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I. Summary of Significant Accounting Policies

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) applicable to governmental entities. A summary of the City and County of Denver's significant accounting policies applied in the preparation of these financial statements follows.

Note A – Reporting Entity

The City and County of Denver (City) was incorporated in 1861 and became a Colorado Home Rule City on March 29, 1904, under the provisions of Article XX of the Constitution of Colorado, as amended, when the people of the City ratified a Charter providing for a Mayor-Council form of government. The City is operated by authority of the powers granted by its Charter. The City provides typical municipal services with the exception of education, public housing, and sewage treatment that are administered by other governmental entities.

As required by U.S. GAAP, these financial statements present the City (primary government) and its component units. The component units discussed below are included in the City's reporting entity because of the significance of their operational or financial relationships with the City in accordance with Governmental Accounting Standards Board (GASB) Statement No. 14, The Financial Reporting Entity, GASB Statement No. 39, Determining Whether Certain Organizations Are Component Units – an amendment of GASB Statement No. 14, and GASB Statement No. 61, The Financial Reporting Entity: Omnibus – an amendment of GASB Statements No. 14 and No. 34. Certain amounts reported in the individual component unit financial statements have been reclassified to conform to the City's accounting policies. Each component unit has a December 31st year end.

1. Blended Component Units.

Gateway Village, Denver 14th Street, and RiNo General Improvement District (GID) – The districts were created by the City as separate legal entities pursuant to state statute. Per statute, the City Council serves as ex officio Board of Directors for the districts. District Advisory Boards, appointed by the City Council, conduct and manage all affairs of the districts, which provide capital improvement and maintenance services entirely to the City, subject to overall approval and supervision of the ex officio Board of Directors. The districts are reported herein in the City's special revenue and debt service funds.

2. Discretely Presented Component Units.

9th Avenue, Cherry Creek North, Cherry Creek Subarea, Colfax, Downtown Denver, Old South Gaylord, West Colfax, Federal Boulevard, Bluebird, Colfax-Mayfair, Santa Fe, and RiNo Business Improvement Districts (BID) – Each BID was created by the City as a separate legal entity pursuant to state statute for the purpose of maintaining public improvements and planning development activities within each BID's geographic boundaries. The City appoints the governing boards of the BIDs and is able to impose its will through the approval of the BID's operating budgets. The 9th Avenue BID had no activity and was dissolved in 2016.

Denver Convention Center Hotel Authority (DCCHA) – The DCCHA was organized by the City as a nonprofit corporation in accordance with State law for the purpose of owning, acquiring, constructing, equipping, operating and financing a hotel adjacent to the City's convention center. The Mayor appoints the Board of Directors of the DCCHA, subject to City Council confirmation, and a financial benefit/burden relationship exists as a result of an economic development agreement between the City and DCCHA. According to the agreement DCCHA distributes certain excess revenues to the City, makes payments in lieu of taxes to the City, and has entered into a room block agreement which coordinates the reservation of hotel room blocks with events scheduled at the City's convention center. The City makes semi-annual economic development payments to the DCCHA, which totaled $10,500,000 in 2016, and will gradually increase to an annual maximum of $11,000,000 in 2018. The City also has the right to purchase the hotel at the purchase option price per the agreement.

Denver Downtown Development Authority (DDDA) – The DDDA was created for the purpose of promoting public health, safety, prosperity, security, and general welfare in order to halt or prevent deterioration of property values or structures within the central business district and to assist in the development and redevelopment of the central business district, especially to benefit the property within the boundaries of the Authority. The City entered into a cooperation agreement with DDDA in 2009 authorizing the Authority to collect and disburse property and sales tax increment revenues. The DDDA collects property and sales tax increment revenue from the City and disburses it to the Denver Union Station Project Authority and the Denver Union Station Metro Districts. The Central Platte Valley Metropolitan District also exists within the boundaries of DDDA and it receives property tax revenue from the DDDA. The Board of Directors is appointed by the Mayor and confirmed by City Council, and City Council may remove any director at will. These appointments and the ability of the City to impose its will on the Authority make the City financially accountable for the Authority.

Denver Preschool Program, Inc. (DPP) – DPP is a nonprofit corporation organized to administer the Denver Preschool Program that provides tuition credits for children of Denver families the year before the child is eligible for kindergarten. The City is legally obligated to provide financial support to DPP, as the program is funded by a sales and use tax increase of fifteen one-hundredths of one percent (0.15%) that was voter-approved through December 2026. The Mayor appoints ten of the eleven DPP board members and City Council appoints a council member as the other board member. The City appointments to the governing body and its financial obligations to DPP make the City financially accountable for the DPP.

Denver Union Station Project Authority (DUSPA) – In 2001, the City, the Regional Transportation District (RTD), the Denver Regional Council of Governments, and the Colorado Department of Transportation entered into an intergovernmental agreement for the redevelopment of Denver Union Station and its surrounding environs as a multimodal transportation hub in the City's metropolitan area. The Denver Union Station Project Authority was created by City ordinance in 2008, as a permanent, centralized agency to accomplish the Denver Union Station Project (the Project) which will specifically deal with the financing, acquiring, equipping, designing, constructing, operating and maintaining of the Project. DUSPA is a Colorado nonprofit organization. The Mayor appoints six of the eleven voting DUSPA board members, which are then confirmed by City Council. The Mayor can remove any City appointed board member at will, giving the City the ability to impose its will on the Authority. The ability to appoint the majority of voting members and to impose its will on DUSPA makes the City financially accountable for the Authority. Tax increment revenue from the City provides funding for the Project, which creates a financial burden relationship between the City and DUSPA. DUSPA is authorized to issue revenue bonds for the Project, which for federal income tax purposes are considered to be issued on behalf of the City, however these bonds, and any other obligation incurred by DUSPA, are not liabilities of the City.

Denver Urban Renewal Authority (DURA) – DURA was created as a separate legal entity by the City pursuant to the state Urban Renewal Law to acquire, clear, rehabilitate, conserve, develop or redevelop identified slum or blighted areas existing within the City and to prevent future blight from developing. In addition, for health and safety purposes, DURA provides housing rehabilitation assistance in the form of low-interest loans to low-income Denver homeowners through two City housing rehabilitation programs. The Mayor appoints the DURA board of directors subject to City Council approval. Any urban renewal project undertaken by DURA must receive prior approval by the City. A significant amount of DURA's financing comes from incremental property and sales tax revenue from the City. In 2009, DURA established Denver Neighborhood Revitalization, Inc. (DNRI), a registered State of Colorado not-for-profit organization and component unit of DURA, to address the needs in the Denver community related to foreclosed and/or abandoned homes. DNRI administers and executes the Neighborhood Stabilization Program (NSP) funds awarded by the City and County of Denver. DNRI activities include acquisition and rehabilitation of foreclosed residential properties in targeted neighborhoods within the City and County of Denver. For presentation purposes, DURA and DNRI financial activity is combined.

Complete financial statements, as applicable, for the following individual discretely presented component units can be obtained from their respective administrative offices:

Bluebird BID
8005 South Chester Street, Suite 150
Centennial, Colorado 80112

Cherry Creek North BID
299 Milwaukee Street, Suite 201
Denver, Colorado 80206

Cherry Creek Subarea BID
1573 South Jamaica Street
Denver, Colorado 80012

Colfax BID
P. O. Box 18853
Denver, Colorado 80218

Colfax-Mayfair BID
P. O. Box 202161
Denver, Colorado 80220

Downtown Denver BID
511 16th Street, Suite 200
Denver, Colorado 80202

Denver Convention Center Hotel Authority
1225 Seventeenth Street, Suite 3050
Denver, Colorado 80202

Denver Downtown Development Authority
201 West Colfax Avenue, Department 1109
Denver, Colorado 80202

Denver Preschool Program, Inc.
305 Park Avenue West, Suite B
Denver, Colorado 80205

Denver Union Station Project Authority
1225 17th Street, Suite 3050
Denver, Colorado 80202

Denver Urban Renewal Authority
1555 California Street, Suite 200
Denver, Colorado 80202

Federal Boulevard BID
2931 West 25th Avenue
Denver, Colorado 80211

Old South Gaylord BID
1076 South Gaylord Street
Denver, Colorado 80209

Santa Fe BID
901 West 10th Avenue, Suite 2A
Denver, Colorado 80204

West Colfax BID
4500 West Colfax Avenue
Denver, Colorado 80204

RiNO BID/GID
2901 Blake St., Suite 165
Denver, Colorado, 80205

3. Fiduciary Component Unit.

Denver Employees Retirement Plan (DERP) – The DERP is a separate legal entity established by City ordinance to provide pension benefits for substantially all City employees, except police officers and fire fighters. The Mayor appoints the members of the DERP governing board. The DERP is presented herein in the City's fiduciary funds as Pension and Health Benefits Trust Funds. The net position of the DERP is held for the sole benefit of the participants and is not available for appropriation by the City.

4. Related Organizations.

The City appoints members to the boards of the following organizations. The City's accountability for the organizations does not extend beyond making these appointments and there is no fiscal dependency by these organizations on the City.

Denver Health and Hospital Authority (Authority) – The Authority is a political subdivision and body corporate of the State of Colorado. The Authority is governed by a nine-member board, all appointed by the Mayor. The Authority entered into contractual agreements with the City to obtain and operate the City's existing hospital system. In accordance with the contractual agreements between the Authority and the City, the City paid the Authority $60,250,000 for providing various health related services to the City and its residents during 2016. In addition, the Authority made payments in the amount of $1,872,000 to the City for human services, fleet, sheriff, and various human resources services.

Denver Housing Authority (DHA) – The DHA was created by ordinance in accordance with U.S. Department of Housing and Urban Development (HUD) regulations. Its five-member board, appointed by the Mayor, controls the daily administration and operations of the DHA. The DHA is dependent on Federal funds from HUD and, as a result, is not financially dependent on the City. In addition, the City is not responsible for any deficits incurred and has no fiscal management control over the DHA.

Denver Public Library Trust (DPL Trust) – The DPL Trust is a charitable entity formed by the Library Commission and the DPL Friends Foundation to accept inherited interests through a bequest. All assets of the DPL Trust derive from a percentage of an interest in two real estate partnerships. The Library Commission appoints the trustees of the DPL Trust. All funds received by the DPL Trust are deposited into a bank account managed by the DPL Trust and quarterly transferred to the DPL Friends Foundation. The monies may be requested during the Denver Public Library's annual budget request from the DPL Friends Foundation.

Denver Water Board – The Denver Water Board was created pursuant to the City Charter as a separate legal entity to oversee the City's water system. The Denver Water Board's five-member governing body is appointed by the Mayor, but the City is not financially accountable for the Denver Water Board because the Denver Water Board has the power to levy property taxes to support general obligation bonds issued by the Denver Water Board and the Denver Water Boards' determination of the necessity for the mill levy would not be subject to approval or modification by the City. The Denver Water Board had no general obligation bonds outstanding as of December 31, 2016, and no longer has authority to issue general obligation bonds.

Lowry Economic Redevelopment Authority (Lowry) – Lowry was created as a public entity by contract between the City and another local government under the Colorado Governmental Immunity Act, C.R.S. Section 24-10-01. Lowry is a separate legal entity intended to maintain, manage, promote, and implement economic redevelopment of the former Lowry Air Force Base. The City is not fiscally accountable for Lowry. Lowry is governed by a nine-member board of directors of which the Mayor appoints seven.

Stapleton Development Corporation (SDC) – The City and DURA created a nonprofit corporation whose objectives would include, but not be limited to, planning an orderly public purpose assessment and redevelopment program for the former Stapleton International Airport property and implementing the redevelopment plan for the property. The SDC board of directors is composed of 11 voting members; the Mayor appoints 9 and 2 are appointed by DURA. All 11 members are confirmed by the City Council. Neither the City nor DURA is financially accountable for SDC, as the City and DURA cannot impose their will on SDC, nor does a financial benefit or burden exist between the entities.

Note B – Government-Wide and Fund Financial Statements

The government-wide financial statements, which include the statement of net position and statement of activities, report information on all of the non-fiduciary activities of the primary government and its component units. Eliminations have been made to minimize the double-counting of internal activities. Governmental activities, which generally are supported by taxes, intergovernmental revenues, and other nonexchange transactions, are reported separately from business-type activities, which rely generally on fees and charges to external parties. The primary government is reported separately from certain legally separate component units for which the primary government is financially accountable.

The statement of net position reports all of the City's assets and deferred outflows of resources, and liabilities and deferred inflows of resources, with the difference being presented as net position.

The statement of activities demonstrates the extent to which the direct expenses of a given function or business-type activity is offset by program revenues. Direct expenses are clearly identifiable with a specific function. Program revenues include: 1) charges to customers who purchase, use, or directly benefit from goods, services provided by the programs, and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular program. Taxes and other items not properly included among program revenues are reported as general revenues.

Separate fund financial statements are provided for governmental funds, proprietary funds, fiduciary funds (even though fiduciary funds are excluded from the government-wide financial statements), and component units. The emphasis of fund financial statements is on major governmental funds, enterprise funds, and component units, each reported as a separate column. All remaining governmental funds, enterprise funds, and component units, are aggregated and reported as nonmajor funds.

Note C – Measurement Focus, Basis of Accounting, and Statement Presentation

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting, as are the proprietary and fiduciary funds, and discretely presented component unit financial statements. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. On an accrual basis, property taxes are recognized in the year for which they are levied. Grants and similar items are recognized as revenue as soon as all eligibility requirements have been met.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are recognized when they are measurable and available. Available means collectible within the current period, or soon enough thereafter, to pay liabilities of the current period or when matured. The City considers all revenue as available, if collected within 60 days after year end. Property taxes, sales and use taxes, franchise taxes, occupational privilege taxes, interest revenue, and charges for services are susceptible to accrual. Other receipts, fines, licenses, permits, and parking meter revenues become measurable and available when cash is received by the City and are recognized as revenue at that time. Grant revenue is considered available if it is expected to be collected within one year and all eligibility requirements are met. Expenditures are recorded when the related liability is incurred, except for debt service expenditures, and certain compensated absences and claims and judgments, which are recognized when the payment is due.

The City reports the following major governmental funds:

- The General Fund is the City's primary operating fund. It accounts for all financial resources of the general government, except those required to be reported in another fund. This fund is financed primarily by sales tax, property tax, and charges for services.
- The Human Services special revenue fund is used to account for proceeds of restricted revenue to be used for public assistance and welfare activities. This fund is financed primarily by intergovernmental revenue and property taxes.

The City reports the following major proprietary funds:

- The Wastewater Management fund accounts for the City's storm and sewer operations. This fund is financed primarily by sanitary sewer and storm drainage charges.
- The Denver Airport System fund accounts for the operation of the City's airport system which includes Denver International Airport. This fund is financed primarily by facility rentals, parking revenues, and landing fees.

The City reports the Denver Convention Center Hotel Authority, Denver Union Station Project Authority, and Denver Urban Renewal Authority component units as major component units.

Additionally, the City reports the following fund-types:

- Internal service funds account for asphalt plant and workers' compensation services provided to the various departments and agencies of the City on a cost reimbursement basis.
- Pension trust funds account for the Denver Employees Retirement Plan and Deferred Compensation Plan which accumulate resources for pension and health benefit payments to qualified City retirees and amounts employees defer from their income.
- The private-purpose trust funds are used to account for resources legally held in trust by the City for use by various organizations for various purposes, i.e., COBRA payments and unclaimed warrants. All resources of the funds, including any earnings on invested resources, may be used to support the various activities of the organizations. There is no requirement to preserve the resources as capital.
- Agency funds account for the Employee Salary Redirect plan, clearing funds for payroll and benefit provider payments, and collected receipts being temporarily held for allocation to other entities. The agency funds are custodial in nature and do not involve measurement of results of operations.

The effect of interfund activity generally has been eliminated from the government-wide financial statements. Exceptions to this practice include payments and other charges between the City's enterprise funds and various other functions of the government. Elimination of these charges would distort the direct costs and program revenues reported for the various functions affected.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the enterprise and internal service funds are charges to customers for sales and services. Operating expenses for the enterprise and internal service funds include the administrative expenses, cost of sales and services, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

When both restricted and unrestricted resources are available for use, the City uses the restricted resources first, then unrestricted resources as needed. If no other restrictions exist, the order of spending of resources will be committed, assigned, and lastly unassigned.

Note D – Assets, Deferred Outflows, Liabilities, Deferred Inflows, and Net Position or Fund Balances

1. **Cash and Investments.** For the primary government, except when prohibited by trust agreements, the operating cash in each fund is maintained in one consolidated pool by the City. Cash in excess of operating requirements is invested by the City. The City Charter, Section 2.5.3(C) and the Denver Revised Municipal Code, Section 20-21, authorize that investments may be made in U.S. Government obligations, its agencies and sponsored corporations, prime commercial paper, prime bankers' acceptances, certificates of deposit issued by eligible banks and savings and loan associations, local government investment pools, repurchase agreements, forward purchase agreements, securities lending agreements, highly rated municipal securities, high grade corporate bonds, asset-backed securities, supranational debt obligations, federal agency collateralized mortgage obligations (CMO), federal agency mortgage pass through securities (MBS), money market funds that purchase only the types of securities specified herein, and other similar securities as may be authorized by ordinance. The pension trust funds and component units maintain deposits and investments outside of the City's investment pools. These are primarily in demand deposits and U.S. Government obligations. Some pension trust funds have investments in real property.

   Investments are stated at fair value, which is primarily determined based upon quoted market prices or significant other observable inputs at year end. Fair values of real estate and other investments are determined by independent periodic appraisals.

2. **Cash Equivalents.** The City's investments held in the consolidated pool with original maturities of three months or less from the purchase date are classified as cash equivalents. For investments owned by wastewater, the airport system, the pension trust funds, and the component units, investments with original maturities of three months or less from the date of purchase are considered cash equivalents.

3. **Property Taxes Receivable.** Property taxes are reported as a receivable and as deferred inflows of resources when the levy is certified by the City's Assessor on or before December 15 of each year, unless there is a special election. Property taxes receivable is reduced by an allowance for uncollectible taxes. Property taxes are due and considered earned on January 1 following the year levied. The first and second halves become delinquent on March 1 and June 16, respectively. Tax rate levy authority for the 2016 fiscal year was approved when Resolution 1213, Series of 2016, was adopted by the City Council and approved by the Mayor.

4. **Water and Wastewater Service Accounts.** Sanitary sewer accounts are maintained, billed, and collected by the Water Board in connection with its water accounts. The Wastewater Management enterprise fund is responsible for billing and collecting storm drainage charges using a cycle billing system. Flat rate accounts and certain cycle billings are billed in advance on a monthly basis and revenues relating to future years are classified as unearned revenue. Metered accounts are billed in arrears and have been accrued.

5. **Interfund Receivables/Payables.** During the course of operations, numerous transactions occur between individual funds for goods provided or services rendered. The balances from these transactions are classified as "interfund receivable" or "interfund payable" on the balance sheet/statement of net position. Other interfund receivables/payables between individual funds have occurred because some funds have overdrawn their equity share of pooled cash.

6. **Due from Other Governments.** Due from other governments includes amounts due from grantors for grants for specific programs and capital projects. Program and capital grants for capital assets are recorded as receivables and revenues when all eligibility requirements are met. Revenues received in advance of project costs being incurred or for which eligibility requirements have not been met are unearned. In the governmental funds, revenue recognition also depends on the timing of cash collections (availability).

7. **Inventories and Prepaid Items.** The City values inventories at cost, which approximates market, and accounts for them using either the weighted average method or the first-in/first-out method. The costs of governmental fund-type inventories are recorded as expenditures when purchased.

   Payments made to vendors for services representing costs applicable to future accounting periods are recorded as prepaid items in both the government-wide and fund financial statements. The cost of prepaid items in the governmental funds are recorded as an expense when consumed.

8. **Restricted Assets.** Certain assets of the General Fund, General Government special revenue fund and certain component units are classified as restricted assets because their use is completely restricted by State statute (see Note IV-E-8).

   In the General Fund and Human Services special revenue fund, certain monies related to capital leases (see Note III-E-1) are classified as restricted in accordance with lease requirements.

   Certain resources of the governmental activities and the Denver Airport System enterprise fund are classified as restricted assets because their use is limited by applicable bond covenants. These covenants require the accumulation of resources for current principal and interest on both bonds and subordinate bonds, principal and redemption price on term bonds subject to mandatory redemption, principal and interest emergency reserve, and operating and maintenance emergency reserve.

   In the governmental activities the net pension asset is presented as a restricted asset.

   Certain assets of the Environmental Services enterprise fund have been restricted by external parties to be used for future plant and equipment expenditures and payment of certain liabilities.

9. **Capital Assets.** Land, collections, construction in progress, buildings, equipment, infrastructure, and intangible assets are reported in the applicable governmental or business-type activities, or component unit columns of the government-wide financial statements. Such assets are recorded at cost or estimated cost if purchased or constructed. Donated capital assets are recorded at their acquisition value at the date of donation. The capitalization threshold of the City is $5,000 except for software which has a threshold of $50,000. The costs of normal maintenance and repairs that do not add to the value of the assets or materially extend assets' lives are not capitalized. Interest incurred during the construction phase of capital assets of business-type activities is reflected in the capitalized value of the asset constructed, net of interest earned on the invested proceeds over the same period.

   Assets under capital leases are recorded at the present value of future minimum lease payments and are amortized over the shorter of the lease term or the estimated useful life of the asset.

   Capital assets of the City and certain component units are depreciated on a straight-line basis over the following estimated useful lives:

Buildings and improvements	5 to 100 years
Motor vehicles and motorized equipment	5 to 20 years
Furniture, machinery, and equipment	3 to 20 years
Collections, excluding library books	15 years
Library books	4 years
Infrastructure	6 to 50 years
Intangibles	3 to 5 years

Library books are depreciated over a 4-year life using the composite method. The Western History artwork collection is not capitalized because these assets are held for public exhibition rather than financial gain and the value cannot be determined. They are protected and preserved and proceeds from any sales must be used to acquire other items for collection. In addition, artwork acquired through the Estate of Clyfford Still is not capitalized because the collection must be held for public exhibition and sale of the collection, or any piece of the collection, is prohibited, under the terms of the will and the donation agreement. A value has not been assigned to the Clyfford Still collection and due to the rarity of the collection combined with restrictions within the will for its ownership and exhibition, its ultimate value may be impossible to establish with any certainty.

Assets held for disposition in governmental funds consist of foreclosed property and land pending future sale. No depreciation is recorded for assets held for disposition.

10. **Long-term Obligations.** The City records long-term debt and other long-term obligations as liabilities in the government-wide and proprietary fund financial statements. Bond premiums and discounts are amortized over the life of the bonds using the effective interest method or the straight-line method over the term of the debt, except for deferred refunding gains (losses) which are amortized using the same methods over the shorter of the term of either the new or old debt. Bond premiums and discounts are presented as an addition or reduction (net) of the face amount of the bond payable. With few exceptions, bonds issued by the City are tax-exempt and subject to federal arbitrage regulations.

In the fund financial statements for governmental fund-types, bond issuance costs, other than prepaid insurance, are recognized as expenditures during the current period even if withheld from actual net proceeds. Bond proceeds and bond premiums are reported as an other financing source. Bond discounts are reported as an other financing use. Issuance costs, even if withheld from actual net proceeds received, are reported as expenditures.

11. **Compensated Absences.** The City has vacation, sick, and paid time off leave policies covering substantially all of its employees, as follows:

Career Service Authority

Fire and Police Departments' Classified Service

Undersheriff

District Attorney and Judges

Employees may accumulate earned but unused benefits up to a specified maximum. The City has recorded an accrued liability for compensated absences in the government-wide and proprietary fund financial statements that was calculated using the vesting method.

12. **Unearned Revenues.** Unearned revenues reflect amounts that have been received before the City has a legal claim to the funds. In subsequent periods, when revenue recognition criteria are met, or when the City has a legal claim to the resources, the unearned revenue is removed from the statement of net position/balance sheet and revenue is recognized.

13. **Pensions.** For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the Denver Employees Retirement Plan (DERP), the Statewide Defined Benefit Plan and Old Hire Fire and Police Pension Plans, administered by the Fire and Police Pension Association of Colorado (FPPA) and the Public Employees' Retirement Association of Colorado Pension Plans (PERA), and additions to/deductions from the various pension plan's fiduciary net position have been determined on the same basis as they are reported by DERP, FPPA, and PERA. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

14. **Deferred Outflows of Resources and Deferred Inflows of Resources.** A deferred inflow of resources is an acquisition of net position by the City that is applicable to a future reporting period and a deferred outflow of resources is a consumption of net position by the City that is applicable to a future reporting period. Both deferred inflows and outflows are reported in the Statement of Net Position, but are not recognized in the financial statements as revenues, expenses, and reduction of liabilities or increase in assets until the period(s) to which they relate. The City reports deferred outflows of resources for pension-related amounts for the City's share of the difference between projected and actual earnings, for the City's share of the difference between contributions to the individual plans and the proportionate share of the contributions, and for changes of assumptions or other inputs. Deferred outflows of resources of the City also consist of the accumulated decrease in fair value of hedging derivatives and the deferred amount on refunding.

    The City reports deferred inflows of resources for pension-related amounts in the government wide financial statements or the City's share of the difference between expected and actual experience and for the City's share of the difference between contributions to the individual plans and the proportionate share of the contributions. The City also reports deferred inflows of resources for property tax receivables that are reported as deferred inflow of resources when levied for the next fiscal year.

    Under the modified accrual basis of accounting, revenue and other fund financial resources are recognized in the period in which they become both measurable and available. Assets recorded in the fund financial statements for which the revenues are not available are reported as a deferred inflow of resources. Deferred inflows of resources are also comprised of property tax and long-term receivables that are unavailable in the fund statements.

    A deferred amount on refunding is included in deferred inflows of resources relating to the Denver Airport System. These amounts are deferred and recognized as an inflow of resources in the period that the amounts become available.

15. **Net Position.** In the government-wide and fund financial statements, net position is the difference between assets, liabilities, deferred inflows, and deferred outflows. Net investment in capital assets, represents capital assets; less accumulated depreciation; and less any outstanding borrowings related to the acquisition, construction, or improvement of those assets. Certain net positions are restricted for capital projects, emergency use, debt service, by donor restrictions, and for the net pension asset.

16. **Fund Balance.** In the fund financial statements, governmental funds report nonspendable, restricted, committed, assigned, and unassigned fund balance classifications based on the nature and extent of the constraints placed on the fund balances.

17. **Encumbrances.** Encumbrances for contracts and purchase orders are unencumbered at year end and reappropriated against the subsequent year's budget. As of December 31, 2016, the encumbrances reflected in **Table 1** (dollars in thousands) were reappropriated against the 2017 budget for remaining prior year encumbrances.

Table 1

Governmental Activities:		
General Fund	$	50,964
Human Services Fund		18,008
Other Governmental Funds		203,251
Total Governmental Activities	**$**	**272,223**
Business-type Activities:		
Wastewater Management	$	48,069
Denver Airport System		151,544
Other Enterprise Funds		6,296
Total Business-type Activities	**$**	**205,909**

Note E – Implementation of New Accounting Principles

Governmental Accounting Standards Board Statement No. 72. In 2016, the City implemented the provisions of GASB Statement No. 72 (Statement No. 72), *Fair Value Measurement and Application*, which is meant to improve financial reporting by clarifying the definition of fair value for financial reporting purposes. The statement also provides additional fair value application guidance and enhances disclosures about fair value measurements. The adoption of GASB 72 resulted in no impact on net position.

Governmental Accounting Standards Board Statement No. 77. In 2016, the city implemented the provisions of GASB Statement No. 77 (Statement No. 77), *Tax Abatement Disclosures*. This Statement requires the City to disclose in the notes to the basic financial statements information on certain tax abatement agreements entered into by the City. The disclosure will include descriptive information about the tax being abated, the gross dollar amount of taxes abated during the period and any additional comments made by the City. The aggregate amount of tax abatements disclosed as of December 31, 2016, is $490,000. There was no impact on net position as a result of implementation.

Governmental Accounting Standards Board Statement No. 79. In 2016, the City implemented the provisions of GASB Statement No. 79, *Certain External Investment Pools and Pool Participant*s, which establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes. As of December 31, 2016, the City had a balance of $55,632,786 in a Local Government Investment Pool, CSAFE. CSAFE adheres to the guidelines outlined in GASB Statement No. 79 regarding liquidity, maturity, quality, diversification and shadow NAV pricing. CSAFE continues to elect to measure their investments at amortized cost for financial reporting purposes. There was no impact on the net position of the City as a result of the implementation.

II. Stewardship, Compliance, and Accountability

Note A – Deficit Fund Equity

At December 31, 2016, the Denver Convention Center Hotel Authority (DCCHA), the Denver Union Station Project Authority (DUSPA), and the Denver Urban Renewal Authority (DURA) component units had deficit net position in the amounts of $39,392,000, $129,161,000, and $123,670,000, respectively.

The DCCHA component unit will use revenue from its hotel facility to fund its deficit net position. DUSPA receives sales tax revenue to fund its deficit net position. The DURA component unit uses Tax Increment Financing (TIF), which is additional incremental property and sales taxes generated by redevelopment projects, to fund their deficit net position.

Note B – Excess Expenditures Over Authorizations

Budget basis expenditures exceeded authorizations for the projects shown in Table 2.

Table 2

Excess Expenditures Over Authorizations
For the Year Ended December 31, 2016 (dollars in thousands)

	Authorization	Budget Basis Expenditures	Excess over Authorization
City Council	$ 4,691	$ 4,780	$ 89
District Attorney	22,737	22,895	158
Public Works	138,169	138,984	815

The expenditures, which resulted in excess of authorization, were recorded because liabilities had been incurred before year end.

III. Detailed Notes for All Funds

Note A – Deposits and Investments

1. **Deposits.** The City Charter, Section 2.5.3(c), requires all banking or savings and loan institutions to pledge sufficient collateral as required by law (Public Deposit Protection Act (C.R.S., 11-10.5-101)) before any public funds are deposited. In addition, the City's Investment Policy requires that certificates of deposit be purchased from institutions that are certified as Eligible Public Depositories by the appropriate state regulatory agency. Under the Colorado Public Deposit Protection Act (PDPA), all deposits exceeding the amount insured by the FDIC are to be fully collateralized at 102.00% of the deposits with specific approved securities identified in the act. The eligible collateral pledged must be held in custody by any Federal Reserve Bank, or branch thereof, or held in escrow by some other bank in a manner as the banking commissioner shall prescribe by rule and regulation, or may be segregated from the other assets of the eligible public depository and held in its own trust department. All collateral so held must be clearly identified as being security maintained or pledged for the aggregate amount of public deposits accepted and held on deposit by the eligible public depository. Deposits collateralized under the PDPA are considered collateralized with securities held by the pledging financial institutions' trust department or agent in the "City's name."

   Custodial credit risk is the risk that, in the event of a failure of a financial institution or counterparty, the City would not be able to recover its deposits, investments or collateral securities. At December 31, 2016, the bank balance and carrying amounts of accounts managed by the Manager of Finance (the Manager) were $10,915,000 and $21,142,000 respectively. The City's deposits, except for the pension trust fund and certain component units' deposits are subject to, and in accordance with PDPA.

   All deposits for DURA, DUSPA, and DCCHA were not subject to custodial credit risk at December 31, 2016, since they were covered by FDIC or PDPA.

2. **Investments.** It is the policy of the City to invest its funds in a manner which will provide for the highest investment return consistent with the preservation of principal and provision of the liquidity necessary for daily cash flow demands. The City's Investment Policy applies to all investment activity of the City under the control of the Manager, including investments of certain monies related to all governmental and business-type activities, and trust and agency funds. The City's Investment Policy does not apply to the investments of the deferred compensation plan or component units. Other monies that may from time to time be deposited with the Manager for investment shall also be administered in accordance with the Investment Policy.

The City Charter, Section 2.5.3(c), and Revised Municipal Code, Section 20-21, authorize the investments that the City can hold. The Investment Policy requires that investments shall be managed in accordance with portfolio theory management principles to compensate for actual or anticipated changes in market interest rates. To the extent possible, investment maturity will be matched with anticipated cash flow requirements of each investment portfolio. Additionally, to the extent possible, investments will be diversified by security type, market sector, and institution. This diversification is required in order that potential losses on individual securities do not exceed the income generated from the remainder of the portfolios. Deviations from expectations shall be reported in a timely fashion and appropriate action taken to control adverse developments.

At December 31, 2016, the City's investment balances were as shown in **Table 3**.

Table 3

City Investment Balances

December 31, 2016 (dollars in thousands)

		Fair Value
Repurchase agreements	$	234
Money market funds		2,657
Local government investment pool		143,416
Common stock		940,452
Commercial paper		15,551
Mutual funds		383,184
Municipal bonds		133,186
U.S. Treasury securities		666,069
U.S. agency securities		1,038,057
Corporate bonds		787,635
Structured products[1]		406,307
Multinational fixed income[2]		244,043
Annuity contracts		237,429
Real estate		164,382
Other		571,642
Total Investments	**$**	**5,734,244**

[1]Includes asset backed securities, collateralized mortgage obligations, and mortgage back securities.

[2] Includes supranational securities. Supranationals are U.S. dollar denominated bonds of international organizations such as the World Bank and International Monetary Fund.

The DERP pension trust fund had securities lending collateral of $231,774,000 at December 31, 2016; see Note III-A-5 for additional discussion related to this balance.

At December 31, 2016, the investment balances of the discretely presented component units were as shown in **Table 4**.

Table 4

Component Units Investment Balances

December 31, 2016 (dollars in thousands)

		Fair Value
Money market funds	$	100,121
Local government investment pool		886
Municipal Bonds		2,271
Commercial paper		10,473
U.S. Treasury securities		30,365
U.S. agency securities		32,549
Corporate bonds		5,128
Structured products[1]		899
Multinational fixed income[2]		1,222
Total Investments	**$**	**183,914**

[1] Includes assed backed securities, collateralized mortgage obligations and mortgage backed securities.

[2] Includes supranational securities. Supranationals are U.S. dollar denominated bonds of international organizations such as the World Bank and International Monetary Fund.

A reconciliation of cash and investments as shown in the basic financial statements as of December 31, 2016, is shown in **Table 5**.

Table 5

Reconciliation of Cash and Investments

December 31, 2016 (dollars in thousands)

	Primary Government	Component Units	Total
Governmental and Business-type Activities			
Cash on hand	$ 9,239	$ -	$ 9,239
Cash and cash equivalents	1,201,914	37,960	1,239,874
Investments	793,465	-	793,465
Restricted cash and cash equivalents	127,015	51,823	178,838
Restricted investments	890,726	183,727	1,074,453
Total Governmental and Business-type Activities	**3,022,359**	**273,510**	**3,295,869**
Fiduciary			
Cash on hand	4,371	-	4,371
Cash and cash equivalents	93,487	-	93,487
Investments	2,667,103	-	2,667,103
Total Fiduciary	**2,764,961**	**-**	**2,764,961**
Total	5,787,320	273,510	6,060,830
Less deposit balance	(53,076) [1]	(89,596)	(142,672)
Total Investments	**$ 5,734,244**	**$ 183,914**	**$ 5,918,158**

[1]The carrying amount of the City's deposits of $21,142, plus pension deposits of $19,685, less uncashed warrants of $12,146, plus other cash amounts of $24,395, equal $53,076.

Fair Value Measurements. The City categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Equities within all asset classes that are classified in Level 1 are valued using prices quoted in active markets for those securities. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities. All equity and equity derivative securities are held in the fiduciary funds. The City currently does not maintain equity securities classified as Level 3. Fixed income securities and derivatives within all asset classes that are classified in Level 2 are valued using either a bid evaluation, matrix pricing or various relational pricing model techniques. Level 2 fixed income securities have non-proprietary information that was readily available to market participants, from multiple independent sources, which are known to be actively involved in the market. The city currently does not maintain fixed income securities classified as Level 3.

Investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) as a proxy are not classified in the fair value hierarchy. See Table 7 for further detail. Short-term securities generally include investments in money market-type securities reported at amortized cost, which approximates market or fair value.

Investment derivative instruments determination of fair value consists of a two-step process. First settlement prices are determined by utilizing the income approach under GASB 72 from “mid-market” pricing data available from public and subscription source. The second step is to determine the credit valuation adjustment for the derivative instrument. The purpose of the credit valuation adjustment is to quantify the nonperformance risk of the reporting entity as well as the nonperformance risk of the counterparty. Fair value is then determined as the settlement price of the derivative instrument adjusted by the credit valuation adjust of both the reporting entity's payment obligation and the counterparty's payment obligations.

The City has the following recurring fair value measurements as of December 31, 2016, as shown in **Table 6**:

Table 6

Fair Value Measurements
December 31, 2016 (dollars in thousands)

					Major Component Units			
Governmental and Business-type Activities	**Fair Value**	**Level 1**	**Level 2**	**Level 3**	**Fair Value**	**Level 1**	**Level 2**	**Level 3**
Money market funds	$ -	$ -	$ -	$ -	$ 71,782	$ -	$ 71,782	$ -
Municipal bonds	131,364	-	131,364	-	2,271	2,271	-	-
Mutual funds	50	50	-	-	-	-	-	-
Commercial paper	15,376	-	15,376	-	-	-	-	-
U.S. Treasury securities	589,046	-	589,046	-	30,365	30,365	-	-
U.S. agency securities	963,579	-	963,579	-	33,448	-	33,448	-
Corporate bonds	489,341	-	489,341	-	5,128	5,128	-	-
Structured products	400,406	-	400,406	-	-	-	-	-
Multinational fixed income	240,423	-	240,423	-	1,222	-	1,222	-
Governmental and Business-type Activities	**$ 2,829,585**	**$ 50**	**$ 2,829,535**	**$ -**	**$ 144,216**	**$ 37,764**	**$ 106,452**	**$ -**
Total investments measured at the NAV[1]	86,274	-	-	-	-	-	-	-
Total investments measured at amortized cost[2]	54,662	-	-	-	-	-	-	-
Total other investments not valued at fair value[3]	22,818	-	-	-	39,511	-	-	-
Total Governmental and Business-type Activities	**$ 2,993,339**	**$ 50**	**$ -**	**$ -**	**$ 183,727**	**$ -**	**$ -**	**$ -**
Fiduciary								
Money market funds	$ 2,657	$ 2,657	$ -	$ -	$ -	$ -	$ -	$ -
Municipal Bonds	1,822	-	1,822	-	-	-	-	-
Common stock	940,452	940,452	-	-	-	-	-	-
Commercial paper	175	-	175	-	-	-	-	-
U.S. Treasury securities	44,689	36,100	8,589	-	-	-	-	-
U.S. agency securities	72,126	-	72,126	-	-	-	-	-
Corporate bonds	21,168	-	21,168	-	-	-	-	-
Structure products	6,915	-	6,915	-	-	-	-	-
Multinational fixed income	3,620	-	3,620	-	-	-	-	-
Mutual funds	383,134	383,134	-	-	-	-	-	-
Other (self directed brokerage)	244,157	154,615	89,542	-	-	-	-	-
Total Fiduciary	**$ 1,720,915**	**$ 1,516,958**	**$ 203,957**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total investments measured at the NAV[4]	739,849	-	-	-	-	-	-	-
Total investments measured at amortized cost[5]	31,407	-	-	-	-	-	-	-
Total other investments not valued at fair value[6]	248,734	-	-	-	-	-	-	-
Total Fiduciary	**$ 2,740,905**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Investments	**$ 5,734,244**	**$ 50**	**$ -**	**$ -**	**$ 183,727**	**$ -**	**$ -**	**$ -**
Governmental and Business-type Activities								
Investment derivative instruments								
Interest rate swaps[7]	$ (153,130)	$ -	$ (153,130)	$ -	$ -	$ -	$ -	$ -
Total Governmental and Business-Type Activities	**$ (153,130)**	**$ -**	**$ (153,130)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

[1]December 31, 2016 balance held at Colotrust.
[2]December 31, 2016 balance held at CSAFE.
[3]Includes $22,584,000 money held in trust, and $234,000 of repurchase agreements.
[4]Includes $1,509,000 of money held at Colotrust. See **Table 7** below for detail of $738,340,000 measured at the NAV
[5]Includes $971,000 of money held at CSAFE and $30,436,000 of short term investments measured at amortized cost.
[6]Includes Deferred Compensation Plan amounts of $237,429,000 of synthetic guaranteed investment contracts and $11,305,000 of loans to participants
[7]Net of $33,206 of interest rate swaps at an asset position and $186,336 of interest rate swaps at a liability position. **See Tables 37** and **41.**

Table 7

Investments Measured at the NAV
December 31, 2016 (dollars in thousands)

	December 31	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Fixed Income Investments				
Private debt	$ 174,741	$ 61,583	Not eligible	n/a
Emerging market debt	46,516	-	Monthly	3 days
Total Fixed Income Investments	**$ 221,257**	**$ 61,583**		
Real Estate Investments				
Real estate - open-end	138,940	-	Quarterly	20 - 90 days
Real estate - closed-end	25,441	19,891	Not eligible	n/a
Total real estate investments	**$ 164,381**	**$ 19,891**		
Alternative Investments				
Private equity	153,175	145,003	Not eligible	n/a
Energy investments	72,189	59,328	Not eligible	n/a
Timber	34,778	-	Not eligible	n/a
Total alternative investments	**$ 260,142**	**$ 204,331**		
Absolute Return				
Hedge Fund	92,560	-	Quarterly	65 days
Total Absolute Return	**$ 92,560**	**$ -**		
Total Investments Measured at the NAV	**$ 738,340**	**$ 285,805**		

- Fixed Income Investments - Private debt investments are intended to generate returns by lending money to various businesses and enterprises, or by purchasing loans originated by other lenders. There are six comingled investment pools, each taking the form of a partnership or similar structure. The debt may be secured or unsecured, and various yield enhancing techniques may be used, such as royalty sharing, equity options, or the application of leverage.

  Investments in emerging market debt seek to purchase the publicly traded sovereign or corporate debt obligations of developing nations.

- Real Estate Investments - Open end real estate investments are pooled investments that own and operate commercial property. Returns are generated from income and price appreciation. These funds have perpetual life, and periodically accept contributions or honor redemptions.

  Closed end real estate investments consist of pooled funds to own and operate commercial property. These funds have a finite life, and funds are returned as investments are liquidated.

- Alternative Investments - Private equity utilizes a fund of funds approach to make investments in venture capital, buyouts, and other corporate finance transactions.

  Energy investments are a diversified portfolio of energy assets, including interests in oil, natural gas, power generation, and renewables.

  Timber investments are made in both domestic and international timberland. Returns are generated through the acquisition, management, harvesting and sale of timber.

- Absolute Return Investments - A hedge fund of funds is used to generate returns that are higher than core fixed income, with significantly lower risk than public equities. A multi strategy approach is used to improve consistency of returns while limiting downside risk.

  A portion of the Plan's fixed income assets are exposed to risks, including credit risk, concentration of credit risk, interest rate risk, and foreign currency risk, that have the potential to result in losses.

Interest Rate Risk. Interest rate risk is the risk that changes in financial market interest rates will adversely affect the value of an investment. The City's Investment Policy limits interest rate risk for investments under the control of the Manager by limiting the maximum maturity of investments. Investments in commercial paper have a maximum maturity of 270 days. Corporate debt obligations have a maximum maturity of five years. U.S. Treasury, agency, and supranational, municipal, and asset-backed securities can have a maximum maturity of ten years. Agency mortgage-backed securities have a maximum maturity of 31 years with an average life limitation of 20 years. Agency collateralized mortgage obligations have a maximum maturity of 31 years with an average life limitation of 10 years. To further mitigate interest rate risk, the investment policy limits investments in asset-backed securities, mortgage-backed securities, and collateralized mortgage obligations to a combined maximum of 20.00% of the City's overall investments. The City also minimizes interest rate risk by maintaining a concentration of its portfolio invested in short-term and extremely liquid investments. The Manager is authorized to waive certain portfolio constraints when such action is deemed to be in the best interest of the City. The Manager has waived the maximum maturity for certain investments in U.S. agency securities that are part of the Denver Airport System structured pool created to facilitate an economic defeasance of a portion of the future debt service payments due on certain airport system bonds, and also the investments held for the Cable Land Trust and Workman's Compensation. Maturities of the underlying investments in the local government investment pool are limited by the pool's investment policies to less than one year.

At December 31, 2016, the City's investment balances and maturities for those investments subject to interest rate risk (excluding the DERP) is shown in **Table 8** (dollars in thousands):

Table 8

		Investment Maturities in Years			
Investment Type	**Fair Value**	**Less than 1**	**1 - 5**	**6 - 10**	**Greater than 10**
Local government investment pool	$ 143,416	$ 143,416	$ -	$ -	$ -
Municipal bonds	133,186	16,386	79,672	25,627	11,501
U.S. Treasury securities	597,635	40,238	480,956	76,441	-
U.S. agency securities	976,759	50,344	785,693	137,241	3,481
Corporate bonds	496,938	83,698	413,240	-	-
Multinational fixed income	244,043	9,998	182,220	49,874	1,951
Structured products	406,307	1,250	294,394	105,240	5,423
Commercial paper	15,551	15,551	-	-	-
Total	**$ 3,013,835**	**$ 360,881**	**$ 2,236,175**	**$ 394,423**	**$ 22,356**

The City's portfolio of U.S. agency securities includes callable securities. If a callable investment is purchased at a discount, the maturity date is assumed to be the maturity date of the investment. If the investment is bought at a premium, the maturity date is assumed to be the call date. As of December 31, 2016, the City owned agency callable securities with a fair value of $11,761,000.

The DERP manages interest rate risk through the constraints on duration specified in each manager's investment guidelines included in the Plan's Investment Policy. At December 31, 2016, the DERP pension trust fund investment balances and maturities for those investments subject to interest rate risk are shown in **Table 9** (dollars in thousands).

Table 9

		Investment Maturities in Years			
Investment Type	**Fair Value**	**Less than 1**	**1 - 5**	**6 - 10**	**Greater than 10**
U.S. Treasury securities	$ 68,434	$ 26	$ 30,960	$ 26,111	$ 11,337
U.S. agency securities	61,298	2	34,889	15,298	11,109
Asset backed	506	-	170	183	153
Corporate	211,088	183	15,665	13,521	181,719
Non- U.S. Government bonds	51,414	139	24,074	11,883	15,318
Mortgage backed	27,689	21	10,779	11,617	5,272
Total	**$ 420,429**	**$ 371**	**$ 116,537**	**$ 78,613**	**$ 224,908**

Credit Quality Risk. Credit quality risk is the risk that the issuer or other counterparty to a debt security will not fulfill its obligations to the City. Moody's, Standard & Poor's, and Fitch Ratings are the three primary Nationally Recognized Securities Rating Organizations (NRSRO) that assess this risk and assign a credit quality rating for most investments. Obligations of the U.S. Government or obligations explicitly guaranteed by the U.S. Government are assigned credit quality ratings of AAA by Fitch and Aaa by Moody's, both with stable outlooks as of December 31, 2016. Standard and Poor's rate securities of the U.S. Government AA+ also with a stable outlook. Of the City's investments at December 31, 2016, commercial paper, municipal bonds, corporate debt obligations, structured products, local government investment pools, and supranational securities were subject to credit quality risk.

The City's Investment Policy requires that commercial paper be rated by at least two NRSRO with a minimum short term rating of A-1, P-1, or F-1 at the time of purchase. The Investment Policy requires that the municipal bonds have a minimum underlying issuer rating from at least two of the three rating agencies of A+ or its equivalent. The Investment Policy requires that corporate debt obligations have a minimum underlying issuer rating from at least two of the NRSRO or A- or its equivalent. The Investment Policy requires that asset-backed securities have a minimum underlying issuer rating from at least two of the NRSRO of AA- or its equivalent. The Investment Policy requires that mortgage-backed securities and collateralized mortgage obligations that had ratings of at least Aaa by Moody's, AAA by Fitch and AA+ by Standard & Poor's. The Investment Policy also requires local government investment pools to be in compliance with Title 24 Part 7 of Article 24 of the Colorado Revised Statues. The Investment Policy also requires supranational securities by issued by institutions with debt obligations rated AAA, or the equivalent, by at least two NRSROs.

Information on the credit ratings associated with the City's investments as of December 31, 2016, is shown in **Table 10** (dollars in thousands).

Table 10

S&P	Commercial Paper	Municipal Bonds	Corporate Debt Obligations	Asset Backed Securities	Agency Mortgage Backed Securities	Collateralized Mortgage obligations	Local Government Investment Pools	Supranational Securities	Total
AAA	$ -	$ 37,649	$ 52,055	$ 146,125	$ 17,395	$ 35,241	$ 143,416	$ 222,956	$ 654,837
AAA	-	-	-	-	-	-	-	-	-
AA+ to AA-	-	49,543	261,893	-	44,362	44,617	-	-	400,415
AA	-	29,395	55,519	-	-	-	-	-	84,914
A+ to A-	-	948	33,016	-	-	-	-	-	33,964
A to A-	-	-	94,455	-	-	-	-	-	94,455
A-1 to A-1+	15,551	-	-	-	-	-	-	-	15,551
NR	-	15,651	-	63,304	4,028	51,235	-	21,087	155,305
Total	**$ 15,551**	**$ 133,186**	**$ 496,938**	**$ 209,429**	**$ 65,785**	**$ 131,093**	**$ 143,416**	**$ 244,043**	**$ 1,439,441**
Moody's									
Aaa	$ -	$ 32,043	$ 86,224	$ 155,655	$ 61,758	$ 101,771	$ -	$ 244,043	$ 681,494
Aa1 to Aa2	-	73,817	102,219	-	-	-	-	-	176,036
Aa3 to A1	-	27,326	219,046	-	-	-	-	-	246,372
A2 to A3	-	-	89,449	-	-	-	-	-	89,449
P-1	15,551	-	-	-	-	-	-	-	15,551
NR	-	-	-	53,774	4,028	29,321	143,416	-	230,539
Total	**$ 15,551**	**$ 133,186**	**$ 496,938**	**$ 209,429**	**$ 65,786**	**$ 131,092**	**$ 143,416**	**$ 244,043**	**$ 1,439,441**

The DERP manages credit risk through the constraints on investments specified in each manager's investment guidelines included in the Plan's Investment Policy. Securities implicitly governed by the U.S. Government are included.

Information on the credit ratings associated with the DERP investments in debt securities at December 31, 2016, is shown in **Table 11** (dollars in thousands).

Table 11

S&P	Moody's	Asset Backed	Corporate Bonds	Non- U.S. Government Bonds	Mortgage Backed	Implicit U.S. Government Bonds	Total
AAA	Aaa	$ 298	$ 16,402	$ -	$ 18,910	$ 2,077	$ 37,687
AAA	NR	-	-	-	531	-	531
AA+ to AA-	Aa3 to A1	20	3,104	-	1,259	59,076	63,459
A+ to A-	A1 to Baa2	46	9,270	15,499	2,886	-	27,701
BBB+ to BBB-	A3 to Baa3	57	7,406	13,806	3,620	-	24,889
BB+ to BB-	Ba3 to B1	-	-	10,141	-	-	10,141
B+ to B-	B1 to Caa1	-	-	107	-	-	107
CCC+ to CCC-	B3 to Caa2	85	-	-	-	-	85
D	NR	-	-	-	-	-	-
NR	Aaa to Baa2	-	-	-	483	-	483
NR	NR	-	174,906	11,861	-	-	186,767
Total		$ 506	$ 211,088	$ 51,414	$ 27,689	$ 61,153	$ 351,850
U.S. Government							68,434
Explicit U.S. Government Agencies							145
Total							$ 420,429

NR - no rating available

Custodial Credit Risk. Custodial credit risk for investments is the risk that, in the event of a failure, the City will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Investments are exposed to custodial credit risk if they are uninsured, are not registered in the City's name, and are held by either the counterparty to the investment purchase or are held by the counterparty's trust department or agent but not held in the City's name. None of the City's investments owned at December 31, 2016, were subject to custodial credit risk.

In accordance with the City's Investment Policy, all of the City's repurchase agreements are collateralized at 102.00% of the market value of the portfolio by U.S. agency securities at the time of purchase. Collateral valuation is calculated and adjusted at least once per week, and adjusted on an as needed basis. Collateral for all investments, including repurchase agreements, are held in the City's name by the City's custodian, J.P. Morgan.

One City agency, the Office of Economic Development, owned repurchase agreements that are related to several bank accounts at Vectra Bank in relation to its HUD Section 108 programs. The cash in these accounts is invested each night in repurchase agreements issued by Vectra. The amounts in these accounts are held in the City's name and protected by the PDPA. In addition, Vectra pledges securities that are direct obligations of the U.S. Government, at a minimum collateralized value of 102.00% in compliance with HUD's investment requirements. The total repurchase agreements at December 31, 2016, were $234,000.

DERP has no formal policy for custodial credit risk. At December 31, 2016, there were no investments or collateral securities subject to custodial credit risk.

Concentration of Credit Risk. Concentration of credit risk is the risk of loss attributed to the magnitude of the City's investment in a single issuer. The City's Investment Policy states that a maximum of 5.00% of the portfolio may be invested in commercial paper, municipal securities, corporate debt obligations, certificates of deposit, asset-backed securities, or mortgage-backed securities issued by any one obligor. The City's Investment Policy states that a maximum of 10.00% of the portfolio may be invested in an individual supranational obligor, local government investment pool, money market mutual fund, or collateralized mortgage obligation. The City's Investment Policy also limits investments in U.S. agency securities to 25.00% of total investments. The City's Investment Policy limits concentrations even further with a combined maximum of 50.00% of the portfolio that can be invested in corporate debt obligations, commercial paper, and certificates of deposit as well as a combined maximum of 20.00% of the portfolio that can be invested in structured products. As of December 31, 2016, all investments were in compliance with this policy. More than 5.00% of the City's investments in U.S. agency securities are in individual issuers: Federal Home Loan Bank (10.00%), Federal National Mortgage Association (9.00%), Federal Home Loan Mortgage Corporation (5.00%).

The DERP Investment Policy mandates that no managed account may invest more than 5.00% of managed assets in the securities of a single issuer. As of December 31, 2016, all DERP investments were in compliance with this policy.

Foreign Currency Risk. Foreign Currency risk is the risk that changes in exchange rates will adversely affect their value of an investment or deposit. The City's Investment Policy, excluding the DERP pension trust fund, does not allow for investments in foreign currency. The DERP pension trust fund Investment Policy allows 18.50% to 30.0% of total investments to be invested in international equities and 1.50% to 3.50% of total investments to be invested in international fixed income. The DERP pension trust fund exposure to foreign currency risk as of December 31, 2016, is reflected in **Table 12** (dollars in thousands).

Table 12

Foreign Currency	Equities	Fixed Income	Total
Argentine Peso	$ -	$ 181	$ 181
Australian Dollar	17,658	-	17,658
Brazilian Real	12,077	3,889	15,966
British Pound Sterling	52,874	-	52,874
Canadian Dollar	10,536	-	10,536
Chilean Peso	1,281	-	1,281
Chinese Yuan	47,746	-	47,746
Columbian Peso	544	2,768	3,312
Czech Koruna	667	-	667
Danish Krone	3,995	-	3,995
Egyptian Pound	246	-	246
Euro	98,206	-	98,206
Hong Kong Dollar	11,295	-	11,295
Hungarian Forint	1,368	2,386	3,754
Indian Rupee	13,247	-	13,247
Indonesian Rupiah	4,965	4,228	9,193
Japanese Yen	69,755	-	69,755
Malaysian Ringgit	3,597	3,935	7,532
Mexican Peso	3,807	3,475	7,282
New Israeli Shekel	2,951	-	2,951
New Zealand Dollar	1,657	-	1,657
Norwegian Krone	3,395	-	3,395
Peru Sole	-	963	963
Philippine Peso	667	191	858
Polish Zloty	1,667	4,666	6,333
Qatari Riyal	649	-	649
Romanian Leu	-	1,414	1,414
Russian Ruble	5,509	1,996	7,505
Singapore Dollar	5,667	-	5,667
South Korean Won	34,451	-	34,451
South African Rand	10,124	2,912	13,036
Swedish Krona	7,900	-	7,900
Swiss Franc	19,622	-	19,622
Taiwan Dollar	24,523	-	24,523
Thai Baht	7,639	3,507	11,146
Turkish Lira	3,790	3,386	7,176
United Arab Emiarti Dirham	1,491	-	1,491
Other	404	-	404
Total Foreign Deposits and Investments	**$ 485,970**	**$ 39,897**	**$ 525,867**

3. **Denver Convention Center Hotel Authority (DCCHA).** DCCHA's investments were not subject to custodial credit risk at December 31, 2016, since they consisted solely of money market funds that are not evidenced by securities and are in DCCHA's name.

4. **Denver Urban Renewal Authority (DURA).** Although it does not have a formal policy to limit exposure to interest rate risk, DURA limits the maximum maturity of investments. At December 31, 2016, DURA's investment balances and maturities are shown in **Table 13** (dollars in thousands).

Table 13

		Investment Maturities in Years	
Investment Type	Fair Value	Less than 1	1 - 5
Money market funds	$ 28,339	$ 28,339	$ -
Local government investment pool	699	699	-
U.S. Treasury securities	30,365	11,093	19,272
Structured products	899	619	280
U.S. agency securities	32,549	3,791	28,758
Corporate bonds	5,128	363	4,765
Multinational fixed income	1,222	-	1,222
Municipal bonds	2,271	-	2,271
Commercial paper	10,473	10,473	-
Total	**$ 111,945**	**$ 55,377**	**$ 56,568**

5. **Securities Lending.** Although the City is authorized to enter into securities lending programs with certain qualified dealers, it had no security lending transactions in 2016. Under this program, investment securities owned by the City are loaned to the dealer up to a maximum of one year in exchange for a predetermined fee. The City continues to receive interest earnings on the loaned securities. The securities are collateralized by the dealer. The collateral is held in the City's name by J.P. Morgan, the City's custodian. Collateral for these transactions is limited to permissible investments included in the City's Investment Policy with maturities not exceeding one year from the date of settlement. The initial market value of the collateral for each investment position maintained with a dealer shall be 102.00% of the market value of the securities being collateralized. Market value includes investment principal plus accrued interest. Collateral valuation levels with each dealer must be determined on at least a weekly basis, and deficiencies from the required 102.00% level must be cured no later than the following business day. The City had no securities on loan as of December 31, 2016.

   The DERP pension trust fund participates in a securities lending program to augment income. The program is administered by the DERP custodial agent bank, which lends certain securities for a predetermined period of time, to an independent broker/dealer (borrower) in exchange for collateral. Collateral may be cash, U.S. Government securities, defined letters of credit or other collateral approved by the DERP. Loans of domestic securities are initially collateralized at 102.00% of the fair value of securities lent. Loans of international securities are initially collateralized at 105.00% of the fair value of securities lent. The DERP continues to receive interest and dividends during the loan period as well as a fee from the borrower. There are no restrictions on the amount of securities that can be lent at one time. The duration of securities lending loans generally matches the maturation of the investments made with cash collateral. At December 31, 2016, the fair value of underlying securities lent was $224,846,000. The fair value of associated collateral was $231,774,000; of this amount, $176,973,000 represents the fair value of cash collateral and $54,801,000 is the fair value of non-cash collateral not reported on the financial statements. The DERP pension trust fund does not have the ability to pledge or sell non-cash collateral unless the borrower defaults, therefore it is not reported on the financial statements.

Note B – Receivables

1. **Accounts Receivables and Allowances.** The City reviews its accounts receivables periodically and allowances for doubtful accounts are established based upon management's assessment of collection. **Table 14** represents the accounts receivables and allowances for doubtful accounts at December 31, 2016.

Table 14

Accounts Receivables and Allowances Summary

December 31, 2016 (dollars in thousands)

	Governmental Activities					Business-type Activities				Fiduciary Funds
Receivable	General	Human Services	Other Governmental Funds	Internal Service Funds	Total	Wastewater Management	Denver Airport System	Nonmajor Business-type	Total	Agency and DERP
Property taxes	$ 119,972	$ 66,134	$ 220,976	$ -	**$ 407,082**	$ -	$ -	$ -	**$ -**	$ 880,608
Other taxes	70,276	-	11,253	-	**81,529**	-	-	-	**-**	9,855
Notes	5,671	-	3,859	-	**9,530**	-	-	-	**-**	-
Accounts	11,012	12,301	11,409	2,133	**36,855**	21,879	59,939	2,684	**84,502**	372
Long-term accounts	69,731	-	35,929	-	**105,660**	-	7,041	2,978	**10,019**	-
Accrued interest	1,902	1	3,021	339	**5,263**	987	7,266	124	**8,377**	1,636
Loans	8,075	-	135,694	-	**143,769**	-	-	-	**-**	-
Gross Receivable	**286,639**	**78,436**	**422,141**	**2,472**	**789,688**	**22,866**	**74,246**	**5,786**	**102,898**	**892,471**
Allowances	(67,797)	(324)	(85,567)	-	**(153,688)**	-	(236)	-	**(236)**	(4,505)
Net Receivable	**$ 218,842**	**$ 78,112**	**$ 336,574**	**$ 2,472**	**$ 636,000**	**$ 22,866**	**$ 74,010**	**$ 5,786**	**$ 102,662**	**$ 887,966**

2. **Notes Receivable.** The special revenue funds', General Fund, related organizations, and component unit notes receivable balance at December 31, 2016, is shown in **Table 15** (dollars in thousands).

Table 15

	December 31	Percent of Total Related Notes Receivable
Neighborhood Development Loans	$ 16,845	n/a
Economic Development Loans	29,720	n/a
Housing Development Loans	106,733	n/a
Total Office of Economic Development	**153,298**	
Less allowances for delinquent loans	(13,014)	n/a
Less allowances for forgivable loans	(79,264)	n/a
Notes Receivable, Net	**$ 61,020**	
Denver Health and Hospital Park Hill Health Clinic	$ 3,745	2.44%
Denver Housing Authority	6,817	4.45%
Total Related Organizations Notes Receivable	**$ 10,562** [1]	
Denver Urban Renewal Authority	$ 8,176	5.34%

[1]Amounts included in the notes receivable balance above.

Allowance for uncollectibles for notes receivable of $92,278,000 is included in the accounts receivable allowance of $153,688,000 in **Table 14.** The Neighborhood, Economic and Housing Development loans are funded from both federal U.S. Housing and Urban Development grants and City monies designated for affordable housing. Recipients of affordable housing loans target low and moderate income households, special needs and the homeless. Rental and occupancy covenants are recorded on these properties for affordability periods of 20 years or more. Housing loans may be fully forgivable at the end of the affordability period, due and payable in full, or due and payable based on occupancy rates or other conditions. The Economic Development loans are made to qualified program recipients under the Community Development Block Grant to provide business owners with funds to promote job creation and growth in targeted areas. Loans are collateralized by the underlying properties.

3. **Long-Term Receivables Allowance.** Included in long-term receivables are amounts related to reimbursement for construction costs, parking fines, court fines, and library fines. The City recorded an allowance for uncollectible accounts for governmental activities of $59,706,000.

4. **Operating Leases.** The Denver Airport System leases portions of its Denver International Airport buildings and improvements to concession tenants under non-cancelable operating leases. Lease terms vary from 1 to 30 years. The operating leases require retail concessions to pay a minimum guarantee or percentage of gross receipts, whichever is greater. Revenue from these operating leases of $92,755,000 was recognized in the Denver Airport System enterprise fund during the year ended December 31, 2016. Minimum future rentals due from concessions under operating leases are shown in **Table 16** (dollars in thousands).

Table 16

Year		
2017	$	89,682
2018		35,158
2019		30,118
2020		26,967
2021		20,821
2022-2026		47,074
2027-2030		1,814
Total	**$**	**251,634**

The United Airlines lease provides it can be terminated by the airline if the airline's cost per enplaned passenger exceeds $20 in 1990 dollars. Rental rates for airlines are established using the rate making methodology whereby a compensatory method is used to set terminal rental rates and a residual method is used to set landing fees. Rentals, fees, and charges must generate gross revenues together with other available funds sufficient to meet rate maintenance covenants per governing bond ordinances.

Note C – Interfund Receivables, Payables, and Transfers

Tables 17 and 18 (dollars in thousands) reflect the City's interfund balances as of December 31, 2016.

1. **Interfund Payables/Receivables.**

Table 17

	Payable Fund							
Receivable Fund	General Fund	Human Services	Nonmajor Governmental	Wastewater Management	Denver Airport System	Nonmajor Business-type	Internal Service	Total
General Fund	$ -	$ 1,030	$ 1,745	$ 358	$ 8,011	$ 391	$ 73	$ 11,608
Human Services	18	-	-	-	-	-	-	18
Nonmajor Governmental	-	1,224	-	-	-	-	-	1,224
Wastewater Management	-	-	-	-	113	-	-	113
Denver Airport System	-	-	-	-	-	-	-	-
Internal Service	-	-	27	-	-	-	-	27
Nonmajor Business-type	6	-	5	-	-	-	-	11
Total	**$ 24**	**$ 2,254**	**$ 1,777**	**$ 358**	**$ 8,124**	**$ 391**	**$ 73**	**$ 13,001**

These balances result from the time lag between the dates that interfund goods and services are provided or reimbursable expenditures occur, transactions are recorded in the accounting system, and payments between funds are made. In addition, some balances result from the overdraft of cash balances in the payable funds.

2. Transfers.

Table 18

	Transfers Out					
Transfers In	General Fund	Human Services	Nonmajor Governmental	Wastewater Management	Nonmajor Business-type	Total
General Fund	$ -	$ 1,500	$ 49,833	$ -	$ -	$ 51,333
Human Services	3,575	-	-	-	-	$ 3,575
Nonmajor Governmental	99,162	89	28,414	29	295	$ 127,989
Nonmajor Business	2,000	-	-	-	-	$ 2,000
Total out	**$ 104,737**	**$ 1,589**	**$ 78,247**	**$ 29**	**$ 295**	**$ 184,897**

Transfers are used to move revenues from the fund in which the City budget requires collection to the fund required to expend the monies, and to move unrestricted revenues collected in the General Fund to finance various activities accounted for in other funds.

Note D – Capital Assets

Capital asset activity for the year ended December 31, 2016, are shown in **Tables 19** and **20.**

1. Governmental Activities.

Table 19

Governmental Activities

For the Year Ended December 31, 2016 (dollars in thousands)

	January 1	Additions	Deletions	Transfers	December 31
Capital assets not being depreciated:					
Land and land rights	$ 310,331	$ 23,253	$ (4,723)	$ -	$ 328,861
Construction in progress	51,913	99,506	(12,309)	(41,325)	97,785
Total capital assets not being depreciated	**362,244**	**122,759**	**(17,032)**	**(41,325)**	**426,646**
Capital assets being depreciated:					
Buildings and improvements	2,398,875	3,910	(24,199)	17,529	2,396,115
Equipment and other	320,967	29,390	(27,782)	-	322,575
Collections	42,300	6,483	(4,690)	388	44,481
Intangibles	35,035	1,368	(2,197)	2,455	36,661
Infrastructure	1,536,665	37,999	(29)	20,953	1,595,588
Total capital assets being depreciated	**4,333,842**	**79,150**	**(58,897)**	**41,325**	**4,395,420**
Less accumulated depreciation for:					
Buildings and improvements	(785,349)	(63,644)	10,845	-	(838,148)
Equipment and other	(239,464)	(23,770)	26,938	-	(236,296)
Collections	(21,696)	(5,334)	4,660	-	(22,370)
Intangibles	(28,554)	(4,195)	1,089	-	(31,660)
Infrastructure	(755,694)	(45,247)	29	-	(800,912)
Total accumulated depreciation	**(1,830,757)**	**(142,190)**	**43,561**	**-**	**(1,929,386)**
Total capital assets being depreciated, net	**2,503,085**	**(63,040)**	**(15,336)**	**41,325**	**2,466,034**
Governmental Activities Capital Assets, net	**$ 2,865,329**	**$ 59,719**	**$ (32,368)**	**$ -**	**$ 2,892,680**

2. Business-type Activities.

Table 20

Business-type Activities

For the Year Ended December 31, 2016 (dollars in thousands)

	January 1	Additions	Deletions	Transfers	December 31
Capital assets not being depreciated:					
Land and land rights	$ 327,700	$ 666	$ -	$ 4,517	$ 332,883
Construction in progress	551,454	263,191	(1,510)	(608,255)	204,880
Total capital assets not being depreciated	**879,154**	**263,857**	**(1,510)**	**(603,738)**	**537,763**
Capital assets being depreciated:					
Buildings and improvements	2,345,672	-	(23,562)	476,474	2,798,584
Improvements other than buildings	3,242,359	22,932	(17,916)	91,013	3,338,388
Machinery and equipment	837,895	15,074	(9,031)	36,251	880,189
Intangibles	6,125	-	-	-	6,125
Total capital assets being depreciated	**6,432,051**	**38,006**	**(50,509)**	**603,738**	**7,023,286**
Less accumulated depreciation for:					
Buildings and improvements	(1,127,084)	(73,315)	12,206	-	(1,188,193)
Improvements other than buildings	(1,371,617)	(88,722)	10,933	-	(1,449,406)
Machinery and equipment	(726,839)	(36,623)	8,217	-	(755,245)
Intangibles	(3,981)	(613)	-	-	(4,594)
Total accumulated depreciation	**(3,229,521)**	**(199,273)**	**31,356**	**-**	**(3,397,438)**
Total capital assets being depreciated, net	**3,202,530**	**(161,267)**	**(19,153)**	**603,738**	**3,625,848**
Business-type Activities Capital Assets, net	**$ 4,081,684**	**$ 102,590**	**$ (20,663)**	**$ -**	**$ 4,163,611**

Note: Interest costs of $51,778 were capitalized during 2016.

3. **Discretely Presented Component Units.** Capital Asset activity for the Denver Convention Center Hotel Authority, Denver Union Station Project Authority, and Denver Urban Renewal Authority component units is shown in **Table 21.**

Table 21

Discretely Presented Component Units

For the Year Ended December 31, 2016 (dollars in thousands)

	January 1	Additions and Transfers	Deletions	December 31
Capital assets not being depreciated:				
Land and land rights	$ 23,421	$ -	$ -	$ 23,421
Construction in progress	204	78	-	282
Total capital assets not being depreciated	**23,625**	**78**	**-**	**23,703**
Capital assets being depreciated:				
Buildings and improvements	249,805	484	(465)	249,824
Machinery and equipment	27,234	554	(141)	27,647
Total capital assets being depreciated	**277,039**	**1,038**	**(606)**	**277,471**
Less accumulated depreciation for:				
Buildings and improvements	(59,925)	(10,765)	250	(70,440)
Machinery and equipment	(26,036)	(19)	-	(26,055)
Total accumulated depreciation	**(85,961)**	**(10,784)**	**250**	**(96,495)**
Total capital assets being depreciated, net	**191,078**	**(9,746)**	**(356)**	**180,976**
Discretely Presented Component Units Capital Assets, net	**$ 214,703**	**$ (9,668)**	**$ (356)**	**$ 204,679** [1]

[1] Excludes net capital assets of $16,086 of Other Component Units.

4. **Depreciation Expense.** Depreciation expense that was charged to governmental activities' functions is shown in **Table 22** (dollars in thousands).

Table 22

General government	$	21,435
Public safety		11,887
Public works, including depreciation of infrastructure		60,625
Human services		1,031
Health		482
Parks and recreation		16,045
Cultural activities		30,473
Community development		86
Capital assets held by internal service funds		126
Total	$	**142,190**

5. **Construction Commitments.** The City's governmental and business-type activities have entered into construction and professional services contracts having remaining commitments under contract as of December 31, 2016, as shown in **Table 23** (dollars in thousands).

Table 23

Governmental Activities:		
Winter Park Capital	$	1,766
Capital Improvements		73,189
Conservation Trust		2,256
Bond Projects		70,399
Other Capital Projects		19,320
Entertainment and Culture		1,731
Total Governmental Activities	$	**168,661**

Business-type Activities:		
Wastewater Management	$	48,069
Denver Airport System		82,924
Total Business-type Activities	$	**130,993**

The commitments for these funds are not reflected in the accompanying financial statements. Only the unpaid amounts incurred to date for these contracts are included as liabilities in the financial statements.

6. **Tax Abatements.** The City negotiates property tax abatement agreements on an individual basis and has tax abatement agreements with eighty-eight entities as of December 31, 2016.

Pursuant to sections 30-11-123 and 31-15-903, C.R.S., and Chapter 53, Article XVI, D.R.M.C., the City is authorized under the Business Incentive Program to enter into agreements with qualifying taxpayers for an incentive tax credit in the amount of the general fund portion of the taxes upon the taxpayer's new taxable personal property assessed by the City upon the new taxable personal property located at or within a new business facility, or directly attributable to an expanded business facility and located at or within the expanded facility, and used in connection with the operation of the new or expanded facility.

If at any time after the City grants an incentive tax credit, the City, in its sole discretion determines that the taxpayer did not meet all requirements of sections 30-11-123 and 31-15-903, C.R.S., Chapter 53, Article XVI, D.R.M.C. or other incentive tax credit requirements of the City under section 53-544, D.R.M.C. in the tax year for which a credit was granted, the City may issue a Special Notice of Valuation, and assess and collect taxes in the amount of the incentive tax credit for the subject tax year.

The City has not made any commitments as part of the agreements other than to reduce taxes. The City is not subject to any tax abatement agreements entered into by other governmental entities. Total tax abatements for the year ended December 31, 2016, were $490,000.

Note E – Lease Obligations

1. **Capitalized Leases.** The governmental activities capital leases are for various properties including the Wellington Webb Municipal Office Building, 2000 West Third Avenue Wastewater building, Arie P.Taylor Building, the Denver office building at 200 W. 14th Ave., District 1, 2, 3, and 5 Police Stations, Fire Station #10, certain Human Services facilities, the Buell Theatre, the 5440 Roslyn maintenance facility property, and the public parking unit within the Cultural Center parking garage. The capital leases also include certain computer software and network equipment, and public works, safety, and parks and recreation equipment.

The City provided funding for the construction of parking facilities adjacent to the Denver Museum of Nature and Sciences (DMNS) the Denver Zoo, and the Denver Botanic Gardens (DBG) from proceeds of certificates of participation (COP) financings. Under separate agreements, the DMNS, the Denver Zoological Foundation Inc., and DBG agreed to increase their admission charges and provide a portion of their admission revenues to help make the COP lease payments. In 2016, the DMNS collected and remitted $577,000 to the City to be applied to the lease payments. The Zoo collected and remitted $642,000. DBG collected and deposited $1,476,000 with a trustee to be applied to lease payments.

In addition to base rental payments, the lease agreement related to the Wellington Webb Municipal Office Building requires the City to make all payments for any swap agreements relating to the Series 2008A Certificates of Participation (COPs) entered into by the lessor. There are 3 swap agreements considered to be hybrid instruments embedded in the lease. See Note III-G-7 for detailed information regarding the swaps.

The Airport is obligated under leases for equipment that are accounted for as capital leases. On January 9, 2015, the Airport entered a Master Installment Purchase Agreement with Banc of America Public Capital Corp for $1,800,000 to finance various capital equipment purchases at a rate of 1.17%. Payments are due annually. The Airport entered into an Installment Purchase Agreement on January 5, 2016, with Santander for $4,100,000 to finance various capital equipment purchases at a rate of 1.19%. Payments are due annually. Assets under capital leases at December 31, 2016, totaled $4,100,000 net of accumulated depreciation of $1,900,000.

The related net book values of plant and equipment under capital lease obligations as of December 31, 2016, are shown in **Table 24** (dollars in thousands).

Table 24

	Governmental Activities	Business-type Activities
Buildings	$ 296,138	$ -
Equipment	29,063	4,578
Intangibles	4,169	-
Land	16,667	-
Less accumulated depreciation	(128,314)	(2,166)
Net Book Value	**$ 217,723**	**$ 2,412**

Table 25 (dollars in thousands) is a schedule by year of future minimum lease obligations together with the present value of the net minimum lease payments as of December 31, 2016.

Table 25

Year	Governmental Activities	Business-type Activities
2017	$ 39,271	$ 2,654
2018	39,924	2,678
2019	40,312	1,873
2020	36,450	875
2021	34,769	912
2022 - 2026	136,980	2,917
2027 - 2032	147,624	-
2031 - 2034	4,487	-
Total minimum lease payments	**479,817**	**11,909**
Less amounts representing interest	(104,705)	(929)
Present Value of Minimum Lease Payments	**$ 375,112**	**$ 10,980**

2. **Operating Leases.** The City is committed under various cancelable leases for property and equipment. These leases are considered for accounting purposes to be operating leases. Lease expenses for the year ended December 31, 2016, were approximately $6,396,000, for governmental activities and $1,203,000 for business-type activities. The City expects these leases to be replaced in the ordinary course of business with similar leases. Future minimum lease payments should be approximately the same amount.

Note F – Rates and Charges

The Denver Airport System establishes annually, as adjusted semi-annually, airline facility rentals, landing fees, and other charges sufficient to recover the costs of operations, maintenance, and debt service related to the airfield and space utilized by the airlines. Any differences between amounts collected and actual costs allocated to the airline's leased space are credited or billed to the airlines. As of December 31, 2016, the Denver Airport System has accrued a liability of $3,107,000 for such amounts due to the airlines.

For the years ended December 31, 2001 through 2005, 75.00% of net revenues (as defined by bond ordinance) remaining at the end of each year is to be credited in the following year to the passenger airlines signatory to use and lease agreements; and thereafter it is 50.00%, capped at $40,000,000. The net revenues credited to the airlines for the year ended December 31, 2016, were $40,000,000 and have been accrued as a liability at year end. Other liabilities include a residual revenue credit balance of $10,647,000.

Note G – Long-Term Debt

1. **General Obligation Bonds.** The City issues general obligation bonds to provide for the acquisition and construction of major capital facilities. General obligation bonds have been issued for both governmental and business-type activities. General obligation bonds are reported in the proprietary funds if they are expected to be repaid from proprietary fund revenues.

General obligation bonds are direct obligations and pledge the full faith and credit of the City. These bonds are generally issued as 15 to 20-year serial bonds, except for refunding issues. General obligation bonds outstanding, excluding unamortized premium of $16,478,000, at December 31, 2016, are $761,406,000. Interest rates vary from 2.30% to 5.65% with a net interest cost of 1.53% to 6.77%.

General obligation bonds have been issued by the Gateway Village General Improvement District (GID) and the Denver 14th Street GID; however, these bonds are solely the obligation of the Districts and not the primary government. As of December 31, 2016, there are bonds outstanding in the amount of $0 for the Gateway GID and $3,535,000 for the Denver 14th Street GID.

Annual debt service requirements to maturity for general obligation bonds are shown in **Table 26** (dollars in thousands).

Table 26

	Governmental Activities			
	General Government		General Improvement District	
Year	Principal [1]	Interest [2]	Principal	Interest
2017	$ 56,825	$ 34,144	$ 105	$ 247
2018	59,930	31,675	110	240
2019	47,930	29,081	120	232
2020	49,775	27,147	130	224
2021	51,765	25,066	135	215
2022 - 2026	268,196	109,153	835	919
2027 - 2031	226,985	37,474	1,180	581
2032 - 2036	-	-	920	132
Total	**$ 761,406**	**$ 293,740**	**$ 3,535**	**$ 2,790**

[1]Does not include $5,103 and $1,362 of compound interest on the Series 2007 and 2014A mini-bonds respectively or unamortized premium of $16,478.

[2]Excludes Build America Bonds interest subsidy. The City is eligible to receive $66 million

2. **Revenue Bonds.** The City and component units issue bonds and notes where income derived from acquired or constructed assets is pledged to pay debt service. Certain Airport system revenue bonds are subject to mandatory redemption requirements in 2016, and subsequent years. Revenue bonds outstanding, excluding unamortized premium (net of discount) of $193,691,000 and $34,996 for the primary government and the component unit DCCHA respectively, at December 31, 2016, are shown in **Table 27** (dollars in thousands).

Table 27

Purpose	Net Interest Cost	Interest Rates	Amount
Excise Tax Revenue	3.28% to 3.89%	1.53% to 5.00%	$ 374,960
Wastewater Management	2.41% to 3.39%	3.00% to 5.00%	152,860
Golf Enterprise	4.80%	4.75% to 5.50%	2,430
Denver Airport System	1.42% to 6.76%	0.84% to 6.41%	3,890,895
Total primary government			**4,421,145**
DCCHA component unit		4.00% to 5.00%	271,795
Total			**$ 4,692,940**

Revenue bonds' debt service requirements to maturity are shown in **Tables 28** and **29** (dollars in thousands).

Table 28

	Governmental Activities		Business-type Activities					
			Golf Enterprise		Wastewater Management		Denver Airport System	
	Principal [1]	Interest	Principal	Interest	Principal [2]	Interest	Principal [3]	Interest
2017	23,485	14,143	565	120	4,980	6,081	170,045	155,020
2018	22,090	13,509	590	92	5,065	5,983	187,945	147,700
2019	21,440	13,168	620	62	5,285	5,761	192,280	140,648
2020	15,910	12,777	655	31	5,500	5,529	197,355	134,412
2021	14,260	12,432	-	-	5,745	5,288	214,875	127,424
2022 - 2026	48,345	54,685	-	-	23,390	23,054	1,197,465	510,842
2027 - 2031	53,320	45,781	-	-	26,040	18,224	892,875	314,089
2032 - 2036	14,225	37,177	-	-	22,290	13,468	436,645	157,033
2037-2041	5,035	36,634	-	-	24,615	9,021	294,910	67,493
2042 - 2046	156,850	21,508	-	-	29,950	3,688	106,500	7,493
Total	$ 374,960	$ 261,814	$ 2,430	$ 305	$ 152,860	$ 96,097	$ 3,890,895	$ 1,762,154

[1]Does not include unamortized premium of $29,716.
[2]Does not include unamortized premium of $19,122.
[3]Does not include unamortized premium of $144,853.

Table 29

	Component Unit	
	DCCHA	
Year	Principal [1]	Interest
2017	-	14,185
2018	-	13,333
2019	2,130	13,333
2020	2,545	13,248
2021	2,985	13,146
2021 - 2026	47,895	60,576
2027 - 2031	61,125	47,344
2032 - 2036	78,015	30,456
2037 - 2040	77,100	9,679
Total	**$ 271,795**	**$ 215,300**

[1]Does not include unamortized premium of $34,996.

In January 2000, the City increased the tax rate on its lodger's tax by 1.75% and short-term auto rental tax by 1.75%. The City has pledged the increase portion of those taxes for debt service on $149,190,000 of Series 2005A Excise Tax Revenue Refunding Bonds issued in August 2005, and $73,630,000 of Series 2009A Excise Tax Revenue Refunding Bonds issued in May 2009. The bonds were issued for the purpose of refunding bonds that financed the expansion of the Colorado Convention Center and were payable through 2023. In 2016, debt service paid on the bonds was $4,726,000.

In November 2015, Denver voters approved the indefinite extension of each of the 1.75% lodger's tax and the 1.75% auto rental tax increases ("Excise Tax Increases") and authorized the issuance of up to $778 million of new excise tax revenue bonds supported by pledged portions of the lodger's, food and beverage, and short-term auto rental taxes for the purpose of financing tourism-related projects for the National Western Center and for improvements to the Colorado Convention Center.

In April 2016, the city issued Dedicated Tax Revenue Refunding and Improvement Bonds, Series 2016A-B, in the amount of $397,310,000. The bonds were issued to fund the initial costs of the National Western Center and Colorado Convention Center improvements, as well as to advance refund all of the outstanding 2005A and 2009A bonds. Effective April 6, 2016, all of the outstanding 2005A and 2009A bonds were defeased and advance refunded resulting in a present value savings of $3,608,000 and a deferred loss of $17,517,000. The City pledged additional revenues to the repayment of the 2016A-B bonds that were not pledged to the repayment of the 2005A and 2009A bonds. The previously unpledged 3.25% and 3.5% portions of the lodger's tax and auto rental tax, respectively, have been pledged to the repayment of the 2016A-B bonds. No new excise taxes or increases to existing excise taxes were imposed in conjunction with the issuance of 2016A-B bonds.

The Series 2016A bonds are fixed rate bonds with final maturity in 2046; The Series 2016B bonds are fixed rate bonds with final maturity in 2032. The total principal and interest remaining to be paid on the bonds is $636,774,000, with annual combined debt service requirements ranging from $7,327,000 to $37,628,000. In 2016, debt service paid and net revenue available for debt service was $26,916,000 and $122,680,000, respectively.

The City, through its Department of Aviation, has pledged future Airport System Net Revenues, as defined in the 1984 Airport System General Bond Ordinance as supplemented and amended and the 1990 Airport System Subordinate Bond Ordinance as supplemented and amended. The $3,890,895,000 of outstanding bonds were issued for the purpose of financing capital projects at the airport and for refinancing earlier bond issues and have maturities ranging from 2016 to 2043. The total principal and estimated interest remaining to be paid on the bonds is $5,653,049,000. Over the past 10 years, annual net revenues available for debt service have averaged $438,495,000. In 2016, debt service paid and net revenue available for debt service was $366,886,000 and $497,560,000 respectively.

On December 1, 2016, the Airport issued $256,810,000 of Series 2016A Bonds in a non-AMT fixed rate mode to refund all of the outstanding Series 2006A, 2007B, and 2007E Bonds through a negotiated sale with RBC Capital Markets as the lead underwriter. On December 13, 2016, the Airport issued $108,735,000 of Series 2016B Bonds in a non-AMT index rate mode to refund all of the outstanding Series 2014A Bonds through a negotiated sale with Bank of America Merrill Lynch. Combined, these two transactions will result in a net present value savings of $41,533,000 through 2032. The difference between the reacquisition price of $420,100,000 and the net carrying amount of the old debt of $410,624,000 resulted in the recognition of a deferred loss on refunding in the amount of $9,477,000. The deferred loss on refunding is being amortized over the remaining use of the old debt.

Included in the Airport System's revenue bonds are $34,900,000 of Series 1992F, G; $28,200,000 of Series 2002C, $58,400,000 of Series 2008B, $92,600,000 of Series 2008C1, $200,000,000 of Series 2008C2-C3, $104,655,000 of Series 2009C and $130,600,000 of Series 2007G1-G2 of Airport Revenue Bonds Series. These bonds are currently credit facility bonds, which bear interest at rates indexed to 1-month LIBOR and are subject to mandatory redemption when the credit facilities and reimbursement agreements supporting them expire and upon the occurrence of certain other events of default. These agreements will either be extended, replaced, or the bonds will be refunded prior to the expiration date.

The City, through its Wastewater Management Division, has pledged future income from its storm drainage and sanitary sewerage facilities, net of operating expenses, for debt service on $50,425,000 of Series 2012 Wastewater Revenue Bonds issued in January 2012 and for debt service on $115,000,000 of Series 2016 Wastewater Revenue bonds issued in November of 2016. The Series 2012 bonds were issued for the purpose of refunding the remaining $20,350,000 of Series 2002 Wastewater Revenue bonds outstanding and to finance improvements to the storm drainage facilities. The Series 2016 bonds were issued to finance capital improvement projects. The total principal and interest remaining to be paid on the bonds is $248,957,000, with annual requirements ranging from $6,725,000 to $11,061,000. Over the past 10 years, annual net revenues available for debt service have averaged $21,706,000. In 2016, debt service paid and net revenue available for debt service was $4,328,000 and $35,293,000 respectively.

The City, through its Golf Division, has pledged future income from its golf facilities, net of operating expenses, for debt service on $7,365,000 of Series 2005 Golf Enterprise Revenue Bonds issued in March 2006. The bonds were issued for the purpose of financing the construction of certain golf facilities of the City and are payable through 2020. The total principal and interest remaining to be paid on the bonds is $2,735,000, with annual requirements of approximately $684,000. Over the past 10 years annual net revenues available for debt service have averaged $1,608,000. In 2016, debt service paid and net revenue available for debt service was $685,000 and $1,940,000, respectively.

For detailed information on individual bond issues see **Other Supplementary Schedules – Combined Schedule of Bonds Payable and Escrows**.

3. **Other Debt.** DURA component unit note payable and tax increment bonds, exclusive of unamortized premium of $28,864,000 at December 31, 2016, are comprised of the following individual issues shown in **Table 30** (dollars in thousands).

Table 30

Purpose	Interest Rates		Amount
Series 2007	1.78% [1]	$	845
Series 2010B-1	3.00% - 5.00%		61,520
Series 2013A-1	5.00%		128,240
Series 2014D-2	4.10% - 4.19%		55,050
Note payable			4,939
Total		**$**	**250,594**

[1]Fixed rate through 2016, then converts to variable

On June 23, 2016, the RiNo Denver General Improvement district issued $3,000,000 of revenue notes for the purpose of financing improvements to Brighton Boulevard between 29th and 44th Streets. The revenue notes were issued with a fixed rate of 3.55% and mature on 6/1/2036. Debt service for the RiNo General Improvement District's revenue note is to be paid from special assessments collected from property owners fronting Brighton Boulevard within the district. The balance on the revenue notes at December 31, 2016, is $2,309,000.

Debt service requirements to maturity for DURA's bond issues as well as RiNo GID's revenue note are shown in **Table 31** (dollars in thousands).

Table 31

	DURA				RiNo GID			
Year		**Principal**		**Interest**		**Principal**		**Interest**
2017	$	22,880	$	11,691	$	107	$	103
2018		28,145		10,593		111		99
2019		26,685		9,255		115		95
2020		20,955		7,967		119		91
2021 - 2025		146,990		23,763		462		385
2026 - 2030		-		-		591		257
2031 - 2035		-		-		713		104
2036		-		-		91		1
Total	**$**	**245,655**	**$**	**63,269**	**$**	**2,309**	**$**	**1,135**

Debt service for DURA's note, payable to the City, is dependent on the availability of tax increment financing (TIF) revenue. Due to the uncertainty of this revenue the payments cannot be estimated. Payments will be made quarterly on the 10th of January, April, June and October, and will consist of the entirety of DURA's receipt of TIF revenues.

4. **Indentures and Reporting Requirements.** The City is subject to a number of limitations and restrictions contained in various indentures. Such limitations and covenants include: continued collection of pledged revenues, segregation of pledged revenues, and maintenance of specified levels of bond reserve funds, permissible investment of bond proceeds and pledged revenues, and ongoing disclosure to the secondary bond market in accordance with the Securities and Exchange Commission's Rule 15c2-12. The City is in compliance with all significant covenants.

5. **Notes payable.** The Airport System entered into Master Installment Purchase Agreements on October 26, 2006. These include an agreement with Koch Financial Corporation for $23,000,000 and an agreement with GE Capital Public Finance for $9,000,000. These transactions financed capital equipment purchases at rates and terms of 4.34% and 4.16% based on a 30/360 calculation for 2007 and were paid off in 2016. The Airport System entered into a $20,500,000 Master Installment Purchase Agreement with Sovereign Leasing, LLC on January 10, 2012, to finance capital equipment purchases, at a rate of 1.96% based on a 30/360 calculation for 2012. The payment schedules relating to the note requirements as of December 31, 2016, are shown in **Table 32** (dollars in thousands).

Table 32

	Denver International Airport	
Year	**Principal**	**Interest**
2017	2,067	196
2018	2,108	155
2019	2,149	113
2020	2,192	71
2021	2,235	27
Total	**$ 10,751**	**$ 562**

The City has a note payable with JP Morgan Chase Bank of New York in the amount of $1,431,000 as of December 31, 2016. This represents Housing and Urban Development (HUD) loans that are due regardless of amounts received from borrowers.

6. **Changes in Long-term Liabilities.** Long-term liability activity for the year ended December 31, 2016, is shown in **Tables 33** and **34** (dollars in thousands).

Table 33

Governmental Activities	**January 1**	**Additions**	**Deletions**	**December 31**	**Due within one year**
Legal liability	$ 5,215	$ 2,600	$ 3,965	$ 3,850	$ -
Compensated absences:					
Classified service employees - 3,164	98,259	24,873	26,553	96,579	4,523
Career Service employees - 5,912	47,947	25,395	26,149	47,193	3,923
Net other postemployment benefit obligation	15,639	1,450	-	17,089	-
Net pension liability	809,969	389,369	71,134	1,128,204	-
Claims payable	29,449	6,673	8,309	27,813	9,684
General obligation bonds[1]	820,901	1,239	54,270	767,870	54,025
GID general obligation bonds	4,130	-	595	3,535	105
GID revenue note	-	3,000	691	2,309	107
Excise tax revenue bonds	171,365	397,310	193,715	374,960	23,485
Capitalized lease obligations	403,555	373	28,816	375,112	26,196
Unamortized premium	31,080	30,858	11,685	50,253	-
Intergovernmental agreement	2,591	-	623	1,968	658
Other governmental funds - note payable	1,431	-	-	1,431	-
Total Governmental Activities	**$ 2,441,531**	**$ 883,140**	**$ 426,505**	**$ 2,898,166**	**$ 122,706**

[1]Additions to general obligation bonds represent mini-bond accretion of $1,239. Ending balance includes compound interest from the 2007 and 2014A mini-bonds of $6,465.

Table 34

	January 1	Additions	Deletions	December 31	Due within one year
Business-type Activities					
Wastewater Management					
Revenue bonds	$ 40,710	$ 115,000	$ 2,850	$ 152,860	$ 4,980
Unamortized premium	4,613	14,853	344	19,122	-
Net pension liability	25,079	11,180	1,953	34,306	-
Capitalized lease obligations	6,857	-	579	6,278	593
Compensated absences	3,131	1,654	1,462	3,323	940
Other long-term liabilities	-	-	-	-	-
Total Wastewater Management	**80,390**	**142,687**	**7,188**	**215,889**	**6,513**
Denver Airport System:					
Revenue bonds	4,112,490	365,545	587,140	3,890,895	170,045
Unamortized premium	128,879	39,396	23,422	144,853	-
Net pension liability	115,000	52,209	9,176	158,033	-
Notes payable	15,692	-	4,941	10,751	2,067
Capitalized lease obligations	1,385	4,096	1,487	3,994	1,485
Compensated absences	9,071	6,717	6,285	9,503	2,299
Total Denver Airport System	**4,382,517**	**467,963**	**632,451**	**4,218,029**	**175,896**
Nonmajor enterprise funds:					
Revenue bonds	2,970	-	540	2,430	565
Unamortized net premium	3	-	3	-	-
Net pension liability	8,465	3,678	370	11,773	-
Capitalized lease obligations	1,322	-	614	708	352
Compensated absences	1,225	449	481	1,193	305
Total nonmajor enterprise funds	**13,985**	**4,127**	**2,008**	**16,104**	**1,222**
Total Business-type Activities	**$ 4,476,892**	**$ 614,777**	**$ 641,647**	**$ 4,450,022**	**$ 183,631**
Major Component Units:					
Revenue bonds[1]	$ 334,799	$ 307,004	$ 335,012	$ 306,791	$ -
Increment bonds and notes payable[2]	637,719	2,571	51,301	588,989	23,678
Compensated absences	166	112	117	161	-
Total Major Component Units	**$ 972,684**	**$ 309,687**	**$ 386,430**	**$ 895,941**	**$ 23,678**

[1]Includes unamortized premium of $34,996.
[2]Includes unamortized premium of $28,864.

The legal liability, compensated absences, net other post-employment benefit (OPEB) obligation and other accrued liabilities in the governmental activities are generally liquidated by the General Fund. The other governmental funds include a note payable liquidated by the Community Development special revenue fund and a claims payable liquidated by the Workers' Compensation internal service fund. The amount available for long-term debt in the debt service funds and in the special revenue fund was $140,821,000.

7. **Swap Agreements.** Included in the City's governmental activities are three derivatives that are embedded in the City's certificated lease for the Webb Municipal Office Building. The intent of the three pay-fixed, receive-variable interest rate swaps is to protect against rising interest rates on the variable rate 2008A Certificates of Participation (COPs). In 2003, Civic Center Office Building, Inc., the lessor, entered into two swap agreements with JP Morgan, associated with the 2003C1 and 2003C2 COPs, and one swap agreement with Lehman Brothers that was associated with the 2003C3 COPs. In October 2008, due to the deteriorating credit rating of the insurer (AMBAC), the outstanding COPs were refunded by the Series 2008A1-A3 Refunding Certificates of Participation, terminating the three swaps. To maintain the interest rate hedge related to the lease payments, the derivative instruments with JP Morgan were amended and new swaps were entered into that were associated with the 2008A1 and 2008A2 COPs. The derivative instrument with Lehman Brothers was terminated and replaced with an agreement with Royal Bank of Canada (RBC). A new swap was initiated under the RBC agreement that was associated with the 2008A3 COPs. At the time of termination of the 2003 swaps, the JP Morgan swaps had negative fair values, and no termination payments were made. In addition to a termination payment made to Lehman Brothers by the City, an up-front payment of $475,000 was received from RBC at the initiation of the 2008 replacement swap. These events resulted in off-market components of the swaps that are being treated as implied loans for accounting purposes and are being amortized through investment revenues over the life of the new hedges.

As of December 31, 2016, all three swaps are effective cash flow hedges and the fair values and changes in fair values are reported in the government-wide Statement of Net Position as deferred outflows of governmental activities. The combined fair market value of the three swaps as of December 31, 2016, was ($31,850,000). The year-end fair values were calculated using the mid-market LIBOR swap curves as of December 31, 2016. The fair values represent the difference between the present value of the fixed payments and the present value of the floating payments, at forward floating rates as of December 31, 2016. When the present value of payments to be made by the City exceeds the present value of payments to be received, the swap has a negative value to the City. When the present value of payments to be received by the City exceeds that of payments to be made, the swap has a positive value to the City.

Table 35 provides the swap associated debt rates as of December 31, 2016.

Table 35

Swap	**2008A1**	**2008A2**	**2008A3**
Associated debt	**2008A1 COP**	**2008A2 COP**	**2008A3 COP**
Fixed payment to counterparty	3.400%	3.400%	3.130%
Variable payment from counterparty (68% LIBOR)	-(0.471%)	-(0.471%)	-(0.471%)
Net swap interest rate	2.929%	2.929%	2.659%
Variable-rate certificate coupon payment	0.710%	0.710%	0.710%
Net swap and certificate rate	**3.639%**	**3.639%**	**3.369%**

As rates vary, lease interest payments and net swap payments will vary. As of December 31, 2016, lease payment requirements of the related variable rate COPs and the net swap payments, assuming current rates remain the same, for their terms, are summarized in **Table 36** (dollars in thousands).

Table 36

Year	**Principal**	**Interest**	**Interest Rate Swaps Net**	**Total**
2017	8,695	1,564	6,215	16,474
2018	9,235	1,502	5,962	16,699
2019	9,805	1,437	5,693	16,935
2020	10,410	1,367	5,409	17,186
2021	11,055	1,293	5,108	17,456
2022-2026	66,355	5,187	20,350	91,892
2027-2031	104,725	2,560	9,785	117,070
Total	**$ 220,280**	**$ 14,910**	**$ 58,522**	**$ 293,712**

Table 37 (dollars in thousands) provides the fair values and the 2016 changes in fair value of the on-market and the implied loan portions of the swaps as of December 31, 2016, and the accounting classifications of the changes in fair value for the year then ended.

Table 37

Counterparty	Effective Date	Notional Amount	Termination Date	Associated Debt Series	Fair Values 12/31/2016	Change in Fair Value		Classification
2008A1 Swap Agreements								
JP Morgan Chase Bank	7/17/03	$ 72,080	12/1/29	2008A1 COP	$ (9,428)	$ (2,099)		Deferred outflow
							$ (255)	Investment revenue
2008A2 Swap Agreements								
JP Morgan Chase Bank	7/17/03	60,780	12/1/29	2008A2 COP	(7,947)	(1,771)		Deferred outflow
							(215)	Investment revenue
2008A3 Swap Agreements								
Royal Bank of Canada	10/1/08	87,420	12/1/31	2008A3 COP	(14,475)	(2,618)		Deferred outflow
							(20)	Investment revenue
Total		$ 220,280			$ (31,850)	$ (6,488)	$ (490)	

Note: Certain City derivatives have been reported as investment derivatives in accordance with the provisions of GASB 53. Additionally, investment income on these derivatives has also been recognized in accordance with GASB 53. The City does not enter into derivative transactions for investment purposes, nor does the City Charter allow for the investment in derivative investments.

The risk involved in the three swaps flows through the lease from Civic Center Office Building, Inc. (the "lessor") to the City. The following risks are generally associated with swap agreements:

- **Credit risk –** All of the governmental activity swaps rely on the performance of the respective swap counterparties. The City is exposed to the risk of these counterparties being unable to fulfill their financial obligations to the lessor. The City measures the extent of the risk based on the credit ratings of each counterparty and the fair value of the swap agreement. As of December 31, 2016, there was no risk of loss to the City, as the swap agreements had negative fair values. The credit ratings of the counterparties as of December 31, 2016, are shown in **Table 38**.

Table 38

Counterparty (Credit Support Provider)	Ratings of the Counterparty or its Credit Support Provider		
	S&P	Moody's	Fitch
JP Morgan Chase Bank	A+	Aa3	AA-
Royal Bank of Canada	AA-	Aa3	AA

- **Termination risk –** Any party to these swap agreements may terminate the swap if the other party fails to perform under the terms of the contract. Additionally, the lessor may terminate any of the swap agreements at any time at its sole discretion. If the swap had a negative fair value at the time of termination the City could be liable to the counterparty for a termination payment equal to the fair market value of the swap. If any of the swaps were terminated, the associated variable rate certificates would no longer have the benefit of the interest rate hedge.

- **Interest rate risk –** The City is exposed to interest rate risk on the swaps. In regards to the pay fixed, receive variable swaps, as the London Interbank Offered Rate (LIBOR) index rate decreases, the City's net payments on the swaps increase.

- **Basis risk –** The City pays interest at variable rates on the COPs associated with the swaps. Each of the swap agreements provide for the applicable counterparty to make variable rate payments based on the LIBOR index. To the extent that the variable rate paid on the certificates is different than the rate received from the counterparties based on LIBOR, there may be a net loss or benefit to the City.

The Airport System has entered into interest rate swap agreements in order to protect against rising interest rates. The 1998, 1999 and 2009A swap agreements are pay fixed, receive variable rate, cash flow hedges, with the variable payment from the counterparty based on the USD-SIFMA Municipal Swap Index and the variable rate of the bonds. The rest of the Airport System's swap agreements are considered investment derivatives as defined by GASB 53. **Table 39** provides a profile of the terms of the Airport's swap agreements (all rates as of December 31, 2016).

Table 39

SWAP	1999, 2002 2009A	2005 2006B	2006A, 2006B 2008A	1998	2008B
Associated Debt	2002C, 2008B, 2009C	2007D, 2016A	2002C, 2007F-G, 2016A, 2016B	2008C2-C3	2002C, 2008C1
Payment to counterparty	6.323%	4.851%	4.009%	4.740%	4.760%
Payment from counterparty	1.309%	4.626%	0.541%	0.641%	0.799%
Net swap interest rate	5.014%	0.225%	3.468%	4.099%	3.962%
Associated bond interest rate	1.218%	5.000%	1.254%	1.150%	1.149%
Net swap and bond rate	**6.232%**	**5.225%**	**4.722%**	**5.249%**	**5.110%**

As rates vary, variable rate bond interest payments and net swap payments will vary. As of December 31, 2016, debt service requirements of the related variable rate debt and net swap payments for the Airport System's cash flow hedges (1998, 1999 and 2009A swap agreements), assuming current interest rates remain the same, for their terms, are reflected in **Table 40** (dollars in thousands).

Table 40

Year	Principal	Interest	Interest Rate Swaps Net	Total
2017	$ 5,200	$ 4,736	$ 18,095	$ 28,031
2018	8,300	4,679	18,095	31,074
2019	43,435	4,576	16,468	64,479
2020	46,680	4,057	13,216	63,953
2021	48,625	3,499	9,695	61,819
2022-2026	156,955	10,454	13,384	180,793
2027-2031	90,805	3,335	-	94,140
Total	$ 400,000	$ 35,336	$ 88,953	$ 524,289

Variable Rate Bonds and Swap payments are calculated using rates in effect on December 31, 2016.

Table 41 (dollars in thousands) provides a summary of the Airport's interest rate swap transactions as of December 31, 2016.

Table 41

Counterparty	Effective Date	Notional Amount	Bond/Swap Termination Date	Associated Debt Series	Payable Swap Rate	Variable Receivable Swap Rate	Changes in Fair Value: Classification	Changes in Fair Value: Amount	Fair Values December 31
Hedging Derivatives									
1998 Swap Agreements									
Goldman Sachs Capital Markets, L.P.	10/4/00	100.000	11/15/25	2008C2-C3	4.7600%	70% LIBOR + 0.10%	Deferred outflow	$ (1,990)	$ (17,214)
							Investment income	(2,374)	
Societe Generale, New York Branch	10/4/00	100.000	11/15/25	2008C2-C3	4.7190%	70% LIBOR + 0.10%	Deferred outflow	(1,979)	(17,001)
							Investment income	(2,339)	
1999 Swap Agreements									
Goldman Sachs Capital Markets, L.P.	10/4/01	100.000	11/1/22	[1]	5.6179%	SIFMA	Deferred outflow	(3,602)	(16,145)
							Investment income	(2,643)	
Merrill Lynch Capital Services, Inc.	10/4/01	50.000	11/1/22	[1]	5.5529%	SIFMA	Deferred outflow	(1,794)	(7,948)
							Investment income	(1,293)	
Investment Derivatives									
2002 Swap Agreements									
Goldman Sachs Capital Markets, L.P.	4/15/02	100.000	11/1/22	[1]	SIFMA	76.33% LIBOR	Investment income	1,181	(516)
2005 Swap Agreements									
Royal Bank of Canada	11/15/06	49.578	11/15/25	2007D [3]	3.5650%	70% LIBOR	Investment income	(1,597)	(6,311)
JP Morgan Chase Bank, N.A.	11/15/06	49.578	11/15/25	2007D [3]	3.6874%	70% LIBOR	Investment income	(1,615)	(6,397)
Jackson Financial Products, LLC	11/15/06	99.156	11/15/25	2007D [3]	3.6560%	70% LIBOR	Investment income	(3,195)	(12,621)
Piper Jaffray Financial Products, Inc.	11/15/06	49.578	11/15/25	2007D [3]	3.6560%	70% LIBOR	Investment income	(1,597)	(6,311)
2006A Swap Agreements									
JP Morgan Chase Bank, N.A.	11/15/07	139.450	11/15/25	2007F-G/2014A [2]	4.0085%	70% LIBOR	Investment income	(4,947)	(18,443)
GKB Financial Services Corp.	11/15/07	46.483	11/15/25	2007F-G/2014A [2]	4.0085%	70% LIBOR	Investment income	(1,648)	(6,148)
2006B Swap Agreements									
Royal Bank of Canada	11/15/06	49.578	11/15/25	[3]	SIFMA	4.0855%	Investment income	2,476	6,647
JP Morgan Chase Bank, N.A.	11/15/06	49.578	11/15/25	[3]	SIFMA	4.0855%	Investment income	2,476	6,647
Jackson Financial Products, LLC	11/15/06	99.156	11/15/25	[3]	SIFMA	4.0855%	Investment income	4,960	13,287
Piper Jaffray Financial Products, Inc.	11/15/06	49.578	11/15/25	[3]	SIFMA	4.0855%	Investment income	2,498	6,625
2008A Swap Agreements									
Royal Bank of Canada	12/18/08	92.967	11/15/25	2007F-G [2, 4]	4.0085%	70% LIBOR	Investment income	(3,297)	(12,294)
2008B Swap Agreements									
Loop Financial Products I, LLC	1/8/09	100.000	11/15/25	2008C1 [2]	4.7600%	70% LIBOR + 0.10	Investment income	(3,718)	(19,092)
2009A Swap Agreements									
Loop Financial Products I, LLC	1/12/10	50.000	11/15/22	[1]	5.6229%	SIFMA	Deferred outflow	(2,174)	(8,045)
							Investment income	(988)	
TOTAL									**$ (121,280)**

[1] Swaps are currently associated with Series 2009C bonds, Series 2008B, and a portion of the Series 2002C bonds.

[2] A portion of the Series 2002C bonds are additionally associated with these swaps.

[3] Previously associated with 2006A. Swaps currently associated with Series 2016A.

[4] Previously associated with 2014A. Swaps currently associated with Series 2016b.

Note: Certain City derivatives have been reported as investment derivatives in accordance with the provisions of GASB 53. Additionally, investment income on these derivatives has also been recognized in accordance with GASB 53. The City does not enter into derivative transactions for investment purposes, nor does the City Charter allow for the investment in derivative investments.

Payments by the Airport System to counterparties relating to these swap agreements, including termination payments, are Subordinate Obligations, subordinate to debt service payments on the Airport System's Senior Bonds, and on parity with the Airport System's Subordinate Bonds. The year-end fair values were calculated using the mid-market LIBOR and BMA swap curves as of December 31, 2016. Fair values represent the difference between the present value of the fixed payments and the present value of the floating payments, at forward floating rates as of December 31, 2016. When the present value of payments to be made by the Airport System exceeds the present value of payments to be received, the swap has a negative value to the Airport System. When the present value of payments to be received by the Airport System exceeds that of payments to be made, the swap has a positive value to the Airport System.

The following risks are generally associated with swap agreements:

- **Credit Risk –** All of the Airport System's swap agreements rely upon the performance of swap counterparties. The Airport System is exposed to the risk of these counterparties being unable to fulfill their financial obligations to the Airport System. The Airport System measures the extent of this risk based upon the credit ratings of the counterparty and the fair value of the swap agreement. If the Airport System delivers a surety policy or other credit support document guaranteeing its obligations under the swap agreement that is rated in the highest rating category of either Standard & Poor's, Moody's Investors Service or Fitch, for any swap agreement, the counterparty to that agreement is obligated to either be rated, or provide credit support securing its obligations under the swap agreement rated in the highest rating category of either Standard & Poor's, Moody's Investors Service or Fitch; or, under certain circumstances, provide collateral. The Airport System is obligated, under the swap agreements, to provide such surety policy or credit support if the unsecured and unenhanced ratings of the Airport System's Senior Bonds is below any two of BBB by Standard & Poor's, Baa2 by Moody's Investors Service or BBB by Fitch. As of December 31, 2016, the ratings of the Airport System's Senior Bonds were A+ by Standard & Poor's (with a stable outlook), A1 by Moody's Investors Service (with a stable outlook) and A+ by Fitch (with a stable outlook). Therefore, no surety policy or credit has been provided to the counterparties by the Airport System. Failure of either the Airport System or the counterparty to provide credit support or collateral, as described in the swap agreements, is a termination event under the swap agreements (see termination risk below). The ratings of the counterparties, or their credit support providers, as of December 31, 2016, are shown in **Table 42.**

Table 42

Counterparty (Credit Support Provider)	Ratings of the Counterparty or its Credit Support Provider		
	S&P	Moody's	Fitch
Goldman Sachs Capital Markets, L.P. (Goldman Sachs Group, Inc.)	BBB+	A3	A
JP Morgan Chase Bank, N.A.	A+	Aa3	AA-
LOOP Financial Products, LLC (Deutsche Bank, AG, New York Branch)	BBB+	A3	A-
Merrill Lynch Capital Services, Inc. (Merrill Lynch & Co., Inc.)	NR	Baa1	A
Royal Bank of Canada	AA-	Aa3	AA
Societe Generale, New York Branch	A	A2	A
Jackson Financial Products, LLC (Merrill Lynch & Co., Inc.)	NR	Baa1	A
GKB Financial Services Corporation II, Inc. (Societe Generale New York Branch)	A	A2	A
Piper Jaffray Financial Products, Inc. (Morgan Stanley Capital Services, Inc.)	BBB+	A3	A

NR - no rating available.

As of December 31, 2016, there was no risk of loss for the swap agreements that had negative fair values. For the swap agreements that had positive fair values, the risk of loss is the amount of the derivative's fair value.

- **Termination Risk –** Any party to the Airport System's swap agreements may terminate the swap if the other party fails to perform under the terms of the contract. Additionally, the Airport System may terminate any of its swap agreements at any time at its sole discretion. Further, certain credit events can lead to a termination event under the swap agreements (see Credit Risk on preceding page). If, at the time of termination, the swap has a negative fair value, the Airport System could be liable to the counterparty for a payment equal to the swap's fair value. If any of the Airport System's swap agreements are terminated, the associated variable rate bonds would either no longer be hedged with a synthetic fixed interest rate or the nature of the basis risk associated with the swap agreement may change. The Airport System is not aware of any existing event that would lead to a termination event with respect to any of its swap agreements.

- **Interest Rate Risk –** The Airport System is exposed to interest rate risk in that as the variable rates of the swap agreements decrease, the Airport System's net payments on the swap agreements increase.

- **Basis Risk –** Each of the Airport System's swap agreements is associated with certain debt obligations or other swaps. The Airport System pays interest at variable interest rates on some of the associated debt obligations and associated swaps. The Airport System receives variable payments under some of its swap agreements. To the extent the variable rate on the associated debt or the associated swap paid by the Airport System is based on an index different than that used to determine the variable payments received by the Airport System under the swap agreement, there may be an increase or decrease in the synthetic interest rate intended under the swap agreement.

8. **Synthetic Guaranteed Investment Contracts.** An option in the City's deferred compensation plan includes a custom stable value fund that includes synthetic guaranteed investment contracts (SGICs). The contracts provide a stable rate of return to the participants. The value of the underlying investments is $243,435,000 as of December 31, 2016.

Note H – Fund Balances

In accordance with GASB Statement No. 54, fund balances are classified as nonspendable, restricted, committed, assigned or unassigned. When expenditures are incurred that use funds from more than one classification, the City will generally determine the order which the funds are used on a case-by-case basis, taking into account any applicable requirements of grant agreements, contracts, business circumstances, or other constraints. If no restrictions otherwise exist, the order of spending of resources will be restricted, committed, assigned and lastly, unassigned.

The City has a target of maintaining a General Fund balance reserve that is 15.00% of budgeted expenditures and should not go below 10.00% of budgeted expenditures, except in response to a severe crisis, economic or otherwise.

Fund balances by classification are detailed in **Table 43** (dollars in thousands).

Table 43

	General	Human Services	Other Governmental Funds	Total Governmental Funds
Nonspendable				
Endowment	$ -	$ -	$ 3,000	$ 3,000
Prepaid items	7,215	75	6,320	13,610
Total Nonspendable	**7,215**	**75**	**9,320**	**16,610**
Restricted:				
General government	-	-	37,608	37,608
Public safety - administration	-	-	39,522	39,522
Public safety - fire	-	-	536	536
Public safety - police	-	-	1,422	1,422
Public safety - sheriff	-	-	6,888	6,888
Public works	-	-	180,635	180,635
Human services	-	75,954	208	76,162
Health	-	-	1,193	1,193
Parks & recreation	-	-	51,620	51,620
Cultural activities	-	-	234,306	234,306
Community development	-	-	4,681	4,681
Economic opportunity	-	-	90	90
Assets held for resale	-	-	730	730
Loans receivable	-	-	60,610	60,610
Long-term debt	19,933	-	137,975	157,908
Emergency use	48,181	-	19	48,200
Total Restricted	**68,114**	**75,954**	**758,043**	**902,111**
Committed:				
General government	13,098	-	-	13,098
Public safety - admin	859	-	-	859
Public safety - fire	571	-	-	571
Public safety - police	2,043	-	-	2,043
Public safety - sheriff	3,013	-	-	3,013
Public works	25,504	-	-	25,504
Health	1,873	-	-	1,873
Parks & recreation	2,607	-	3,044	5,651
Cultural Activities	140	-	20,997	21,137
Community development	1,169	-	-	1,169
Economic opportunity	87	-	-	87
Total Committed	**50,964**	**-**	**24,041**	**75,005**
Assigned:				
General government	-	-	-	-
Public safety - admin	-	-	-	-
Public works	-	-	559	559
Parks & recreation	-	-	-	-
Cultural activities	-	-	-	-
Total Assigned	**-**	**-**	**559**	**559**
Unassigned	**271,130**	**-**	**-**	**271,130**
Total Fund Balances	**$ 397,423**	**$ 76,029**	**$ 791,963**	**$ 1,265,415**

- **Nonspendable Fund Balances** – Nonspendable fund balances are amounts that cannot be spent because they are either not in a spendable form or are legally or contractually required to be maintained intact.

  The City has two types of nonspendable fund balances: Prepaid items and an endowment. The prepaid items, which total $13,610,000, are in a nonspendable form and the endowment totaling $3,000,000 is in a permanent fund whose earnings are used for the maintenance of the residence known as Cableland.

- **Restricted Fund Balances – R**estricted fund balances represent amounts constrained by external parties, enabling legislation and/or constitutional provisions.

  General Government has restricted fund balances for future grant expenditures, capital improvements, technology upgrades, and bond projects.

  Public Safety – Administration has restricted fund balance for capital improvements, operation of correctional facilities, 911 expenses, and various assets and maintenance. Public Safety – Fire and Public Safety – Police have restricted funds for capital maintenance projects. Restricted balance for Public Safety – Sheriff is primarily comprised of County Jail improvements.

  Public Works has a restricted fund balance of $180,635,000. This balance represents funds dedicated for capital improvements and maintenance. Notable capital improvements include Brighton Boulevard, drainage enhancements, Quebec Street Multimodal, Cherry Creek South Drive Corridor, and South Broadway/I-25.

  Human Services has restricted fund balance for grant expenditures and improvements to the Richard T. Castro Building.

  Health has $1,193,000 restricted fund balance for grant expenditures and Energy Conservation projects.

  Parks and Recreation restricted fund balance represents funds dedicated to capital projects, maintenance, and various conservation projects. Major capital projects include the Central Denver Recreation Center, Ruby Hill Park, and River North Park.

  Cultural Activities fund balance restrictions include restrictions for capital projects and special revenue funds for future grant expenditures. Major capital projects include the National Western Center Project, Colorado Convention Center Upgrades, Helen Bonfils Theater renovations, Red Rocks Amphitheatre improvements, and improvements to the Denver Center for the Performing Arts Parking Garage.

  Community Development Activities and Economic Opportunity have restricted fund balance arising from special revenue funds for grant expenditures.

- **Committed Fund Balances –** Committed funds can only be used for specific purposes pursuant to constraints imposed by City Council, the highest level of decision-making authority in the City. City Council's formal action to establish committed funds, and to rescind committed funds, is through passage of ordinance. The General Fund has $50,964,000 committed for various capital and community projects. The Other Governmental Funds have $24,041,000 in committed fund balance for various community projects.

- **Assigned Fund Balances –** Assigned fund balances are constrained for specific purposes by City Council as authorized by the City's charter. The City has $559,000 of assigned fund balance for Public Works activities with the General Improvement Districts.

- **Unassigned Fund Balance –** Unassigned fund balance is the residual classification for the General Fund. A negative unassigned fund balance occurs when expenditures exceed amounts that are nonspendable, restricted, committed, or assigned. The General Fund has $271,130,000 in unassigned fund balance.

IV. Other Note Disclosures

Note A – Risk Management

The City is exposed to various risks of losses related to torts; theft of, damage to, and destruction of assets; errors and omissions; and natural disasters. In addition, the City is party to numerous pending or threatened lawsuits under which it may be required to pay certain amounts upon final disposition of these matters. The City has historically retained these risks, except where it has determined that commercial insurance is more cost beneficial or legally required. The City has covered all claim settlements and judgments out of its General Fund resources, except where specifically identifiable to an enterprise fund. The City currently reports substantially all of its risk management activities, except workers' compensation (see Note IV-C), in its General Fund. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. Current liabilities are reported when the liability has matured. These losses include an estimate of claims that have been incurred but not reported.

The Lowry Landfill, which accepted hazardous waste from the late 1960s to 1980, is listed on the national Superfund list. This means that the contamination at the site will be mitigated under the auspices of the U.S. Environmental Protection Agency. Under federal law, the City, as owner and operator of the facility is one of the parties responsible for cleanup of the site. The City's share of the remaining costs for cleanup could be incurred over the next 5 to 30 years. The City's liability for a portion of the cleanup costs is probable, but cannot be reasonably estimated.

With respect to matters expecting to be settled subsequent to 2016, the City Attorney estimates the amount of liability determined as probable and incurred but not reported claims and judgments at December 31, 2016, to be approximately $3,850,000. Changes in the long-term legal liability during the past two years are shown in **Table 44** (dollars in thousands).

Table 44

	2016	2015
Beginning balance - January 1	$ 5,215	$ 6,413
Current year claims and changes in estimates	530	540
Claims settled	(1,895)	(1,738)
Ending Balance - December 31	**$ 3,850**	**$ 5,215**

Pursuant to Colorado law, if a monetary judgment is rendered against the City, and the City fails to provide for the payment of such judgment, the Board of County Commissioners must levy a tax (not to exceed 10 mills per annum) upon all of the taxable property within the City for the purpose of making provision for the payment of the judgment. The City must continue to levy such tax until the judgment is discharged. Such mill levy is in addition to all other mill levies for other purposes. The Colorado Governmental Immunity Act establishes limits for claims made against governmental entities. These limits are $350,000 per injury or $990,000 per occurrence.

See Note IV-E-5 regarding Denver Airport System related litigation.

Note B – Pollution Remediation

The City has four underground storage tanks that leaked and are under remediation. Funds spent on remediation are partially reimbursed up to 50.00% of the cost by the Colorado Petroleum Storage Tank Trust. As of December 31, 2016, the City accrued a current liability, measured at its expected amount, using the expected cash flow technique, of $9,000 in the Environmental Services fund for its share of remediation costs related to these underground storage tanks. The City determined the liability amount by estimating a reasonable range of potential outlays, with no amount within the range considered a better estimate than any other amount.

The Environmental Protection Agency has listed a large area in north Denver on the National Priorities List of Superfund Sites because of lead, arsenic and cadmium contamination found in soils in residential neighborhoods. EPA has divided the Site into three operable units. Operable Unit 1 (OU1) consists of the contaminated residential soils in north Denver. Operable Unit 2 (OU2) is the Grant-Omaha Smelter Site. Operable Unit 3 (OU3) is the Argo Smelter Site.

ASARCO, Inc. finished the remediation of Operable Unit 1 in 2006 and has not claimed that the City is responsible for any of those costs; therefore, management believes the possibility that the City has any liability associated with OU1 is remote.

The EPA has named the City a Potentially Responsible Party (PRP) at OU2 as the current owner of part of the site where the former Grant-Omaha Smelter was located. Denver has entered into an Administrative Order on Consent to perform a remedial investigation and feasibility study and has paid $18,000 dollars of EPA's past costs. Whether this site is contaminated or whether it will require remediation cannot be determined until completion of the remedial investigation and feasibility study. The City's responsibility for some of the investigation and clean up costs is probable; however, at this early stage in the process it is not possible to estimate the costs associated with this site, therefore no liability has been accrued. ASARCO, Inc. is another significant PRP at the site. ASARCO, Inc. filed bankruptcy and the City filed a contingent claim for environmental remediation costs and reached a settlement with ASARCO for $640,000, for which payment has been received.

The City has no connection to OU3 and EPA has not asserted that the City has any responsibility for investigation or clean up, therefore management believes the possibility is remote that the City has any liability associated with OU3.

Note C – Workers' Compensation

The City has a Workers' Compensation self-insurance trust established in accordance with State Statutes to be held for the benefit of the City's employees. This trust is included in the Workers' Compensation internal service fund.

The Workers' Compensation internal service fund compensates City employees, or their eligible dependents, for injuries as authorized by the State Workers' Compensation law, in addition to maintaining in-house records of claims. The Workers' Compensation program is part of the City's Risk Management Office, which also provides safety training and loss prevention for all City departments and agencies.

The Department of Labor and Employment of the State of Colorado establishes the amount of funding required each year for the City to maintain its self-insured permit. The requirement is calculated using the average amount of claims paid over the previous three years plus the outstanding liability for claims as of the end of the previous year. This requirement at December 31, 2016, for 2017, was $18,926,000. The Workers' Compensation internal service fund has current assets and appropriations set aside in 2016 to satisfy this requirement. These funds may only be used for payment of workers' compensation benefits and administrative costs.

The City has purchased reinsurance coverage in order to reduce its risk. For the period from January 1, 2016, through December 31, 2016, the self-retention amount was $2,500,000 for all employees. The City had no settlements in the past three years that exceeded its self-retention levels.

Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated, and includes an amount for claims that have been incurred but not reported. Claim liabilities are calculated considering the effects of inflation, recent claim settlement trends, and other economic and social factors. The liability is reported in the Workers' Compensation internal service fund and was discounted for investment income. Changes in the liability during the past two years are shown in **Table 45** (dollars in thousands).

Table 45

	2016	2015
Beginning balance, undiscounted - January 1	$ 29,449	$ 31,471
Current year claims and changes in estimates	12,965	13,751
Claims paid	(8,309)	(9,592)
Ending balance undiscounted	**34,105**	**35,630**
Less discount	(6,292)	(6,181)
Ending Balance - December 31	**$ 27,813**	**$ 29,449**

Note D – Subsequent Events

1. **Certificates of Participation.** On February 16, 2017, the City issued $15,506,673 of refunding Certificates of Participation, series 2017A to advance refund the outstanding series 2008B Certificates of Participation to achieve interest cost savings for the Denver Botanic Gardens.

2. **General Obligation Bonds.** On March 9, 2017, the City deposited $50,985,000 in escrow sufficient to defease the outstanding General Obligation Better Denver Bonds, series 2010D and series 2011A.

3. **Denver Union Station Project Authority (DUSPA).** On February 3, 2017, the Denver Union Station Project Authority, a component unit of the City, dissolved. Any remaining funds to which DUSPA may otherwise have been entitled to, including accrued incremental property and sales taxes, were transferred to the Denver Downtown Development Authority (DDDA), which is also a component unit of the City. Loan agreements entered into by DUSPA were also transferred to the DDDA.

Note E – Contingencies

1. **Legal Debt Margin.** Per the City Charter, the City's indebtedness for general obligation bonds shall not exceed 3.00% of actual value as determined by the last final assessment of the taxable property within the City. At December 31, 2016, the City's general obligation debt outstanding was $761,406,000 and the City's legal debt margin was $2,541,000.

2. **Prior Years' Defeased Bonds.** At various dates in prior years, the City and certain component units have placed proceeds from bond issues and cash contributions in irrevocable refunding escrow accounts. The amounts deposited in the irrevocable escrow accounts are invested in U.S. Treasury obligations that, together with interest earned thereon, would provide amounts sufficient for payment of all principal and interest of the bond issues on each remaining payment date. The likelihood of the earnings and principal maturities of the U.S. Treasury obligations not being sufficient to pay the defeased bond issues appears remote. Accordingly, the escrow accounts and outstanding defeased bonds are not included in the accompanying financial statements. Defeased bonds principal outstanding at December 31, 2016, for the City was $257,075,000.

3. **Grants and Other.** Under the terms of federal and state grants, periodic audits are required and certain costs may be questioned as not being appropriate expenditures under the terms of the grants. Such audits could lead to reimbursement to the grantor agencies. City management believes disallowances, if any, will be immaterial to its financial position and activities.

The City is responsible for administering certain federal and state social services programs for which the related revenue and expenditures are not included in the accompanying financial statements since the state now makes the grant disbursements.

Table 46 (dollars in thousands) lists Denver County electronic benefit transfers (EBT) authorizations, warrant expenditures, and total expenditures associated with the Human Services special revenue fund for the year ended December 31, 2016.

Table 46

Program	City EBT Authorizations	City Share of Authorizations	Expenditures by City Warrant	City Share of Authorizations Plus Expenditures by City Warrant	Total Expenditures
Adult Foster Care	$ -	$ -	$ -	$ -	$ -
Adult Protective Services	-	-	2,862	2,862	2,862
Aid to Needy & Disabled	3,529	706	-	706	3,529
Aid to the Blind	-	-	-	-	-
Child Care	14,903	1,432	1,484	2,916	16,387
Child Support Enforcement[1]	49	25	13,183	13,208	13,232
Child Support IV-D Waiver	-	-	56	56	56
Child Welfare	23,059	4,700	37,719	42,419	60,778
Child Welfare 100 FTE	-	-	1,252	1,252	1,252
Child Welfare DDS Transition	-	-	31	31	31
Child Welfare Grants - IV-E Waiver	-	-	1,508	1,508	1,508
Child Welfare Hotline	-	-	18	18	18
Child Welfare Pathway to Success	-	-	66	66	66
Colorado Works	19,123	4,116	8,135	12,251	27,258
Core Services	6,258	970	1,896	2,866	8,154
County Administration	-	-	21,590	21,590	21,590
County Only Pass Thru	-	-	7,124	7,124	7,124
Federal Grants	-	-	6,152	6,152	6,152
Food Assistance Benefits	125,577	-	-	-	125,577
Food Assistance Fraud	-	-	487	487	487
Food Assistance Job Search	-	-	1,439	1,439	1,439
Foster Care Adoption Recruitment	-	-	3	3	3
Home Care Allowance	741	37	-	37	741
Low Income Energy Assistance	2,960	-	490	490	3,450
Non-allocated Programs[2]	157	154	176	330	333
Old Age Pension	20,479	-	752	752	21,231
PSSF Caseworker Visitation	-	-	2	2	2
SSI - Home Care Allowance	882	44	-	44	882
TANF Collections-EBT	(406)	(81)	-	(81)	(406)
Title IV-B Sub Part 2 - PSSF	-	-	547	547	547
Title IV-E Independent Living	-	-	179	179	179
Total	**$ 217,311**	**$ 12,103**	**$ 107,151**	**$ 119,254**	**$ 324,462**

[1]The State pays Direct Settled items for EBT administration, IRS fees and Locator fees and then charges the counties for those costs. These are not true EBT payments, but are amounts settled via CFMS.

[2]Does not include audit adjustments, TANF Collections - IV-D Retained, Medicaid Collections and programs not settled in CFMS, with the exception of federal grants, which are also captured in the CAFR. It also excludes County Wide Cost Allocation Pass Thru, as these amounts are not earned by expenses incurred by Human Services.

4. **Conduit Debt Obligations.** From time to time, the City issues industrial development revenue bonds, single-family mortgage revenue bonds, multi-family mortgage revenue bonds, construction loan revenue bonds, and special obligation revenue bonds to provide financial assistance to private-sector entities for the acquisition and construction of private, industrial, and commercial facilities deemed to be in the public interest. The bonds are secured by the property financed and are payable solely from payments received on the underlying mortgage loans. Upon repayment of the bonds, ownership of the acquired facilities transfers

to the private-sector entity served by the bond issuance. Not the City, the State, nor any political subdivision thereof is obligated in any manner for repayment of the bonds. Accordingly, the bonds are not reported as liabilities in the accompanying financial statements. As of December 31, 2016, the aggregate principal amount payable for the bonds, excluding the Airport's Special Facility Revenue bonds, was approximately $60,374,000.

To finance the acquisition and construction of various facilities at Denver International Airport, the City issued three series of Special Facility Revenue Bonds. These bonds are special limited obligations of the City, payable and secured by a pledge of certain revenues to be received from lease agreements for these facilities. The bonds do not constitute a debt or pledge of the full faith and credit of the City or the Airport System, and accordingly, have not been reported in the accompanying financial statements. As of December 31, 2016, Airport Special Facility Revenue Bonds outstanding totaled $270,025,000.

5. **Denver Airport System.** The City and Adams County entered into an intergovernmental agreement for Denver International, dated April 21, 1988 (the Intergovernmental Agreement). The Intergovernmental Agreement establishes maximum levels of noise that should not be exceeded on an average annual basis at various grid points surrounding the Airport. Penalties must be paid to Adams County when these maximums are exceeded.

   There is no noise penalty due for 2016.

   The Airport System is involved in several other claims and lawsuits and is the subject of certain other investigations. The Airport System and its legal counsel estimate that the ultimate resolution of these matters will not materially affect the accompanying financial statements of the Airport System.

   Under the terms of the Federal grants, periodic audits are required and certain costs may be questioned as not being appropriate expenditures under the terms of the grants. Such audits could lead to reimbursement to the grantor agencies. The Airport System management believes disallowances, if any will be immaterial to its financial position and activities of the Airport.

6. **Environmental Services.** State and federal laws will require the City to close the Denver Arapahoe Disposal Site (DADS) once its capacity is reached and to monitor and maintain the site for 30 subsequent years. The contracted operator is responsible for all closure and post-closure costs for the landfill's individual cells while they are under contract to operate the landfill. However, the ultimate responsibility rests with the City as owner of the facility. The City contractually shifted this financial responsibility to its operator as described below.

   Effective October 1, 1997, the City renegotiated its contract with Waste Management of Colorado, Inc. (WMC), the current operator of DADS. As a result, the City assigned its responsibility for all closure and post-closure costs to WMC. To cover these costs, WMC has provided a performance bond of $3,000,000, provided a corporate guarantee from their parent company, Waste Management, Inc (WMI), and posted a financial assurance plan with the State of Colorado (including an insurance certificate of $22,527,000 as of April 2017). Due to this assignment of closure and post-closure costs to WMC, the City no longer recognizes the related closure and post-closure costs liability in its financial statements.

7. **Denver Urban Renewal Authority.** In connection with DURA's development of the Denver Dry Building, DURA has guaranteed certain loans made to the Denver Building Housing, Ltd. by the Bank of Denver with an outstanding balance of $2,486,000 at December 31, 2016. In addition, DURA has guaranteed all obligations of the Denver Dry Development Corporation as general partner, under the terms and conditions of the limited partnership agreement of the Denver Building Housing, Ltd. No amounts have been recorded as a liability in the financial statements, as DURA management believes the possibility of having to make payments under these guarantees is remote.

8. **TABOR.** At the general election held November 3, 1992, the voters of the State approved an amendment to the Colorado Constitution limiting the ability of the State and local governments, such as the City, to increase revenues, debt and spending, and restricting property, income and other taxes. In addition, the amendment requires that the State and local governments obtain voter approval to create any "multiple fiscal year direct or indirect debt or other financial obligation whatsoever without adequate present cash reserves pledged irrevocably and held for payments in all future fiscal years." The amendment excludes from its restrictions the borrowings and fiscal operations of "enterprises." Enterprises are defined to include government-owned businesses authorized to issue their own revenue bonds and receiving less than 10.00% of their revenues in grants from all Colorado State and local governments combined. The amendment also requires the establishment of an "Emergency Reserve" equal to 3.00% of fiscal year spending excluding debt service for all years subsequent to 1994. The City has established an emergency reserve of $48,181,000. The amendment is also applicable to several component units, which have established emergency reserves of $19,000.

   In November 2005, local voters approved Referred Measure 1B to allow the City to retain revenues collected, with the exception of property tax revenue, in excess of the limits established by the state amendment to the constitution for ten fiscal years beginning with fiscal year 2005 and thereafter retain and spend any excess revenues up to the amount of the revenue cap as defined. For 2016, TABOR revenues exceeded the established limits by $318,800,000.

   In November 2012, Denver voters approved Referred Measure 2A to allow the City to retain all revenues collected beginning in 2013.

   There are numerous uncertainties about the interpretation of the amendment and its application to particular governmental entities and their operations. It is possible that the constitutionality of the amendment as applied in some situations may be challenged on various grounds, including the argument that the amendment conflicts with other constitutional provisions and violates the protections afforded by the federal constitution against impairment of contract.

Note F – Deferred Compensation Plan

1. **Description of the Plan.** The Deferred Compensation Plan (Plan) was adopted by the City to provide a means by which public employees could defer a portion of their current income and related income taxes to future years. Under Section 457 of the Internal Revenue Code, amounts deferred and income earned on those funds are not taxed until made available to the participant. The Plan's publicly available financial report can be obtained by contacting the City of Denver Controller's Office at 201 West Colfax Avenue, Department 1109, Denver, Colorado, 80202.

2. **Administration of the Plan.** The Deferred Compensation Governing Committee of the City manages the Plan. The Committee has designated a third-party administrator for the Plan to account for all deferred compensation, withdrawals, interest income credited, and the individual balance for each participant. In addition, the administrators execute individual participant agreements and provide Plan information and counseling to all eligible employees.

3. **Investments.** Investments are recorded at fair value. In compliance with the City Charter, the Deferred Compensation Governing Committee has approved certain options for investment. All investments are transferred to a retirement trust investment fund offered by the Teachers Insurance and Annuity Association of America-College Retirement Equities Fund (TIAA-CREF). The Plan provides for self-directed investments by the participants.

4. **Contributions.** Participation in the Plan is voluntary and is open to all City employees. The City does not make any contributions. The maximum deferral in any one year is generally limited to 100.00% of a participant's pre-deferred taxable income or $18,000 for 2016. Those who are age 50 and older may save an additional $6,000 per year. However, special provisions, applicable during the last three taxable years before a participant attains normal retirement age under the Plan, or any year thereafter prior to the participants' separation from service, may increase the annual maximum up to $36,000 for 2016. Total contributions by employees were $36,889,000 for 2016.

5. **Withdrawals.** Withdrawals from the Plan may be made upon retirement, termination of employment with the City, or in hardship cases as approved by the Administrator. Upon death, amounts credited to the participant are paid to the beneficiary designated by the participant.

   Eligible participants may elect the Systematic Withdrawal Option, purchase an annuity, or receive a lump-sum distribution. The Systemic Withdrawal Option allows eligible participants to withdraw specified amounts from their account at regular intervals. The balance of their account remains in the pool of Plan assets and continues to be invested as directed by the participant. The annuity option allows eligible participants to purchase a payment stream for a period certain or for the lifetime of the annuitant. Contracts purchased under this annuity option remain as assets of the Plan. The periodic distributions are accounted for as withdrawals in the year disbursed.

6. **Assets.** All amounts of compensation deferred under the Plan, all property and rights purchased with those amounts, and all income attributable to those amounts, property, or rights are held in trust by the City for the exclusive benefit of the participants and their beneficiaries. The assets of the Plan are reported as an other employee benefit trust fund of the City.

7. **Plan Termination and Amendments.** The City can at any time elect to amend, modify, or terminate the Plan. However, notice must be given to all participants at least 45 days prior to the effective date of an amendment. No amendments will deprive the participants of any benefits they were entitled to prior to the change. If the Plan is terminated, all amounts then credited to the participants are to be paid out by the administrators under the normal withdrawal requirements and procedures.

8. **Component Units.** Several component units offer plans similar to the City's which are also qualified under Section 457 of the Internal Revenue Code.

Note G – Pension Plans

The City has six pension plans covering substantially all employees of the primary government, as follows:

- Denver Employees Retirement Plan (DERP)
- Fire and Police Pension Plan - Statewide Defined Benefit Plan (FPPA SWDB)
- Public Employees' Retirement Association of Colorado Pension Plan - State Division Trust Fund (PERA SDTF)
- Public Employees' Retirement Association of Colorado Pension Plan - Judicial Division Trust Fund (PERA JDTF)
- Denver Old Hire Fire Pension Fund (FPPA Old Hire Fire)
- Denver Old Hire Police Pension Fund (FPPA Old Hire Police)

The majority of the City's employees are covered under the Denver Employees Retirement Plan. Full time firemen and policemen are covered under the Fire and Police Pension Association plans, and county court judges and the District Attorney are covered under the Public Employees' Retirement Association of Colorado. In addition to the six plans offered, several component units offer various types of pension plans, which include deferred annuity plans and defined contribution plans.

A summary of pension related items as of and for the year ended December 31, 2016, is presented in **Table 47** (dollars in thousands).

Table 47

Plan	Net Pension Liability	Net Pension Asset	Deferred Outflows of Resources	Deferred Inflows of Resources	Pension Expense
DERP:					
Governmental Activities	$ 851,426	$ -	$ 243,161	$ -	$ 112,951
Business-type Activities	204,113	-	62,844	322	29,768
FPPA SWDB	-	701	68,823	1,284	10,745
PERA SDTF	755	-	105	21	59
PERA JDTF	11,066	-	3,457	421	1,375
Old hire Fire	168,425	-	29,519	-	44,021
Old hire Police	96,532	-	35,090	-	43,403
Total	**$ 1,332,317**	**$ 701**	**$ 442,999**	**$ 2,048**	**$ 242,322**

1. Cost Sharing Multiple-Employer Defined Benefit Pension Plans.

The Denver Employees Retirement Plan (DERP)

Plan Description. The Denver Employees Retirement Plan (DERP) administers a cost-sharing multiple-employer defined benefit plan to eligible members. The DERP is administered by the DERP Retirement Board in accordance with sections 18-401 through 18-430.7 of the City's Revised Municipal Code. Amendments to the plan are made by ordinance. These Code sections establish the plan, provide complete information on the DERP, and vests the authority for the benefit and contribution provisions with the City Council. The DERP Retirement Board acts as the trustee of the Plan's assets.

The Plan provides retirement, death and disability benefits for its members and their beneficiaries. Members who were hired before July 1, 2011, and retire at or after age 65 (or at age 55 if the sum of their age and credited service is at least 75) are entitled to an annual retirement benefit, in an amount equal to 2.00% of their final average salary for each year of credited service, payable monthly for life. Effective for employees hired after September 1, 2004, the formula multiplier was reduced to 1.50%. Final average salary is based on the member's highest salary during a 36 consecutive month period of credited service. Members with 5 years of credited service may retire at or after age 55 and receive a reduced retirement benefit.

For members who were hired after July 1, 2011, they must be age 60 and have combined credited service of at least 85 in order to receive a normal retirement prior to age 65. Final average salary is based on the member's highest salary during a 60 consecutive month period of credited service. Five-year vesting is required of all employees in order to qualify for a benefit, regardless of their age at the time of termination of employment.

Annual cost of living adjustments are granted on an ad hoc basis. The estimated cost of benefit and contribution provisions is determined annually by an independent actuary, recommended by the plan's Board, and enacted into ordinance by Denver City Council.

The Plan is accounted for using the economic resources measurement focus and the accrual basis of accounting. DERP issues a publicly available comprehensive annual financial report that can be obtained at https://www.derp.org/.

Funding Policy. The City contributes 11.50% of covered payroll and employees make a pre-tax contribution of 8.00% in accordance with Section 18-407 of the Revised Municipal Code of the City. The City's contributions to DERP for the year ended December 31, 2016, were $64,345,000, which equaled the required contributions.

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. At December 31, 2016, the City reported a liability of $1,055,539,000 for its proportionate share of the net pension liability related to DERP. The net pension liability was measured as of December 31, 2015, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2014. Standard update procedures were used to roll forward the total pension liability to December 31, 2015. The City's proportion of the net pension liability was based on City contributions to DERP for the calendar year 2015 relative to the total contributions of participating employers to DERP.

At December 31, 2015, the City's proportion was 89.51%, which was an increase of 0.63% from its proportion measured as of December 31, 2014. The proportional share of the governmental activities and the business-type activities was 72.20% and 17.31%, respectively, an increase of 0.28% and 0.35% for the governmental activities and the business-type activities, respectively.

The components of the City's proportionate share of the net pension liability related to DERP as of December 31, 2016, are presented in **Table 48** (dollars in thousands).

Table 48

	Governmental Activities	Business-type Activities	Total
Total pension liability	$ 2,256,163	$ 540,871	$ 2,797,034
Plan fiduciary net positon	1,404,737	336,758	1,741,495
Net pension liability	**$ 851,426**	**$ 204,113**	**$ 1,055,539**

For the year ended December 31, 2016, the governmental activities and the business-type activities recognized pension expense of $112,951,000 and $29,768,000, respectively. A summary of the City's deferred outflows of resources and deferred inflows of resources related to pensions for DERP as of December 31, 2016, is presented in **Table 49** (dollars in thousands).

Table 49

	Governmental Activities		Business-type Activities		Total	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 15,146	$ -	$ 3,631	$ -	$ 18,777	$ -
Changes of assumptions or other inputs	38,048	-	9,121	-	47,169	-
Net difference between projected and actual earnings on pension plan investments	135,622	-	32,513	-	168,135	-
Changes in proportion	1,804	-	5,775	322	7,579	322
Contributions subsequent to the measurement date	52,541	-	11,804	-	64,345	-
Total	**$ 243,161**	**$ -**	**$ 62,844**	**$ 322**	**$ 306,005**	**$ 322**

The $64,345,000 reported as deferred outflows of resources related to pensions, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net pension liability in the year ended December 31, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as presented in **Table 50** (dollars in thousands).

Table 50

Year	Governmental Activities	Business-type Activities	Total
2017	$ 57,394	$ 16,484	$ 73,878
2018	57,339	15,650	72,989
2019	48,239	11,956	60,195
2020	27,649	6,627	34,276
2021	-	-	-
Thereafter	-	-	-
Total	**$ 190,621**	**$ 50,717**	**$ 241,338**

The total pension liability in the December 31, 2015 actuarial valuation was determined using the actuarial assumptions and other inputs presented in **Table 51.**

Table 51

	DERP
Investment rate of return	7.75%
Salary increases	3.25% - 7.25%
Inflation	2.75%

Mortality rates were based on the RP-2000 Combined Mortality Table via scale AA to 2020, with multipliers specific to gender and payment status of employee.

The latest experience study was conducted in 2013 covering the 5-year period of January 1, 2008 to December 31, 2012. At the time, the recommended mortality table was expected to produce a margin of 8.00% on the retired male mortality experience and 7.00% on the retired female experience.

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return were adopted by the plan's trustees after considering input from the plan's investment consultant and actuary(s). For each major asset class that is included in the pension plan's target asset allocation as of December 31, 2015, these best estimates are summarized in **Table 52.**

Table 52

Asset Class	Target Allocation	Long-Term Expected Rate of Return
U. S. Equities	22.50%	4.30%
Non - U. S. developed markets	15.50%	6.00%
Emerging markets	8.00%	9.80%
Total Public Equity	46.00%	
Core fixed income	11.50%	0.80%
Debt	2.50%	5.90%
Private debt	6.50%	8.40%
Total Fixed Income	20.50%	
Real estate	8.00%	6.40%
Absolute return	5.00%	3.60%
Energy MLP's	7.00%	7.30%
Private equity/other	13.50%	7.70%
Cash	0.00%	0.50%
Total Asset Class	**100.00%**	

Discount Rate. The discount rate used to measure the total pension liability was 7.75% (8% at prior measurement date). This single discount rate was based on the expected rate of return on pension plan investments of 7.75%. The projection of cash flows used to determine this single rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the City's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate. Table 53 presents the City's proportionate share of the net pension liability, calculated using a discount rate of 7.75%, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher (dollars in thousands):

Table 53

City's proportionate share of the net pension liability	1% Decrease 6.75%	Current Discount Rate 7.75%	1% Increase 8.75%
Governmental Activities	$ 1,088,351	$ 851,426	$ 650,205
Business-type activities	260,911	204,113	155,874
Total	**$ 1,349,262**	**$ 1,055,539**	**$ 806,079**

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in the separately issued DERP financial reports found at https://www.derp.org/index.cfm/ID/38.

Fire and Police Pension Plan – Statewide Defined Benefit Plan (FPPA SWDB)

Plan Description. Full-time firefighters and police officers hired on or after April 8, 1978, participate in the Statewide Defined Benefit Plan - Fire and Police Pension Plan (FPPA SWDB). The plan is a cost-sharing multiple-employer defined benefit pension plan administered by the Fire and Police Pension Association of Colorado (FPPA) that provides normal, early, vested, or deferred retirement and death benefits. Authority for the plan, including benefit and contribution provisions, is derived from Title 31, Articles 30, 30.5, and 31 of the Colorado Revised Statutes. The plan is amended by statute and is accounted for using the economic resources measurement focus and the accrual basis of accounting. FPPA issues a publicly available comprehensive annual financial report that can be obtained at http://fppaco.org/toc_frames.html.

Funding Policy. Statute requires the City contribute 8.00% of base salary and employees make a pre-tax contribution of 9.00% for a total contribution rate of 17.00%. In 2014, employees elected to increase the member contribution rate to the plan beginning in 2015. Employee contribution rates will increase 0.50% annually through 2022 to a total of 12.00% of base salary. Employer contributions will remain at 8.00% resulting in a combined contribution rate of 20.00% in 2022. The City's contributions to the FPPA SWDB for the year ended December 31, 2016, were $15,648,000.

Pension Assets, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. At December 31, 2016, the City reported an asset of $701,000 for its proportionate share of the net pension asset related to the FPPA SWDB plan. The net pension asset was measured as of December 31, 2015, and the total pension liability used to calculate the net pension asset was determined by an actuarial valuation as of December 31, 2014. Standard update procedures were used to roll forward the total pension asset to December 31, 2015. The City's proportion of the net pension asset was based on City contributions to FPPA SWDB plan for the calendar year 2015 relative to the total contributions of participating employers to the FPPA SWDB plan.

At December 31, 2015, the City's proportion was 39.81%, which was an increase of 0.30% from its proportion measured as of December 31, 2014.

For the year ended December 31, 2016, the City recognized pension expense of $10,745,000. The components of the City's proportionate share of the net pension asset related to FPPA SWDB as of December 31, 2016, are presented in **Table 54** (dollars in thousands).

Table 54

		FPPA SWDB
Total pension liability	$	735,247
Plan fiduciary net positon		735,948
Net pension liability (asset)	**$**	**(701)**

A summary of the City's deferred outflows of resources and deferred inflows of resources related to pensions for FPPA SWDB as of December 31, 2016, is presented in **Table 55** (dollars in thousands).

Table 55

	FPPA SWDB			
Sources		**Deferred Outflows of Resources**		**Deferred Inflows of Resources**
Difference between expected and actual experience	$	5,676	$	829
Changes of assumptions or other inputs		11,023		
Net difference between projected and actual earnings on pension plan investments		35,716		-
Change in proportion		760		455
Contributions subsequent to the measurement date		15,648		-
Total	**$**	**68,823**	**$**	**1,284**

The $15,648,000 reported as deferred outflows of resources related to pensions, resulting from contributions subsequent to the measurement date, will be recognized as an increase in the net pension asset in the year ended December 31, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as presented in **Table 56** (dollars in thousands).

Table 56

Year		FPPA SWDB
2017	$	10,906
2018		10,906
2019		10,906
2020		10,021
2021		1,757
Thereafter		7,395
Total	**$**	**51,891**

The total pension asset in the December 31, 2015 actuarial valuation was determined using the actuarial assumptions and other inputs presented in **Table 57.**

Table 57

	FPPA SWDB
Investment rate of return	7.50%
Salary increases	4.00% - 14.00%
Inflation	3.00%

Mortality rates were based on the RP-2014 Combined Mortality Table with Blue Collar Adjustment, projected with Scale BB, 55.00% multiplier for off-duty mortality is used in the valuation of off-duty mortality active members. On-duty related mortality is assumed to be 0.00020 per year for all members.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Fund's target asset allocation as of December 31, 2015, are summarized in **Table 58.**

Table 58

Assset Class	Target Allocation	Long-Term Expected Rate of Return
Global equity	37.00%	6.50%
Equity long/short	10.00%	4.70%
Illiquid alternatives	20.00%	8.00%
Fixed income	16.00%	1.50%
Absolute return	11.00%	4.10%
Managed futures	4.00%	3.00%
Cash	2.00%	0.00%
Total Asset Class	**100.00%**	

Discount Rate. The discount rate used to measure the total pension liability was 7.50% (no change from the prior measurement date). The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates under Colorado statutes. Based on those assumptions, the SWDB plan fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the City's Proportionate Share of the Net Pension Liability (Asset) to Changes in the Discount Rate. **Table 59** presents the City's proportionate share of the net pension asset, calculated using a discount rate of 7.50%, as well as what the City's proportionate share of plan's net pension asset would be if it were calculated using a discount rate that is 1.00% lower or 1.00% higher (dollars in thousands):

Table 59

	1% Decrease 6.50%	Single Discount Rate Assumption 7.50%	1% Increase 8.50%
City's proportionate share of the net pension liability (asset)	$ 98,307	$ (701)	$ (82,826)

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in the separately issued FPPA financial reports found at http://fppaco.org/toc_frames.html.

Public Employees' Retirement Association of Colorado Pension Plans (PERA)

Plan Description. County court judges and the District Attorney of the City are provided with pensions through the State Division Trust Fund (SDTF) or the Judicial Division Trust Fund (JDTF) —cost-sharing multiple-employer defined benefit pension plans administered by PERA. PERA provides retirement, disability, and survivor benefits that are specified in Title 24, Article 51 of the Colorado Revised Statutes (C.R.S), administrative rules set forth at 8 C.C.R. 1502-1, and applicable provisions of the federal Internal Revenue Code. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. Plan benefits are specified in Title 24, Article 51 of the Colorado Revised Statutes (C.R.S.), administrative rules set forth at 8 C.C.R. 1502-1, and applicable provisions of the federal Internal Revenue Code. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. The plans are accounted for using the economic resources measurement focus and the accrual basis of accounting. PERA issues a publicly available comprehensive annual financial report that can be obtained at www.copera.org/investments/pera-financial-reports.

Funding Policy. Eligible employees are required to contribute 8.00% of their PERA-includable salary. The City contributes 18.23% of includable salaries to the SDTF and 16.34% of includable salaries to the JDTF. Employer contributions are recognized by the SDTF and the JDTF in the period in which the compensation becomes payable to the member and the City is statutorily committed to pay the contributions to the plans. The City's contributions to the SDTF for the year ended December 31, 2016, were $37,000. The City's contributions to the JDTF for the years ended December 31, 2016, were $468,000.

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. At December 31, 2016, the City reported a liability of $755,000 and $11,066,000 for the SDTF and JDTF, respectively, for its proportionate share of the net pension liability related to the PERA plans. The net pension liabilities were measured as of December 31, 2015, and the total pension liabilities used to calculate the net pension liabilities was determined by an actuarial valuation as of December 31, 2014. Standard update procedures were used to roll forward the total pension liabilities to December 31, 2015. The City's proportion of the net pension liabilities were based on City contributions to the SDTF and JDTF plan for the calendar year 2015 relative to the total contributions of participating employers to the SDTF and JDTF plans.

At December 31, 2015, the City's proportion of the SDTF was 0.007%, which equaled its proportion measured as of December 31, 2014.

At December 31, 2015, the City's proportion of the JDTF was 6.02% which was a decrease of 0.38% from its proportion measured as of December 31, 2014.

The components of the City's net pension liability related to PERA as of December 31, 2016, are presented in **Table 60** (dollars in thousands).

Table 60

	SDTF	JDTF
Total pension liability	$ 1,719	$ 27,757
Plan fiduciary net positon	964	16,691
Net pension liability	**$ 755**	**$ 11,066**

For the year ended December 31, 2016, the City recognized pension expense for the SDTF and JDFT of $59,000 and $1,375,000, respectively. A summary of the City's deferred outflows of resources and deferred inflows of resources related to pensions for the SDTF and JDTF plans as of December 31, 2016, is presented in **Table 61** (dollars in thousands).

Table 61

	SDTF		JDTF		Total	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 11	$ -	$ 335	$ -	$ 346	$ -
Changes of assumptions or other inputs	-	9	1,681	-	1,681	9
Net difference between projected and actual earnings on pension plan investments	57	-	973	-	1,030	-
Change in proportion	-	12	-	421	-	433
Contributions subsequent to the measurement date	37	-	468	-	505	-
Total	**$ 105**	**$ 21**	**$ 3,457**	**$ 421**	**$ 3,562**	**$ 442**

The $37,000 and $468,000 reported by the SDTF and JDTF plans, respectively, as deferred outflows of resources related to pensions, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net pension liability in the year ended December 31, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as presented in **Table 62** (dollars in thousands).

Table 62

Year	SDTF	JDTF
2017	$ 4	$ 819
2018	16	819
2019	15	654
2020	12	276
2021	-	-
Thereafter	-	-
Total	**$ 47**	**$ 2,568**

The total pension liability in the December 31, 2014 actuarial valuation was determined using the actuarial assumptions and other inputs in **Table 63.**

Table 63

	SDTF	JDTF
Price inflation	2.80%	2.80%
Salary increases, including wage inflation	3.90% - 9.57%	4.40% - 5.40%
Investment Rate of Return, net of pension plan investment expenses, including price inflation	7.50%	7.50%

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with males set back 1 year, and females set back 2 years.

The actuarial assumptions used in the December 31, 2014 valuation were based on the results of an actuarial experience study for the period January 1, 2008 through December 31, 2011, adopted by PERA's Board on November 13, 2012, and an economic assumption study, adopted by PERA's Board on November 15, 2013 and January 17, 2014.

The SDTF's and JDTF's long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation.

As of the most recent analysis on the long-term expected rate of return presented to the PERA Board on November 15, 2013, the target allocation and best estimates of geometric real rates of return for each major asset class are summarized in **Table 64.**

Table 64

Assset Class	Target Allocation	10-Year Expected Geometric Real Rate of Return
U. S. equity - large cap	26.76%	5.00%
U.S. equity - small cap	4.40%	5.19%
Non U. S. equity - developed	22.06%	5.29%
Non U. S. equity - emerging	6.24%	6.76%
Core fixed income	24.05%	0.98%
High yield	1.53%	2.64%
Long duration government credit	0.53%	1.57%
Emerging market bonds	0.43%	3.04%
Real estate	7.00%	5.09%
Private equity	7.00%	7.15%
Total Asset Class	**100.00%**	

SDTF Discount Rate. The discount rate used to measure the total pension liability was 7.50 percent. The projection of cash flows used to determine the discount rate applied the actuarial cost method and assumptions shown above. In addition, the following methods and assumptions were used in the projection of cash flows:

- Total covered payroll for the initial projection year consists of the covered payroll of the active membership present on the valuation date and the covered payroll of future plan members assumed to be hired during the year. In subsequent projection years, total covered payroll was assumed to increase annually at a rate of 3.90%.

- Employee contributions were assumed to be made at the current member contribution rate. Employee contributions for future plan members were used to reduce the estimated amount of total service costs for future plan members.

- Employer contributions were assumed to be made at rates equal to the fixed statutory rates specified in law, including current and estimated future AED and SAED, until the Actuarial Value Funding Ratio reaches 103%, at which point, the AED and SAED will each drop 0.50% every year until they are zero. Additionally, estimated employer contributions included reductions for the funding of the AIR and retiree health care benefits. For future plan members, employer contributions were further reduced by the estimated amount of total service costs for future plan members not financed by their member contributions.

- Employer contributions and the amount of total service costs for future plan members were based upon a process used by the plan to estimate future actuarially determined contributions assuming an analogous future plan member growth rate.

- The AIR balance was excluded from the initial fiduciary net position, as, per statute, AIR amounts cannot be used to pay benefits until transferred to either the retirement benefits reserve or the survivor benefits reserve, as appropriate. As the ad hoc post-retirement benefit increases financed by the AIR are defined to have a present value at the long-term expected rate of return on plan investments equal to the amount transferred for their future payment, AIR transfers to the fiduciary net position and the subsequent AIR benefit payments have no impact on the Single Equivalent Interest Rate (SEIR) determination process when the timing of AIR cash flows is not a factor (i.e., the plan's fiduciary net position is not projected to be depleted). When AIR cash flow timing is a factor in the SEIR determination process (i.e., the plan's fiduciary net position is projected to be depleted), AIR transfers to the fiduciary net position and the subsequent AIR benefit payments were estimated and included in the projections.

- Benefit payments and contributions were assumed to be made at the end of the month.

Based on the above actuarial cost method and assumptions, the SDTF's fiduciary net position was projected to be available to make all projected future benefit payments of current members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The discount rate determination does not use the Municipal Bond Index Rate. There was no change in the discount rate from the prior measurement date.

Sensitivity of the City's proportionate share of the net pension liability to changes in the discount rate. Table 65 presents the City's proportionate share of the net pension liability calculated using the discount rate of 7.50%, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate (dollars in thousands).

Table 65

	1% Decrease 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
City's proportionate share of the net pension liability	$ 953	$ 755	$ 588

JDTF Discount Rate. The discount rate used to measure the total pension liability was 5.73%. The projection of cash flows used to determine the discount rate applied the actuarial cost method and assumptions shown above. In addition, the following methods and assumptions were used in the projection of cash flows:

- Total covered payroll for the initial projection year consists of the covered payroll of the active membership present on the valuation date and the covered payroll of future plan members assumed to be hired during the year. In subsequent projection years, total covered payroll was assumed to increase annually at a rate of 3.90%.

- Employee contributions were assumed to be made at the current member contribution rate. Employee contributions for future plan members were used to reduce the estimated amount of total service costs for future plan members.

- Employer contributions were assumed to be made at rates equal to the fixed statutory rates specified in law, including current and estimated future AED and SAED, until the Actuarial Value Funding Ratio reaches 103%, at which point, the AED and SAED will each drop 0.50% every year until they are zero. Additionally, estimated employer contributions included reductions for the funding of the AIR and retiree health care benefits. For future plan members, employer contributions were further reduced by the estimated amount of total service costs for future plan members not financed by their member contributions.

- Employer contributions and the amount of total service costs for future plan members were based upon a process used by the plan to estimate future actuarially determined contributions assuming an analogous future plan member growth rate.

- The AIR balance was excluded from the initial fiduciary net position, as, per statute, AIR amounts cannot be used to pay benefits until transferred to either the retirement benefits reserve or the survivor benefits reserve, as appropriate. As the ad hoc post-retirement benefit increases financed by the AIR are defined to have a present value at the long-term expected rate of return on plan investments equal to the amount transferred for their future payment, AIR transfers to the fiduciary net position and the subsequent AIR benefit payments have no impact on the Single Equivalent Interest Rate (SEIR) determination process when the timing of AIR cash flows is not a factor (i.e., the plan's fiduciary net position is not projected to be depleted). When AIR cash flow timing is a factor in the SEIR determination process (i.e., the plan's fiduciary net position is projected to be depleted), AIR transfers to the fiduciary net position and the subsequent AIR benefit payments were estimated and included in the projections.

- Benefit payments and contributions were assumed to be made at the end of the month.

- Based on the above actuarial cost method and assumptions, the projection test indicates the JDTF's fiduciary net position was projected to be depleted in 2040 and, as a result, the municipal bond index rate was used in the determination of the discount rate. The long-term expected rate of return of 7.50 percent on pension plan investments was applied to periods through 2040 and the municipal bond index rate, the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System, was applied to periods on and after 2040 to develop the discount rate. The discount rate used to measure the total pension liability from the prior measurement date was 6.14%, a change of (0.41)% compared to the current measurement date.

Sensitivity of the City's proportionate share of the net pension liability to changes in the discount rate. Table 66 presents the City's proportionate share of the net pension liability calculated using the discount rate of 5.73%, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.73%) or 1-percentage-point higher (6.73%) than the current rate (dollars in thousands).

Table 66

	1% Decrease 4.73%	Current Discount Rate 5.73%	1% Increase 6.73%
City's proportionate share of the net pension liability	$ 14,234	$ 11,066	$ 8,361

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in the separately issued PERA financial reports found at https://www.copera.org/investments/pera-financial-reports.

2. Agent Multiple-Employer Defined Benefit Plans

Denver Old Hire Fire and Police Pension Funds (FPPA Old Hire Fire and Police)

Plan Description. The Old Hire plans are agent multiple-employer defined benefit pension plans that are administered by the Fire and Police Pension Association (FPPA). Authority for the plans, including benefit and contribution provisions, is derived from Title 31, Articles 30, 30.5, and 31 of the Colorado Revised Statutes. The Plans are amended by statute. The plans provide normal, early, vested, or deferred retirement benefits to plan participants. The Old Hire pension plans are for fire fighter and police employees hired before April 8, 1978. The plans are accounted for using the economic resources measurement focus and the accrual basis of accounting and are closed to new entrants. FPPA issues a publicly available comprehensive annual financial report that includes the old hire plans and can be obtained at fppaco.org/toc_frames.html.

Funding Policy. The City is required to contribute to the Old Hire plans at an actuarially determined rate. Modification of the Old Hire plans is regulated by state law and by FPPA Rules and Regulations as authorized by state law. Changes to contribution requirements require an affirmative vote of 65.00% of active members and City Council ordinance. The City's contributions to the FPPA Old Hire Fire and Police plans for the year ended December 31, 2016, were $13,061,000 and $5,027,000, respectively.

Plan Membership. The plan membership of the Old Hire plans as of December 31, 2015 is presented in **Table 67.**

Table 67

Members	Old Hire Fire	Old Hire Police	Total
Retirees and beneficiaries	801	1,052	**1,853**
Inactive, non-retired beneficiaries	-	-	-
Active members	1	-	**1**
Total	**802**	**1,052**	**1,854**

Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. At December 31, 2016, the City reported a liability of $168,425,000 and $96,532,000 for the Old Hire Fire and Old Hire Police plans, respectively, for the net pension liability related to the FPPA old hire plans. The net pension liabilities were measured as of December 31, 2015, and the total pension liabilities used to calculate the net pension liabilities was determined by an actuarial valuation as of December 31, 2014. Standard update procedures were used to roll forward the total pension liabilities to December 31, 2015.

The components of the net pension liability of the City as of December 31, 2016, is presented in **Table 68** (dollars in thousands).

Table 68

	Old Hire Fire	Old Hire Police
Total pension liability	$ 497,664	$ 702,471
Fiduciary net position	329,239	605,939
Net Pension Liability	**$ 168,425**	**$ 96,532**

For the year ended December 31, 2016, the City recognized $44,021,000 and $43,403,000 of pension expense for the Old Hire Fire and Old Hire Police plans, respectively. A summary of the City's deferred outflows of resources and deferred inflows of resources related to pensions for the Old Hire Fire and Old Hire Police plans as of December 31, 2016, is presented in **Table 69** (dollars in thousands).

Table 69

	Old Hire Fire		Old Hire Police		Total	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ -	$ -	$ -	$ -	$ -	$ -
Changes of assumptions or other inputs	-	-	-	-	-	-
Net difference between projected and actual earnings on pension plan investments	16,458	-	30,063	-	46,521	-
Contributions subsequent to the measurement date	13,061	-	5,027	-	18,088	-
Total	$ 29,519	$ -	$ 35,090	$ -	$ 64,609	$ -

The $13,061,000 and $5,027,000 reported by the Old Hire Fire and Old Hire Police plans, respectively, as deferred outflows of resources related to pensions, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net pension liability in the year ended December 31, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as presented in **Table 70** (dollars in thousands).

Table 70

Year	Old Hire Fire	Old Hire Police
2017	$ 4,217	$ 7,702
2018	4,217	7,702
2019	4,216	7,703
2020	3,808	6,956
2021	-	-
Thereafter	-	-
Total	**$ 16,458**	**$ 30,063**

The changes in net pension liability for Old Hire Fire and Old Hire Police plans are presented in **Table 71.**

Table 71

	Old Hire Fire			Old Hire Police		
	Increase (Decrease)			Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balances as of January 1, 2016	$ 474,369	$ 348,877	**$ 125,492**	$ 677,839	$ 632,808	**$ 45,031**
Changes for the year:						
Service cost	-	-	-	-	-	-
Interest	34,026	-	**34,026**	48,801	-	**48,801**
Differences between expected and actual experience	(699)	-	**(699)**	(12,201)	-	**(12,201)**
Changes of assumptions	32,102	-	**32,102**	43,358	-	**43,358**
Contributions - employer	-	16,803	**(16,803)**	-	18,089	**(18,089)**
Contributions - employee	-	7	**(7)**	-	-	-
Net investment income	-	6,174	**(6,174)**	-	11,278	**(11,278)**
Benefit payments	(42,134)	(42,134)	-	(55,326)	(55,326)	-
Administrative expense	-	(488)	**488**	-	(910)	**910**
Other changes	-	-	-	-	-	-
Total Net Changes	**$ 23,295**	**$ (19,638)**	**$ 42,933**	**$ 24,632**	**$ (26,869)**	**$ 51,501**
Balances as of December 31, 2016	**$ 497,664**	**$ 329,239**	**$ 168,425**	**$ 702,471**	**$ 605,939**	**$ 96,532**

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Plans target asset allocation as of December 31, 2015 these best estimates are summarized in **Table 72.**

Table 72

Asset Class	Target Allocation	Long-Term Expected Rate of Return
Global equity	37.00%	6.50%
Equity long/short	10.00%	4.70%
Illiquid alternatives	20.00%	8.00%
Fixed income	16.00%	1.50%
Absolute return	11.00%	4.10%
Managed futures	4.00%	3.00%
Cash	2.00%	0.00%
Total	**100.00%**	

The total pension liability in the December 31, 2014 actuarial valuation was determined using the actuarial assumptions and other inputs reflected in **Table 73.**

Table 73

	Old Hire Fire	Old Hire Police
Investment rate of return	7.50%	7.50%
Salary increases	n/a	n/a
Inflation	3.00%	3.00%

Mortality rates were based on the RP-2000 Combined Mortality Table with Blue Collar Adjustment, projected with Scale AA.

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates under Colorado statutes. Based on those assumptions, the plan fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the City's Net Pension Liability to Changes in the Discount Rate. Table 74 presents the City's net pension liability/(asset), calculated using a discount rate of 7.50%, as well as what the City's net pension liability/(asset) would be if it were calculated using a discount rate that is 1.00% lower (6.50%) or 1.00% higher (8.50) (dollars in thousands):

Table 74

	1% Decrease 6.50%	Discount 7.50%	1% Increase 8.50%
Old Hire Fire net pension liability	$ 214,178	$ 168,425	$ 129,129
Old Police Fire net pension liability	165,333	96,532	37,907
Total	**$ 379,511**	**$ 264,957**	**$ 167,036**

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in the separately issued FPPA financial reports found at http://fppaco.org/toc_frames.html.

Each retirement system issues a publicly available financial report that includes financial statements and required supplementary information of that plan. Those reports are available by contacting:

Colorado PERA
P. O. Box 5800
Denver, Colorado 80217-5800

Denver Employees Retirement Plan
777 Pearl Street
Denver, Colorado 80203

Fire and Police Pension Association
5290 DTC Parkway, Suite 100
Greenwood Village, Colorado 80111

Note H – Other Postemployment Benefits

In addition to the pension benefits described in Note IV-G, the City provides health insurance to eligible retirees and their qualifying dependents. Current and retired employees participate in the same group plans with blended premium rates creating an implicit rate subsidy for the retirees in the plans.

1. **DERP Participants' Plan Description.** The City acts in a cost-sharing multiple-employer capacity by providing health insurance to eligible DERP retirees and their qualified dependents through the City's group insurance plans. As authorized by section 18-412 of the City's Revised Municipal Code, DERP retirees are allowed to participate in the health insurance programs offered to active employees. To be eligible, a retiree must be a minimum of 55 years of age if hired prior to July 1, 2011, and a minimum of 60 years of age if hired after July 1, 2011, with 5 years of service and have begun receiving their pension benefit. Coverage ceases when one reaches Medicare age. As of the December 31, 2015 actuarial valuation, there are 8,422 active employees under age 65 covered under the health insurance plans. In addition, there are 1,107 retired employees not yet covered by Medicare who are covered by the plans. There is no stand-alone financial report for this medical coverage benefit and it is not included in the DERP report.

2. **Funding Policy for DERP Participants' Plan.** DERP retirees are responsible for 100.00% of the blended premium rate. They may choose to use their health benefit toward the premium costs. The health benefit associated with the DERP pension (see Note IV-H) provides monthly health insurance premium reduction of $12.50 per year of service for retired participants under the age of 65 and $6.25 per year of service for retirees age 65 and older. The City's required contribution toward the implicit rate subsidy is based on pay-as-you-go financing.

   Contributions made by the City toward the implicit rate subsidy for DERP participants were $5,208,000, $5,685,000, and $5,240,000, for the years ended December 31, 2016, 2015, and 2014, respectively, based on pay-as-you-go financing.

The Schedule of Funding Progress, presented as Required Supplementary Information following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

3. **PERA Participants' Plan Description.** The City acts in cost sharing multiple employer capacity by providing county judges and the District Attorney access to the Health Care Trust Fund ("HCTF"), a healthcare trust administered by PERA. The HCTF benefit provides a health care premium subsidy and health care programs (known as PERACare) to PERA participating benefit recipients and their eligible beneficiaries. Title 24, Article 51, Part 12 of the C.R.S., as amended, establishes the HCTF and sets forth a framework that grants authority to the PERA Board to contract, self-insure and authorize disbursements necessary in order to carry out the purposes of the PERACare program, including the administration of health care subsidies. PERA issues a publicly available comprehensive annual financial report that includes financial statements and required supplementary information for the HCTF. The report can be obtained at www.copera.org/investments/pera-financial-reports.

4. **Funding Policy for PERA Participants' Plan.** The City is required to contribute at a rate of 1.02% of PERA-includable salary for all PERA members as set by statute. No member contributions are required. The contribution requirements for the City are established under Title 24, Article 51, Part 4 of the C.R.S., as amended. The apportionment of the contributions to the HCTF is established under Title 24, Article 51, Section 208(1)(f) of the C.R.S., as amended. For the years ending December 31, 2016, 2015, and 2014, respectively the City contributions to the HCTF were $5,000, $6,000, and $5,000, respectively, equal to their required contributions for each year.

5. **FPPA Participants' Plan Description.** The City acts in a single-employer capacity by providing access to health insurance to eligible FPPA retirees and their qualified dependents through the respective groups' insurance plans. Based on City practice, fire fighter retirees and police officer retirees are allowed to participate in the health insurance programs offered to active employees. Fire fighters and police officers hired prior to April 8, 1978, are eligible for this coverage with a minimum of 25 years of service; however, police officers are also eligible when they begin collecting their pension benefit should they not obtain 25 years of service. For FPPA employees hired after April 7, 1978, they must have elected to begin collecting their pension and be a minimum of 55 years of age with 5 years of service or attained age 50 with 30 years of service. Coverage ceases when one reaches Medicare age. As of the December 31, 2016, actuarial valuation, there are 2,361 active employees under age 65 covered under the health insurance plans. In addition, there are 228 retired employees not yet covered by Medicare who are covered by the plans. There is no stand-alone financial report for this medical coverage benefit and it is not included in the FPPA report.

6. **Funding Policy for FPPA Participants' Plan.** FPPA retirees are responsible for 100.00% of the blended premium rate. The City's required contribution toward the implicit rate subsidy is based on pay-as-you-go financing.

7. **Annual Cost and Net Other Post Employment Benefit Obligation for FPPA Participants Plan.** The City's annual other postemployment benefit (OPEB) cost is calculated based on the Annual Required Contributions (ARC), an amount actuarially determined in accordance with the parameters of GASB 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost

each year and amortize any unfunded Actuarial Accrued Liabilities (AAL) over a period of 30 years. **Table 75** (dollars in thousands) details the components of the City's annual OPEB cost for the year, the amount contributed, and changes in the City's net OPEB obligation.

Table 75

Employer's normal cost	$	1,773
Amortization of unfunded AAL		1,508
Interest on net OPEB obligation		625
Adjustment to ARC		(622)
Annual OPEB Cost		**3,284**
Employer contribution		1,834
Increase in net OPEB obligation		**1,450**
Net OPEB obligation - January 1		**15,639**
Net OPEB Obligation - December 31	**$**	**17,089**

The annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB Obligation for the year ended December 31, 2016, and the two preceding years are detailed in **Table 76** (dollars in thousands).

Table 76

Fiscal Year Ended		**Annual OPEB Cost**		**Contributions**	**% of Annual Cost OPEB Contributions**		**Net OPEB Obligations**
December 31, 2014	$	4,236	$	1,800	42.5%	$	13,148
December 31, 2015		4,431		1,940	43.8%		15,639
December 31, 2016		3,284		1,834	55.8%		17,089

8. **Funded Status and Funding Progress for FPPA Participants Plan.** The funded status for the year ended December 31, 2016, is presented in **Table 77** (dollars in thousands).

Table 77

		OPEB
Actuarial accrued liability (AAL)	$	39,396
Actuarial value of plan assets		-
Unfunded AAL (UAAL)	**$**	**39,396**
Funded ratio		0.00%
Covered payroll	$	210,650
UAAL as a % of covered payroll		18.7%

Actuarial valuations of an ongoing plan involve the estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revisions as actual results are compared with past expectations and new estimates are made about the future. The Schedule of Funding Progress, presented as Required Supplementary Information following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

9. **Actuarial Methods and Assumptions.** Projections and benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and included in the types of benefits provided at the time of each valuation and the historic pattern of benefit costs between the employer and the plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with long-term perspective of calculations. **Table 78** details the actuarial methods and assumptions used.

Table 78

	OPEB
Actuarial valuation date	12/31/16
Actuarial cost method	Entry age normal
Amortization method	Level % of pay
Remaining amortization period	30 years, open
Actuarial assumptions:	
Investment rate of return	4.00%
Heathcare cost trend	Grading from 8.5% decreasing by .5% per year to 5% thereafter
General inflation	3% annually
Projected salary increases	4.00%

* * *