City Treasurer's
Annual Report of Investments

Fiscal Year Ended 6/30/19
(FY 18-19)

City of Carlsbad

City of Carlsbad

CITY TREASURER

ANNUAL REPORT OF INVESTMENTS

Fiscal Year Ended June 30, 2019

Prepared by
Craig Lindholm, City Treasurer
April 7, 2020

City of Carlsbad

City of Carlsbad

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CITY TREASURER LETTER OF TRANSMITTAL

Fiscal Year 2018-19 Annual Report of Investment Portfolio

April 7, 2020

Honorable Mayor, City Council and residents of the City of Carlsbad,

I am pleased to present the Annual Report of Investments for the City of Carlsbad for the fiscal year 2018-19 which ended June 30, 2019. The report is intended to provide reliable information as a basis for reviewing portfolio performance and making management decisions. It also provides an archival reference.

The city treasurer is charged with the design of an effective cash management and investment program for the City of Carlsbad and all its agencies. Among other activities, this includes arranging banking services; forecasting all cash receipts and expenditures; investing all inactive cash; managing investment risk exposures; and reporting all investment activities.

This report summarizes and analyzes the activities of the investment portfolio over fiscal year 2018-19. Total portfolio assets, investment portfolio relative to total city assets, source of portfolio assets, asset allocations, yield achieved, unrealized gains and losses, and cash revenues are presented. To provide perspective to this data a summary of observations is provided about global and domestic markets for the fiscal year ended June 30, 2019. Comparisons are also made with the preceding fiscal years. Finally, a statement is offered regarding the prospects for the fiscal year 2019-20.

Sincerely,

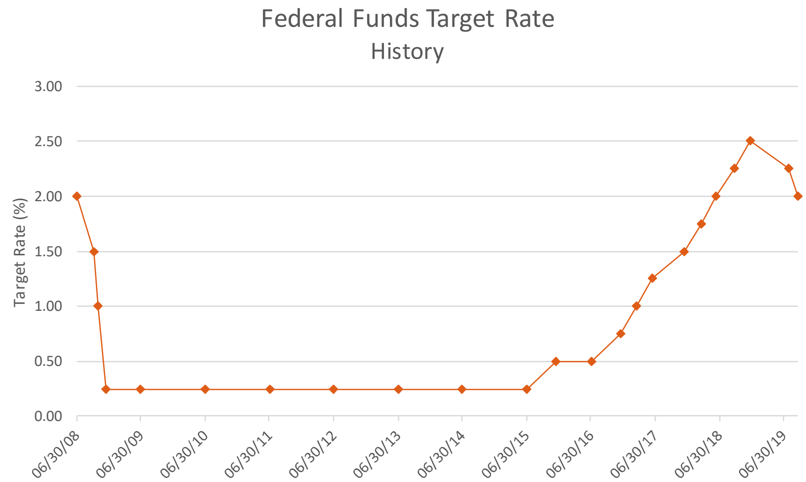
Craig J. Lindholm,
City Treasurer

City of Carlsbad

City of
Carlsbad

FISCAL YEAR 2018-19 MARKET REVIEW

Federal Funds Target Rate

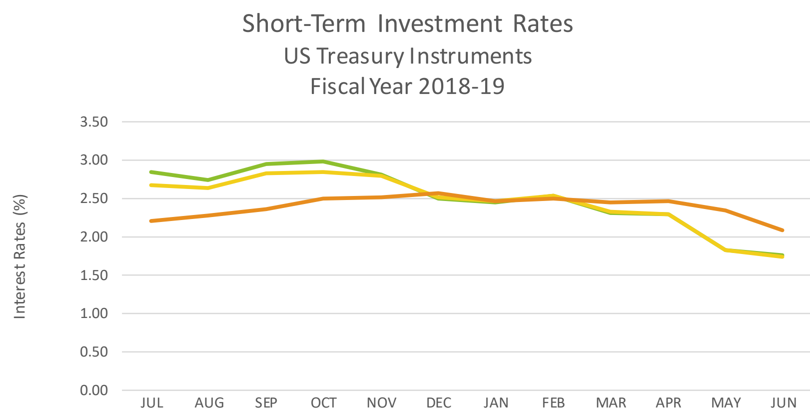


The federal funds rate is a key money market rate that correlates with rates of other short-term credit arrangements. It is the interest rate that banks charge each other for overnight loans. In fiscal year 2018-19, the Federal Reserve increased the federal funds rate twice making an overall increase from 2.0% to 2.5%.

Short-Term Interest Rates

Changes in short-term market interest rates are usually affected by the actions of the Federal Reserve.

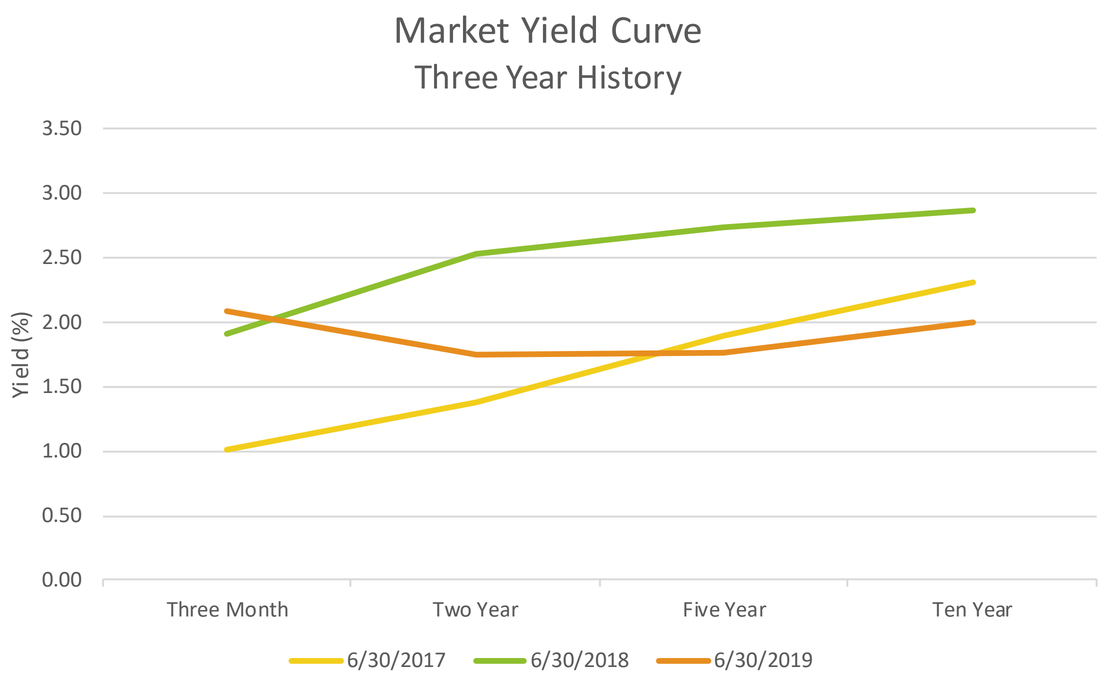
Short-term interest rates in the five year, two year, and six month markets decreased in fiscal year 2018-19.



	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Five Year	2.85	2.74	2.95	2.98	2.81	2.50	2.44	2.53	2.31	2.29	1.83	1.76
Two Year	2.67	2.63	2.82	2.83	2.79	2.51	2.47	2.54	2.33	2.29	1.83	1.74
6 Month	2.21	2.28	2.36	2.49	2.52	2.56	2.46	2.50	2.44	2.46	2.35	2.09

Market Yield Curve

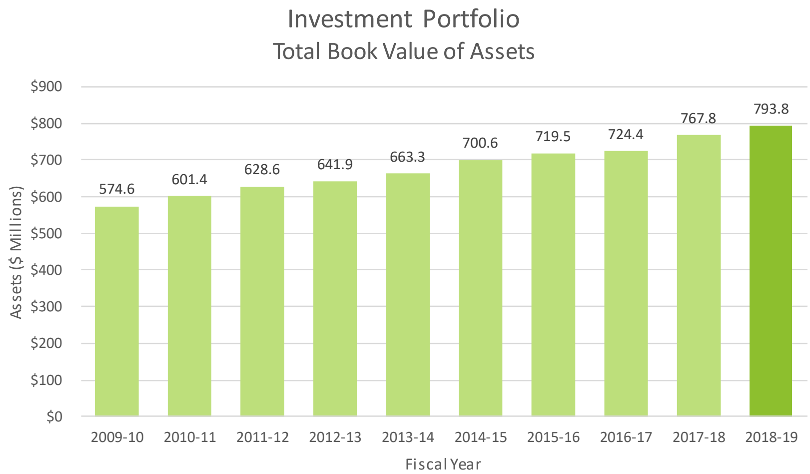
The yield curve is a graphic presentation of the difference between short-term and longer-term interest rates of US Treasury instruments on a given day. Financial analysts use it to assess the market's expectation of recession or inflation. The normal shape of the yield curve has a moderately upward slope, with short-term rates lower than longer-term rates. If the upward slope steepens, the financial markets believe inflation may occur. An inverted yield curve occurs when short-term market rates are greater than longer-term market rates. An inverted curve indicates that the financial markets expect a slower economy, if not a recession.



PORTFOLIO ANALYSIS

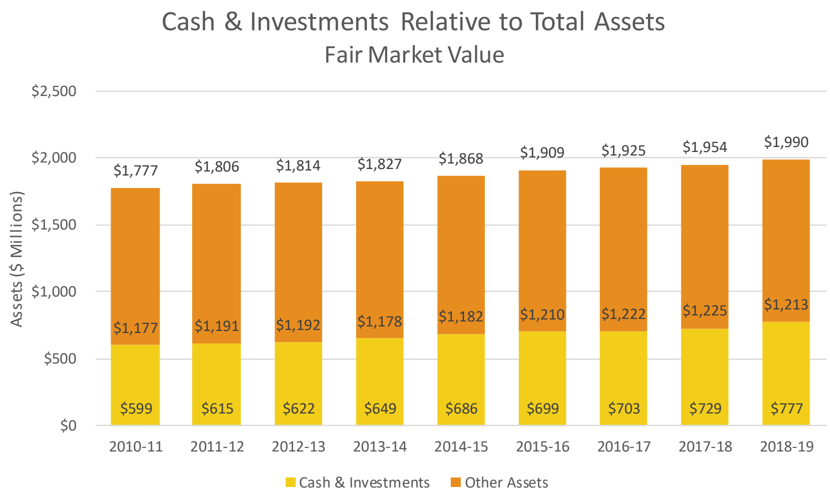
Portfolio Assets

Total assets in the investment portfolio, based on book value, stood at $793.8 million at the end of the fiscal year; a $26 million increase. This increase includes interest earned, loan payments received, and revenues in excess of expenses.



Total City Assets

The city publishes a *Comprehensive Annual Financial Report (CAFR)* at the end of each fiscal year as required by California state law and in conformity with General Accepted Accounting Principles and requirements prescribed by the Governmental Accounting Standards Board.



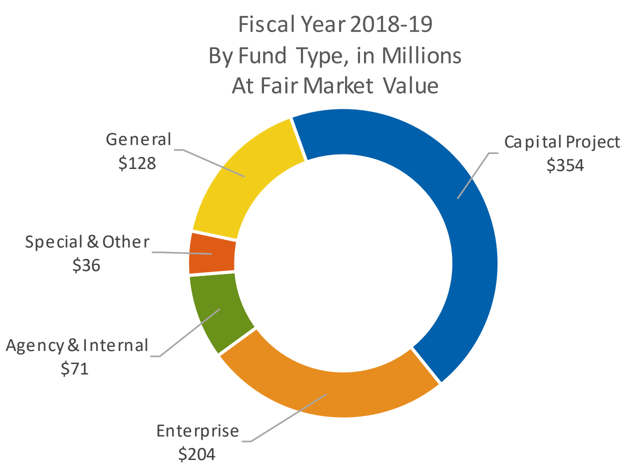
Among other information, the *CAFR* presents a statement of net position showing the total assets owned by the city and all its agencies. At the end of fiscal year 2018-19, cash and investments managed by the city treasurer represented 39% of all assets reported by the city and its agencies.

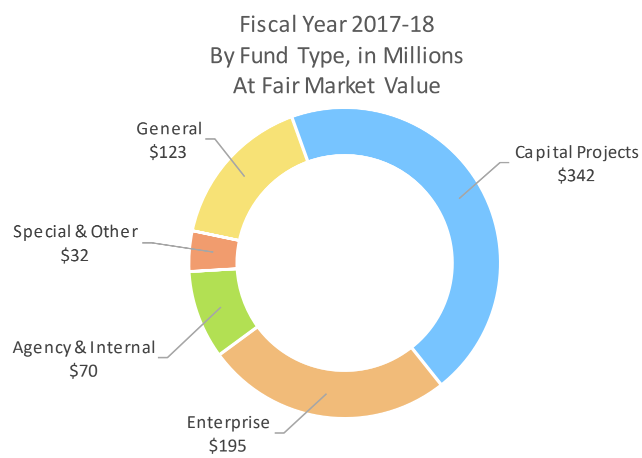
Sources of Assets

The portfolio is an internal investment pool that invests the available cash from various funds of all city agencies. The top three sources of portfolio assets calculated at market value are: Capital Project Funds at 45%; Enterprise Funds at 26%; and the General Fund at 16%. Together, these three funds account for 87% of total portfolio assets.

The Capital Project Fund includes funds for the General Capital Construction, Traffic Impact Fees, Public Facilities Fees, Park Development, TransNet Taxes, Drainage Fees, Special Districts, Infrastructure Replacement, and Gas Tax funds. Enterprise Funds are the Carlsbad Municipal Water District, Sewer, Solid Waste, Storm Water, and Golf Course funds.

Source of Pooled Assets





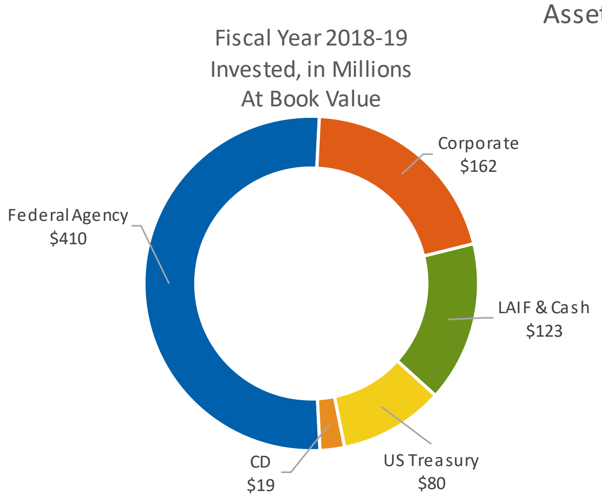
City of Carlsbad

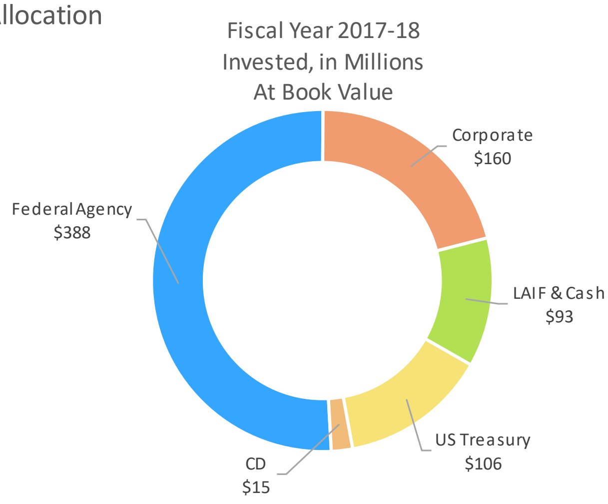
Allocation of Assets

Investments are made in financial instruments as authorized by the City of Carlsbad Investment Policy and the California Government Code. With the exception of bank deposits and deposits in the California state Local Agency Investment Fund (LAIF), all investments are in fixed-income instruments with known maturity dates.

On June 30, 2019, 52% of portfolio assets were invested in federal agencies, 20% in corporate notes, 10% in US Treasuries, 2% in certificates of deposit and 16% in LAIF and cash. During the past fiscal year, the dollar allocation of portfolio assets to federal agencies, corporate notes, LAIF, cash, and certificates of deposit increased while the allocation to US Treasuries decreased from the previous year.

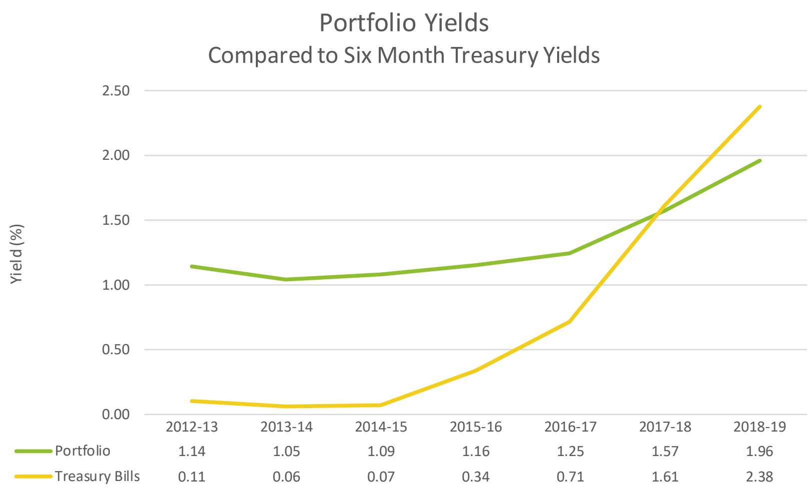
Asset Allocation



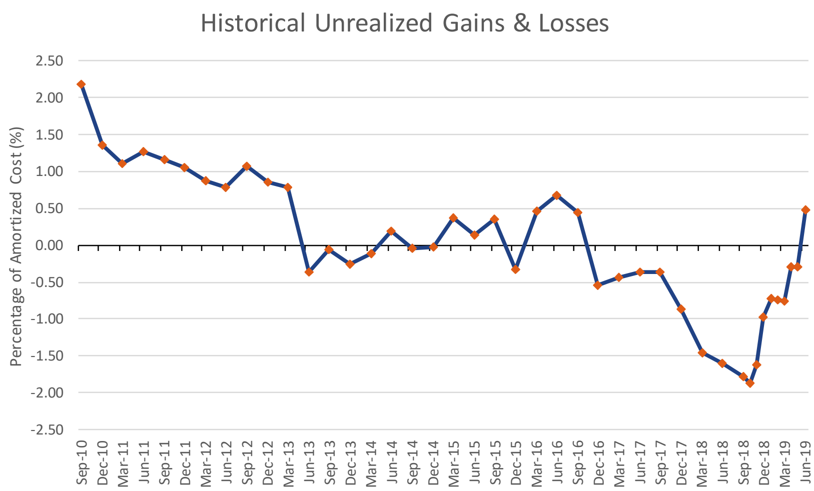


Federal Agency Breakdown by Percentage of Total Portfolio	
Federal Home Loan Mortgage Corporation	14.28%
Federal Home Loan Bank	11.94%
Federal Farm Credit Bank	10.48%
Federal National Mortgage Association	7.49%
Supranational	2.46%
Federal Agricultural Mortgage Corporation	1.94%
Private Export Funding Corporation	1.04%
Tennessee Valley Authority	0.94%
FICO	0.63%
RFCO Strip Principal	0.35%

Yields



The average return of the portfolio increased to 1.96% from 1.57% the year before. The portfolio yield is heavily influenced by changes in short-term market interest rates. The average interest rate for six-month US Treasury Bills increased to 2.38% from 1.61% the previous year. This graph shows the change in percentage of the portfolio over the last several years. Investments gain and lose market value subsequent to purchase because of changes in market interest rates. When market interest rates decrease, investments made previously at higher rates will gain value. The reverse is true when market interest rates increase. Accountants refer to these changes in value as unrealized gains and unrealized losses (commonly referred to as paper gains and paper losses). The gain/loss is not recognized until the investment is sold. Changes in value due to changes in market interest rates are normal and are to be expected.

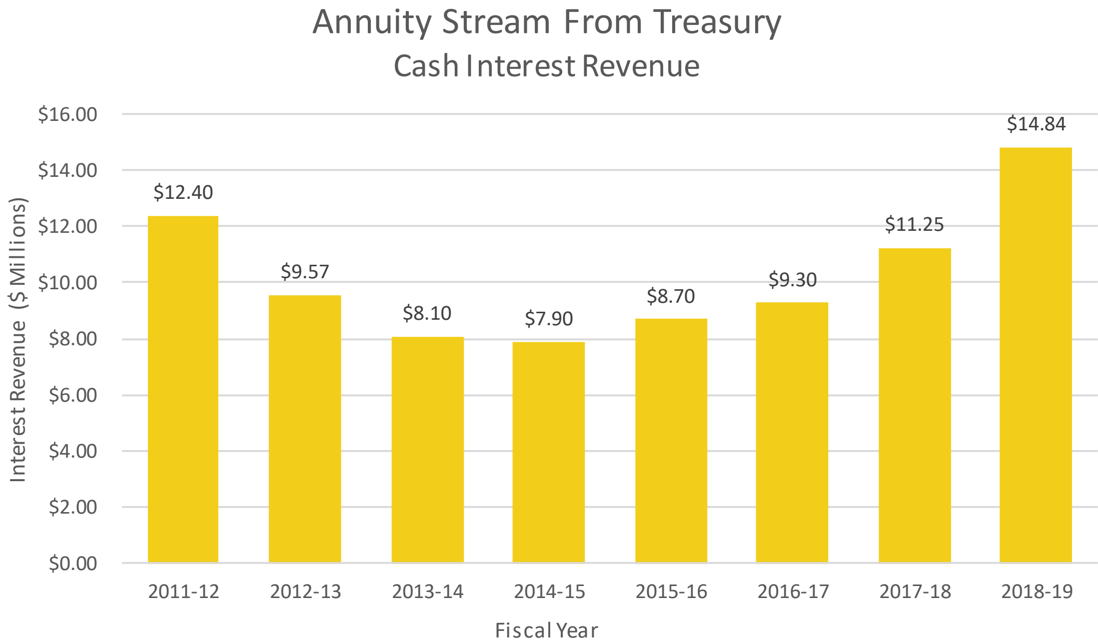


With a buy and hold policy, an objective of the city's investment policy is to achieve an average market rate of return over the economic cycle.

The success in achieving this objective can be approximated with having unrealized gains and losses that are relatively equal over time. Tracking and measuring unrealized gains and losses could also reveal any presence of high-risk investments in the portfolio. The changes in asset values shown in the graph indicate portfolio investments are within acceptable interest rate risk standards identified in the city's investment policy. The total portfolio had an unrealized gain of 0.487% on June 30, 2019. If going forward, we begin to see moderation occur, with respect to future interest rate increases, unrealized gains and losses should remain at or near zero percent. This is due to the average maturity of the overall portfolio positioned at just under two years.

Annuity Stream

Interest income from portfolio investments represents an annual stream of revenues. This annual stream totaled $14.8 million, an increase of $3.6 million from the previous fiscal year. This increase can be attributed to higher yields earned by the portfolio and an overall larger pool of investments. Of the total cash interest revenues earned by the portfolio, approximately $3.4 million was credited to the General Fund. Cash income is a function of assets in the portfolio, the market interest rates at the time of the investments, and interest payment schedules of the portfolio holdings.



FISCAL YEAR 2018-19 REVIEW

Global & Domestic Observations

Another year with China dominating the headlines as its economic growth has slowed while at the same time debt levels have climbed significantly. China continues to search for solutions to increase its economic growth moving from using residential construction to its stock markets to stimulate jobs. President Trump and his team of economic advisers invested a great deal of time and effort in negotiating new trade agreements with major US trading partners including, China, South Korea, Mexico and Canada. NAFTA has been replaced with USCMA, United States Canada Mexico Agreement. President Trump imposed several levels of tariffs to increase the pressure on China to address long-standing trade imbalances on a variety of fronts. Security concerns about Huawei, a major Chinese telecom equipment manufacturer, as a potential major supplier to US telecom firms as they transition to 5G communication services were also front and center. Several European countries are proceeding forward in spite of security concerns shared by US Intelligence agencies. Britain experienced more turmoil as implementation dates approach to proceed forward with their exit from the European Union also referred to as Brexit.

In the US markets, consumer expectation of inflation over the next three years is constrained at 2.4%. Year over year inflation is projected to be 2.3% which is at target levels. Consumer confidence and spending growth is projected to be 3.9%. The US stock market valuations have continued to expand through this past year. These figures are important indicators of future economic growth as consumers comprise roughly 70% of our economic activity in the US. Gross domestic product growth is projected to be 2.1% for the 4th quarter of 2019. Our domestic energy production has continued to expand. In 2020 the US is projected to become a net energy exporter of both crude oil and refined products for the first time in 70 years.

One of our largest contributors to US export success and generating well-paid jobs has been the Boeing Corporation. Ongoing issues with the 737 MAX aircraft have shut down the assembly of new aircraft pending resolution of several design and safety issues.

Another area of growth within the US economy is residential housing. This year there is a projection of 1.253 million new homes to be constructed. In spite of this strength of new construction we are still below the rates of construction necessary to support the rates of new household information. Affordability continues to be a major challenge in many markets across the US. Prices are continuing to rise year over year in this low interest rate environment for new mortgages issued.

In the US the issue of student loan indebtedness is a key campaign talking point. It is estimated that there is $1.5 trillion dollars of student loans. This amount is greater than all credit card debt issued. This student loan debt has constrained the ability to purchase homes for many households.

Negative interest rates continue to be a monetary policy tool that some countries have been utilizing in an effort to stimulate economic activity. Currently there is $13.4 trillion dollars of debt issued utilizing a negative interest rate structure. Major countries utilizing this tool are Japan, Germany and Switzerland. Questions are abound as to whether this monetary policy will generate economic growth over the longer term.

At the end of fiscal year 2018-19, LAIF investments had a yield of 2.45%, and all other investments had a yield of 1.87%. Revenues from the investment portfolio are projected to increase slightly over the coming year despite a moderate rate decrease to due to higher cash balances.

For the month of June 2019, the yield of the total portfolio averaged 1.95%. Total assets in the investment portfolio stood at $777 million as measured at fair market value at the close of fiscal year 2018-19.

City of Carlsbad

CITY TREASURER
ANNUAL REPORT OF INVESTEMENTS

APPENDICES

City of Carlsbad

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APPENDIX A: RISK MANAGEMENT

Risk Management

All investments are exposed to risk of some type. The objective of risk management is to identify the risks involved and establish acceptable levels of risks that are consistent with the city's investment objectives. Risk management includes managing, measuring, monitoring, and reporting the various risks to which portfolio investments are exposed.

Portfolio investments are exposed to the following types of risks:

- Credit risk
  - Custodial credit risk
    - Investments
    - Deposits
  - Default credit risk
  - Concentration credit risk
- Interest rate risk
- Event risk

As of June 30, 2019, the portfolio had the following investments and cash in its internal investment pool. The amounts shows do not include $0.7 million in interest receivable.

Investment	Maturities	Market Value	Gain (Loss)*
US agencies	July 2019 – July 2024	$ 491,186,269	$ 1,435,651
Corporate notes	July 2019 – January 2024	163,972,281	1,813,758
Certificates of deposit	July 2019 – June 2024	18,814,466	60,334
LAIF		114,066,817	-
Cash accounts		8,085,527	-
		$ 796,125,360	$ 3,309,743

*Market value less amortized cost.

APPENDIX B: DISCLOSURES

Custodial Credit Risk (Investments)

The city uses a third-party custody and safekeeping service for its investment securities. Wells Fargo Bank is under contract to provide these custodial services. Custodial credit risk is the risk that the city will not be able to recover the value of its investments in the event of a Wells Fargo Bank failure. All city investments held in custody and safekeeping by Wells Fargo Bank are held in the name of the city and are segregated from securities owned by the bank. This is the lowest level of custodial credit risk exposure.

Custodial Credit Risk (Deposits)

The city maintains cash accounts at Wells Fargo Bank. At the conclusion of each business day, balances in these accounts are "swept" into overnight investments. These overnight investments are pooled and collateralized with either US government securities or US agency securities. The California Code authorizes this type of investment. A small amount of cash is not swept from the Wells Fargo Bank checking accounts to cover checks that may be presented for payment. Amounts up to $250,000 are FDIC insured.

Default Credit Risk

Default credit risk is the risk that the issuer of the security does not pay either the interest or the principal when due. The debts of most US agencies are not backed by the full faith and credit of the federal government; however, because the agencies are US Government-sponsored, they carry double A (AA) credit ratings. The default credit risk of these investments is minimal.

Unless otherwise exempted, California Government Code limits investments to the top three credit ratings: AAA, AA, and A. It is the city's policy, however, to limit investments to the top two credit ratings (AAA and AA). As of June 30, 2019, five investments in corporate notes had a credit rating below the AA limit. These investments were made when the credit ratings were either AAA or AA and a subsequent change in rating has occured. California Government Code and the city's investment policy allow the city treasurer to determine the course of action to correct exceptions to the policy. It is the intent of the city treasurer to hold these investments in the portfolio until maturity unless events indicate a sale should be made.

The default credit risk for corporate notes with a credit rating of single A (A) is considered by the city treasurer to be within acceptable limits for purposes of holding to maturity and is within the California Government Code limitations.

LAIF is an investment pool managed by the California state treasurer. Its investments are short-term and follow the investment requirements of the state. As of June 30, 2019, the average maturity of the LAIF investments was 173 days. The state treasurer is not required to contract for a credit rating to be assessed for LAIF. California Government Code Section 16429.3 excludes LAIF deposits from being transferred, loaned, impounded or seized by any state agency or official.

Concentration Credit Risk

Concentration credit risk is the heightened risk of potential loss when investments are concentrated in one issuer. The California Government Code does not identify a specific percentage that indicates when concentration risk is present for any one issuer. California Government Code Section 53601(k) does, however, require that total investments in medium-term corporate notes of all issuers not exceed 30% of the portfolio. As of June 30, 2019, approximately 20.5% of the city's total portfolio investments were in medium-term corporate notes.

For concentration of investments in any one issuer, the city's investment policy requires that no more than 5% of investments in corporate notes be in any one issuer. There is no similar requirement in either the California Government Code or the city's investment policy for US agencies. As of June 30, 2019, no investments in any one corporate issuer exceeded 5% of total portfolio investments.

Interest Rate Risk

Interest rate risk is the risk that investments will lose market value because of increases in market interest rates. A rise in market interest rates will cause the market value of investments made earlier at lower interest rates to lose value. The reverse will cause a gain in market value. As of June 30, 2019, the portfolio had a 0.42% gain in market value based on cost.

The city's investment policy has adopted two means of limiting its exposure to market value losses caused by rising market interest rates: (1) limiting total portfolio investments to a maximum modified duration of 2.2, and (2) requiring maturing investments within one year to be equal to an amount that is not less than two thirds of the current year operating budget of $276,114,864 (fiscal year 2018-19). As of June 30, 2019, the modified duration of the portfolio was 1.74, within the required maximum of 2.2. Investments maturing within one year were $280,201,071, exceeding the required minimum of $184,076,576. The city's exposure to interest rate risk is within acceptable limits.

Event Risk

Event risks include the chance that something unexpected will impede the ability of an issuer of a security to meet its obligations. These types of risks are usually short in duration, but can impair the city's ability to communicate with or use banking services. Such an event could cause a delay in collecting securities which have matured. Security risks are also within this category.

APPENDIX C: PORTFOLIO ACTIVITIES - FISCAL YEAR 2018-19

The city's portfolio balance increased 3.4% from $767.8 million to $793.8 million based on book value in fiscal year 2018-19. The increase of $26 million does little to show the volume of cash that flows in and out of the portfolio during one fiscal year. The following table illustrates that the city treasurer managed $1.3 billion of cash inflows and cash outflows which prompted investment decisions during fiscal year 2018-19.

Cash Inflows and Outflows	
Bond calls	$ 45,439,000
Bond maturities	137,023,000
Bond purchases	200,000,000
Interest income	14,848,000
LAIF investments	284,073,272
LAIF withdrawals	170,201,380
Sweep investments	226,299,325
Sweep withdrawals	225,950,717
	$ 1,303,834,694