. The orange sentence there is the part of the code that limits local governments to only 20 percent in money market funds and mutual funds. The second sentence of number (5) limits local governments to no more than ten percent per mutual fund. This is something that we see when we're reviewing investment policies quite often, that this ten percent per fund has mistakenly also been applied to money market funds. And you can tell that it only applies to mutual funds because it references paragraph (1), which is specifically for mutual funds. So just something to note, something you might want to look at your policy about and fix. There's no reason not to limit the per fund of a money market fund, but the code does not actually require that.

So then addressing money market funds, 53601(l) paragraph (2) is specifically for money market funds. The difference here is that money market funds must be registered with the Securities and Exchange Commission, and that's really their only requirement for their characteristics here.

Nancy Jones: What I found very interesting in preparing for today is that there's a definition of what can go into a money market fund and a definition of what can go into mutual funds, but there isn't a definition of what money market funds may invest in. And the reason for that is that is limited by the SEC. So you would not be able to find a money market fund that didn't have securities that are permitted by California Government Code.

Deborah Cunningham: That's actually really good in the context of some of the changes that will be occurring to money market mutual funds because of rule and regulation changes. It should allow investors to continue to use them despite what will be characteristic changes coming in 2016. We'll talk a little bit more about that as the presentation goes on.

Sarah Meacham: Okay. So then the rest of the things applying to money market funds are the same rating requirements, or the fund will have retained an advisor. Again, any large, brand name mutual fund or money market fund advisor is going to have the number of years of experience and the assets under management to qualify. So, again, something that we see often that's a sort of mistaken conception about the way California code is written, a money market fund that you choose to use for your agency does not necessarily have to have a credit rating. It doesn't hurt to have a credit rating, but if the advisor has five years' experience and has at least $500 million under management, the fund does not technically have to have a credit rating because it's an either/or for this (4)(A) and (B). Again, number (5) applies to both mutual funds and money market funds. No more than a total of 20 percent.

Slide 7 – Money Market Funds vs. Mutual Funds (15:20)

Linda Louie: Quick question. How can an investor be assured there can be no equity investments in the fund? And is there an SEC requirement in order to be marketed as a money market fund?

Sarah Meacham: A money market fund per Rule 2a-7 would not be able to own an equity security.

Deborah Cunningham: That's correct. And even if you look at the longer-term fixed-income fund, so looking at the mutual fund side of it with the WAM no more than five years, the prospectus is the operative document that indicates what is allowed and not allowed within the various constraints of each individual mutual fund. So that's where you would look to make sure that there is no capability in a mutual fund, not a money market fund, for owning equity securities. The money market side of the equation, though, eliminates that just as a possibility.

Nancy Jones: Very often, a bank custodian will ask you where you want your money swept if you have a securities portfolio and there's some cash left over. They're usually going to ask you what fund you want to use for the remaining cash. That's when you need to ask for a prospectus to make sure you instruct your custodian to put the money in a fund that qualifies by law because the custodians hold money for other types of entities than local governments. So if you were a corporation, you might be able to sweep your money into something other than what's restricted for California local governments.

Linda Louie: Okay. Thank you.

Nancy Jones: So the next page we're going to talk about the difference between money market funds and mutual funds, and the most important concept that we're really going to discuss today is: what is a constant net asset value and what it means. You're going to hear a lot about that during this webinar. I think of a constant net asset value as being the price at which – I think of the net asset value as being the price at which you buy and sell a share. And if it's constant at a dollar, that means you're going to be buying and selling securities, buying and selling shares at a dollar. In the mutual fund, you will buy and sell shares at something other than a dollar probably. It could be $0.99 or $0.98 or $1.02. So that is the most important difference between a net asset value of a dollar and a constant net asset value of a dollar and a mutual fund when the value of the shares fluctuate.

Sarah Meacham: Technically, the net asset value is the ratio of a fund's market value to its amortized cost, and that's how it's calculated. The next most important characteristic of a fund or pool is its weighted average maturity or WAM. So a money market fund is required to have a WAM of 60 days or less. That is per the SEC. Mutual funds can have, as I mentioned before, really can invest in anything, so they could have a weighted average maturity or duration which runs the gamut. For California local agencies, though, that fund cannot buy any security longer than five years, and so the weighted average maturity would have to be less than five years as well.

Nancy Jones: The importance of the weighted average maturity is that the weighted average maturity drives the value of the share. And we're going to be discussing that later. So the SEC has set 60 days as the maximum number of, the average maturity you can have because that's what is going to hold the value of a share at a dollar, and we're going to be going through this later in the presentation.

Deborah Cunningham: And that's actually a number that has changed over the course of the last several years. That number originally, when the rules for money market funds came out from the SEC, was 120 days. That had a little bit more volatility associated with it on underlying securities than the SEC thought was tolerable over the course of years, and so they then changed it to 90 days. It's most recently in 2010 gone down to 60 days, and that's a reflection of a lot of the events that occurred in the marketplace or in the financial crisis of 2007 and 2008. It's a risk-mitigating number that, you know, ultimately will never go back up again but can continue to be shaved off and go down. But today, it stands at 60.

Sarah Meacham: Thanks, Debbie. So the biggest difference between a money market fund and mutual fund is that in a mutual fund the loss of principal is an acceptable characteristic. As Nancy mentioned before, you can buy a mutual fund share, you know, at $0.99. If rates fall, that share could rise to $1.05, and then you can sell it at a gain. If rates rise, the share price could fall and you would have to sell it at a loss, maybe $0.95 or you know, something less than where you bought it. So that's an important concept to understand when considering mutual funds for your portfolio. And because of that, we don't generally recommend mutual funds for public entity portfolios simply because of that ability to lose principal. You cannot hold a mutual fund to maturity, so you can't control whether or not you realize a loss when you need to sell a share. Juxtapose that with holding a security where if the market value declines, you have the choice to hold it to maturity and get back all of your principal.

Slide 8 – Risk Mitigation in Money Market Funds (21:33)

Deborah Cunningham: Okay, the next portion then would basically detail why it does make sense in an ultra-conservative strategy from a liquidity and cash perspective to use money market funds and how they've been designed by the SEC in the regulatory environment that they use and have to adhere to to be low risk. So the SEC has chosen to mitigate risk in money market funds by having very specific requirements with regard to credit risk, interest rate risk, liquidity risk and concentration risk. From a credit risk perspective, ultimately a fund must have 97 percent of its assets in first tier securities with no more than 3 percent of its assets in second tier securities. Ultimately, those are then further mitigated in the context of individual issuers from a first tier perspective can't go higher than 5 percent from a portfolio perspective. And second tier issuers can't go higher than half of a percent of a portfolio with no more than 45 days in the maximum maturity of those particular instruments. All being told, very few funds actually use second tier issuers at this point. Almost the entire universe of money market funds is relegated into that first tier credit risk universe. On the interest rate side of the equation, we already heard, you know, the discussions around the maximum final maturity of 60 days, so that's the…I'm sorry, the weighted average maturity of 60 days and how that's come down over the years from a regulatory requirement for money market funds. The final maturity of any particular instrument within a money market fund is defined as being no longer than 397 days. So a single instrument can go out, and you can buy a T-bill at 12 months or you can buy a short-term note at 397 days all collectively, though, at a weighted average maturity basis, the total portfolio must be no longer than 60 days.

There's a new concept, then, of weighted average life that was brought into the interest rate mitigation side of the equation by the 2010 amendments that govern from an SEC perspective how money market mutual funds are allowed to invest. Weighted average life, it takes into context the floating rate securities that are held within a money market fund. So floating rate securities are generally a core holding of money market funds, and it makes sense in a constant net asset value perspective because floating rate securities generally have their interest rates adjust based on what's happening to interest rates in the marketplace. So hopefully the Fed raises interest rates tomorrow, and if that's the case, the floating rate securities that are money market mutual funds will then be resetting higher because they're pegged off a short-term interest rate that will be heading higher if the Fed, in fact, does move interest rates higher tomorrow afternoon. So weighted average life takes into context the final maturity of those floating rate securities, whereas, weighted average maturity takes into account the next reset of those floating rate securities. So weighted average life, again, is a risk mitigation device on the interest rate risk side of the equation and it can be no longer than 120 days.

Liquidity risk is another area where the SEC has been concerned and has put in various requirements from a risk mitigation perspective. On the daily liquidity side of the equation, money market funds must maintain at least 10 percent in daily liquidity. And on a weekly basis, maturing securities that are within a one week time period altogether including the daily securities must never go lower than 30 percent. So 10 percent daily, 30 percent weekly help to mitigate any kind of a run risk from a liquidity perspective in a money market fund. And then lastly, from a concentration risk perspective, the SEC has input various requirements on diversification for individual issuers. I mentioned the first tier and second tier levels when we were talking about credit risk mitigation. They also have requirements from an industry perspective, and then the prospectus itself oftentimes limits concentration risk in any particular either country or sector of the marketplace, but again, that's where the prospectus limitations would come in, and concentration risk in general from an SEC perspective is mitigated through the requirements for maximum allowance on a per share holding and maximum allowance on an industry basis within the pools.

Slide 9 – Local Government Investment Pools (LGIPs) (26:43)

Sarah Meacham: Okay, so we're going to introduce the next kind of pool that local agencies in California can invest in, and those are local government investment pools. These are pools that are established by state or local governments, you know, for the use by other public agencies to pool their investments. The three most common kinds of pools that we see in California are the state pool run by the State Treasurer's Office, which everybody knows is the Local Agency Investment Fund or LAIF. The next kind are investment pools run by the county treasurers, and the last kind are joint powers authorities running pools like CAMP and CalTRUST, and these are trusts established according to state code. They invest exclusively in the securities allowed by California Government Code 53601. We are not going to address state pools ourselves because Kim is on the phone from LAIF to talk about those, so she'll talk about those after we talk about county pools and pools run by JPAs.

Slide 10 – County Investment Pools (27:54)

Sarah Meacham: County investment pools are permitted by California Government Code Section 53684. They are managed by the county treasurer. They are typically created to manage money for involuntary investors like schools and like the county departments, but some county treasurers do allow investments by voluntary participants like cities or special districts within their counties, but it is at the discretion of each individual county treasurer whether they do that or not. Some county pools have credit and/or liquidity ratings. Again, it depends on whether the county treasurer wants to have those, but the most important thing is how much the portfolios of these different county pools vary, and they vary quite a bit based on the different characteristics, permitted investments. So depending on what the county treasurer includes in their investment policy, what average maturity they want to have, what kind of withdrawal notice they want to require. And so those things depend on the risk tolerance of the county, the size of the assets in the county and the pool, and then the county treasurer's resources for managing the investments in that pool.

Slide 11 – Survey of County Investment Pools (29:14)

Nancy Jones: We wanted to be able to make some general statements about county pools, so we looked at S&P's annual survey of California county pools, so it was published last year. And what we discovered was there's hardly anything that we can tell you that's a generalization about a county pool. We looked at their weighted average maturity because that's very, very important, but the maximum maturity of a county pool is three and a half years and the minimum is less than three months, so we couldn't really make sense you out of that. So then we tried to look at the average, and there was nothing in there that we could figure out. So we went to the median to see what's the point above which and below which there are the number of days or years that pools are invested, and that came out to be 1.3 years. Half of the 55 counties that reported have weighted average maturity of less than a year and half have more. That didn't tell us very much. So we looked at the percent of assets that are maturing in less than 90 days. That's what S&P reports. It's probably a carryover. Next time they publish it, they should really publish it with 60 days. But as you can see, some have 100 percent of their portfolio maturing in less than 90 days, and some have as little as 6 percent. And although county pools typically pay out a dollar per share, we also wanted to see what their net asset value was, and S&P reported that the pool with the most liquidity had $1.40 per share. The pool with the least liquidity would have had a value of $0.91 per share. So if there ever were to be a run on the pool, the pool that had $0.91 per share would find itself in a shortfall position. What was interesting though was the median there, $0.99995, which tells us that maybe the majority of the county pools do pay attention to their net asset value and try and keep it at a dollar.

Slide 12 – County Investment Pool WAMs (31:24)

Nancy Jones: Then we tried to make even more sense out of the weighted average maturity. Sarah did this statistical analysis for you.

Sarah Meacham: We looked at what the normal curve would have been on the weighted average maturity data, which you can see plotted on the light blue line. We created frequency buckets so that we could do this analysis, and what you see here is where it shows zero and one, that means that there's one pool with a weighted average maturity under 100 days. There are five pools with a weighted average maturity between 1 and 200 and so on and so forth. We also plotted the mean, or the average, of the weighted average maturity, which turned out to be 480 days, which you can see is very close to that median that we showed you before in years of 1.3. So, you know, that didn't really tell us a whole lot because you can see here there is quite a lot of variance. Then, we plotted and calculated the standard deviation of these WAMs and found that two-thirds, or 68 percent, which is one standard deviation, gives you a range of 270 days to 690 days. That means that two-thirds of the pools that reported had their WAMs in between this range. So again, quite a lot of variance, not telling us whether there is sort of one strategy that is followed by the county treasurers, and really there isn't.

If you look at taking this a little bit farther, looking at two standard deviations where you see almost the whole picture runs the gamut 60 to 900 days. So if you're going to invest in a county pool, you really do need to look at your individual county pool and find out how that pool is managed before investing in it.

Slide 13 – Share Issued by a JPA **(33:32)**

Sarah Meacham: So the next kind of pool are shares issued by a joint powers authority. These are permitted by California Government Code 53601(p). There are two in the state: CAMP and CalTRUST. I'm sorry this is a little bit slow here. Both of those pools are managed by professional investment advisory firms. They are only allowed to invest in securities authorized by California Government Code 53601. They are available for use by all local governments in California. Their portfolios also vary based on the different objectives that those pools may have, the difference really being that CAMP strives to maintain a principal value constant at $1 per share, the CalTRUST money market fund does that as well. The two other CalTRUST pools have their price of their shares fluctuate.

Slide 14 – LGIP Features **(34:38)**

Nancy Jones: Years ago, in order to use a JPA, you had to join the JPA. But the law changed a few years ago, so anybody who wants to use a JPA like CalTRUST or CAMP just signs up for it the way you do for money market funds.

Sarah Meacham: And Nancy is going to through some of the features of the different LGIPs.

Nancy Jones: We looked at some of the features that we thought might matter to you and liquidity was one of them. And what you can see is that LAIF and CAMP and the CalTRUST Wells Fargo Money Market Fund all have daily liquidity if you give us notice by 10:00 or 11:00 and get money out the same day. That's typically true for county pools as well. Some county pools have restrictions on how much notice you have to give or on the amount. The only two pools where you have to give notice for a withdrawal are the two CalTRUST funds that operate like mutual funds, their short-term fund and their medium-term fund. The next thing we looked at is: can you get a dollar out for every dollar you put in? And the answer is you can do that for LAIF, for the county pool, for CAMP and for this CalTRUST money market fund over here. As Sarah has mentioned, if you have got a variable rate net asset value, you could get out $0.95 or $1.05 depending on when you need your money. As you would expect, all the pools are managed. LAIF is managed by the state. The county pools are managed by county treasurers, and CAMP and CalTRUST are managed by professional investment advisors.

The ratings are important for some of the pools that have gotten rated. LAIF and some county pools do not have ratings. Some do. The CalTRUST long-term fund, this medium-term fund here is also not rated. CAMP has a AAA rating. That is the highest rating you can get. The little “m” beside it means it's a rating for a money market fund. And the CalTRUST short-term fund has a AA rating. That’s the second highest rating you can get and the “f” has to do with the fluctuating shares for a mutual fund. And the S1 here is a volatility rating. Mutual funds get volatility ratings. Money market funds do not.

Slide 15 – LGIP Features (continued) (37:22)

Nancy Jones: Linda made it very clear she wanted us to tell you what the risks of all of the pools are. So on this page this is what we're doing. Every pool – LAIF, the county pools, CAMP, CalTRUST, the money market funds – all have the risk that comes from the underlying securities. There are some government funds, there are some government money market funds that invest only in Treasuries and agencies, so they have far less risk than the types of funds we're discussing today, which really can invest in the types of securities allowed by the government code. The only other risk really to pay attention to is when there is a mutual fund, in this case these short-term and the medium-term funds offered by CalTRUST, because they are like mutual funds, you do have a risk of principal loss. And Debbie mentioned this earlier and it's very important: there is going to be another round of reforms for money market funds, and the set of reforms is not expected to have any impact on LAIF, county pools, the CAMP pool or the longer-term pools offered by CalTRUST. It is going to have an effect on money market funds, so this is the CalTRUST money market fund, and the type of money market funds which Debbie has discussed and probably is going to discuss a little bit more.

Sarah Meacham: So we'll let Kim talk about LAIF now.

Slide 16 – Local Agency Investment Fund (LAIF) Agenda (38:51)

Kimberly McCorstin: Okay. Good morning. Today, I just wanted to give you an overview of the Local Agency Investment Fund, or LAIF, which will include a summary of LAIF statute; a review of the LAIF program and participation; the Pooled Money Investment Account, or PMIA, and LAIF oversight; the funds that make up the PMIA; the instruments currently invested in the PMIA; our maturity schedule; and we'll take a historical look over the last five years at the yield and then we'll discuss a little bit about what we see going forward.

Slide 17 – LAIF Statute Summary (39:22)

Kimberly McCorstin: All right. So the Local Agency Investment Fund, or LAIF, is a voluntary program. It was created by statute, more specifically California Government Code Section 16429.1. So this first slide gives you a summary of the statute. Of course, you can find the full text of the code on our website. I'm not going to read through this slide, but I will be touching on most of these points in the next few minutes. LAIF began in 1977 as an investment alternative for California local governments and special districts. The treasurer elected to use these monies as part of the PMIA, which gave local agencies the opportunity to participate in a major portfolio and earn the same yields at no extra cost to taxpayers. LAIF currently makes up about a third of the PMIA, and the LAIF balance as of August 31st was approximately $20 million *[$20 billion]*.

Slide 18 – LAIF Participation as of June 30, 2015 – 2,488 Agencies (40:15)

Kimberly McCorstin: All right. So this is a slide of our participation. As of June 30th, LAIF had 2,488 local agencies participating in the program. This includes cities, counties, special districts and our special districts consist of districts such as water, school, utility, fire protection, community services, non-profits, transportation and our quasi-governmental agencies. The majority of our participants invest in regular LAIF accounts. However, we also have bond accounts and these come in two forms, our regular bond accounts and trustee bond accounts. The regular bond accounts are set up by the issuer and the issuer manages the account. On the trustee bond account, the issuer would transact through a trustee, which is usually a bank trust department. So this pie breaks down the composition of our participants as of June 30th, which you can see special districts make up 64 percent of the participation with 1,599 accounts. We have 474 cities, 53 counties, 96 regular bond accounts and 266 trustee bond accounts participating in LAIF.

I wanted to briefly touch on LAIF operations. Participants can call in their transactions Monday through Friday from 7:30 to 4:15. If a withdrawal request is placed by 10:00 AM, you'll receive your funds the same day. Transactions can be scheduled up to ten days in advance. For cash flow purposes, we do appreciate a 24-hour notice for withdrawals over $10 million. Our regular LAIF accounts are capped at $50 million and they are allowed 15 transactions per month. However, our bond accounts operate a little differently. There is a one-time deposit with no cap and a monthly drawdown schedule is set up when the account is opened. We are currently in the process of setting up a self-service web portal, which we call LAIF Online, and this will allow our LAIF participants to initiate their own transactions online. This service will be available in the near future. So our interest is calculated and allocated quarterly. LAIF administrative fees are based on the actual cost to manage the LAIF program and they're deducted from interest earnings prior to allocation. The fees are calculated as a percentage of earnings and not assets under management. For many years, these fees have equated to less than a basis point for our participants.

A couple points I wanted to make. In the past, LAIF participants have had concerns about us being a state pool for the safety of their funds in the event of a late budget. In addition to being concerned that their funds would be raided by some other state agency, by our state agency officials or agencies. I wanted to assure you that your LAIF funds are safe by statute, which are Government Code Section 16429.3 and 16429.4. If there is a late budget, LAIF monies cannot be frozen. Participants will continue to have access to their funds on demand, and in addition, LAIF funds cannot be transferred or borrowed by any state official or agency.

Slide 19 – PMIA and LAIF Oversight (43:21)

Kimberly McCorstin: All right. So this slide just touches on the PMIA and LAIF oversight. I wanted to mention that the Pooled Money Investment Board, or PMIB, governs the PMIA. The board consists of the State Treasurer as the chairperson, the State Controller, and the Director of the Department of Finance. The government code is listed on this slide. The board meets monthly and is responsible for monitoring cash flows in and out of the treasury. The board also approves the investment policy, new commercial paper issuers, surplus money investment firm requests and AB55 loan requests.

In addition, the Local Investment Advisory Board, or LIAB, oversees LAIF. The LAIB consists of five members, with the State Treasurer, again, as the chairperson. The board generally meets twice a year, but we are in contact with our board members throughout the year. The Treasurer has now made these board meetings open to the public, so anyone can dial in to listen and ask questions. So for more information on this or for our schedules, agendas and minutes, you can visit our website or call our office. Contact information will be listed at the end of this presentation.

Slide 20 – PMIA Source of Funds as of June 30, 2015
Average Quarterly Balance -- $65.3 Billion (44:32)

Kimberly McCorstin: So this is the source of funds that make up the PMIA. LAIF is one of four components in the PMIA. For the quarter ending June 30, 2015, the PMIA averaged $65.3 billion. The largest piece of the pie, over half, is the Surplus Money Investment Fund, or SMIF. SMIF consists of available cash from special funds in the state which do not have investment authority of their own, in addition to those that do but choose to be a part of the PMIA. SMIF is relatively low in volatility. The second largest piece of the pie is LAIF, which is over a third, and LAIF balance consistently hover around $20 million – $20 billion, I'm sorry. Because LAIF funds can be withdrawn at any point in time, we make sure there is sufficient liquidity available by dedicating a portion of the PMIA investments in instruments that provide a high degree of liquidity, which you'll see on the next slide. The general fund is just around 16 percent and is fairly stable, but this is difficult to project. There are many deposits to and withdrawals from the general fund accounts that need to be considered when estimating cash flows. And the last piece of the pie is other funds, which are – they represent deposits from STRS, PERS, and Fish and Game endowment funds.

Slide 21 – PMIA Portfolio Composition as of June 30, 2015 -- $69.6 Billion (45:50)

Linda Louie: Kim, at one point did LAIF ever loan out money to the State? And if so, is that no longer permitted?

Kimberly McCorstin: No, we haven't, and that is no longer permitted, but what we did was it is now in the government code.

Linda Louie: Great.

Kimberly McCorstin: Okay. So this next slide is a snapshot of our portfolio. I want to note Government Code Section 16430 spells out our authorized investment. However, our investment policy is more restrictive than the government code. The largest category of PMIA investments, almost half, are Treasury bills and notes. By code we are allowed to invest in Treasuries with any maturity. As you know, Treasury bonds generally have 30-year maturities. However, by policy we limit this to five years, and in practice we haven't gone out more than three years.

The second largest category is negotiable certificates of deposit and bank notes, which is about 22 percent. These investments are deposits with domestic and foreign banks. They're required to be denominated in U.S. dollars, avoiding currency risk, and we currently have CDs and bank notes invested in six different domestic institutions and in institutions in nine foreign countries such as Australia, Canada, Finland to name a few. These securities are supported by the financial strength of those institutions issuing them, so our credit analysis is very important. In addition to standard banking risks, we monitor for domestic banks. Those headquartered in foreign countries require additional analysis. So we pay attention to the strength of the foreign country's economy, the political stability of the country, and governmental control over the banking industry to name a few. We do monitor the credit quality of these banks on a daily basis, and we are diversified by institution, country and maturity date.

Next is commercial paper, which is about 9 percent of the portfolio, and these are short-term and secured promissory notes issued by various economic entities, and it's typically to finance certain short- term credit needs or they're used as a source of working capital. We only invest in commercial paper of prime quality. The government code currently imposes limits on the maturity of 180 days and the amount of CP in which we can invest. However, legislation has recently been passed that extends the allowable maturity date out to 270 days. This will be effective on January 1st of next year. And you can also visit our website for a list of our approved CP issuers.

Next is our time deposit program, which is very important to us and comprises approximately 8 percent of our portfolio at $5.4 billion with 72 institutions participating in that program. This program was established in 1945 to place deposits with eligible California institutions, which are banks, savings and loans, and credit unions. The deposits are then reinvested in the communities in which they serve. These funds are collateralized at a minimum of 110 percent and the institutions generally receive lower rates than can be obtained from other sources, They must maintain a satisfactory or better Community Reinvestment Act, or CRA, rating to be eligible to participate in the program. The yields are priced on the 3- and 6-month Treasury bill plus a small spread, which is based on the credit quality of the institution.

So agencies at 13 percent include federal agencies issued by Federal Home Loan Bank, Freddie Mac, Fannie Mae, Federal Farm Credit Bank, in addition to supranationals. These investments include longer-term debentures and/or short-term discount notes. One of the supranationals we invest in is the International Bank for Reconstruction and Development, which is the world green bond program. We currently have $250 million for World Bank Green Bonds on the portfolio, along with $50 million in a green bond program underwritten by the International Finance Corporation, or IFC, and $50 million in Inter-American Development Bank, or IADB. These programs have provided us with a good return while providing financing for worldwide projects to combat climate change.

Loans on are our portfolio are really small, about 1 percent, and this is comprised of short-term loans to the general fund to even out cash flows and AB55 loans, which provide startup funds for authorized bond finance projects. Once the bonds are sold, these loans are paid back from bond proceeds. We have a very small amount of mortgages left on the portfolio that will be maturing in the next couple years, and these are California-only, 30-year fixed with no subprime loans.

I also wanted to touch on our credit analysis. We do have a credit manager assisted by a staff member whose responsibility it is to monitor the credit ratings of our currently approved issuers as well as research possible new issuers. We subscribe to the three major credit rating agencies, and we have a credit committee that approves new issuers. When evaluating new issuers, we will research the issuer's credit ratings as well as the credit rating agency comments. We'll look at financials, the country of origin, the industry in which it operates. We also talk to the Street to see how those instruments are trading, and we also need to take into account how well it fits into our current list of approved issuers.

Slide 22 – PMIA Par Values Maturing by Date and Type as of June 30, 2015 (51:21)

Kimberly McCorstin: Okay, so this slide illustrates for you the investments we have by maturity date, which is the number of months and then years. In essence, this is an aging of our investments. The year bill is a favorite of ours because they're issued every month, giving us a liquidity ladder. And we do purchase these every month. As of June 30, 2015, we had $33.1 billion in Treasury bills and notes laddered over the next three years. We do the same thing for our other programs. Note how the time deposits, agencies, commercial paper, CDs and bank notes mature over the course of time. What I wanted to show you is how this slide illustrates the liquidity of our portfolio. If you add up all the investments that mature within the next 90 days, this adds up to $22.4 billion, which covers the balance of LAIF, which as I stated is approximately $20 billion. In addition, we can cover about half the portfolio in six months. So the PMIA is truly a short-term portfolio with an average life of approximately – it was 210 days as of yesterday.

Slide 23 – PMIA Average Monthly Yield Comparison (52:31)

Kimberly McCorstin: Okay, so this slide shows you the PMIA yield as compared to the actual Fed funds rate, or the overnight lending rate, and the Standard & Poor's Government Investment Pools index rate over the last five years. We don't use these as benchmarks, but we want to be following in the same general direction. And as you can see, the shape of our curve closely follows the shape of the Fed funds and S&P GIP curves. By the way, the S&P GIP index is comprised of pools that invest in the same types of securities that we do.

Slide 24 – A Look Ahead (53:00)

Kimberly McCorstin: So I wanted to take a look at what we see in the future. First off, we'll continue to do what we're doing. We are a short-term buy and hold portfolio. So we'll continue to take a balanced approach, which will continue to focus on our primary objectives, which are safety, liquidity and then yield. Safety, which has been discussed in this webinar series, is the preservation of principal. So we'll continue to concentrate on safety through asset allocation and risk assessment. We'll continue to diversify our investments by type, credit and maturities. We'll also continue to purchase high-quality, short-term instruments. When we do approve new issuers, they'll be top tier issuers. When we feel there are any threats to a geographic area or a particular issuer, we'll act accordingly and reduce our exposure to particular areas if need be. Also, we'll continue to look at U.S. agencies and pick those up when we see value of in them and when they match the dates that we need. Liquidity is the second most important goal of our portfolio, and that means the availability of principal for our participants. So we will continue to concentrate on liquidity by purchasing an appropriate number of Treasuries, both bills and notes, and we'll continue to look for value every day and will continue to closely monitor the liquidity. Okay. For yield, we look for a prudent return, which means a safe and justified yield. So we'll look to make a rate of return consistent with market conditions. However, do expect us to follow the market. When interest rates do start to go up, our portfolio is well-positioned to follow these moves.

We're very transparent, and you can take a look at our PMIA investments on our website at www.treasurer.ca.gov. You'll also find our investment policy, statutes, and various performance reports there as well. Our monthly reports will show you our daily transactions. The quarterly report shows the market valuation of our portfolio. And our annual report gives you an overview of programs and a summary of investments and earnings. In addition, we send out a weekly performance report every Wednesday to our LAIF participants that have subscribed to our electronic distribution list. So if you are a LAIF participant and are not receiving these reports and would like to, please visit our website to sign up or feel free to give us a call anytime to get signed up. So I hope this gave you a good overview of LAIF. There are numerous investment options out there for local agencies, so it really comes down to what your needs are and which program or programs best meet those needs. Near the end of this presentation, Nancy and Sarah will be reviewing some of those things to consider when you're deciding where to invest your money.

Slide 25 – Overview of Key SEC Changes to Money Market Fund Rules (55:45)

Kimberly McCorstin: I think we're going to go on to Deborah. Debbie.

Deborah Cunningham: Sorry. I had to take it back off mute. So the next portion of the presentation is going to deal with some of the key changes that are happening from a rulemaking perspective with money market funds – we alluded to this earlier in the presentation – that are called the 2014 amendments. Sort of a misnomer in that that's when the amendments were brought forth and publicized. In actuality though, the implementation of these key rule changes doesn't occur until October of 2016. So still over a year away. The reason for the very long time of implementation has to do with the extent of sort of operational and programming changes that are necessary in order to accomplish some of these structural changes. When I referred back earlier to the 2010 amendments that came about as a direct result of some of the problems that occurred in the cash markets in 2007 and 2008 with the financial crisis, the changes that occurred in 2010 were basically risk mitigating from a portfolio perspective. So dialed in a little bit of the interest rate risk that could be taken. Dialed in a little bit of the liquidity risk that could be taken. Dialed in a little bit of the credit risk that could be taken.

In contrast, the 2014 amendments, which I am going to focus on for the next several pages of the presentation, are more operational or structural in nature and don't really change a whole lot of what's happening from an investment perspective. So the first key change is a definition of retail investor. We've all thought, you know, historically and classified things as these are institutional or retail, but the SEC decided that they really needed a very clear definition if they were going to exempt the retail investor from some of these structural changes. The retail definition that they gave us was actually a fairly generous one and is on the current slide and basically says that no matter what the process is of getting to a beneficial owner, whether it's through intermediaries or trusts or other types of accounts, as long as at the end of the day the resulting investment decisions are made by a beneficial owner that is a natural person, then that natural person constitutes a retail investor and as such will be exempt from some of the changes that are going forth in 2016 to the funds and how we conduct business in them.

Slide 26 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (58:34)

Deborah Cunningham: The retail money market fund is a money market fund that is designing itself to just be owned by beneficial owners that are natural persons. So they want to be exempt from some of the changes that we're going to talk about, and as such, they are designated themselves as retail money market funds. Beneficial ownership is effectively based on who indirectly or directly is in charge of the voting and the investment power for that particular, for the control of that particular person's, or that particular pool of cash.

Slide 27 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (59:12)

Deborah Cunningham: Some of the retail fund examples that the SEC provided us with that necessarily might not have been thought of generally speaking on a historic basis as retail can include omnibus accounts. They basically are looking to get again through the layers of intermediaries a Social Security number that is a unique identifier back to a natural person. And then, you know, some ideas about natural persons would basically be those that are mentioned here: investment accounts in which only natural persons have a pecuniary interest in the account; tax advantage savings accounts such as retirement, college, or health plans. These would be considered retail because of the underlining nature of the natural persons at the base level. Personal trusts that are established for the benefit of natural persons. Estates, again, because they go back to the natural person in the context of the settlement of that estate.

Slide 28 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (1:00:12)

Deborah Cunningham: The SEC also provided us with some examples of accounts that are not considered retail. Obviously, businesses, corporations, partnerships, limited liability companies, those are all necessarily ones that require tax identification numbers as opposed to individual Social Security numbers, and as such are not considered retail in the context of this SEC definition. State and local governments are not considered retail. There are certain types of accounts that could be established by those state and local governments that ultimately have natural persons at the bottom of those lists, but for the most part, the state and local government portion of the investments would be considered in the institutional category and not the retail category. Defined benefit plans, again, where the benefits are provided by the employer, not to the employees, but ultimately the decision making is made by the employers. And endowments necessarily would not qualify as retail money market funds.

Slide 29 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (1:01:21)

Deborah Cunningham: Now, why is retail then an important thing? And it's one of those items that allows you to be exempt then from some of the key changes that are being made in 2016 to the money market fund investment requirements. The two key changes that would be ideal to be exempt from are 1) floating the net asset value of the mutual funds, that is like a money market product; and 2) having the capability of imposing gates and fees to that money market fund. Let's start with the floating net asset value. Basically, institutional prime and institutional municipal funds starting in October of 2016 must now price their securities on a market value basis carried out to a tenth of a penny – I'm sorry, a hundredth of a penny, as opposed to the penny rounding which is what's been common since the money market industry began back in the early 1970s. So instead of having a $1.00 NAV, the $1.00 NAV actually has four digits associated with it to the right of the decimal point. And therefore, very small changes in interest rates and spreads and credit conditions in the marketplace can cause that fourth digit to change. Just to give you an example: with a $1.00 price, interest rates could basically be withstood, interest rate changes could be withstood up to about 350 basis points with a 60-day weighted average maturity product before that $1.00 price would round down or round up to $0.99 or a $1.01. So substantial market moves that, you know, heretofore are not something that's commonplace on a regular basis. Contrast that to the floating NAV as defined by this four-digit pricing carried out to the hundredth of a penny. Ultimately, about three and a half basis points change in the marketplace from an interest rate spread or credit perspective is what is going to be able to be tolerated. So a much different perspective on whether that fourth digit, which is zero, actually is going to change on a regular basis.

Slide 30 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (1:03:51)

Deborah Cunningham: Okay. When we look at an SEC requirement for a floating NAV, basically there are two exemptions to the types of funds that don't have to impose this market value pricing on a daily basis. And they are retail, as I was explaining before, money market funds, as well as government money market funds. Also, the reason that they're able to maintain a $1.00 NAV and going back to some of the things that Sarah and Nancy were saying earlier about the pools being able to maintain a constant net asset value is because they're allowed, the SEC is permitting those particular types of money market funds to continue to use amortized costs for pricing. So amortized cost is a calculated way, an accounting methodology of pricing securities that basically accrues or accretes values from a discounted or premium price back to par for those individual securities when they mature. And as such, it permits and is very simple, then, for money market funds to maintain that stable net asset value using that amortized cross-pricing mechanism.

Institutional prime and institutional municipal, although they are required to float their NAV with the four-digit mark-to-market pricing, if they own securities that are 60 days and less in final maturity, those particular instruments will be allowed to use amortized cost pricing, too. Now, amortized cost pricing I will mention is premised on the fact, the allowance is premised on the fact that it does reflect normal market pricing. So normal market pricing for money market securities is going to be required by all funds, it's just a question of whether or not that fourth digit, the third and fourth digits are required from a transaction perspective for the underlying shareholders that are in that product. Government and retail funds are, again, allowed to maintain their two-digit pricing, but they do have to monitor on a regular basis and post their shadow daily price. Those of you that are in money market mutual funds or even the local government investment pools at this point are very used to seeing a market value price posted on a daily basis carried out to four or five digits. The difference in this rulemaking is that for certain subsets of the sectors of funds, institutional prime and institutional municipal, they will have to transact at that four-digit NAV rather than just post it as is currently the case.

Slide 31 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (1:06:44)

Deborah Cunningham: The next major change to the money market fund rulemaking in 2016 is to allow for the capability of imposing a fee or a gate. And again, there are exceptions to this. The government fund sector in money market funds is the exception. So government money market funds do not have to have this language. Essentially, what this language requires for all other types of money market funds is that boards have the discretion to impose either a liquidity fee or a redemption gate if the weekly liquid assets that we were talking about from a risk mitigation perspective earlier, if those fall below 30 percent. So 30 percent is the tolerance level. They go down to 29 or 28, the board has to discuss whether or not they should impose a fee, then, to allow redemptions or put up a gate and stop redemptions. Again, there's another trigger at a level when weekly liquid assets would fall below 10 percent, and again, the board has discretion as to whether to act. In my estimation the likelihood of a fee or a gate imposed post this implementation is no more such than it is today. Ultimately, it just requires checkpoints for boards to now address and identify key, specific issues that they want to, you know, understand in the path of the investment product, the money market mutual fund.

A credit event ultimately is what would more than likely impose, cause the imposition of a fee or a gate. And if you go back in history, those fees or gates have been implemented by other types of products historically. Florida has a local government investment pool that imposed a gate at one point back in 2007. The money market industry had a mutual fund, Putnam, as well as a couple of others, that imposed gates in the September 2008 time period. This now requires boards to review those types of actions, but again, the likelihood of them being required or imposed is probably no more than it is today. It's a credit event that would call such a necessary action into play.

Slide 32 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (1:09:15)

Deborah Cunningham: Fees and gates, as I mentioned, are applicable to all money market funds with the exception of government funds. There is a liquidity fee imposition of two percent or a gate that would addressed by the board if the weekly liquid assets fell below 30 percent. There would be a one percent fee if the weekly liquid assets then fell below ten percent unless the board decides otherwise and it's not in the best interest of shareholders. A gate in this case would be mitigated to no longer than ten business days in any 90-day period. The fee or gate must be removed as soon as the weekly liquid assets in a product go beyond 30 percent or back into the positive territory from a risk mitigation perspective.

Slide 33 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (1:10:09)

Deborah Cunningham: So those are the key changes that people and funds are trying to avoid at this point. This next slide just basically gives you an overview of the time frame for implementing some of the key changes in this rulemaking to money market funds. July of 2014 was when the SEC actually voted and approved these new rules. It was published in the Federal Register in August of 2014. The amendments themselves became effective 60 days after that in October of 2014. There was some compliance with a new form, Form N-CR, which is basically a new disclosure form which happened in July of this year. In October of this year we'll begin collecting historical data on the weekly and daily liquidity and market NAV information for publishment in the April 14th time period along with an additional disclosure form, Form PF. And then ultimately, the large implementation of changes with the floating net asset value for institutional prime and institutional municipal and fees and gates implementation for everything other than government will happen in October of 2016.

Slide 34 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (1:11:27)

Deborah Cunningham: This next chart just gives you a very distinct overview of the various types of money market funds and how they're impacted by these rules that will be implemented in 2016. So for U.S. Treasury-only money market funds, they will remain a constant or stable net asset value, and they will not have liquidity gates or liquidity fees and redemption gate capabilities. Government money market funds, those that can own Treasuries as well as government agencies, will also maintain a stable or constant net asset value and not have the capability of imposing a liquidity fee or redemption gate. Retail prime and retail municipal will both be able to maintain stable or constant net asset values, but yet, will have the language that allows them to insert a redemption gate or impose a liquidity fee if certain events were met. And then the bottom two categories, institutional prime and institutional municipal, which is for the most part where state and local governments would fall, are required to have a product that floats its NAV calculated out to the fourth digit beyond the right decimal point of the dollar and that have the capability of imposing a gate or a fee.

Slide 35 – Overview of Key SEC Changes to Money Market Fund Rules (cont.) (1:12:58)

Deborah Cunningham: And again, this next slide summarizes by saying that amortized costs, which is the backdrop to how stable or constant net asset values are derived. And I think we said at the very beginning of this webinar that we would be hitting on a few key points, one of them being stable or constant net asset value products. And we've, I think, been true to that word, but amortized cost is the functional equivalent of allowing that to occur. And it's from a money market perspective still permitted for government money market funds and retail money market funds. Market-based pricing for transactional reasons will need to be implemented for institutional prime and institutional municipal accounts, and we kind of went through some of the definitions of those.

Slide 36 – Money Market Fund Rules Will Not Apply to LGIPs (1:13:52)

Sarah Meacham: So we mentioned it before, but we just wanted to reiterate the rules that Debbie described that are changing for money market funds are not going to apply to local government investment pools, and the reason for that is the difference in how money market funds and LGIPs are regulated. So money market funds are regulated by the Securities and Exchange Commission. LGIPs are not regulated by the SEC, and they're not really regulated by GASB either, but they do take certain accounting and reporting guidance from GASB. And that will be important because if LGIPs follow the GASB rules, then they will be able to still provide or quote that stable net asset value. So LAIF, county investment pools and other LGIPs are not required by the new SEC rules to move to a floating NAV, and that's an important distinction between LGIPs and money market funds.

Slide 37 – Why Weighted Average Maturity Should Matter to You (1:15:00)

Sarah Meacham: Sorry. We're having a little bit of technical difficulties with this slide. Okay. So Debbie mentioned before about money market funds with a WAM of 60 days or less being able to withstand an interest rate increase of 3 percent. And so we're demonstrating that here, you know, we told you at the beginning that WAM was very important, and we're going to demonstrate why here and on the next page. So if we start at a net asset value of $1.00 regardless of the type of fund or the weighted average maturity, which you can see here across the top, and then if rates are unchanged, those funds will be able to maintain that $1.00 net asset value. But as rates rise, that will impact the various funds based on their weighted average maturity. The longer the weighted average maturity of the fund, the farther the net asset value will fall away from $1.00. And you can see that here as these rows turn red for the longer WAM funds like mutual funds. And we're going to give you an example of how this will impact your principal if you invest in a stable NAV fund, a variable NAV fund and a longer WAM floating NAV fund because the impacts will be quite different based on the type of fund and the weighted average maturity of the fund. And we're going to use an interest rate increase of 1 percent as an example, so you can see here for a fund with a WAM of 60 days, the NAV would fall from $1.00 to $0.9983. If you were looking at a mutual fund, the WAM would fall from $1.00 to $0.985 if you had a 1½-year maturity.

Slide 38 – Stable vs. Variable NAV (1:17:20)

Sarah Meacham: So, you know, looking at how this impacts the value of an investment based on the kind of fund and the WAM of that fund, first we look at a stable net asset value LGIP. I do want to point out that when we talk about a 1 percent rate increase, for simplicity, we are talking about a rate increase that happens immediately or overnight, and we went with 1 percent because that's much more reasonable than something a little bit higher than that. But if you have an investment in a stable net asset value local government investment pool with a WAM of 60 days, the WAM would fall based on that rate increase to $0.9983. Because this pool will still be able to round its net asset value to a dollar, your share price will still be a dollar and so you will not lose any money on a $10 million investment or $50 million investment.

Nancy Jones: If rates rise by 1 percent overnight.

Sarah Meacham: Right, if rates rise by 1 percent overnight. So it would be no loss on principal on a stable net asset value local government investment pool. If you are invested in a variable net asset value money market fund and this is post reform next October 2016, with the same weighted average maturity and the same net asset value, the share price on those funds would also be $0.9983 because the fund is no longer allowed to round the $0.9983 to $1.00, which means that if you were to take your money out of that fund on that day, the loss on $10 million would be $17,000, and the loss on $50 million would be $85,000. And then, if you were looking at investing in a longer variable net asset value mutual fund or local government investment pool – here we are showing you one with a 1½-year average maturity – if the net asset value would have fallen from $1.00 to $0.985 based on the 1 percent rate increase, and this fund can also not round up to $1.00, and so the share price would be $0.985, which on a $10 million investment would result in a $150,000 loss of principal and $750,000 on a $50 million principal investment. So we think these are, you know, this is a significant impact on your investments, and when you're considering how you're going to manage your cash, you're certainly going to have to think about how a variable NAV and changes in interest rates will impact your ability to get all of your principal back on these variable NAV investments.

Slide 39 – Pool Safety (1:20:27)

Nancy Jones: And as Debbie said for the money market funds, if you choose to move to a government fund, these rules, the NAV will remain at $1.00. So there will be lots of options and I think there will be lots of news in local government organizations so that you'll know what your choices are when the time comes. We're going to conclude the session today by talking about how do you decide whether or not a money market fund, a mutual fund, a local government investment pool, LAIF, county pools are right for you. And the next few pages have to do with any kind of a pool.

Slide 40 – Analyzing Investment Pools (1:21:17)

Nancy Jones: It seems pretty obvious that you would want to know whether or not the pool meets your investment objectives. If somebody is looking for a short-term liquid investment as part of their investment objective, a pool would certainly be one of the choices you might want to make. You also want to know whether or not you are okay with all of the investments allowed by that pool. Some people who do not have the ability to safely invest in securities other than Treasuries and agencies might have an investment policy that says that that's all that they are allowed to invest in, but those same people might say that LAIF, the county pool and the LGIPs have professional managers, and so they're going to be okay investing in a pool that is less restrictive than their own policy because they trust the advisors who are managing the pools. I think we've talked about WAM throughout the day, and you just have to decide whether or not this is something that's going to matter to you if you're going to be drawing on the pool for liquidity. And then it's important to understand the manager's objectives for the portfolio. The reason I say this is a lot of the short-term pools have as an objective to meet daily liquidity. And for most of the pools, the daily liquidity need isn't known until that day. So if you have some money that does not need to be liquid, a liquid pool may not be the place to put that money. You might want to look elsewhere or buy securities to meet that need because there's a high likelihood that you will earn more if you're in a security or portfolio that has a longer average maturity. So you might not want all your money in any pool.

Slide 41 – What You Need to Know When Making Comparisons (1:23:22)

Nancy Jones: Years ago, the CMTA and the CSMFO and maybe even CDIAC got together and published a list of questions that you should answer before you invest in any pool so that you know the answer. And the first question was: how do they calculate interest? The second question was: how often do they make an interest payment? Monthly? Quarterly? The next question was: if you are in a pool that's actively managed, does that pool pass along the gains and losses?

Sarah Meacham: And anecdotally, this is somewhere that I think you would want to think about how a county pool might treat the difference between voluntary and involuntary participants in the pool. Do they treat them differently? If there is a loss in the county pool on a security, and that, you know, impairs the pool's ability to pay out, or if the pool has longer weighted average maturity which could impair liquidity when rates rise, and the pool is forced to sell something at a loss to make liquidity, does the pool treat voluntary and involuntary participants differently on paying out those funds? Would the pool be able to freeze withdrawals or would they pay out at less than a dollar? So those are the kinds of things you need to think about when you’re asking how does the pool treat gains and losses. And that's just, sort of, one potential example there.

Nancy Jones: Another thing to think about are the administrative expenses of the pool. Kim talked about the miniscule administrative expenses that LAIF charges. County pools charge very different prices for the use of their service, so it's important to know what their charges are for and what you will be charged to use their pool. For money market funds, mutual funds and the LGIPs, the prospectus for all of those will tell you what the administrative expenses are. And in most cases, I think all cases, the administrative expenses are netted from yield. So in some ways it's moot, but it's also nice to know what they're getting. Then you want to compare the yield to market yields. You really don't want to have a fund that’s paying a whole lot more or a whole lot less than the market. So you just want to make sure you take a look and do a little bit of a yield history before you invest in the pool. And you also want to know where are the cash and securities being held? Today, the law requires that all cash and securities be held by a third-party custodian, so that's probably a pretty simple criteria, but you ought to be able to answer the question.

Then you want to know, you know, are these funds independently audited? Yes or no. You want to make sure that their reports are available to you upon demand. And you want to know whether or not there are limitations on the investments, how much you can invest, what the minimum is, what the maximum is, and if there are any kind of a withdrawal requirement. That is the end of the formal presentation.

Slide 42 – LAIF Contact Information (1:26:59)

Nancy Jones: We thank you for participating today, and we're certainly all of us glad to answer any questions if Linda, if you have any that have been sent in or if anyone wants to send some in now.

Slide 43 – Questions (1:27:11)

Linda Louie: All right. Thank you very much. We'll take a moment. Our timing is good here. We're to go to 11:45.

Slide 44 – Thank you for your participation (1:27:21)

Linda Louie: So if anyone in our class here would like to submit some questions, we'll take a moment to do so. We had placed contacts on the slides, so if you're interested, you can certainly ask them as well as. And again, our speaker contacts are on our website. I thought the speakers did a really good job on behalf of CDIAC in terms of framing the differences between mutual funds and money market mutual funds and local government investment pools. It gives you a lot to think about on how to manage your cash and some of your investment decisions and strategies. Nancy had referenced the study on the local government investment pool that CDIAC had conducted, and I mentioned that in the beginning of our introduction. That was a study conducted in early 2000, which was kind of a cursory study that looked at California's market at that time regarding the different investments and local agency investment pools and who is investing and some of those various considerations that we just went over in our last slide. All right. It doesn't like we're having very many questions going in. Well, here we go. We do have one. Let's see. LAIF pool money with the PMIA, does that include the SMIF funds, and who invests in those funds? That's for Kim.

Kimberly McCorstin: It does. If you go back to our slide that shows the source of funds, SMIF is included and those are really state agency funds such as DWR, Lottery, those type of funds.

Return to Slide 20 – PMIA Source of Funds as of June 30, 2015
Average Quarterly Balance -- $65.3 Billion (1:29:04)

Linda Louie: State funds. Okay.

Kimberly McCorstin: That's it. So state agencies.

Linda Louie: Over 51 percent. All right. Good. Any other questions from the audience? Let's take a second here. Maybe not. All right. You do have the contact information to our faculty here if you have any follow up questions. So before we close, we do want to get feedback from you on this webinar, so you'll receive a post survey in email sometime today. We hope that you take the time to respond to that. The whole series has been meant to be kind of a baseline education informational piece for you, so that you understand public, local government investment code and so that you begin to understand what you can and cannot invest in here in California as a local government official. So as we progress along through the months, CDIAC would like to share that we'll have additional education for more in-depth discussion and analysis on this particular topic of investment pools and money markets as part of this capstone seminar that we are planning to do in collaboration with the California Municipal Finance – I'm sorry, California Municipal Treasurers Association, and that's slated for January 2016 in Southern California. And the goal of that particular two-day seminar will be to help you to excel your knowledge on the specific investment instruments as we've identified them in this nine-part series program. So we will certainly take more analysis, look where you've got more of the base of the definitions and understanding of the code and some general considerations in investing these in your portfolio. Registration for that class, that two-day class will probably open up in another month as we're working right now with CMTA on the agenda.

So in closing, we hope that you've gained important information in this program, and we'd like to really thank our great presenters, Deborah Cunningham, Kim McCorstin from LAIF, Nancy

Jones and Sarah Meacham from PFM for your expertise and your dedication of time and your practice in making this webinar informational and educational for our audience. I'd also like to thank our staff here, Susan Mills and Sandra Kent, for their work in producing our webinars throughout this series. Thank you, everyone, for participating, and we hope to see you in January for the investment seminar with CMTA. And remember to follow us on Twitter. Thank you.

Nancy Jones: Thanks, Linda, for putting together such a good seminar.

Linda Louie: Thank you all. We'll meet you online.