California Debt and Investment Advisory Commission

Webinar Transcript

The Public Investment Portfolio:
Part 1 – Introduction to Money Markets
Understanding Banker's Acceptances and
Commercial Paper

Wednesday, July 8, 2015

(Editor's Note: This transcript has been prepared by the California Debt and Investment Advisory Commission (CDIAC) and it believes it to be a fair and accurate reproduction of the comments of the speakers. Any errors are those of CDIAC and not the speakers.)

The money market is a wholesale market for short-term debt that provides liquidity for governmental entities, and it is considered an extremely safe investment option for public entities. In addition to providing the background on the wide variety of money market products, this webinar will provide a detailed explanation of banker's acceptances (BAs) and commercial paper (CP) for public portfolio investment. This is the first of three presentations on money market securities.

Title Slide – The Public Investment Portfolio: Part 1 – Introduction to Money Markets – Understanding Banker's Acceptances and Commercial Paper

Linda Louie: Good morning, everyone, and welcome to the California Debt and Investment Advisory Commission's webinar, *The Public Investment Portfolio: An Introduction to Money Markets - Understanding Banker's Acceptances and Commercial Paper*. My name is Linda Louie, and I'm the education manager at CDIAC. Before proceeding with our broadcast, if you're experiencing any technical problems, please contact GoToMeeting at 1-800-263-6317. Again, that's 1-800-263-6317, or you can try the website at the address on your screen. *Understanding Banker's Acceptances and Commercial Paper* is the fourth component of a nine-part webinar series on public investments that CDIAC has scheduled to run through the summer. Each webinar focuses on a category of statutorily authorized investments in a way that helps keep you to understand many of the features and risks and how you might go about assessing whether or not a particular investment meets or fits into your agency's investment policy objectives. Thank you for joining us today and we hope you will be able to participate in each webinar in the series to gain a fundamental understanding of the full spectrum of investment options for public investment portfolios; however, we do understand that schedules may not permit participation in every webinar. So to help broaden your knowledge of other investment management topics, CDIAC has a number of different resources and recommended readings available to you on our website. You may visit them on the education web page. The presentation slides for today's webinar are also available on the CDIAC website at the address on the screen. All webinars in the series will be posted to the CDIAC website two to three weeks following each of the nine broadcasts.

And may we point out that the 2015 edition of CDIAC's *Local Agency Investment Guidelines* and the *California Public Fund Investment Primer* are currently linked on CDIAC's main page at the address listed on the screen. Please note, if you'd like to view the live captioning during the program, you may 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 would like to receive a certificate of attendance for CPE credit, you must be registered and logged into the webinar under your own name, and a certificate will be emailed to you within about a week. During the webinar you will have the ability to submit questions to the faculty by using the box marked "Questions" near the bottom of your control panel. The speakers will address some of your questions during the presentation and some maybe needed to be held until the Q&A session at the end of the webinar. However, we will try to address your questions in a timely fashion to emphasize any points for your education. If we run out of time for all questions, we will follow up with responses on the CDIAC website.

Slide 2 – Disclaimer (03:10)

Linda Louie: Before I introduce our speakers, I ask you to take a note of the important notice on the screen. It's a disclaimer. The presentation today is informational and does not constitute investment advice or recommendations. There may be many risks, policy, portfolio, and suitability factors that must be considered by an agency prior to making an investment decision. The webinar material is presented as of July 8, 2015, and is in current context. So keep in mind the replay of the webinar that will posted will not reflect any changes in the investment authority or market conditions which may occur after today and that may affect the suitability of an investment.

Today's webinar is designed to provide you with an overview and understanding of the money markets with respect to commercial paper and banker's acceptances as an investment option for the public investment portfolio under government code. You will get a sense of what governments can do and cannot do when investing in commercial paper and banker's acceptances and begin to think about when it makes sense to include these investments as part of a diversified portfolio through understanding of code and a mathematical analysis.

Slide 3 – Speaker Introductions (04:20)

Linda Louie: So with these objectives in mind, let me introduce our faculty for today's webinar. From a city we have Hank Stern. Hank is the city treasurer at the City of Anaheim and was appointed in January 2007. He is responsible for the City's cash management program, including the investment of the City's funds, collection and receipts of all revenues, and serves as the investment adviser for the City's outstanding debt issues. Prior to his appointment, he spent 27 years in the public sector holding positions that included chief investment officer for the cities of Los Angeles, Long Beach and Lakewood, California. He also experienced some banking in the aerospace industries. Hank holds many professional memberships with California international public finance and treasury associations. He also received his Certified Treasury Professional designation from the Association of Finance Professionals in 2001 and was recertified in subsequent years. He was named in 2007 the American Finance Professionals Honors Program. Hank holds a Bachelor of Arts and Master of Public Administration degrees from California State University, Long Beach.

Next, we'd like to introduce Tony Garcia. Tony is a vice president in fixed income sales at the Wells Fargo Securities firm. He works in the Sacramento office and has over 30 years of capital market experience. During his career, Mr. Garcia has focused on fixed income sales to public fund and corporate clients. Tony is a designated Chartered Financial Analyst and is registered with the Financial Industry Regulatory Authority, FINRA, as a general securities representative. Tony holds a Bachelor of Business Administration and finance from the University of Texas at Austin and completed his master's in business administration from National University. With these introductions, let's now turn the program over to our faculty. Hank, shall we begin?

Slide 4 – Money Market Securities (06:26)

Henry Stern: Absolutely. Good morning, everyone. Let's get into the process. This morning our topic is money market securities, and since my background is somewhat academic, I always like to quote people. Two major persons who have been involved in the fixed income and money market systems over the last 30 years is Marcia Stigum and Frank Fabozzi. And if you study any type of investments, you'll run across these names. Technically, the money market is a market where large borrowers raise short-term money by selling various debt instruments. What that means simply is that in the old days, if a corporation needed money, they would go to a bank. That's where the prime rate came from. Those prime rates was interest rates that the banks would give their prime customers.

A lot of your larger corporations found out that investors would like to invest directly with them in their paper. They'd bypass the banking markets, and as a result they could raise money at a cheaper rate than going to banks, and in some cases their prime rate costs were significantly less than what the bank was going to charge them. An example would be today, prime rate is 3.25% in the current market, and yet you can see CP levels that are 0.10%, 0.15% in the 30 to 60 day area. These markets have been evolving over the last 40, 50, 60 years.

Slide 5 – Money Market Securities (cont.) (08:07)

Henry Stern: I'm trying to get to the next slide. Oops, went too far. Money markets are generally maturities of less than one year by definition. They are rated by your national rating statistical organizations, such as Moody's, S&P and that. We'll get into that later. Securities tend to be in bearer form; that's because they're marketable securities. If you have a security that is registered in your name, it's no longer a marketable security. This would be particularly something to think about if you're looking at a, quote, CD versus a negotiable certificate of deposit. Negotiable, or NCDs, tend to be in bearer form and not registered in your purchasing name. So keep that in mind if you're going to do that. However, our topic today is not about CP or CDs and NCDs but about CPs and commercial paper and bankers' acceptances.

Slide 6 – Types of Money Market Securities (09:04)

Henry Stern: Types of money market securities. The most largest market of all is U.S. Treasury bills and occasionally when the Treasury bumps up against limitations on their issuance, they will issue what is called a cash management bill, a CMB. Those are rare, limited issues. Most of the time the Treasury will go through the Treasury bill market. Federal agencies handle their short-term cash flow needs on cash management with discount notes. Then you have commercial paper, banker's acceptances, negotiable CDs, repurchase agreements. The last two money market funds and LAIF are an aggregate of individual securities. You're not buying in a specific security from a money market fund or LAIF. You're participating in a pool. We added those because for a lot of agencies, these are viable short-term money market solutions for the cash management program. However, the other items listed here are specific securities that you can take delivery of.

Slide 7 – Commercial Paper (10:13)

Henry Stern: As we get into commercial paper, I think we'll turn this one over to Tony.

Slide 8 – Commercial Paper (cont.) (10:20)

Tony Garcia: Thank you, sir. I just wanted to outline the presentation today is going to be broken into three basic parts. First, we'll cover commercial paper. Then, it will be followed by a discussion of bankers' acceptances. We'll then go over the calculations that are used to generate the purchase price or the cost of the security, and then we'll go on to cover the yield calculation. The calcs we are going to use are common to commercial paper, banker's acceptance, Treasury bills and agency discount notes. We'll then finish with a few general comments related to portfolio management. And if all goes well, there will be a little time for Q&A, though if we do our jobs well, then there won't be many of them. At any rate, let's get on with our discussion of commercial paper.

Commercial paper as we currently understand it has gone through a process of change and refinement over a surprisingly long period of time. With the very beginnings of trade and need to provide a guarantee of payment for goods to be delivered or funds to be paid at a future date required a means of providing confidence for both the buyer or the receiver and the seller. Commercial paper, thus, came into existence to satisfy these needs and has been an important source of funding since the 19th century and was included as an allowable investment for the

Federal Reserve Banks in the original Federal Reserve Act of 1913. There are actually historical references to commercial paper in literature. They include a reference to a gentleman whose, and I quote, "business was that of discounting commercial paper," which was in Honoré de Balzac's novel *Bureaucracy*, which was written in the early 1800s. In a larger legal context, commercial paper is defined as a specific type of personal property. And it is primarily governed by Article 3 of the Uniform Commercial Code of the United States. It's defined as a written instrument or document such as a check, draft, promissory note or a certificate of deposit, that manifests the pledge or duty of one individual to pay money to another. Now, commercial paper as we'll refer to it here and as we see it in the financial markets is a promissory note, which represents a pledge to pay money by the maker of the pledged, in this context, the issuer to the payee or the holder of the note.

Historically, promissory notes took the form of a written document that defined who was to be paid and when they were to be paid. The payee was either specifically identified or the note was made payable to bearer, which Hank referenced, which created some risk, not the least of which was the possibility of theft. It should be noted that as recently as 1992, 60% of commercial paper was still issued in physical form and passed between the issuer's paying agent and the custodian's buyers by the use of runners. These gentlemen, with their briefcases filled with millions of dollars worth of commercial paper, would run around from one custodian to another custodian delivering the paper. These notes should not be confused with any sort of credit arrangement or loan. The loan agreement will define the terms of the transaction, while the promissory note is the actual evidence of the debt. As such, it can be sold, typically at a discount to the face or par value of the note, by each successive holder or owner. Commercial paper or CP is a short-term, generally unsecured promissory note of a corporation, and to an increasing extent, public entities. In this session, we'll limit the discussion it to commercial paper issued by corporations. Companies use commercial papers for a number of reasons, including seasonal cash needs, bridge financing, and on those occasions when CP represents a cheaper source of funding than bank credit lines.

Commonly, CP is issued in various maturities ranging from 1 to 270 days with the average maturity being about 30 days. While there's no legal time limit to commercial paper issuance, the 270-day limit is followed as a consequence of certain provisions of the Securities Act of 1933, which preclude a need to go through the registration process for each individual issue. Most commercial paper is issued in discount form similar to Treasury bills and agency discount notes. This means that the buyers purchase an amount of commercial paper at a sum less than the par or the face value. The difference between the amount paid and the amount received at maturity is the interest income. Minimum denominations will tend to vary from issuer to issuer, and they can range from 25,000 to 1 million, but generally a million is about where you see most issuers come in. Investors will generally buy CP and hold it to maturity, which means that there really is a relatively small secondary market in commercial paper. Commercial paper programs are offered on a continuous basis, and buyers will typically roll one piece of CP into the next at maturity.

Slide 9 – Outstanding Commercial Paper (15:48)

Tony Garcia: The commercial paper market, as you can see by this graph, has gone through some pretty significant convulsions since the financial crisis. And really hasn't rebounded as the market or as the economy has steadied and improved. The total amount of commercial paper outstanding in 2007 was a little over 2 trillion in size, but dropped dramatically as the economy broke down and the Fed aggressively lowered rates and injected a huge amount of liquidity into the system. I think as you look at this graph, you can see that almost the entire loss of issuance in outstandings is due to the collapse of the asset-backed commercial paper market. The Federal Reserve provides data on the amount of paper outstanding by breaking the total outstanding issuance down into four subcategories: nonfinancial, financial, asset-backed and other, with "other" typically denoting an issuer where no domicile could be determined. I'm not sure how they do it that, but at any rate, that's how the Fed breaks it down. As you can see, the total size of the CP market has now shrunk to about a trillion. The daily average volume in total CP is about 77 billion per day with 4.4 billion in AA non-financial, 5.6 billion in A-2/P-2 non-financial, a billion in AA financial, and 8.9 billion in asset-backed paper. As you can tell, the various categories don't sum to the total, as there is substantial issuance that doesn't fall into any one of these categories. So with a total outstandings of about a trillion, non-financial paper accounts for about 250 billion, financial paper about 500 billion, and asset-backed CP is about 225 billion.

Slide 10 – Investment Authority (17:45)

Tony Garcia: I think Hank is going to now cover the actual code section that we all love regarding CP.

Henry Stern: Well, not only love, however, as investment officers in the state of California, this is technically our commandments from the mount. No matter what your policy says, no matter what a broker-dealer tells you, you're going to be held accountable to the California Government Code. As a result we quoted what the code is. I would advise you to read the whole California Government Code under 53600, but specifically, 53601 defines commercial paper of a "prime" quality of the highest rating or highest letter and number rating by a nationally recognized statistical rating organization (NRSRO). That's a mouthful. And I think Tony will cover that in a couple more slides. This is really where your authorization comes from so you can buy commercial paper.

Slide 11 – Section 53601 (h) – Paragraph (1) (18:51)

Henry Stern: It continues, 53601(h), the entity, it describes what the entity or issuer has been to be. It has to be organized, operating in the United States. It has to have total assets of $500 million or more, and it has to have debt other than commercial paper, if any, that is rated A or higher by an NRSRO. This is sort of a catch-all. Sometimes, you can't find a rating. A good example would be Cargill, which I think is a very good issuer or a very good corporation. It's a private entity. They issue commercial paper. They do not, as far as I know, have any long-term debt, and if they do, it's not rated. But I consider that to be an acceptable issuer of commercial paper, and we use it from time to time for the City of Anaheim as well as the other entities I used to work for. So if they do have outstanding long-term debt, you need to make sure that it's all A or better rated. In the financial crisis, some of the larger banks actually dropped below A for a period of time, even though their commercial paper was rated A-1/P-1. Technically, under the code, you could not have bought that CP. It's a matter of just understanding what you are authorized under code to do and not, and you need to be in compliance with the code.

Slide 12 – Section 53601 (h) – Paragraph (2): Asset-Backed Commercial Paper (ABCP) (20:17)

Henry Stern: The entity also has to be organized in the United States as a special purpose corporation, trust or limited partnership. I'm not going to bore you with the rest of this. You can go and read the code at your leisure. This applies more for asset-backed commercial paper and it's in paragraph stated 2 of section 53601.

Slide 13 – Further Restrictions on All CP (20:38)

Henry Stern: And then further restrictions. This is typical on any type of CP. Maximum maturity of 270 days or less. Local agencies are restricted to 25% of the total monies in their portfolio in eligible commercial paper. There is an exception; there is always an exception. Counties and also the cities of San Francisco and Los Angeles, San Francisco being unique – they are also a city and a county at the same time. They may invest up to 40% of their eligible funds in commercial paper. And there's a reason for that. Counties have incredible cash flow swings due to property tax and school districts. They're given a little more latitude and leeway in that maximum percentage of 40%. Local agencies also may not purchase more than 10% of a single issuer's commercial paper. That's not your portfolio. That's the issuer's total amount of commercial paper. What you need to do is, on any commercial paper, you can ask your broker/dealer or you can go to the actual issuer itself and ask for a prospectus and an outline sheet. It's a GIB sheet that is called a shelf registration, and that will determine exactly what the amount of total CP they're authorized to issue, and then you can calculate your 10% on that. For most issuers, they're at $1 billion or $500 million. I think it would be really fantastic for you as an investment officer if you've got that kind of money and can approach 10% of their outstanding commercial paper. But keep in mind the 10% rule is about their amount of outstanding commercial paper. It is not pertaining to your size of the portfolio. Tony.

Slide 14 – Nationally Recognized Statistical Rating Organization (NRSRO) (22:32)

Tony Garcia: As Hank mentioned, one of the first limitations imposed by the code on commercial paper is that the paper must be rated of the highest quality or ranking by Moody's Investor Services, Standard & Poor's Corporation, or one of the other nationally recognized statistical rating organizations – that's harder to say than it sounds – or NRSROs, which we'll use going forward. For a fee, these firms will rate the commercial paper and various forms of debt on a scale that reflects the relative ability in the eyes of the rating agency to repay the debt. The purpose is to provide a set of criteria and a rating system that investors may use to compare the relative investment quality of short-term and long-term instruments. The SEC has on its website a list of NRSROs that are registered with it. The SEC rules require that a credit ratings firm that has been designated an NRSRO must make publicly available the certain documents and information that they submit to the SEC. And this would be typically done on their website. On this slide, we list some of the companies with some of the most well-known being Moody's Investor Service, Standard & Poor's Rating Services, and Fitch. There's also a larger group of ratings firms that include A.M. Best, DBRS, which is the former Dunn & Bradstreet, Egan-Jones and Morningstar. Please check the SEC website for a complete listing of those firms.

Slide 15 – Ratings (24:09)

Tony Garcia: For commercial paper, Moody's uses a scale of Prime-1 as the highest rating, which is assigned to companies that have a superior ability of repaying this debt. Moody's issues successively lower ratings of A-2 and P-3 for companies with less financial strength than those with a higher rating. Finally, Moody's uses a Not Prime rating for companies that don't meet the criteria for prime rated companies. For longer term debt Moody’s uses a letter scale that reflects their estimate of the company's ability to meet those obligations. The Moody’s scale beginning with the highest rating, which indicates the lowest investment risk, begins with a Aaa rating followed by a Aa, A and Baa. These are all considered investment grade ratings. Below these are ratings for high yield securities, which are sometimes referred to as junk. Moody's provides some general guidelines for the short-term ratings categories. They are P-1 issuers or their supporting institutions have a superior ability to repay short-term debt obligations. P-2 issuers have a strong ability to repay short-term obligations, and P-3 issuers have an acceptable ability to repay the short-term debt obligations.

Standard & Poor's follows a similar methodology for categorizing the relative risk to investors in both short-term and long-term securities. For commercial paper, S&P uses the highest rating of A-1+ and A-1, followed by successively lower rating of A-2 and A-3. The long-term rating scale is also similar to Moody's scale beginning with a AAA as their highest and proceeding down to BBB for investment grade issues. They then go to BB down to D for non-investment grade securities. While the ratings are important, they tend to be backward-looking. I think Hank here has some thoughts regarding that.

Henry Stern: Well again, Tony's correct. They tend to be lagging. Keep in mind that the rating agencies are looking at financial statements. By nature, when a financial statement is generated, whether it's an interim statement or a published audited statement, they tend to lag. They are not timely in manner. Before I get into my example, I also want to point out that according to the code, it says commercial paper has to be rated A-1 or higher or the equivalent by one of the rating agencies. It doesn't say you have to have A-1/P-1 paper. It says by any one of those rating services. If you want to be creative – and I don't recommend this – you could buy something that's rated P-1/A-2. That's what we call split rated paper. That's not a conservative approach. I can tell that I would never endorse that. I purchase all my paper at A-1/P-1. I don't believe in split rated paper. Unfortunately, that's my opinion, and I try to keep that out of things, but you would be best served if you stayed with straight rated paper at A-1/P-1. However, the code, and in full disclosure, it only says you have to have one rating agency at that high level. Going back to the lagging indicator, you need to do your due diligence. Rating agencies and ratings themselves are a great tool, but they don't protect you from everything. A good example is back in the 2008 crisis. Lehman Brothers, they were rated single, actually A-1/P-1 and they were rated A right up at the time they declared bankruptcy. Of course, anybody that was holding Lehman paper in 2008 was holding it for an extended period of time and either faced a loss or several cents on the dollar as far as reimbursement.

Again, due diligence. That can be a little bit stressful on the smaller agencies. For a lot of you, you're it. You don't have the resources or the staff. You don't have the resources of, let's say, a Bloomberg or a rating agency. You can't afford to pay for ratings. There are some people out there that will try to sell you a service. There is one method. It's a quick fix, but it tends to be accurate most of the time. I call it the market smarts, and that is the market itself understands what risk is. A good example, again, going back to Lehman Brothers. When Bear Stearns had an issue in early 2008, the financial sector of issuance for CP became more expensive for these issuers. And a good example is at Lehman Brothers was paying an incredibly high rate for its commercial paper on the 30-, 60-, 90-day basis versus other financial institutions such as BofA and Merrill Lynch. That's a red flag. All these guys technically because of their ratings should be in a very narrow range for issuance of interest rates. When you see an interest rate for a company start to spike above its peer group, that's a red flag, and as a result, you should be thinking seriously about removing it from your approved list of issuers or stop buying it at all. I'm not saying you have to sell it, but it depends on conditions, and you have to as an investment officer, you have to be aware of what's happening in the market. Again, the market is smarter than me or anybody else. It's an accumulation of all the people, and as Tony and I have jokingly referred to, there are two elements that drive our markets: fear and greed. That's what determines pricing, yields, etc. In the case of a tie, fear wins out every time. And you'll see a panic to the doors to bail out of something if they're fearful they will lose their money. With that in mind, think about market rate levels when you're looking at purchasing securities, not just commercial paper, but anything, even longer term debt. The market is smart. It is smarter than all of us. That's just an aside to keep in mind.

Keep in mind also that if you're going to develop an approved list of issuers, and we do that here at Anaheim. We also did that at Long Beach, L.A. and Lakewood. Do not put that list in your policy. Keep it in your guidelines because as markets change, you are going to have people added to or removed from the list. If you put it in your policy, you're probably going to have to go back to the city council to ask them to make an amendment to that. You want some flexibility as an investment officer, so keep it in your guidelines as an approved list. Don't put it in your policy; you'll handcuff yourself. With that in mind, Tony.

Slide 16 – Registration Exemptions (31:19)

Tony Garcia: Those are great points. Thank you. Most public debt issuance is required to be registered with the SEC. This is a pretty expensive process which includes the issuance of a prospectus and the filing of required financial documents and others. There are, however, certain exemptions to the registration requirement provided in the Securities Act of 1933. Some of these exemptions apply to commercial paper issuance with the main ones being sections 3(a)3 and 4(a)(2). Under Section 5 of the Securities Act of 1933, Congress requires that business entities that can borrow funds, that want to borrow funds in the public markets must register the security and file certain information with the SEC prior to the issuance of the debt. However, Sections 3 and 4 provide certain exemptions to this requirement with a few that specifically apply to commercial paper. While commercial paper is considered a security under the 1933 Act, it is exempt from registration by Section 3(a)3, where it states that a security is exempt if it is a note, draft, bill of exchange or banker's acceptance that arises out of current transaction, or the proceeds of which have been or are to be used for current transactions, and which has a maturity at the time of issuance of not exceeding nine months, exclusive of the days of grace or any renewal thereof, the maturity of which is likewise limited.

Now according to the SEC it was the intent of Congress that the 3(a)3 exemption apply only to prime quality, negotiable commercial paper of a type not ordinarily purchased by the general public. That is, paper issued to facilitate well-recognized types of current operational business requirement and of a type eligible for discounting by the Federal Reserve Banks. Those are the actual words that drive that 3(a)3 registration exemption. With the passage of the Jobs Act of 2012, the section 4(2) was redesignated as the 4(a)(2) of the Securities Act. This is commonly referred to as the private placement exemption and provides for transactions by an issuer not involving any public offering. This allows companies to issue commercial paper without a limit on the use of proceeds and provides no maturity issuance limitations, though it should be noted that maturities longer than 390 days are very rare. There are, however, restrictions on the sale and transfer of paper issued under this exemption. Simply put, the sale of securities under the 4(a)(2) exemption is limited to persons – and I'm quoting the U.S. Supreme Court here – that are capable of fending for themselves not involving a public offering. Rule 506(b) of Regulation D provides a safe harbor for the issuer if the offering is made to accredited investors and not more than 35 sophisticated yet unaccredited investors.

The definition of an accredited investor covers a wide variety of offerees, including corporations, banks, insurance companies, and certain natural persons, and it also includes a trust or other entity with assets in excess of $5 million not formed to acquire the securities offered whose purchases a sophisticated person makes. So corporations will use this exemption so as to allow them to use the proceeds for purposes outside those normally deemed to be general corporate purposes. These can include stock buyback programs, acquisitions and ultimately can be any legitimate board-sponsored purpose. There are some 4(a)(2) programs that are issued under the Rule 144(a) Safe Harbor, which may only be sold to qualified institutional buyers, or QIBs. And those are institutions that are in excess of – have assets under management in excess of $100 million and there's a list that specifically identify those that qualify as QIBs.

Another market trend that needs to be noted is that there is a number of high grade CP issuers that have been or are in the process of converting their 3(a)3 programs to 4(a)(2) programs because of the added financial flexibility. And it gives them – and the fact that it gives them a lot of financial flexibility, also there's really no additional cost for them in terms of having to pay a higher yield associated with that issuance.

Slide 17 – Commercial Paper Issuers (36:30)

Tony Garcia: Now, as indicated, corporations are the largest issuers of commercial paper with financial companies representing the largest class of issuers. Non-financial companies follow, then asset-backed issuers, and to a growing extent we are seeing public entities enter the commercial paper market. Hank, you've been active in this market. I think you have got some thoughts about some of the issuers.

Henry Stern: Well, the issuers as a rule – well first of all, when I purchase commercial paper, I'm looking at it as a short-term investment in my portfolio. Different than maybe what the counties would have for their cash flows, but I'm looking at it as 90 days or less. I don't go out beyond that as a rule. I trigger in on my payrolls and my A/P registers. Again, this listing here is a listing that we see a lot of these names on pages in Bloomberg and offerings on a continual basis. I want to emphasize and go to the bottom of the slide. These are examples only. We're not recommending it for purchase. Again, you have to do your due diligence, but this just to give you a sample of what financial issuers are in the marketplace, what industrial issuers are in the marketplace and what public issuers are doing. And it's not just the University of California. I've seen the State of California out there. I've seen some of your large cities out there, like the City of L.A. DWP issues commercial paper from time to time. It's just something to think about. You still are being held to a rating. You're still being held to do your due diligence, and I would highly recommend that you develop an approved list of issuers that you can purchase from and not be flying the seat of the pants when you see items.

The industrial issuers tend to be cyclical. It means there are days when t they're not in the market and days when they are. The financial issuers tend to be more continuous as far as being issuers in the commercial paper market. Again, these are items that are mostly bought at a discount. They're usually held to maturity because you trigger in a date if you're in the 30-, 60-, 90-day range. They are marketable. You could sell them early, but you'll be selling them at whatever market levels are at the time you want to sell and not at the time you bought. Because they are discount, they will accrete up to or the par value. Tony, any talk about your asset-backed commercial paper.

Slide 18 – Asset-Backed Commercial Paper (39:13)

Tony Garcia: Let's go on to ABCP. This will be the last component of the commercial paper piece. Asset-backed commercial paper is a class of commercial paper where the repayment of the paper is based on the cash flows generated by the assets underlying the issuance and/or from one or more liquidity or credit support providers. ABCP begins with the creation of a bankruptcy remote special purpose entity – that's a mouthful – an SPE, sometimes called the conduit that is created to house the assets and to issue commercial paper against those assets. Asset-backed commercial paper repayment is dependent on the cash flows generated by the underlying assets in the portfolio. Cash flows are typically augmented by the conduit drawing on liquidity facilities provided by third party financial institutions. Most of the programs are also structured with credit enhancement to protect against losses in the portfolio of assets. The asset-backed CP market collapsed during the financial crisis due to in large part to the problems in the subprime mortgage market. The quality of the assets in the investment pools came into question and caused buyers to demand significantly higher returns. As mentioned ABCP has gone from a high of 1.18 trillion in outstanding in 2007 to only about 225 billion as of May of 2015.

Slide 19 – Asset-Backed Commercial Paper: Underlying Assets (40:41)

Tony Garcia: The assets in these programs can include a number of receivables: trade receivables, consumer debt receivables that are like credit cards, auto and equipment loans and leases, manufactured housing loans, dealer floor plan loans, and collateralized debt obligations, or CDOs. Asset-backed CP may be issued as either 3(a)3 or 4(a)(2) programs. If it is issued as a

3(a)3 paper program, it can be no longer than nine months and the proceeds must be used to finance current transactions. If issued as a 4(a)(2) program, it may be issued up to 397 days.

Slide 20 – Bloomberg Screen (DOCP) (41:25)

Henry Stern: Getting back to try and help, these – if you have access to a Bloomberg screen, you're familiar with some of these. I've been very fortunate when I went to Long Beach, L.A. and again at Anaheim that we have access to a Bloomberg system. At Lakewood I didn't, and I'll share a few thoughts about a smaller agency in a few minutes. This is a typical DOCP page, and that you type in DOPC and hit return, and Bloomberg will take you to this page. This is an actual page from June 18 at about 10:00 in the morning. It shows you who is still open and who is closed. It gives you an idea. You can drill in on any of these and if they are approved issuers and you can find out what they're writing for periods of time.

Slide 21 – Bloomberg "BOOM" Screen (42:17)

Henry Stern: Another screen we have is the BOOM page, and these are offerings. Again, these can be executable. However, they list as you can see on the – let me go to this column here. If DLA is dealer and for example you'll see there's Morgan Stanley, there's Citigroup, there's J.P. Morgan, there's Bank of America. BOOM tends to accumulate all approved issuers that you have a relationship with, and their listings of commercial paper. We could toggle as you see all the way down and see a listing from A through Z. I just snapshot something in the C area. You see Cargill was there. They were issuing paper to June 25th at a 0.09. You can see Catholic Health. I'm not going to pick on them, but they were issuing at a 0.17, 0.19, 0.2. There's Coca Cola, 0.2, 0.3. They were out as far as August and October, where Cargill was only issuing about five days or something in front of it. These are helpful screens that can help you through the process. If you have a Bloomberg, you can actually go shopping to find out what you want to see. You can also put these items here. You can click on the issuer. You can click on maturity dates, so you can see exactly recent to further out. This is a settlement date, and again, most commercial paper is bought same day.

On a cash market basis, you need to be early. This is a late picture at 10:29. That's Pacific Time. Most of the time commercial paper will shut down a little after 9:00 our time on the Pacific Coast and that's 12:00 in New York. And as Tony alluded to with the runners delivering paper, all the houses at that point are now starting to send out their holdings to custodians and looking for cash coming back to them. So the settlement period is usually about 1:00 PM New York time to about 4:00 PM. You can still get a cash trade done, but as a rule they want it done early in the morning. The early bird catches the worm. If you really want to see a full listing of this or your DOCP page, you should be in at 6:00 or 7:00 in the morning. That's not practical for a lot of us. I will tell you honestly I get here at about 8:00 in the morning, so I take what's left. I like to sleep. The SD simply means one day settlement. Everything else that's blank means current day settlement. It shows you the discount rate. It shows you the regulation. Is it a 3(c) program or 4(2)(a) program? And as Tony mentioned a lot are going to 4(2)(a)s. It also shows you ratings of A-1 and P-1. And F1 is for Fitch. These items help.

I remember my days at Lakewood when I didn't have access to this and in the early 1980s also. What I did in that case is I get a piece of paper out at 8:00 or 7:30 or 8:30 in the morning, you call your broker-dealers and ask them, what's out there in commercial paper? Technically you've got a range you're looking at: 30 days, 60, 90, whatever you want to focus on. Whether it's your payroll or A/P register. You might say, okay, who is issuing out in – let's see, today is July 8th – so you're probably asking, who is issuing out at August 15th? I'm just making the date up. Your broker-dealers will give you some indication and names. Technically, if you want to be a very good shopper, you would competitively bid and call several of your broker-dealers and say, give me a level on this, and who's out in the market? Again, keep in mind that while you're talking, people are buying. So if you wait too long and go back to your first dealer, if you've talked to four, you may find out what he's offering is no longer there. Somebody bought it. Haste makes waste. You are going to have to jump on it right away. But those are items that you can still do and be very effective on the short-term markets for commercial paper or as we are going to discuss, bankers' acceptances or Treasury discounts or agency discounts. Again, it's a cash – markets tend to be done before 9:00 AM our time on the Pacific Coast. Keep that in mind, and at this point we've covered a lot of material on CP and getting ready to go into the banker's acceptance. Are there any questions? Feel free to ask, or if you want to hold them until the end, we'll try to answer your questions at this time. I'm going to transition back to Tony, who is going to tell you some important information about banker's acceptances.

Slide 22 – Banker's Acceptances (47:15)

Tony Garcia: Thanks. Yeah, I think the queue is looking pretty good right now in terms of questions, which I think we have one or two we'll hold until the end. This next section is going to cover banker's acceptances, their origin, purpose and creation.

Slide 23 – Banker's Acceptances (cont.) (47:33)

Tony Garcia: Banker's acceptances or BAs came into existence with the passage of the Federal Reserve Act of 1913. Banker's Acceptances were created as a finance vehicle for the facilitation of domestic and international commercial paper transactions – or commercial transactions. I'm stuck on that commercial paper thing. At its core, a BA is a time draft that has been guaranteed by a bank. While there is no stated restriction on the length to maturity of an acceptance, few if any, are created with maturities longer than 180 days. That is in large part due to the eligibility restrictions imposed by the Federal Reserve on those BAs that they will accept as collateral in their open market operations. BAs are discount instruments that trade similar to Treasury bills, agency discount notes and the discounted commercial paper.

Slide 24 – Banker's Acceptance Creation (48:24)

Tony Garcia: Probably the best way to understand the creation of a banker's acceptance is to actually follow through a hypothetical transaction. Let's assume that a domestic chain of consumer goods stores, the importer in this case, has contracted to purchase from a Japanese manufacturer, the exporter, 50,000 television sets for $10 million that are to be delivered in 120 days. The negotiations have been completed, the buyer will – after they've been completed, the buyer will arrange with its domestic bank to have the bank issue an irrevocable letter of credit, an

LOC, in favor of the exporter. The LOC will contain all the particulars regarding the transaction, including language that will state that the domestic bank will make good on the payment of $10 million owed by the importer to the exporter 120 days after shipment of the television sets. This agreement is called a time draft. The LOC will then be sent to the exporter's bank in Japan. Let's see. Here. We're having technical error. Probably operator error on this one, so sorry about that. The Japanese bank will notify the exporter upon receipt of the LOC. The manufacturer will then ship the televisions to the U.S. and present the appropriate shipping documents to the bank. The Japanese bank will then pay the exporter the present value of $10 million.

It's generally assumed that for working capital purposes the exporter would wish to receive payment upon shipment rather than in 120 days when delivery and payment are made. The Japanese banks may at this point choose to hold the time draft in its loan portfolio waiting for delivery in payment or the bank may choose, as did the exporter, to get its money now. In the latter case, the Japanese bank will present the time draft along with the appropriate documents to the domestic bank that issued the LOC and on whom the time draft is drawn. The domestic bank will stamp the draft accepted, thereby creating a banker's acceptance and incurring an obligation to pay the draft at maturity. The Japanese bank will be paid the present value of the draft at some discount rate. The domestic bank may at this point choose to hold the acceptance in its portfolio or sell it into the marketplace. At maturity the importer will pay the bank the full amount due, and the bank will fulfill its obligations to the holder of the BA. I should note in the time since their first use in 1913, there is no known instance where a BA has presented an investor with a loss of principal.

Slide 28 – Investment Authority (51:22)

Tony Garcia: In part, this is due to the fact that a BA represents a non-revocable obligation on the part of the accepting bank and is at least a contingent responsibility of the drawer of the draft and any of the endorsing institutions. The bank's obligation to pay is further perfected by the obligation of the buyer to pay and by the documents that evidence ownership of the drafts in transit. In essence, if none of the entities in the transaction are able to pay, the holder of the acceptance has the right to the goods being imported. At least you know there's a market for that. Unfortunately, we've had some technical difficulties, but the actual images will be on the presentation when it gets posted on the State Treasurer's website. I'm going to hand it back to Hank to talk about the code.

Henry Stern: Okay and again, we're back to what authorizes you to buy these things. And again, we are going back to Government Code 53601, Section (g), and it basically defines what a banker's acceptance is. Tony did an excellent job, but here's your definition if you want to write it. Restrictions are 180 days of maturity. You can't exceed 40% of your agency's money in banker’s acceptances, and this is a little quirk, no more than 30% of the agency's money may be invested in a single issuer's banker’s acceptances from a commercial bank. So there are some restrictions on those. Let me see.

Slide 29 – Definition (53:00)

Henry Stern: There's two types of banker's acceptances. Those eligible for discount or purchase by the Federal Reserve Bank. Tony has covered that. And then there are those that are ineligible. They have similar characteristics of an eligible BA, but they don't meet the strict criteria that the Fed has installed, and these BAs must maintain a reserve requirement for trading and for purchase.

Slide 30 – Definition (cont.) (53:30)

Henry Stern: I'm going backwards there. BAs eligible for purchase by the Federal Reserve, acceptance must finance a short-term, six months or less. Tony has actually covered most of the definitions on this. Just wanted to reiterate this and show it in bullet point form for you. Again, that's at the end. There's a couple of things. First of all, banker's acceptances have gone through what we call seasonal issues. In the early 1980s, I'm dating myself now, but in the early 1980s and early 1990s, banker's acceptances were a high volume item that was purchased by a lot of municipalities. The glory days of 1981, 1982, we could buy Japanese BAs for 60 days at 0.21%. 21 basis points, which was incredible at the time. My portfolio at Lakewood was earning somewhere around 16%, 17%. Of course, there were names, because we were on the Pacific coast, we had more access through Bank of America, Security Pacific bank – that's an old bank – First Interstate Bank in dealing with the Japanese banker's acceptances.

One that I loved was Dai-Ichi Kangyo. I loved saying that one. But there was Bank of Japan. There was the Industrial Bank of Japan. There were European ones like Crédit Lyonnais would issue those. Today, it's really hard to find these. They have sort of like shrunk as far as total volume, and I don't know whether if we can even find total volume on BAs right now. But they are an eligible investment for you. You can look at those, and I do see them from time to time from J.P. Morgan and BofA. They are actually listed on the BOOM page for J.P. Morgan. So they do issue some banker's acceptances. And as Tony mentioned, they probably have three levels of perfection: they have the bank that is accepting it, the irrevocable letter of credit from the secondary bank, and then you also have your goods in place as a collateral item. Although you really don't want to take possession of an oil tanker or cargo thing for garments, but you do have several layers of protection, which is important in what banker's acceptances do. With that in mind, I'll turn to Tony for the technical side of calculations, which everybody is just waiting to see.

Skipped Slide 31 – Calculations

Slide 32 – Price and Yield Calculations (56:12)

Tony Garcia: Yeah. The exciting part. Well, the calculations used for commercial paper and banker's acceptances are basically the same. Well, they are the same – what am I talking about? In fact, the calculations for discounted securities including Treasury bills, agency discount notes as BAs and CPs they are all the same. All these securities trade at a discount to their par or face value. That is, you would purchase one of these securities at a percentage of the par value and at maturity you will receive the full face value. During that time the security would accrete from your cost to the maturity value. The difference between the discounted amount and the par value would be your interest income. The calculations used for a discounted money market securities consist of two significant parts. The first component is determining the price and thereby the cost of the security, and the second part is determining the yield on the security so that it can be compared to non-discounted securities like Treasury notes and corporate bonds.

Slide 33-38 – Calculating the Discount, Price and Cost (57:16)

Tony Garcia: The method used to determine the price of an issue of commercial paper or BA is essentially a present value calculation. We need to know four pieces of information. We need to know the maturity date of the security, the settlement date, the par or face value, and the discount rate. The maturity date is the date that the issuer's obligated to pay the owner of the security. The settlement date is the date that the security is to be paid for by the investor. The par value is the amount of the maturing value of the trade. And the discount rate is the rate that is used to discount or to present value the par value. So in our example here, we begin with a security with a par value of $1 million that will mature in 182 days and has the highly fictitious rate of 1%, but we'll start there.

So the equation can be stated in several different ways, but comes down to this. The price is equal to 100 minus the number of days to maturity, divided by 360 day year, multiplied by the discount rate in percentage terms. We know that the discount rate is 1%, and the number of days to maturity is 182 days. So we first determine our discount amount, which is basically the back half of that equation. We plug in our 182 days to maturity, dividing by 360 days, multiplying by our discount rate, we get a discount amount of 0.505555, et cetera. Our price is then 100 minus our discount amount of 0.50555 or a price of 99.494444. To get our cost, the par value of $1 million times our dollar price, and as you recall, the original formula, our discount rate was in the form of a percent. So to properly scale this, we need to move the decimal two places to the left, which gives us our cost of $994,944.44.

Slide 39-41 – Calculating Bond Equivalent Yield (59:41)

Tony Garcia: The calculation for bond equivalent yield is a little more complex in some ways. But in some ways it's just really reversing the previous formula with a couple of changes. The reasons for these changes is to allow us to compare the yield to securities that use a 365-day year or in the instance of a leap year, 366-day year. Field calculations for securities like Treasury notes and the like. So we begin by taking our discount rate and dividing it by our dollar price. This gives us a percentage value of what we earn compared to what we paid for the security. Since this is not an annualized value, we can make it one by multiplying the result by our 365-day year divided by the number of days to maturity. Then multiplying by 100 puts the yield back into percentage terms. So plugging everything into our formula, we have our discount amount of 0.505555 divided by our cost of 99.49444. This product is then multiplied by 365, divided by 182, and all of this multiplied by 100. And this gives us our bond equivalent yield of 1.0218. Now, it's important to note that while the cost calculation works for maturities out to one year, the yield calculation we just did here doesn't. It only works for securities up to 182 days in length. This is because if we are comparing the yield of our discounted security to a bond that pays a coupon, we need to account for the effect that that bond payment will have on what is earned by the interest bearing security. In other words, the effect of the interest earned on the reinvestment of the interest, and the calculation to do that looks like this.

Slide 42 – Bond Equivalent Yield: For Maturities Greater Than 182 Days (1:01:43)

Tony Garcia: I'm not going to make any attempt to try and explain this, and anyone that wants to explain this to me is welcome to give me a call. Let's just say that the calculation works and allows you to compare apples to apples for longer dated discounted securities. In this formula you have a yield calculation that allows you to compare it to a bond that pays interest semi-annually. Typically most CP is bought to mature six months and in, but you will see purchases out longer as portfolio managers may try and target specific maturity dates to meet cash flow needs and the like. This pretty much wraps up the calculation portion. There are a couple of issues we'd like to discuss and I am going to hand that back to Hank.

Slide 43 – Uses of Money Market Securities (1:02:28)

Henry Stern: I hope everybody got all that. And Tony does have a toll-free number if you want to give him a call and discuss the calculations that he went through. I prefer to use a calculator and Bloomberg to do my calculations, but that's okay. We're going to summarize now. Getting toward the end. You're probably tired of hearing us talk, but again, the two items we've talked about today, commercial paper and banker's acceptances are defined as money market securities. That means, and you've already seen, the maximum maturity lengths for these are less than a year. So they're dealing for short-term money market investment needs for your cash flow for your agency. You need to provide a diversification of investment securities for your cash management program. You need to always keep in mind diversification is equating to safety. And you need to ensure appropriate levels of liquidity on your cash operations.

Slide 44 – Diversification Across Asset Classes (1:03:27)

Henry Stern: Diversification. Industry best practices recommend that you consider exposure to any one issuer across all types of securities. Many issuers, and I'll give you an example, Bank of America, J.P. Morgan and a lot of financial institutions will issue commercial paper, banker's acceptances, medium-term corporate notes and certificates of deposit, either NCDs or CDs. What I'm proposing, or what the City of Anaheim does is, we add or accumulate all of these items and post them against the issuer. For the City of Anaheim, we restrict a single issuer to 5% of my portfolio. So that means for Bank of America regardless of whether I'm buying commercial paper, BAs, medium-term bonds or CP, the most exposure I can have of all those added together is a total of 5% of my portfolio. That prevents me from putting all my eggs in one basket. If you wanted to go 5% each individual category, you could probably max out at 20% or greater. That's starting to get a little bit top-heavy for one issuer in your portfolio. Safety and prudence would dictate for you to try to restrict that.

I have seen professional cash managers restrict a single issuer to 2.5% or 3% of the portfolio. And these are portfolios that are several billion dollars. So it depends on your level of risk, which is appropriate for your agency, and also your level of investment expertise and comfort level as to what type of restrictions, if any, you want to put on the issuers. I would highly recommend that you put some type of limitations so that you're not getting too over invested in a single issuer. Again, it's – we have a lot of clichés in business, and one is "invest down to your sleep level." If you're invested in an issuer and you're having a hard time coming to grips with that, you probably need to reduce that percentage down to something that you can sleep on, as we say in the business. Another example would be if you're going to put a 5% limitation in, that would be a policy issue, and we do that for the City of Anaheim. It's in my investment policy that I cannot accumulate more than 5% with a single issuer. Now it becomes a compliance issue. If I or any investment officer in Anaheim invest more than 5%, we have to spell it out in our monthly investment report. We have a compliance issue.

Another issue you may want to look at is an approved list of issuers, and, again, as I mentioned before, an approved list of issuers keeps you from going off the reservation and it also keeps you from making what we call impulsive buys. I would highly recommend, because we do that here in Anaheim and I've done that also at L.A. and Long Beach and Lakewood, an approved list of issuers of people that I will buy commercial paper from because I have done my credit or due diligence. I would highly recommend in this case you do not put the approved list of issuers in your policy. And the question would be why not? Because if you want to change that list of issuers, you would have to go back to the council to get approval. The approved list should be part of your operating guidelines because as we've mentioned through this entire discussion and you've seen it in other webinars, financial conditions change. That means credit ratings can change. You want to have the flexibility as an investment officer to add or delete people from your approved list without having to go back to your city council or your legislative body, which is the one to give you the authorization through your investment policy to buy. So I would recommend not putting this in the policy, but having it as a guideline to give you more flexibility. As an investment officer, you always want as many optionalities as possible when you're investing in your portfolio. You're not trying to circumvent anything. You still want to be transparent, but you need those tools so that you can be efficient when it comes to managing your cash management issues.

Slide 45 – Safekeeping **(1:07:52)**

Henry Stern: Another item. This is almost a given, but I'm sure there's a few smaller entities out there that haven't gone to this yet. And that is delivery versus payment. Under GASB, etc., they recommend this for your risk profiles when you are doing your CAFR. Use of a third party custodian, and in very simple terms, I buy a purchase, let's say from Bank of America, in commercial paper. We agree on the amount. They agree to send it to my safekeeping facility. My safekeeping facility will look at the CUSIP number and the purchase price and the name on the item. When all agree, they will send the money from my custodian account to the purchaser I bought it from, and they will take into custody that security. As a result, you don't have to worry about the wrong security being delivered, and sometimes that has happened. I've had a call from my custodian saying, hey, they're trying to send this security in. This is not what you authorized, to which we do what we call a do not deliver or do not accept. In the old business they called it a DNK. So the broker-dealer has to get it right. They can't slip in a secondary security, and that happens sometimes when they don't own the actual security you bought. They're going out to the street, and they couldn't get it in time. So to protect you and your agency, delivery versus payment is a very best practice right now for our investment process.

Slide 46-47 – Sources **(1:09:30)**

Henry Stern: And again, as an academic, these are books – I've actually read these book. My kids tell me I'm an incredibly boring person, but these are very good reference points for you to delve in deeper into money markets as well as fixed income investments, if that's your hope as far as career. Stigum has written some very good books. Girard Miller was with GFOA when he wrote *Investing Public Funds*. It's now in its second edition. It's an excellent resource. And of course, there are some other items here. You can go to the Federal Reserve System on their website and Securities Exchange. This can help you on your research for due diligence. You can look for the Edgar Reports. You can look for the 10Ks that are issued by companies. I believe also the Federal Reserve has, it's a delayed item, but they actually list what commercial paper is currently yielding on their website. You have to go in there and play a little game with it, but you can see what 30-, 60-, 90-day commercial paper is going for in the marketplace. It's not a vehicle you can buy from. It simply gives you an indication where levels are. You could use that to proof against what's being offered by the broker-dealers if you do not have access to Bloomberg. There are other items out there. I'd highly recommend that you get a little creative with your Internet side. With that in mind, I think, unless Tony wants to add something, we're into Q&A. Tony.

Slide 48 – Questions & Answers (1:11:07)

Tony Garcia: Actually, I am going to hand it off to Linda here. I think there were a couple of questions in the queue, so we're going to deal with them here.

Linda Louie: Thank you. And thank you, audience, for staying a little over time. We'll be brief, but we did have two questions float in. I think this one is probably addressed to Hank. The audience is curious to know kind of the criteria process that you utilize in evaluating whether or not commercial paper is appropriate for the portfolio analysis, for your portfolio.

Henry Stern: Well, one thing we've evolved to is I have my portfolio broken into two parts: a short-term portfolio and a long-term portfolio. The short-term is focused primarily on money markets, LAIF, commercial paper, BAs, and if I had to, discount notes from the agency and Treasury. I look at an approved list that I put together. It was mentioned and I hate to say it because I have got the gray hair, but I've been in the business a long time. I'm familiar with a lot of names. I am familiar with their credits. And as a result, I build that list, and then I look at what I need to fund in the next 30, 60, 90 days with my short-term portfolio. Obviously, several things we do. One is you have got to make a payroll. You know when those payroll dates are, at least I hope you know where they are. You also have A/P registers. For the City of Lakewood we used to issue an A/P register once every two weeks in the old days. I think they issue them once a week now there. I know here at Anaheim we issue two or three check registers a week. So we have to maintain our balances at our commercial bank as well as have access to funds to pay those bills when they come due.

Another item you may want to look at, counties have to deal with this, too, is your debt service for those cities that have issued debt. You are going to have debt service payments at least twice a year. One is to pay the interest on a six-month basis. The second debt service payment usually includes principal and interest. So those are key dates you would probably want to look at to utilize for your commercial paper. Another thing I look at and it's an educational tool. Again, I am looking at the aggregate total of my yield on the portfolio, but for a lot of people that are being pressured by their bosses saying, well, you know why are rates so low on your portfolio? A good illustration is to buy one or two pieces of commercial paper and roll through it so that you can show them, that's what the market is in 30, 60, 90 days and it isn't just what somebody says. I actually bought securities and that is a hard illustration of where interest rates are on the short-term side. Education is a key component. When people question me on commercial paper, and you need to be very transparent and available to answer questions from your legislative body and your other department heads in the organization who may think they know more about investments than you do. But that's what I look at when I look at commercial paper.

I haven't bought a banker's acceptance in probably 15 years. The volume just isn't there. And I prefer to have issuers that have large programs, so in case I had to sell early – I made a misjudgment on my cash flow and I need to raise money in a hurry – selling a piece of commercial paper from Bank of America, J.P. Morgan or, let's say, General Electric, there's a readable secondary market to sell into. Those are items that I look at and consider when I buy commercial paper, but as a rule it's a buy and hold and I'm targeting a specific date when I buy these short-term obligations. Does that answer the question?

Linda Louie: Yeah, very comprehensive. Very good. Thank you, Hank. And the final second question that floated in during the course of the webinar is: the audience is interested to know whether or not a local government agency is considered a qualified investor. So CDIAC would like to reference the audience to an issue brief that was released by CDIAC in 2013. It's the issue brief on Rule 144A securities. Now just to keep in mind, I'll hit a couple highlights and we can close the program. This particular issue brief is really kind of examining corporates and what a qualified institutional buyer is and this falls under the Government Code Section 53601(k). And basically that code reads that CDIAC believes that the California local agencies do not meet the Securities and Exchange Commission's (SEC) definition of an allowable buyer of these securities. So as we try to define the QIB, basically under the rule of 144A, it stipulates public agencies who invest in benefits for their employees qualify as QIBs specifically under section 144A(D), which defines these public institutions as "any plan established and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees." So the key part is in this issue brief that we'll post on this particular website after the program is we'll refer you to Appendix A because it goes further into the definition of a what a qualified institutional buyer is under SEC outlines. And for the purpose of the section, a QIB means basically any following entities acting for its own account or the accounts of other qualified institutional buyers that in the aggregate owns an investment discretionary basis at least 100 million of securities of issues that are not affiliated with the entity. That includes insurance companies, investment companies, small businesses, investment firms, a plan established and maintained by a state, employee benefit plan, a trust fund with trustees at a bank that are operated for those participants exclusively in those types of plans and any business development company.

So do read that, and as it pertains for the most part under 144A, local government agencies do not fall under the definition by the SEC and government code to be considered really a QIB. But when it comes to commercial paper, there's a different translation, so we want you to reference that issue brief and have some digest and have some further questions regarding that and relating to this webinar or corporates, and we will go over corporates in another webinar in the near future in September. You can continue to work with CDIAC and its faculty on that program.

Henry Stern: Linda, this is Hank. Along with that, a lot of agencies have what we call enterprise funds, which are not affiliated directly with the agency. For example, Anaheim and L.A. for sure have funds from utilities or convention centers, which are not the specific entity's money but it's pooled in the portfolio. As a result, if you have more than 100 million in your portfolio, you do qualify as a QIB, even though you've defined it slightly differently. I can tell you that we were a QIB at Long Beach, L.A. and Anaheim. Respective portfolios were 1.6 billion at Long Beach, over 6 billion in L.A. and over I am over $400 million here at Anaheim. QIB is a requirement, you have to sign a form and also you have to be recertified to that form to a depository once a year. So if things change and your balances change, you could become a non-QIB qualifier. But most broker-dealers will need to see you as a certified QIB before they will sell you those type of securities. Just as a note for a lot of people listening in.

Linda Louie: Very good. That's a nice supplemental explanation for this.

Slide 49 – Public Investment Webinar Series (1:19:50)

Linda Louie: Before we close, CDIAC would like to draw your attention to the remaining slate of webinars in this investment series. The agendas and the registration instructions for each of the webinars are posted on the CDIAC website. Our next webinar that was scheduled for July 22nd that would examine CDs, deposit placement services and collateralized bank deposits, will be delayed due to unforeseen events. It will be rebroadcast on a new date, Wednesday, September 9th. If you're registered for this webinar, you will receive a new meeting notice that you are registered for this program. If September 9th does not work for your schedule, you have the option to cancel your registration and view the posted recording at a later date. Therefore, our next broadcast will be August 5th, when we examine the use of repurchase agreements and reverse repurchase agreements and securities lending as part of the investing in money markets.

In closing, CDIAC would like to thank our expert speakers who did a fantastic job on this section, Hank Stern and Tony Garcia, for their dedication of time and expertise to making this webinar a success. And a big thank you to our education team, Susan Mills and Sandra Kent, for their work in producing this webinar. So thank you, everyone, for your participation and retention throughout the program, and we look forward to you joining us in September for our next program. Thank you very much.