To: Benjamin I. Myers, City Manager

From: Melissa R. Marsh, Deputy City Manager - Administrative Services

Date: January 18, 2017

RE: Investment Report 2nd Quarter of Fiscal Year 2017

A summary of the investments for the City of Madison Heights as of December 31, 2016 is included in this memo. The requirements of the City of Madison Heights Investment Policy and P.A. 20 of 1943, as amended, govern the investments held by the City.

Interest Update:

During this quarter, the Federal Open Market Committee (FOMC) met two times and increased its short-term rate guidance, taking the federal funds rate target range from 0.50% to 0.75% at its December meeting. This contributed to the last quarter of calendar year 2016 being negative, as the main S&P Municipal Bond Index returned 3.30%. Benchmark rates continued to rise throughout the term structure, which pushed total returns negative, reversing almost all of the gains posted earlier in the year.

There is a direct relationship between Treasury securities and municipal bond performance. This is important because over 48% of the City's portfolio is invested in these Treasuries and bonds. As we have discussed, the typical bond, including Treasury notes and bonds with initial maturities from two to thirty years, pays a fixed rate of interest each year based on the face value of the bond, and the face amount is paid off when the bond matures. *For example, if you own a $100,000 Treasury bond that has a 6 percent coupon rate and matures in 10 years, you will receive semiannual interest payments of $3,000 and the $100,000 face value on the maturity date in 10 years.*

Since the interest paid by a bond and the face value are fixed values, the bond market mechanism to adjust for changing interest rates is to change the current market price of a bond. As a result of how bond markets function, you may pay more or less than the face value to purchase a specific bond. An inverse relationship exists between bond prices and interest rates. If you own a bond paying a certain rate of interest and rates in the bond market go up, a buyer will not pay you the same price you paid for the bond. The price will be lower to bring the yield based on price in line with current market rates. So if rates increase, the market prices for bonds decrease. If rates go down, the market value of bonds goes up. Longer-term bonds have greater price volatility than will bonds with a shorter time to maturity.

If you own a Treasury security or other bond, rising interest rates will not affect the interest you earn or the face value amount you would receive when the bond matures. However, the higher rates will cause the current market value of your bond to decline, so if you wanted to sell the bond, the amount you receive would be less than the bond's value when rates were lower. Because rising interest rates result in lower bond prices, the investment world's view is that rising rates are a negative for bonds.

Despite the decline in market values of these investments we continue to pursue a diversified investment strategy instead of moving to vehicles such as 100% Certificates of Deposit. The majority of the return on bonds comes from the interest payments (the coupon payments); fluctuations in the price of a bond or treasury typically have very little impact on the value of the investment as a whole. This is due to the long term nature of our fixed rate investments and the higher rate of return we will realize by holding these fixed rate vehicles such as bonds and treasuries until either the call date or maturity. As explained in previous reports in any given quarter, the method of marking investments to market value may result in loss; however, holding bonds until maturity would result in a total return of investment. I have included a chart below that will compare our current returns with what our returns would be if we were invested 100% in certificates of deposit at the current rate of 1.1%.

In accordance with the City's investment policy, the City limits its exposure to possible decline in fair market value by maintaining diversification and controlling maturity dates. The table on the following page details the amounts at December 31, 2016. There is a difference between the coupon rate (i.e. yield at issue date) and the estimated quarterly annual yield. When a bond is issued, it has a coupon rate until it matures. This rate is related to the current interest rates. When a bond is sold or called before maturity, the value of the bond, not the coupon, will be affected by the current market interest rates. If current interest rates are higher than the coupon, the bond will sell below its face value. When interest rates are lower, they are sold at a premium or higher than face value. A bond's estimated annual yield is related to the current prevailing interest rates. A bond's yield is its annual interest (coupon) divided by its current market price.

Investment Listing, by Security Type

Description	Amount	Adjusted Cost	Market Value	Unrealized Gain (Loss)	Accrued Interest	Estimated Annual Income	% of Total Portfolio	12/31/2016 Annual Yield to Maturity	12/31/2015 Annual Yield to Maturity
Fixed Income Assets									
Government Bonds	1,992,000	$ 2,001,021	$ 1,949,986	$ (51,035)	$ 7,004	$ 24,623	6.6%	1.26%	1.67%
Securities	4,537,082	3,523,649	3,371,835	(151,814)	10,893	132,098	11.4%	3.92%	2.97%
Municipal Bonds	2,535,000	2,600,696	2,548,461	(52,235)	4,508	37,757	8.6%	2.16%	3.05%
Certificates of Deposit	2,961,325	2,961,325	2,961,325	-	4,412	28,492	10.0%	1.63%	0.50%
Local Government Investment Pool/Money Market	18,745,774	18,745,774	18,745,774	-	17,875	64,379	63.4%	0.66%	0.43%
Total Investments			$29,577,381				100.0%		

Risk:

Interest rate risk is the risk that interest rates will change and adversely affect the fair value of the investment of the government's cash flows. The City attempts to limit exposure to a possible decline in fair market value by diversifying maturity dates.

Credit risk is the risk that the investment will not fulfill its promise to pay the investor when required. There is a credit risk associated with all financial institutions, brokers and investment vehicles. The City attempts to limit exposure to credit risk by diversifying the holders of investments, maintaining a high credit rating for investments, and restricting Certificates of

Deposit investments to those with financial institutions that are members of the Federal Deposit Insurance Corporation (FDIC).

Concentration of risk occurs when the municipality is heavily invested in one issuer. The city's largest issuer is the Local Government Investment Pool managed by Oakland County. This pool is diversified with other County investments.

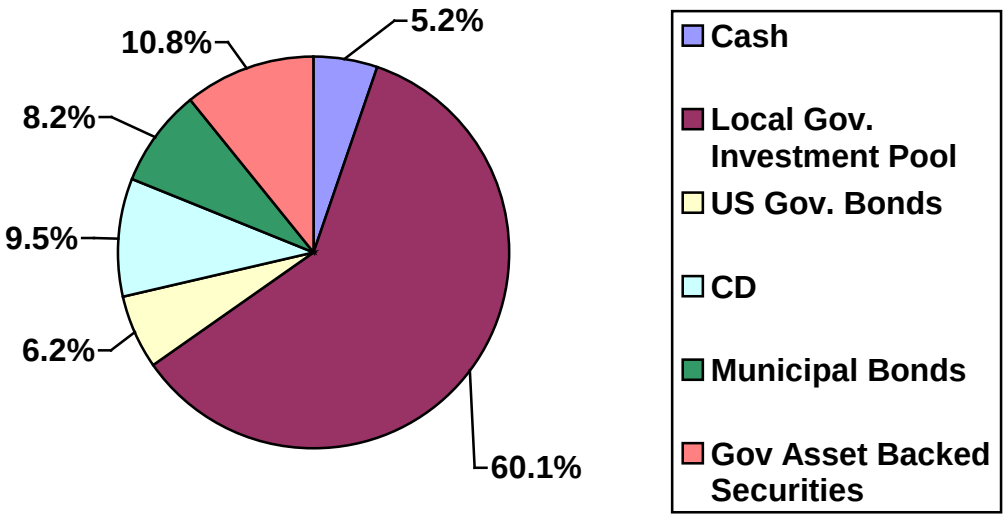
Quarter Investments:

As of December 31, 2016, the City has the following Cash and Investment balances (combination of all funds, excluding pension and health care savings funds).

Total amount in the cash accounts	$ 1,631,585
Total amount in Investments	29,577,381
	$31,208,966

The chart below details the diversification of the City investments as of December 31, 2016.

Diversification – Second Quarter of Fiscal Year 2017
Last Day of the Quarter



Cash and Investments by Fund

Fund	Amount at 12/31/15	Amount at 12/31/16
General Fund	$15,156,382	$15,760,747
Major Road	(454,971)	(373,713)
Local Road	2,756,752	2,424,395
Downtown Development Authority	36,958	41,310
Drug Forfeiture	113,270	82,834
Community Development Block Grant	(16,425)	(13,341)
Special Assessment	1,230,784	1,190,667
Fire Station Bond	404,776	391,427
Water and Sewer	9,870,068	11,512,964
Escrow	227,712	191,676
Total Cash and Investments	**$29,325,306**	**$31,208,966**

* Amounts of cash/investments by fund are prior to year-end closing and subject to change with necessary month-end adjustments.