City of Moline
619 16 Street, Moline – 2nd Floor
Council Chambers

Committee-of-the-Whole Agenda

6:30 p.m.

Tuesday, August 11, 2015

Mayor's Board Appointments

Mayor's appointment of Laura Ford to the Board of Fire and Police Commissioners to fill the unexpired term of Robert Schwieder to expire May 31, 2016.

Proclamation

A Proclamation from Kiwanis to declare August 20, 2015, as "Kiwanis International Day."

Informational

Habitat for Humanity Quad Cities - Neighborhood Revitalization Program. (Ray Forsythe, Planning and Development Director)

Agenda Items

1. **Habitat for Humanity Permit Fees** (Ray Forsythe, Director)
2. **Purchase of Eight Medium Duty Ford F-650 Trucks** (J.D. Schulte, Fleet Manager)
3. **Purchase of Seven Hook-lift Hoist Units** (J.D. Schulte, Fleet Manager)
4. **Purchase of Modular Hydraulic Power Unit** (J.D. Schulte, Fleet Manager)
5. **Purchase of Air Compressor** (J.D. Schulte, Fleet Manager)
6. **Actuarial Valuation Reports** (Kathy Carr, Finance Director)
7. **Other**
8. **Public Comment**

Explanation

1. **A Resolution Authorizing the Planning and Development Department to pay the building permit fees associated with Habitat for Humanity Quad Cities' "Rock the Block Floreciente" event, the permit fees to construct a new home at 335 4th Avenue, and the permit fees associated with Habitat for Humanity Quad Cities' five-year Neighborhood Revitalization Program, which in total shall not exceed $17,000; and Authorizing Staff to do all things necessary to assist Habitat for Humanity Quad Cities throughout the five-year term of the Neighborhood Revitalization Program which includes payment of the future building permit fees throughout the term of the Neighborhood Revitalization Program as budgeted by the Planning and Development Department.** (Ray Forsythe, Planning & Development Director)

Explanation: Habitat for Humanity Quad Cities has scheduled an event called "Rock the Block Floreciente" in the Floreciente Neighborhood on September 26, 2015 to officially kick-off its new Neighborhood Revitalization Program. The "Rock the Block Floreciente" event will complete approximately twenty minor home repairs and yard clean-up projects throughout the neighborhood and break ground for the construction of a new home at 335 4th Avenue which will require permits. The Neighborhood Revitalization program will be a five-year program that will focus on revitalization efforts throughout the community. Habitat for Humanity Quad Cities has requested that the City of Moline pay the building permit fees associated with Habitat for Humanity Quad Cities' "Rock the Block Floreciente" event, the permit fees to construct a new home at 335 4th Avenue, and the permit fees in association with Habitat for Humanity Quad Cities' five-year Neighborhood Revitalization Program which in total shall not exceed $17,000. Staff is requesting contingency funds of $5,000.00 for this year and will budget in future years the balance of the program fees.

Staff Recommendation:	Approval
Fiscal Impact:	2015 -$5,000Account: 010-9955-418.1098
	2016-2019 -$3,000 Account: 010-0715-463.03-22
Public Notice/Recording:	N/A
Goals Impacted:	Great Place to Live

2. **A Resolution authorizing the purchase of eight medium duty Ford F-650 Compressed Natural Gas trucks from Courtesy Ford in Davenport, Iowa, in the amount of $542,645.** (J.D. Schulte, Fleet Manager)

Explanation: Included in the 2015 Fleet Services Budget is the replacement of eight medium duty trucks for the Street, Water, and WPC Divisions of Public Works and the Parks Department. These truck purchases have been deferred for several years. The units being replaced range from 13 to 17 years of age. Fleet Services developed specifications for the cab and chassis units and published a request for proposals. The lowest price proposal meeting all the requirements was submitted by Courtesy Ford in Davenport, Iowa. The price for all eight units is $542,645. Additional documentation is attached.

Staff Recommendation:	Approval
Fiscal Impact:	$599,460 budgeted in account #448-0867-437.07-03
Public Notice/Recording:	N/A
Goals Impacted:	Improved City Infrastructure & Facilities, Financially Strong City

3. **A Resolution authorizing the purchase of seven hook-lift hoist units from Swaploader U.S.A. LTD. in Des Moines, Iowa, for the amount of $79,658.60.** (J.D. Schulte, Fleet Manager)

Explanation: Included in the 2015 Fleet Services Budget is the purchase of hook-lift hoists to be installed on replacement cab and chassis units for the Parks Department and the Streets, Water and WPC Divisions of the Public Works Department. Hook-lift hoists allow for the use of one cab and chassis to be used for multiple activities by swapping attachments in an action similar to the operation of a tow truck or roll-off trash truck. These hook-lifts are installed in place of a traditional dump truck hoist. The City of Moline was the first municipal customer of Swaploader U.S.A. LTD from Des Moines, Iowa, when Moline began using these devices in 1996. At that time, Swaploader agreed to sell these items to the City of Moline at dealer pricing. They have since established territories and built a dealer network to serve those territories. Because the City of Moline fleet has been standardized to their products prior to the creation of their current dealer network, Swaploader will still sell to the City of Moline direct and at dealer pricing. Purchasing this brand will allow the City of Moline to reuse many existing attachments such as leaf boxes, salt spreaders, garbage truck bodies and constructions boxes. Fleet Services recommends that the budgeted hook-lift devices be purchased from Swaploader U.S.A. LTD from Des Moines, Iowa, in the amount of $79,658.60. Additional documentation is attached.

Staff Recommendation:	Approval
Fiscal Impact:	$94,000.00 budgeted in account #448-0867-437.07-03
Public Notice/Recording:	N/A
Goals Impacted:	Financially Strong City, Strong Local Economy, Cost-Effective Services

4. **A Resolution authorizing the purchase of a modular hydraulic power unit for the Water Division from Mobile Hydraulics Equipment Company in Riverside, Missouri, for the amount of $32,160.** (J.D. Schulte, Fleet Manager)

Explanation: Included in the 2015 Fleet Services Budget is a compressor, generator and hydraulic tool system to be installed on a replacement service truck in the Water Division. This truck is used for service work by the Water Distribution crews for any distribution system maintenance or repair needed for main breaks, hydrant work or curb box installation and maintenance. On the current truck the compressor, generator and hydraulic circuits draw power from the same source and restrict the simultaneous use of tools to two items. Fleet Services and Water Division staff have been evaluating equipment for the past two years and have determined that purchasing a modular hydraulic power system is in the best interest of the City in this application. Mobile Hydraulics Equipment Company manufactures Hippo Multipower Systems for military applications that will allow for up to three components to operate simultaneously, eliminating the need for additional trucks and staff to be dispatched for hydraulic power. Their modular system meets the flow and pressure needs of our current inventory of portable tools. Fleet Services is recommending that the budgeted modular hydraulic power system be purchased from Mobile Hydraulics Equipment Company from Riverside, Missouri, in the amount of $32,160. Additional documentation is attached.

Staff Recommendation:	Approval
Fiscal Impact:	$35,000 budgeted in Account #448-0867-437.07-03
Public Notice/Recording:	N/A
Goals Impacted:	Financially Strong City, Strong Local Economy, Cost-Effective Services

5. **A Resolution authorizing the purchase of an air compressor for the Streets Division from Rexco Equipment in Davenport, Iowa, for the amount of $24,335.** (J.D. Schulte, Fleet Manager)

Explanation: Included in the 2015 Fleet Services Budget is the replacement of an air compressor for the Streets Division. Fleet Services has researched the required size and capacity needed and established minimum requirements for the replacement. The joint purchase contract has a Doosan P250/HP185WDZ-T4F compressor available that meets the requirements. The unit can be purchased and delivered through the NJPA joint purchase contract #060311-CEC from Rexco Equipment in Davenport, Iowa, for $24,335. $24,450 was budgeted for this purchase. Additional documentation is attached.

Staff Recommendation:	Approval
Fiscal Impact:	$24,450 budgeted in Account #448-0867-437.07-03
Public Notice/Recording:	N/A
Goals Impacted:	Financially Strong City, Strong Local Economy, Cost-Effective Services

6. **A Resolution accepting the actuarial valuation reports submitted by Lauterbach & Amen for the contribution year ending December 31, 2015 for the City of Moline Police and Firefighters' Pension Funds.** (Kathy Carr, Finance Director)

Explanation: The sworn Police and Fire personnel of the City of Moline are covered by two pension plans that are defined-benefit, single-employer pension plans. The purpose of the annual actuarial valuation reports is to provide the annual recommended amounts for the City's employer contributions. Todd Schroeder, an actuary with Lauterbach & Amen, will present the reports and answer questions. Additional documentation attached.

Staff Recommendation:	Approval
Fiscal Impact:	Increases the funding levels by $197,930 for Police Pension and $1,085,423 for Firefighters' Pension.
Public Notice/Recording:	Finance staff will file with Illinois Department of Insurance, Public Pension Division.
Goal Impacted:	Financially Strong City

BLOCK BY BLOCK

Six building blocks support a strong NR program.

1 **Community Engagement**
The cornerstone of NR is community engagement. Collaborating with residents and other community stakeholders will allow the focus to be on their needs, concerns and aspirations.

2 **Partnerships**
The work of revitalizing neighborhoods is too big for any one entity. NR relies on partnerships with local governments, churches, businesses, civic groups and neighborhood associations.

3 **A Community Action Plan**
A community Action Plan will be developed following the asset-based format. The plan will serve as the roadmap for the neighborhood's revitalization efforts.

4 **Construction Products**
In addition to new home construction, Habitat will use an expanded toolbox of construction products to reach more families and spur revitalization.

5 **Measuring Impact**
Measuring the impact of NR efforts will provide a better understanding of the neighborhood and the surrounding community.

6 **Broadened Support**
Neighborhood Revitalization opens the door for Habitat to serve more families and expand services outward into the community.

Our Mission

Habitat for Humanity Quad Cities (HFHQC) works in partnership with God and people from all walks of life to build simple, decent affordable housing and improve our community so all people can live as God intended.

NEIGHBORHOOD REVITALIZATION INITIATIVE
PARTICIPATING AFFILIATE

Habitat for Humanity
QUAD CITIES

Building Homes, Building Hopes, Building Dreams

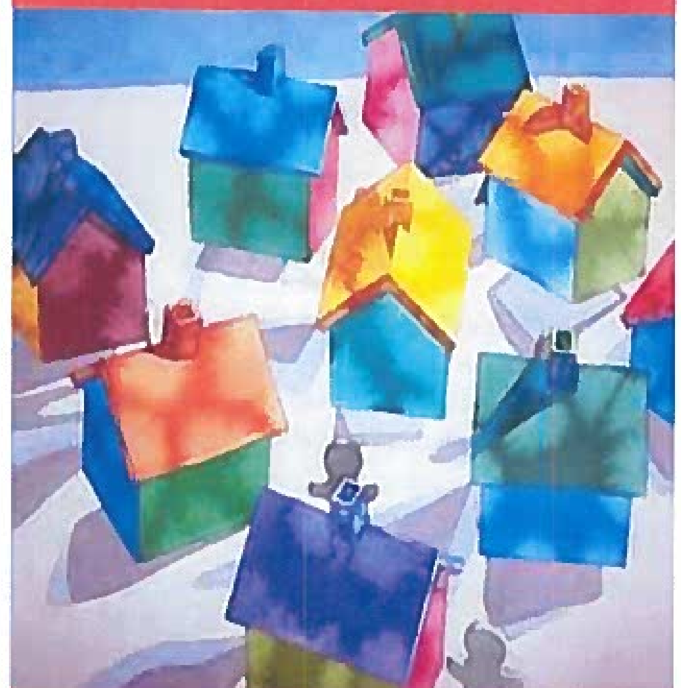
3625 Mississippi Avenue
Davenport, Iowa 52807

563-359-9066 Office
563-359-9070 Fax

Equal Housing Opportunity

Habitat for Humanity
QUAD CITIES

Neighborhood Revitalization



Strengthening Families

Building Partnerships

Renewing Neighborhoods

Exciting New Initiative

Habitat for Humanity Quad Cities (HFHQC) is proud to join a growing number of affiliates nationwide in adopting the Neighborhood Revitalization (NR) initiative.

Through this new program, HFHQC will look beyond just building new homes and direct efforts toward the social, economic and environmental needs of a neighborhood as well.

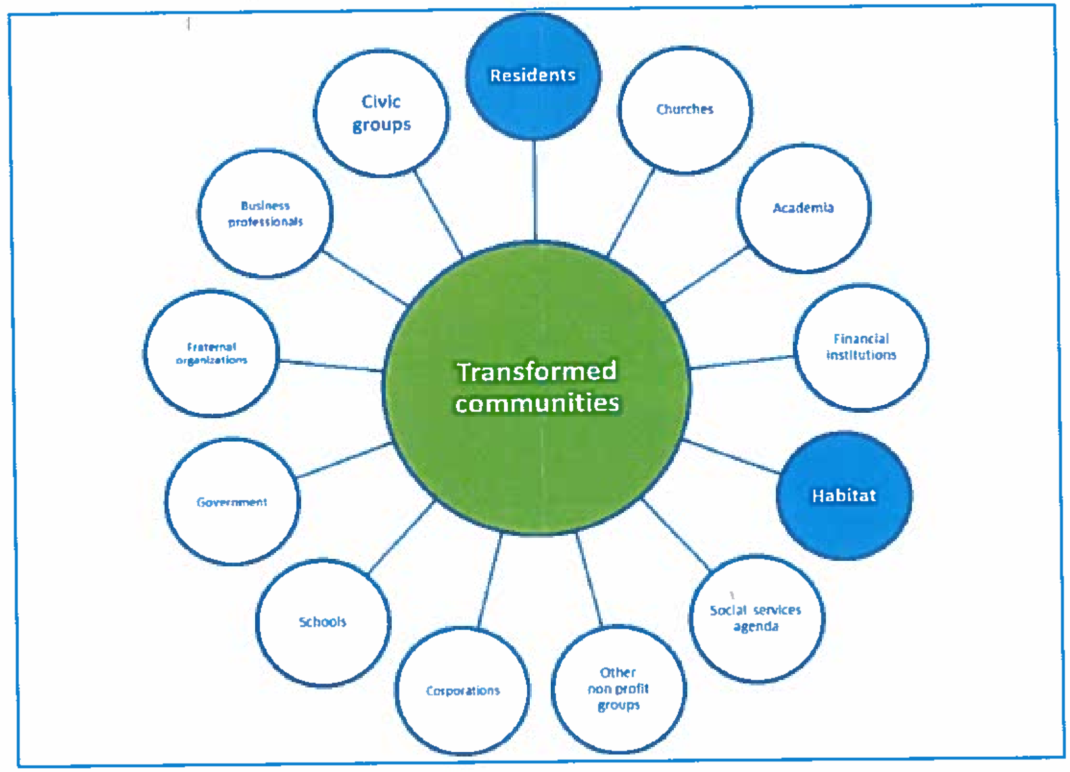
What NR Will Look Like

It starts with the selection of a **focus** neighborhood in a city where HFHQC already has a presence. As part of the selection process, community leaders will be consulted along with a review made of each city's demographic information.

Once a neighborhood has been chosen, meetings will be held with local residents and stakeholders to address housing conditions and to uncover any quality of life issues that can be improved.

Depending on the neighborhood, HFHQC will organize a response to remove the identified issues or join forces with existing stakeholders to complete the project.

Through partnerships with residents and other interested parties, there will be the opportunity to serve more families, build more than houses, and transform a neighborhood into a stronger and more sustainable community.



"After 22 years of building homes across the Quad Cities, we understand the impact a new home has on a neighborhood. The Neighborhood Revitalization program will allow us to look beyond the construction of new homes and expand services outward into the community."

Kristi Crafton, Executive Director of Habitat for Humanity Quad Cities

NR Vision

The focus neighborhood will be revitalized into a vibrant, safe and inviting place to live for current and future residents. This will happen through the hard work of engaged citizens, partnerships with civic and business groups, and a renewed community spirit.

NR Mission

Through the Neighborhood Revitalization Initiative, Habitat for Humanity Quad Cities will serve more families by responding to community aspirations with an expanded array of products, services and partnerships, empowering residents to revive their neighborhood and enhance their quality of life.

REQUEST FOR PROPOSAL FOR NINE (9) FORD MODEL YEAR 2016 F650 CNG CAB AND CHASSIS UNITS FOR THE CITY OF MOLINE PUBLIC WORKS DEPARTMENT FLEET SERVICES DIVISION 2015 BUDGET

The proposal for these units must conform to all Federal Department of Transportation rules and regulations as published at the time of this proposal and shall meet the applicable requirements of the National Fire Protection Association (NFPA) for CNG systems as stated in current edition at time of contract execution.

68,040.00 – DRIVER'S DELIVERY

(8) **Total cost for each 194" wheelbase unit FOB Moline:** $ 67,965.00 – TRUCK DELIVERY

(1) **Total cost for the 182" wheelbase unit FOB Moline:** $ 66,945.00 – DRIVER'S DELIVERY

66,870.00 – TRUCK DELIVERY

Delivery date: Pe FIROMAN + CNG CONVERSION

The undersigned certified that he/she is a representative of the company shown below and as such representative is authorized to submit this proposal on their behalf.

Federal Tax Identification Number: 42-1030854

Company: Courtesy Ford Trucks

Address: 3921 West River Drive

City/State/Zip: Davenport, IA 52802

Telephone Number: (563) 326-4011 **FAX Number:** (563) 326-3912

Authorized Signature: Dale Zude

Name/Title: Dale Zude / Vice President

Date: 3 July 2015

REQUEST FOR PROPOSAL FOR NINE (9) FORD MODEL YEAR 2016 F650 CNG CAB AND CHASSIS UNITS FOR THE CITY OF MOLINE PUBLIC WORKS DEPARTMENT FLEET SERVICES DIVISION 2015 BUDGET

POLICY STATEMENT
EQUAL EMPLOYMENT OPPORTUNITY

It is the policy of Courtesy Ford Trucks (insert firm name) to provide equal employment opportunity to all persons regardless of race, color, religion, sex or national origin. Accordingly, we will take Affirmative Action to insure that we will:

1.Recruit, hire and promote in all job classifications regardless of race, color, religion, sex or national origin.

2.Make promotional decisions that are in accordance with principles of equal opportunity by imposing only valid requirements for promotional opportunities.

3.Incorporate our equal employment opportunity policy in all personnel actions such as compensations, benefits, transfers, layoffs, returns from layoffs, company sponsored training, education and tuition assistance.

4.Conduct social and recreation programs sponsored by out agency without regard to race, color, sex and religion.

Firm name: Courtesy Ford Trucks

Authorized Signature: Dale Zude

Name/Title: Dale Zude / Vice President

Date: 3 July 2015

REQUEST FOR PROPOSAL FOR NINE (9) FORD MODEL YEAR 2016 F650 CNG CAB AND CHASSIS UNITS FOR THE CITY OF MOLINE PUBLIC WORKS DEPARTMENT FLEET SERVICES DIVISION 2015 BUDGET

CORPORATION

The undersigned certifies on behalf of the Corporation named below that the Corporation is not barred from proposing this contract, as a result of a violation of either bid-rigging or bid-rotating. Further, the undersigned certifies and warrants that he or she is duly authorized to execute this Certification on behalf of the Corporation in accordance with by-laws of the Corporation and that this certification is bind upon the Corporation and is true and accurate.

Corporate name: Courtesy Ford Trucks

Signed by: Dale Zude

Title: Vice President

Business Address: 3921 West River Drive Davenport, IA 52802

Names of Corporate Officers:

President: David Kehoe

Vice President: Dale Zude

Vice President: Dan Kehoe

Secretary/Treasurer: James Keeven

Attest: Dale Zude V. Pres.

	A / B	C	D	E	G
1	**Lifecycle Cost Analysis F650 Diesel versus CNG**				
2	**Universal Variable Data**		**Derived Values**		***FORMULA/SOURCE:***
3	Target Months in Service:	108	Actual Months:	100	Actual Months in Service given the Maximum Replacement Mileage and Mileage-per-Month
4	Target Replacement Mileage:	100,000	Actual Mileage:	100,000	Actual Miles at Replacement given the Maximum Service Months and Mileage-per-Month
5	Expected Mileage-per-Month:	1,000	Daily Mileage:	32.9	Expected Average Miles-per-Month driven; Average Daily Miles driven given the Mileage-per-Month entered
6	Annual Interest Rate:	2.50%	Monthly Interest:	0.208%	Annual Interest Rate/12-months
9	Book Depreciation Rate:	1.67%			Rate currently used by Fleet Services
10	Diesel Fuel Cost-per-Gallon:	$ 1.99			Average price of fuel per gallon for Diesel Fuel (B20 ULSC)
11	CNG Fuel Cost-per-Gallon:	$ 0.76			Average price of fuel per gallon for Compressed Natural Gas (CNG)
12	Estimated Personal Use:	0%			Percentage of personal use for which the employee reimburses the City
14					
15		**Diesel Engine**	**CNG Engine**		Models being analyzed
16	**Acquisition Cost**				
17	Factory Invoice Price	$ 58,559.00	$ 67,965.00		Price quoted by dealer
19	AFV Rebate Illinois EPA	$ -	$ -		Illinois EPA Green Fleet Rebate for alternative vehicle purchase
22	**Net Acquisition Cost**	**$ 58,559.00**	**$ 67,965.00**	**$ -**	Invoice Price - Fleet Incentives
23	**Fixed Costs**				
24	Effective Depreciation	$ 48,759.00	$ 57,165.00		Net Acquisition Cost - Projected Resale Price
25	*Projected Resale Price*	$ 9,800.00	$ 10,800.00		Value anticipated from historic comparisons
28	Cost of Money	$ 4,007.12	$ 4,650.76	$ -	Cost of Money not invested for rate of return. (Year 1 interest + Year 2 interest + Year 3 interest + Year 4 interest + Year 5 interest)
29	*Year 1*	$ 1,329.51	$ 1,543.06	$ -	(Net Vehicle Cost * Year 1 Interest Factor) * Year 1 Total Months)
30	*Year 2*	$ 1,036.13	$ 1,202.56	$ -	(Net Vehicle Cost * Year 2 Interest Factor) * Year 2 Total Months)
31	*Year 3*	$ 742.75	$ 862.05	$ -	(Net Vehicle Cost * Year 3 Interest Factor) * Year 3 Total Months)
32	*Year 4*	$ 449.37	$ 521.55	$ -	(Net Vehicle Cost * Year 4 Interest Factor) * Year 4 Total Months)
33	*Year 5*	$ 449.37	$ 521.55	$ -	(Net Vehicle Cost * Year 5 Interest Factor) * Year 5 Total Months)
37	*Delivery Days*	180	180		Calendar days for guaranteed delivery
40	**Total Fixed Cost:**	**$ 52,766.12**	**$ 61,815.76**	**$ -**	Actual Depreciation + Interest + Build Time Delay Cost
41	**Operating Costs**				
42	Total Fuel Cost	$ 28,428.57	$ 10,857.14		(Actual Miles/Estimated Miles-per-Gallon) * Fuel Cost-per-Gallon
43	*Estimated Miles-per-Gallon*	7	7		Value from actual experience
44	Total Maintenance Cost	$ 90,000.00	$ 52,000.00		Actual Mileage * Estimated Maintenance Cost-per-Mile
45	*Estimated Maintenance Cost-per-Mile*	$ 0.9000	$ 0.5200		Value from actual experience (Insurance, license, maintenance, etc...)
46	**Total Operating Cost:**	**$ 118,428.57**	**$ 62,857.14**	**$ -**	Total Fuel Cost + Total Maintenance Cost
47	**Personal Use Costs**				
48	Fixed Cost for Personal Use	$ -	$ -	$ -	Total Fixed Cost * Estimated Personal Use
49	Operating Cost for Personal Use	$ -	$ -	$ -	Total Operating Cost * Estimated Personal Use
50	**Total Personal Use Cost**	**$ -**	**$ -**	**$ -**	Fixed Cost for Personal Use + Operating Cost for Personal Use (amount to be reimbursed to City by employee)
51					
52	**Total Lifecycle Cost:**	**$ 171,194.69**	**$ 124,672.90**	**$ -**	Total Fixed Cost + Total Operating Cost - Total Personal Use Cost
53	**Lifecycle Cost-per-Mile:**	**$ 1.7119**	**$ 1.2467**	**$ -**	Total Lifecycle Cost / Actual Miles
54					

FLEET SERVICES
(309) 736-5753

3635 4th Avenue
Moline, Illinois
61265
email: jschulte@moline.il.us
Fax # 309-797-1858

To: Mike Waldron, Public Works Director
Kathy Carr, Finance Director

From: J.D. Schulte, Fleet Manager

Subject: Sole Source Procurement for CNG Systems

Date: August 5, 2015

Chapter 27, Section 27-3105 of the Moline Code of Ordinances provides that the appropriate purchasing official may determine, after a good faith review, that there is only one source for the required item and the contract may be awarded without competition.

Chapter 27, Section 27-4101 (4) provides the use of a brand name or equal specification when it is in the City's best interest.

The Fleet Services Division has budgeted to replace several trucks that are used for snow and ice removal in the 2015 budget. The engines being specified will be compressed natural gas (CNG) and installed by one of Ford Motor Company's Quality Vehicle Modifiers (QVM). This provides for warranty coverage from Ford for the entire vehicle from bumper to bumper. We currently have six units in the fleet that have been purchased under this OEM program.

Venchurs Vehicle Systems is a Ford QVM for CNG system installations and has provided the Ford CNG systems that we currently have in the Fleet. We have only had one warranty claim during the time they have been in service and payment was received in less than two weeks. They use parts and equipment that can be purchased locally and off the shelf items that reduce downtime and lower the cost of maintenance. They also answer their technical support line 24 hours per day.

Fleet Services is recommending that the budgeted Ford CNG systems be provided by Venchurs Vehicle Systems, their QVM in Adrian, Michigan as a Sole Source Procurement in accordance with Chapter 27, Section 27-3105 and Section 27-4101 of the Moline Code of Ordinances.

Additional documentation is attached.

An EFCO Company

SWAPLOADER®

"Hooked on Quality" U.S.A. LTD.

SwapLoader U.S.A. Ltd. - 1800 N.E. Broadway Ave. - Des Moines, Iowa 50313 - 515-266-1141

July 2, 2015

Same as Sold To:

Sold To: City of Moline

Ship To:

Attn:	J.D. Schulte	**Attn:**	
Company Name:	City of Moline, IL	**Company Name:**	
Street Address:		**Street Address:**	
City, State, Zip:		**City, State, Zip:**	
Telephone:		**Telephone:**	
Fax:		**Fax:**	
Email Address:		**Email Address:**	

We are pleased to offer the following quotation for SwapLoader Hooklift Hoist and Accessories.

SL-105 Quote

The SL-105 SwapLoader hoist (10,500 lb. Dump / Lift Capacity)

- Accommodates 10' to 13' bodies or containers
- The optimum flatbed length is 12'
- Cab to axle (CA) requirement is 78" to 96" with 96" being the optimum CA.
- Clear frame requirement is 130".

The SL-105 is shipped with the following items as standard equipment:
Dual 4" DA lift cylinders, sliding jib with 2.5" DA cylinder, slide through body locks, 15 gallon reservoir tank, hydraulic two (2) section manual valve, in-cab manual control levers and 84" cables. Order pump as separate line item from hoist. Hoist is shipped less PTO (customer to furnish PTO) and the hoist is painted a black primer.

TERMS AND CONDITIONS OF SALE	
Orders:	All Orders subject to acceptance by SwapLoader U.S.A., Ltd.
Performance:	SwapLoader U.S.A., Ltd. shallnot be liable for failure to complete the order in accordance with its terms if failure is due to wars, strikes, fires, floods, accidents, delay in transportation, or other causes beyonds its reasonable control.
Cancellation:	No order can be cancelled once accepted by SwapLoader without written request by the consumer/distributor and approval by an officer of SwapLoader U.S.A., Ltd.
Payment:	20% down payment with order, full payment prior to shipment by wire transfer or cashier's check.
Prices:	All orders are subject to current prices in effect on date of shipment.
F.O.B. Point:	Unless otherwise stated, all prices are F.O.B. point of manufacture.
Taxes:	Unless specifically stated, prices listed do not include federal, state, city, or other excise, occupation, sales, use or similar taxes, which are extra and are the responsibility of the purchaser.
Mounting Prices:	Mounting prices assume normal factory installation on a truck chassis suitable for the unit purchased. Relocation of batteries, gas tanks, mufflers/exhaust, air tanks, etc. will be an additional charge, billed at our standard labor rate.

Comments:

Hydraulic components have been removed from the price quote per your request. If you are unsure whether or not a hydraulic component comes standard with the SwapLoader hoist package, please call.

An EFCO Company

SWAPLOADER U.S.A. LTD.

"Hooked on Quality"

SwapLoader U.S.A. Ltd. - 1800 N.E. Broadway Ave. - Des Moines, Iowa 50313 - 515-266-1141

Attn: J.D. Schulte
Company Name: City of Moline

ITEM NO.	DESCRIPTION	QTY.	EACH	TOTAL
	HOIST			
12h55	SL-105 (fixed 35 5/8"Jib) 10,500 # Dump / Lift Capacity Hoist	**8**	12,154.80	97,238.40
HVK-105	Hyd. Valve Deduct Kit consists of the hydraulic control valve assembly, valve mount bracket, control levers, control lever console, control cables and bonnet connection kits. SL-105	**8**	(525.00)	(4,200.00)
HTK-105	Hyd. Tank Deduct Kit consists of the hydraulic tank with site gauge, suction strainer, filler cap, hydraulic filter, tank fittings, and hydraulic tubing/hoses to frame bulkhead fittings, valve fittings, and return hose from valve. SL-105	**8**	(250.00)	(2,000.00)
				-
			Total of Hoists $	**91,038.40**
	HOIST ACCESSORIES *(mounts permanently to chassis and/or hoist)*			
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
			Total of Hoist Accessories $	**-**
	SUB-FRAME & SUB-FRAME ACCESSORIES *(mounts permanently to container/body)*			
				-
				-
				-
				-
				-
				-
				-
			Total Sub-Frame & Accessories $	**-**
	SHIPPING			
	Freight	1	-	-
			Total Shipping $	**-**

Order Summary

Sub-Total			$	**91,038.40**
Special Items (Net Figure)	1	-	$	-
Freight			$	-
Order Total			**$**	**91,038.40**

Availability: 0
Weeks From Purchase Order

These Prices Expire on: August 1, 2015

Terms: Prepay

Quote Prepared By: ______________________
SwapLoader

Date: ______________________
Date

Quote Approved By: ______________________
Matt White- SwapLoader Gen. Mgr.

Date: ______________________
Date

Customer: ______________________
Signature

P.O. Number: ______________________

____
Date

CITY OF MOLINE ILLINOIS

FLEET SERVICES
(309) 524-2380

3635 4th Avenue
Moline, Illinois
61265
email: jschulte@moline.il.us
Fax # 309-524-2389

To: Mike Waldron, Public Works Director

From: J.D. Schulte, Fleet Manager

Subject: Sole Source Procurement-Swaploader

Date: August 4, 2015

Chapter 27, Section 27-3105 of the Moline Code of Ordinances provides that the appropriate purchasing official may determine, after a good faith review, that there is only one source for the required item and the contract may be awarded without competition.

Chapter 27, Section 27-4101 (4) provides the use of a brand name or equal specification when it is in the City's best interest.

The Fleet Services Division has budgeted to replace several trucks with "Hook-Lift" attachment units in 2015. The new units will be installed on cab and chassis units purchased from a competitive bid.

The City of Moline was the first municipal customer of Swaploader U.S.A. LTD from Des Moines Iowa when we began using these devices in 1996. Swaploader agreed to sell these items to the City of Moline at dealer pricing at that time. They have since established territories and built a dealer network to serve those territories. Because our fleet has been standardized to their products since before their current dealer network was created, they will still sell to the City of Moline direct and at dealer pricing. Purchasing this brand will allow the City of Moline to reuse many existing attachments such as leaf boxes, salt spreaders, constructions boxes, etc.

Fleet Services is recommending that the budgeted Hook-Lift devices be purchased from Swaploader U.S.A. LTD from Des Moines Iowa as a Sole Source Procurement in accordance with Chapter 27, Section 27-3105 and Section 27-4101 of the Moline Code of Ordinances.

Additional documentation is attached.

Quote

Date	Estimate #
8/4/2015	217

FOB	Lead Time
RIverside, MO	90 Days ARO

Terms	Rep
Net 30	WJF

Mobile Hydraulics Equipment Company
208 NW Business Park Lane
Riverside, MO 64150
1-800-844-0624

Name / Address
City of Moline, IL 3635 4th Ave. Moline, IL 61265 JD Schulte

Item	Description	Qty	Price Per Each	Total
HIPPO3033P-HAE	PTO Driven - 30 SERIES, 3 FUNCTION, MULTI POWER UNIT 2 each 10gpm @ 2,000psi Hydraulic Tool Circuits 5.2kVA @ 120VAC Electric 125cfm @ 100psi of Air Color = White NOTE: host vehicle MUST HAVE A PTO PROVISION & SEIC	1	32,160.00	32,160.00T

Thank you for your business.

Subtotal	$32,160.00
Sales Tax (0.0%)	$0.00
Total	$32,160.00

The above pricing is good for 90 days from the estimate date.

NOTE: All applicable state, county, city and special tax district taxes will be added to all invoices unless we receive evidence of Tax Exemption from Purchaser.

REXCO EQUIPMENT, Inc. Since 1964

City of Moline
Department of Public Works
3635 4th Avenue
Moline, Illinois 61265
Attn: J D Schulte

June 23, 2015

Re: Doosan Air Compressor Proposal

Pricing to include the following:

- (1) P250/HP185WDZ-T4F
- Engine Make/Model: Duetz D2.9
- Number of Cylinders – (4)
- Displacement cu in (L) 177 (2.9)
- Electrical – Volts – (12)
- Tire Size – in (15)
- Warranty
    - 1-year / 2,000-hour bumper to bumper
    - Engine: 2-year / 4,000 -hour
    - Airend: 2-year / 4,000-hour
- FOB Rexco Equipment, Davenport, Iowa
- NJPA Pricing..$24,335.00
    - Doosan's NJPA contract # (060311-CEC)
    - NJPA Member # 30797/77931

Thank you for the opportunity to quote the above machine.

Sincerely,

Steve Cutforth
Territory Manager
Rexco Equipment, Inc.

1925 Blairs Ferry Rd., N.E.
Cedar Rapids, IA 52410
Phone: 319.393.2820
Fax: 319.393.6387

5900 S.W. 56th Street
Des Moines, IA 50321
Phone: 515.287.4910
Fax: 515.287.4610

13500 118th Avenue
Davenport, IA 52804
Phone: 563.381.1200
Fax: 563.381.4503

13548 So. 220th St., Unit #5
Gretna, NE 68028
Phone: 402.332.5585
Fax: 402.332.3130

1518 Highway 1 West
Iowa City, IA 52246
Phone: 319.248.1130
Fax: 319.248.1132

www.rexcoequipment.com

Lauterbach & Amen, LLP
27W457 Warrenville Road
Warrenville, IL 60555-3902

Actuarial Valuation as of January 1, 2015

MOLINE FIREFIGHTERS' PENSION FUND

Utilizing Data as of December 31, 2014
For the Contribution Year January 1, 2015 to December 31, 2015

LAUTERBACH & AMEN, LLP

Actuarial Valuation – Funding Recommendation

Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

MOLINE FIREFIGHTERS' PENSION FUND

Contribution Year Ending: December 31, 2015
Actuarial Valuation Date: January 1, 2015
Utilizing Data as of December 31, 2014

Submitted by:

Lauterbach & Amen, LLP
630.393.1483 Phone
www.lauterbachamen.com

Contact:

Todd A. Schroeder
July 22, 2015

LAUTERBACH & AMEN, LLP

TABLE OF CONTENTS

TABLE OF CONTENTS

ACTUARIAL CERTIFICATION

This report documents the results of the Actuarial valuation of the Moline Firefighters' Pension Fund. The purpose is to report the actuarial contribution requirement for the contribution year January 1, 2015 to December 31, 2015. Determinations for purposes other than meeting the employer's actuarial contribution requirements may be significantly different from the results herein.

The results in this report are based on information and data submitted by the Moline Firefighters' Pension Fund including studies performed by prior actuaries. We did not prepare the actuarial valuations for the years prior to January 1, 2015. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness, as appropriate, based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The Moline Firefighters' Pension Fund selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned of Lauterbach & Amen, LLP, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render this Actuarial Opinion. There is no relationship between the Moline Firefighters' Pension Fund and Lauterbach & Amen, LLP that impairs our objectivity.

The information contained in this report was prepared for the use of the Moline Firefighters' Pension Fund and the City of Moline in connection with our actuarial valuation. It is not intended or necessarily suitable for other purposes. It is intended to be used in its entirety to avoid misrepresentations.

Respectfully Submitted,

LAUTERBACH & AMEN, LLP

Todd A. Schroeder

Todd A. Schroeder, EA

MANAGEMENT SUMMARY

Contribution Recommendation
Funded Status
Management Summary

CONTRIBUTION RECOMMENDATION

	Prior Valuation*	Current Valuation
Contribution Requirement	$3,488,751	$4,574,174
Expected Payroll	$4,099,008	$4,378,650
Contribution Requirement as a Percent of Expected Payroll	85.11%	104.47%

Recommended Contribution has Increased $1,085,423 from Prior

FUNDED STATUS

	Prior Valuation*	Current Valuation
Normal Cost	$1,046,712	$1,125,075
Market Value of Assets	$26,653,953	$27,428,623
Actuarial Value of Assets	$27,599,873	$28,245,379
Actuarial Accrued Liability	$67,375,912	$81,109,112
Unfunded Actuarial Accrued Liability	$39,776,039	$52,863,733
Percent Funded		
Actuarial Value of Assets	40.96%	34.82%
Market Value of Assets	39.56%	33.82%

Funded Percentage has Decreased 6.14 on an Actuarial Value of Assets Basis.

*Prior Valuation completed by Tepfer Consulting Group, Ltd.

MANAGEMENT SUMMARY – COMMENTS AND ANALYSIS

Contribution Results

The contribution recommendation is based on the funding policies and procedures that are outlined in the "Actuarial Funding Policies" section of this report.

The State of Illinois statutes for pension funds contain parameters that should be used to determine the minimum amount of contribution to a public pension fund. Those parameters and the resulting minimum contribution can be found in the "Illinois Statutory Minimum Contribution" section of this report.

Defined Benefit Plan Risks

Asset Growth

Pension funding involves preparing plan assets to pay benefits for the members when they retire. During their working careers, assets need to build with contributions and investment earnings, and then the pension fund distributes assets during retirement. Based on the fund's current mix of employees and funded status, the fund should be experiencing positive asset growth on average if requested contributions are made and expected investment earnings come in. In the current year the fund asset growth was positive by $774,670.

Asset growth is important long-term. Long-term cash flow out of the pension fund is primarily benefit payments. Expenses make up a smaller portion. The fund should monitor the impact of expected benefit payments and the impact on asset growth in the future. In the next 5 years, benefits payments are anticipated to increase 20-25%, or approximately $1 million dollars. In the next 10 years, the expected increase in benefit payments is 35-40%, or approximately $1.9 million dollars.

Unfunded Liability:

Unfunded liability represents dollars we expect to be in the pension fund already for the fund members based on funding policy. To the extent dollars are not in the pension fund the fund is losing investment returns on those dollars going forward. Payments to unfunded liability pay for the lost investment earnings, as well as the outstanding unfunded amount. If payment is not made, the unfunded liability will grow.

In the early 1990s, many pension funds in Illinois adopted an increasing payment to handle unfunded liability due to a change in legislation. The initial payments decreased, and payments were anticipated to increase annually after that. In many situations, payments early on may be less than the interest on unfunded liability, which means unfunded liability is expected to *increase* even if contributions are at the recommended level.

The current contribution recommendation includes a payment to unfunded liability that is currently $83,884 more than interest on the unfunded liability. All else being equal and contributions being made, unfunded liability would still be expected to increase. The employer and the fund should anticipate currently that improvement in the funded % will be mitigated in the short-term. The employer and the fund should understand this impact as we progress forward to manage expectations.

Actuarial Value of Assets:
The pension fund smooths asset returns that vary from expectations over a five year period. The intention over time is that asset returns for purposes of funding recommendations are a combination of several years. The impact is intended to smooth out the volatility of contribution recommendations over time, but not necessarily increase or decrease the level of contributions over the long-term.

When asset returns are smoothed, there are always gains or losses on the Market Value of Assets that are going to be deferred for current funding purposes, and recognized in future years. Currently, the pension fund is deferring approximately $800,000 in losses on the Market Value of Assets. These are asset losses that will be recognized in upcoming periods, independent of the future performance of the Market Value of Assets.

Plan Assets

The results in this report are based on the Assets held in the pension fund. Assets consist of funds held for investment and for benefit payments as of the Valuation Date. In addition, Assets may be adjusted for other events representing dollars that are reasonably expected to be paid out from the pension fund or deposited into the pension fund after the Actuarial Valuation Date as well.

The current fund Assets are Audited.

The Plan Assets Used in this Report are Audited

The actuarial value of assets under the funding policy is equal to the fair market value of assets, with unexpected gains and losses smoothed over 5 years. More detail on the Actuarial Value of Assets can be found in the funding policy section of the report.

Demographic Data

Demographic factors can change from year to year within a pension fund. Changes in this category include hiring new employees, employees retiring or becoming disabled, retirees passing away, and other changes. Demographic changes can cause an actuarial gain (contribution that is less than expected compared to the prior year) or an actuarial loss (contribution that is greater than expected compared to the prior year).

Demographic gains and losses occur when the assumptions over the one-year period for employee changes do not meet our long-term expectation. For example, if no employees become disabled during the year, we would expect a liability gain. If more employees become disabled than anticipated last year, we would expect a liability loss. Generally we expect short-term fluctuations in demographic experience to create 1%-3% gains or losses in any given year, but to balance out in the long-term.

In the current report, the key demographic changes were as follows:

New hires: The fund added 2 new active members in the current year through hiring. When a new member is admitted to the pension fund, the employer contribution will increase to reflect the new member. The increase in the recommended contribution in the current year for new fund members is approximately $27,000.

Disability: There was 1 member of the fund who became disabled during the prior year. When a member becomes disabled, the fund will often experience a decrease in normal cost, but an increase in unfunded liability. The increase in the recommended contribution in the current year for the new disability was approximately $21,000.

Retirement: There were 2 members of the fund who retired during the year. When a fund member retires the normal cost will decrease. Any change in the actuarial liability will be considered when determining the amount to pay towards unfunded liability each year. The decrease in the recommended contribution in the current year due to the retirement experience is approximately $14,000.

Mortality: There was 1 retiree who passed away during the year, with an eligible surviving spouse. When a retiree passes away the fund liability will decrease as the pension fund no longer will make future payments to the retiree. If there is an eligible surviving spouse, the fund liability will increase to represent the value of the expected payments that will be made to the spouse. The decrease in the recommended contribution in the current year due to the passing of the retiree is approximately $2,200. There were also two surviving spouses who passed away during the year. The fund liability decreased as the pension fund no longer will make future payments to these surviving spouses. The decrease in the recommended contribution in the current year due to the passing of the surviving spouses is approximately $12,000.

Salary Increases: Salary increases were greater than anticipated in the current year. About half of the active population received increases just below 5%. There were a few active members who received increases between 9.00% - 12.50%. The increase in the recommended contribution in the current year due to salary increases is approximately $17,000.

<u>Assumption Changes</u>
The actuarial assumptions were changed in the current year. The changes were made to better reflect the future anticipated experience in the fund. See table on the following page.

Funding Policy Changes

The funding policy was not changed in the current year.

ACTUARIAL CONTRIBUTION RECOMMENDATION - RECONCILIATION

Actuarial liability is expected to increase each year for both interest for the year and as active employees earn additional service years towards retirement. Similarly actuarial liability is expected to decrease when the fund pays benefits to inactive employees.

Contributions are expected to increase as expected pay increases under the funding policy for the Fund.

Other increases or decreases in actuarial liability (key changes noted below) will increase or decrease the amount of unfunded liability in the plan. To the extent unfunded liability increases or decreases unexpectedly, the contribution towards unfunded liability will also change unexpectedly.

	Actuarial Liability	Contribution Recommendation
Salary Increase Greater than Expected	165,502	16,625
Demographic Changes	777,271	(16,470)
Assumption Changes	6,515,783	554,245
Asset Return Less than Expected *	-	48,371
Contributions Less than Expected	-	35,722
Total Actuarial Experience	$ 7,458,556	$ 638,492

*The impact on contribution due to asset performance is based on the Actuarial Value of Assets.

Key demographic changes were discussed in the prior section.

VALUATION OF FUND ASSETS

Market Value of Assets
Actuarial Value of Assets

VALUATION OF FUND ASSETS

MARKET VALUE OF ASSETS

Statement of Assets

	Prior Valuation	Current Valuation
Cash and Cash Equivalents	$ 1,108,606	$ 886,280
Fixed Income	-	8,920,629
Stock Equities	9,262,934	-
Mutual Funds	16,282,413	17,621,714
Net Assets Available for Pensions	$ 26,653,953	$ 27,428,623

The Total Value of Assets has Increased $774,670 from Prior Valuation.

Statement of Changes in Assets

Total Market Value - Prior Valuation	$ 26,653,953
Plus - Employer Contributions	3,489,864
Plus - Employee Contributions	412,364
Plus - Return on Investments	1,642,081
Less - Benefit and Related Payments	(4,724,492)
Less - Other Expenses	(45,147)
Total Market Value - Current Valuation	$ 27,428,623

The Return on Investment on the Market Value of Assets for the Fund was Approximately 6.1% Net of Administrative Expenses.

The return on investments shown has been determined as the Return on Assets from the statement of changes in assets, as a percent of the average of the beginning and ending Market Value of Assets. Return on Investment is net of the Other Expenses as shown. The Return on Investments has been excluded from the Total Market Value of Assets at the end of the year for this calculation.

MARKET VALUE OF ASSETS (GAIN)/LOSS

Current Year (Gain)/Loss on Market Value of Assets

Total Market Value - Prior Valuation	$ 26,653,953
Contributions	3,902,228
Benefit Payments	(4,724,492)
Expected Return on Investments	1,836,997
Expected Total Market Value - Current Valuation	27,668,687
Actual Total Market Value - Current Valuation	27,428,623
Current Market Value (Gain)/Loss	$ 240,063
Expected Return on Investments	$ 1,836,997
Actual Return on Investments (Net of Expenses)	1,596,934
Current Market Value (Gain)/Loss	$ 240,063

The Return on the Market Value of Assets was Lower than Expected Over the Most Recent Year.

The (Gain)/Loss on the Market Value of Assets has been determined based on expected returns at the actuarial rate.

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

Total Market Value - Current Valuation		$ 27,428,623
Adjustment for Prior (Gains)/Losses		
	Full Amount	
First Preceding Year	$ 240,063	192,051
Second Preceding Year	(736,292)	(441,775)
Third Preceding Year	2,728,930	1,091,572
Fourth Preceding Year	(125,458)	(25,092)
Total Deferred (Gain)/Loss		816,756
Initial Actuarial Value of Assets - Current Valuation		28,245,379
Less Contributions for the Current Year and Interest		-
Less Adjustment for the Corridor		-
Actuarial Value of Assets - Current Valuation		$ 28,245,379

The Actuarial Value of Assets is Equal to the Fair Market Value of Assets with Unanticipated Gains/Losses Recognized over 5 Years. The Actuarial Value of Assets is Currently 103% of the Market Value.

(GAIN)/LOSS ON THE ACTUARIAL VALUE OF ASSETS

Total Actuarial Value - Prior Valuation	$ 27,599,873
Plus - Employer Contributions	3,489,864
Plus - Employee Contributions	412,364
Plus - Return on Investments	1,512,917
Less - Benefit and Related Payments	(4,724,492)
Less - Other Expenses	(45,147)
Total Actuarial Value - Current Valuation	$ 28,245,379

The Return on Investment on the Actuarial Value of Assets for the Fund was Approximately 5.4% Net of Administrative Expenses.

The Actuarial Value of Assets incorporates portions of gains and losses over multiple years.

HISTORICAL ASSET PERFORMANCE

The chart below shows the historical rates of return on plan assets for both Market Value of Assets and Actuarial Value of Assets.

	Market Value	Actuarial Value
First Preceding Year	6.1%	5.4%

The returns on assets shown above were calculated based on the annual return on investment for the year, as a percentage of the average value of the assets for the year.

For purposes of determining the average value of assets during the year, the ending market value of assets has been adjusted to net out to the portion related to the investment returns themselves. All other cash flows are included.

For purposes of determining the annual return on investment we have adjusted the figures shown on the preceding pages. The figures shown on the preceding pages are net of investment expenses. We have made an additional adjustment to net out administrative expenses. Netting out administrative expenses allows us to capture returns for the year that can be used to make benefit payments as part of the ongoing actuarial process.

The adjustment we make is for actuarial reporting purposes only. By netting out administrative expenses and capturing return dollars that are available to pay benefits, it provides us a comparison to the estimated rate of return on assets, but does not provide a figure that would be consistent with the return rates that are determined by other parties. Therefore this calculated rate of return should not be used to analyze investment performance of the Fund or the performance of the investment professionals.

RECOMMENDED CONTRIBUTION DETAIL

RECOMMENDED CONTRIBUTION DETAIL

ACTUARIAL ACCRUED LIABILITY

	Current Valuation
Active Employees	$ 24,460,162
Inactive Employees	
Terminated Employees - Vested	-
Retired Employees	45,656,453
Disabled Employees	7,482,766
Other Beneficiaries	3,509,731
Total Inactive Employees	56,648,950
Total Actuarial Accrued Liability	$ 81,109,112

The Total Actuarial Liability has Increased $8,901,996 from Prior Valuation.

FUNDED STATUS

	Current Valuation
Total Actuarial Accrued Liability	$ 81,109,112
Total Actuarial Value of Assets	28,245,379
Unfunded Actuarial Accrued Liability	$ 52,863,733
Total Market Value of Assets	$ 27,428,623
Percent Funded	
Actuarial Value of Assets	34.82%
Market Value of Assets	33.82%

Funded Percentage as of the Valuation Date is Subject to Volatility on Assets and Liability in the Short-Term.

RECOMMENDED CONTRIBUTION DETAIL

DEVELOPMENT OF THE EMPLOYER NORMAL COST

	Current Valuation
Total Normal Cost	$ 1,125,075
Estimated Employee Contributions	(414,001)
Employer Normal Cost	$ 711,074

At a 100% Funding Level, the Normal Cost Contribution is Still Required.

NORMAL COST AS A PERCENTAGE OF EXPECTED PAYROLL

	Current Valuation
Expected Payroll	$ 4,378,650
Employee Normal Cost Rate	9.455%
Employer Normal Cost Rate	16.24%
Total Normal Cost Rate	25.69%

Ideally the Employer Normal Cost Rate will Remain Stable.

CONTRIBUTION RECOMMENDATION

	Current Valuation
Employer Normal Cost*	$ 789,829
Amortization of Unfunded Accrued Liability/(Surplus)	3,784,345
Funding Requirement	$ 4,574,174

The Recommended Contribution has Increased 17.0% from the Prior Valuation (See the Management Summary).

*Employer Normal Cost Contribution includes interest through the end of the year.

ACTUARIAL METHODS – RECOMMENDED CONTRIBUTION

Actuarial Valuation Date	January 1, 2015
Data Collection Date	December 31, 2014
Actuarial Cost Method	Entry Age Normal (Level % Pay)
Amortization Method	Level Dollar (Closed)
Amortization Target	90% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.

ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Minimum Contribution
Methods and Assumptions

STATUTORY MINIMUM CONTRIBUTION

	Minimum Contribution
Contribution Requirement	$3,341,266
Expected Payroll	$4,378,650
Contribution Requirement as a Percent of Expected Payroll	76.31%

FUNDED STATUS – STATUTORY MINIMUM

	Minimum Contribution
Normal Cost	$1,337,763
Market Value of Assets	$27,428,623
Actuarial Value of Assets	$28,245,379
Actuarial Accrued Liability	$74,085,231
Unfunded Actuarial Accrued Liability	$45,839,852
Percent Funded	
Actuarial Value of Assets	38.13%
Market Value of Assets	37.02%

ILLINOIS STATUTORY MINIMUM CONTRIBUTION

The Statutory Minimum Contribution is based on funding methods and funding parameters in the Illinois statutes for pension funding. The resulting contribution is lower than the recommended contribution for the current plan year. The lower contribution amount is not recommended because it represents a deferral of contributions when compared to the recommended contribution method.

The recommended contribution method is intended to allocate pension contributions in a manner that provides for increases that are manageable going forward. When contributions are lowered in current years, the resulting contributions in future years can increase more rapidly, with the risk of becoming unmanageable. The Securities and Exchange Commission in 2013 used the phrase "Statutory Underfunding" to describe situations where contributions appear to be more manageable in the short-term, but set up future contribution requirements that are less likely to be manageable.

ACTUARIAL METHODS – ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Actuarial Valuation Date	January 1, 2015
Data Collection Date	December 31, 2014
Actuarial Cost Method	Projected Unit Credit (Level % of Pay)
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	90% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.

ACTUARIAL VALUATION DATA

Active Employees
Retirees and Beneficiaries

ACTUARIAL VALUATION DATA

ACTIVE EMPLOYEES

	Current Valuation
Vested	45
Nonvested	16
Total Active Employees	61
Total Payroll	$ 4,303,342

INACTIVE EMPLOYEES

	Current Valuation
Terminated Employees - Vested	0
Retired Employees	63
Disabled Employees	15
Other Beneficiaries	26
Total Inactive Employees	104

SUMMARY OF BENEFIT PAYMENTS

	Current Valuation
Terminated Employees - Vested	$ -
Retired Employees	296,172
Disabled Employees	49,201
Other Beneficiaries	49,291
Total Inactive Employees	$ 394,664

Benefits shown for terminated employees under deferred retirement are not currently in pay status.

ACTUARIAL FUNDING POLICIES

Actuarial Cost Method
Financing Unfunded Accrued Liability
Actuarial Value of Assets

ACTUARIAL FUNDING POLICIES

ACTUARIAL COST METHOD

The actuarial cost method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

In accordance with the Pension Fund's Funding Policy the actuarial cost method for the recommended contribution basis is Entry Age Normal (Level Percent of Pay). The Entry Age Normal Cost Method is a method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age. The portion of this actuarial present value allocated to a valuation year is called normal cost. The portion of the actuarial present value not provided at a valuation date by the actuarial present value of future normal costs is called the actuarial liability.

FINANCING UNFUNDED ACTUARIAL ACCRUED LIABILITY

The Unfunded Actuarial Accrued Liability may be amortized over a period either in level dollar amounts or as a level percentage of projected payroll.

In accordance with the Pension Fund's Funding Policy for the recommended contribution the unfunded actuarial accrued liabilities are amortized by level dollar contributions to 90% funding target over the remaining 26 future years including the municipality's fiscal year 2040.

ACTUARIAL VALUE OF ASSETS

The pension fund is an ongoing plan. The employer wishes to smooth the effect of volatility in the market value of assets on the annual contribution. The Actuarial Value of Assets is equal to the Market Value of Assets with unanticipated gains/losses recognized over five years.

The asset valuation method is intended to create an Actuarial Value of Assets that remains reasonable in relation to the Market Value of Assets over time. The method produces results that can fall above and below the Market Value of Assets. The period of recognition is short.

It is intended that the period of recognition is short enough to keep the Actuarial Value of Assets within a decent range of the Market Value. The employer has not placed a specific corridor around the Market Value of Assets.

ACTUARIAL ASSUMPTIONS

Nature of Actuarial Calculations
Actuarial Assumptions in the Valuation Process
Actuarial Assumptions Utilized

ACTUARIAL ASSUMPTIONS

NATURE OF ACTUARIAL CALCULATIONS

The results documented in this report are estimates based on data that may be imperfect and on assumptions about future events. Certain plan provisions may be approximated or deemed immaterial, and, therefore, are not valued. Assumptions may be made about participant data or other factors. Reasonable efforts were made in this valuation to ensure that significant items in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in the calculations. As these differences arise, the expense for accounting purposes will be adjusted in future valuations to reflect such actual experience.

A range of results different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience only and should not imply precision which is not inherent in actuarial calculations.

ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described in the previous section.

The principal areas of financial risk which require assumptions about future experience are:

- Long-term Rates of Investment Return
- Patterns of Pay Increases for Members
- Rates of Mortality Among Members and Beneficiaries
- Rates of Withdrawal of Active Members
- Rates of Disability Among Members
- Age Patterns of Actual Retirement

Actual experience of the Pension Fund will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments to the computed contribution requirement.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations).

Details behind the selection of the actuarial assumptions can be found in the assumption document provided to the client. The client has reviewed and approved the assumptions as a reasonable expectation of the future anticipated experience under the plan.

ACTUARIAL ASSUMPTIONS UTILIZED

Expected Return on Investments 7.00% net of adminstrative expenses.

CPI-U 2.00%

Total Payroll Increases 3.50%

Individual Pay Increases 3.00% - 29.06%

Individual salary increases include a long-term average increase for inflation, average annual increases for promotions, and any additional increases for a step program. Sample Rates as Follows:

Service	Rate	Service	Rate
0	29.06%	8	5.00%
1	5.00%	9	5.00%
2	5.00%	10	5.00%
3	5.00%	15	5.00%
4	5.00%	20	3.00%
5	5.00%	25	3.00%
6	5.00%	30	3.00%
7	5.00%	35	3.00%

Retirement Rates 100% of the L&A Assumption Study Cap Age 65 for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
50	0.100	53	0.180
51	0.100	54	0.180
52	0.100	55	0.180

Withdrawal Rates

100% of the L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.049	40	0.008
30	0.030	45	0.004
35	0.016	50	0.002

Disability Rates

100% of the L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.000	40	0.004
30	0.000	45	0.007
35	0.002	50	0.012

Mortality Rates

L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.0005	40	0.0005
30	0.0003	45	0.0008
35	0.0003	50	0.0013

Married Participants

85% of Active Participants are Assumed to be Married. Female Spouses are Assumed to be 3 Years Younger than Male Spouses.

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Establishment of the Fund
Administration
Employee Contributions
Normal Retirement Pension Benefits
Pension to Survivors
Termination Benefits
Disability Benefits

SUMMARY OF PRINCIPAL PLAN PROVISIONS

ESTABLISHMENT OF THE FUND

The Firefighters' Pension Fund is established and administered as prescribed by "Article 4. Firefighters' Pension Fund – Municipalities 500,000 and Under" of the Illinois Pension Code.

ADMINISTRATION

The Firefighters' Pension Fund is administered by a Board of Trustees located in each municipality maintaining a pension fund for its firefighters. Its duties are to control and manage the pension fund, to hear and determine applications for pensions, to authorize payment of pensions, to establish rules, to pay expenses, to invest funds, and to keep records.

EMPLOYEE CONTRIBUTIONS

Employees contribute 9.455% of salary.

NORMAL RETIREMENT PENSION BENEFIT

<u>Hired Prior to January 1, 2011</u>

Eligibility: Age 50 with at least 20 years of creditable service and no longer a firefighter.

Benefit: 50% of final salary is payable commencing at retirement for 20 years of service. An additional 2.5% of final salary is added for each additional year of service (prorated monthly) in excess of 20 years of service (not to exceed 75% of final salary). "Final salary" is based on the pay rate for the firefighter at retirement.

Annual Increase in Benefit: A firefighter is entitled to an initial pension increase equal to 1/12 of 3% of the original monthly benefit for each full month that has passed since the pension began. The initial increase date will be the later of the first day of the month following the attainment of age 55, or the first anniversary of the date of retirement. Subsequent increases of 3% of the current pension amount will be provided in each January thereafter.

NORMAL RETIREMENT PENSION BENEFIT - CONTINUED

Hired on or After January 1, 2011

Eligibility: Age 55 with at least 10 years of creditable service and no longer a firefighter.

Benefit: 2.5% of final average salary for each year of service is payable at retirement (not to exceed 75% of final average salary). "Final average salary" is determined by dividing the highest total salary over 96 consecutive months of service in the last 120 months of service by the total number of months of service in the period. Annual salary for this purpose will not exceed $106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

EARLY RETIREMENT PENSION BENEFIT

Hired Prior to January 1, 2011

None

Hired on or After January 1, 2011

Eligibility: Age 50 with at least 10 years of creditable service and no longer a firefighter.

Benefit: The normal retirement pension benefit reduced by ½ of 1% for each month that the firefighter's age is under age 55.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1st . The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

PENSION TO SURVIVORS

Hired Prior to January 1, 2011

Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the firefighter on the last day of service, payable immediately.

Death - Non-Duty

Current Pensioners (Including Disabled Pensioners): Surviving spouse to receive continuation of the pension at the time of death or 54% of pensionable salary at the time pension began, if greater.

Active Employee with 20+ Years of Service: Surviving spouse is entitled to the full pension earned by the firefighter at the time of death, or 54% of the pensionable salary at death if greater.

Active Employee with 10-20 Years of service: Surviving spouse is entitled to 54% of the salary attached to the rank of the firefighter on the last day of service, payable immediately

Annual Increase in Benefit: None.

Hired on or After January 1, 2011

Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the firefighter on the last day of service, payable immediately.

Death - Non-Duty

Current Pensioners (Including Disabled Pensioners), Active Employee with 20+ Years of Service, and Active Employee with 10-20 Years of service: Surviving spouse to receive 66 ⅔% of the firefighter's earned pension at the date of death.

Annual Increase in Benefit: The initial increase date will be the January 1st after the attainment of age 60 by the recipient of the survivor's pension. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original survivor's pension amount.

TERMINATION BENEFIT

Hired Prior to January 1, 2011

Eligibility: At least 10 years but less than 20 years of creditable service.

Benefit: An accrual factor times final salary for each year of service is payable beginning at age 60. "Accrual Factor" is a factor of 1.5% at 10 years of service, increasing ratably up to 2.4% at 19 years of service. "Final salary" is based on the pay rate for the firefighter on the date of separation.

Annual Increase in Benefit: A firefighter will receive an initial increase of 3% on the first anniversary of the date of start of payments. Subsequent increases of 3% of the current pension amount will be provided in each January thereafter.

Hired on or After January 1, 2011

Eligibility: At least 10 years but less than 20 years of creditable service.

Benefit: An accrual factor times final salary for each year of service is payable beginning at age 60. "Accrual Factor" is a factor of 1.5% at 10 years of service, increasing ratably up to 2.4% at 19 years of service. "Final salary" is based on the greater of salary during the last year of service prior to termination of employment or the pay rate for the firefighter at termination of employment. Annual salary for this purpose will not exceed $106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

Annual Increase in Benefit: The initial increase date will be the January 1st following the first payment. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

DISABILITY BENEFIT

Hired Prior to January 1, 2011

Eligibility: Disability (duty; or non-duty with 7 years of service).

Benefit: A firefighter who becomes disabled on duty is entitled to receive a pension equal to the greatest of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the firefighter is entitled to 50% of final salary. “Final salary” is based on the pay rate for the firefighter at retirement.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60. Subsequent increases will occur on each subsequent January 1st. The first increase is 3% of the original benefit for each full year that has passed since the pension began. Subsequent increases are 3% of the original pension benefit amount.

Hired on or after January 1, 2011

Eligibility: Disability (duty; or non-duty with 7 years of service).

Benefit: A firefighter who becomes disabled on duty is entitled to receive a pension equal to the greater of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the firefighter is entitled to 50% of final salary. “Final salary” is based on the pay rate for the firefighter at last day of service.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

GLOSSARY OF TERMS

GLOSSARY OF TERMS

Actuarial Accrued Liability **–**The actuarial present value of future benefits based on employees' service rendered to the measurement date using the selected actuarial cost method. It is that portion of the Actuarial Present Value of plan benefits and expenses allocated to prior years of employment. It is not provided for by future Normal Costs.

Actuarial Cost Method **–** The method used to allocate the projected obligations of the plan over the working lifetimes of the plan participants.

Actuarial Value of Asset **–** The value of the assets used in the determination of the Unfunded Actuarial Accrued Liability. The Actuarial Value of Assets is related to Market Value of Assets, with adjustments made to spread unanticipated gains and losses for a given year over a period of several years. Actuarial Value of Assets is generally equally likely to fall above or below the Market Value of Assets, and generally does not experience as much volatility over time as the Market Value of Assets.

Asset Valuation Method **–** A valuation method designed to smooth random fluctuations in asset values. The objective underlying the use of an asset valuation method is to provide for the long-term stability of employer contributions.

Funding Policy **–** A set of procedures for a Pension Fund that outlines the "best practices" for funding the pension benefits based on the goals of the plan sponsor. A Funding Policy discusses items such as assumptions, Actuarial Cost Method, assets, and other parameters that will best help the sponsor meet their goal of working in the best interest of the plan participant.

Market Value of Assets **–** The value of the cash, bonds, securities and other assets held in the pension trust as of the measurement date.

Normal Cost **–**The present value of future benefits earned by employees during the current fiscal year. It is that portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Unfunded Actuarial Accrued Liability **–** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The Unfunded Actuarial Accrued Liability is amortized over a period either in level dollar amounts or as a level percentage of projected payroll

Lauterbach & Amen, LLP
27W457 Warrenville Road
Warrenville, IL 60555-3902

Actuarial Valuation as of January 1, 2015

MOLINE POLICE PENSION FUND

Utilizing Data as of December 31, 2014
For the Contribution Year January 1, 2015 to December 31, 2015

LAUTERBACH & AMEN, LLP

Actuarial Valuation – Funding Recommendation

Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

MOLINE POLICE PENSION FUND

Contribution Year Ending: December 31, 2015
Actuarial Valuation Date: January 1, 2015
Utilizing Data as of December 31, 2014

Submitted by:

Lauterbach & Amen, LLP
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Contact:

Todd A. Schroeder

July 22, 2015

LAUTERBACH & AMEN, LLP

TABLE OF CONTENTS

TABLE OF CONTENTS

ACTUARIAL CERTIFICATION

This report documents the results of the Actuarial valuation of the Moline Police Pension Fund. The purpose is to report the actuarial contribution requirement for the contribution year January 1, 2015 to December 31, 2015. Determinations for purposes other than meeting the employer's actuarial contribution requirements may be significantly different from the results herein.

The results in this report are based on information and data submitted by the Moline Police Pension Fund including studies performed by prior actuaries. We did not prepare the actuarial valuations for the years prior to January 1, 2015. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness, as appropriate, based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The Moline Police Pension Fund selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned of Lauterbach & Amen, LLP, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render this Actuarial Opinion. There is no relationship between the Moline Police Pension Fund and Lauterbach & Amen, LLP that impairs our objectivity.

The information contained in this report was prepared for the use of the Moline Police Pension Fund and the City of Moline in connection with our actuarial valuation. It is not intended or necessarily suitable for other purposes. It is intended to be used in its entirety to avoid misrepresentations.

Respectfully Submitted,

LAUTERBACH & AMEN, LLP

Todd A. Schroeder

Todd A. Schroeder, EA

MANAGEMENT SUMMARY

Contribution Recommendation
Funded Status
Management Summary

CONTRIBUTION RECOMMENDATION

	Prior Valuation*	Current Valuation
Contribution Requirement	$3,542,595	$3,740,525
Expected Payroll	$5,416,114	$5,590,505
Contribution Requirement as a Percent of Expected Payroll	65.41%	66.91%

Recommended Contribution has Increased $197,930 from Prior Year.

FUNDED STATUS

	Prior Valuation*	Current Valuation
Normal Cost	$1,297,684	$1,250,907
Market Value of Assets	$32,601,942	$34,156,882
Actuarial Value of Assets	$33,891,593	$35,129,659
Actuarial Accrued Liability	$73,494,100	$77,875,052
Unfunded Actuarial Accrued Liability	$39,602,507	$42,745,393
Percent Funded		
Actuarial Value of Assets	46.11%	45.11%
Market Value of Assets	44.36%	43.86%

Funded Percentage has Decreased 1.00 on an Actuarial Value of Assets Basis.

*Prior Valuation completed by Tepfer Consulting Group, Ltd.

MANAGEMENT SUMMARY – COMMENTS AND ANALYSIS

Contribution Results

The contribution recommendation is based on the funding policies and procedures that are outlined in the "Actuarial Funding Policies" section of this report.

The State of Illinois statutes for pension funds contain parameters that should be used to determine the minimum amount of contribution to a public pension fund. Those parameters and the resulting minimum contribution can be found in the "Illinois Statutory Minimum Contribution" section of this report.

Defined Benefit Plan Risks

Asset Growth

Pension funding involves preparing plan assets to pay benefits for the members when they retire. During their working careers, assets need to build with contributions and investment earnings, and then the pension fund distributes assets during retirement. Based on the fund's current mix of employees and funded status, the fund should be experiencing positive asset growth on average if requested contributions are made and expected investment earnings come in. In the current year the fund asset growth was positive by $1,554,940.

Asset growth is important long-term. Long-term cash flow out of the pension fund is primarily benefit payments. Expenses make up a smaller portion. The fund should monitor the impact of expected benefit payments and the impact on asset growth in the future. In the next 5 years, benefits payments are anticipated to increase 25-30%, or approximately $1.2 million dollars. In the next 10 years, the expected increase in benefit payments is 55-60%, or approximately $2.4 million dollars.

Unfunded Liability:

Unfunded liability represents dollars we expect to be in the pension fund already for the fund members based on funding policy. To the extent dollars are not in the pension fund the fund is losing investment returns on those dollars going forward. Payments to unfunded liability pay for the lost investment earnings, as well as the outstanding unfunded amount. If payment is not made, the unfunded liability will grow.

In the early 1990s, many pension funds in Illinois adopted an increasing payment to handle unfunded liability due to a change in legislation. The initial payments decreased, and payments were anticipated to increase annually after that. In many situations, payments early on may be less than the interest on unfunded liability, which means unfunded liability is expected to *increase* even if contributions are at the recommended level.

MANAGEMENT SUMMARY

The current contribution recommendation includes a payment to unfunded liability that is approximately $36,000 less than interest on the unfunded liability. All else being equal and contributions being made, unfunded liability would still be expected to increase. The employer and the fund should anticipate currently that improvement in the funded % will be mitigated in the short-term. The employer and the fund should understand this impact as we progress forward to manage expectations.

Actuarial Value of Assets:
The pension fund smooths asset returns that vary from expectations over a five year period. The intention over time is that asset returns for purposes of funding recommendations are a combination of several years. The impact is intended to smooth out the volatility of contribution recommendations over time, but not necessarily increase or decrease the level of contributions over the long-term.

When asset returns are smoothed, there are always gains or losses on the Market Value of Assets that are going to be deferred for current funding purposes, and recognized in future years. Currently, the pension fund is deferring approximately $970,000 in losses on the Market Value of Assets. These are asset losses that will be recognized in upcoming periods, independent of the future performance of the Market Value of Assets.

<u>Plan Assets</u>
The results in this report are based on the Assets held in the pension fund. Assets consist of funds held for investment and for benefit payments as of the Valuation Date. In addition, Assets may be adjusted for other events representing dollars that are reasonably expected to be paid out from the pension fund or deposited into the pension fund after the Actuarial Valuation Date as well.

The current fund Assets are Audited.

The actuarial value of assets under the funding policy is equal to the fair market value of assets, with unexpected gains and losses smoothed over 5 years. More detail on the Actuarial Value of Assets can be found in the funding policy section of the report.

The Plan Assets Used in this Report are Audited.

<u>Demographic Data</u>
Demographic factors can change from year to year within a pension fund. Changes in this category include hiring new employees, employees retiring or becoming disabled, retirees passing away, and other changes. Demographic changes can cause an actuarial gain (contribution that is less than expected compared to the prior year) or an actuarial loss (contribution that is greater than expected compared to the prior year).

Demographic gains and losses occur when the assumptions over the one-year period for employee changes do not meet our long-term expectation. For example, if no employees become disabled during the year, we would expect a liability gain. If more employees become disabled than anticipated last year, we would expect a liability loss. Generally we expect short-term fluctuations in demographic experience to create 1%-3% gains or losses in any given year, but to balance out in the long-term.

In the current report, the key demographic changes were as follows:

New hires: The fund added 6 new active members in the current year through hiring. When a new member is admitted to the pension fund, the employer contribution will increase to reflect the new member. The increase in the recommended contribution in the current year for new fund members is approximately $40,000.

Disability: There were 2 members of the fund who became disabled during the year. When a member becomes disabled, the fund will often experience a decrease in normal cost, but an increase in unfunded liability. The increase in the recommended contribution in the current year for the disability experience is approximately $23,000.

Retirement: There were 2 members of the fund who retired during the year. When a fund member retires the normal cost will decrease. Any change in the actuarial liability will be considered when determining the amount to pay towards unfunded liability each year. The decrease in the recommended contribution in the current year due to the retirement experience is approximately $10,500.

Termination: There were 2 members of the fund who terminated employment during the year. These members both took a refund. The fund is no longer obligated to pay a benefit to the member in the future. The decrease in the recommended contribution in the current year due to the termination experience is approximately $29,000.

Mortality: There was 1 retiree who passed away during the year, with an eligible surviving spouse. The retiree's surviving spouse passed away during the year, as well. When a retiree or surviving spouse passes away, the fund liability will decrease as the pension fund no longer will make future payments to the retiree. The decrease in the recommended contribution in the current year due to the passing of the retiree and surviving spouse is approximately $23,000.

Assumption Changes

The actuarial assumptions were changed in the current year. The changes were made to better reflect the future anticipated experience in the fund. See table on the following page.

Funding Policy Changes

There were no funding policy changes made in the current year.

ACTUARIAL CONTRIBUTION RECOMMENDATION - RECONCILIATION

Actuarial liability is expected to increase each year for both interest for the year and as active employees earn additional service years towards retirement. Similarly actuarial liability is expected to decrease when the fund pays benefits to inactive employees.

Contributions are expected to increase as expected pay increases under the funding policy for the Fund.

Other increases or decreases in actuarial liability (key changes noted below) will increase or decrease the amount of unfunded liability in the plan. To the extent unfunded liability increases or decreases unexpectedly, the contribution towards unfunded liability will also change unexpectedly.

	Actuarial Liability	Contribution Recommendation
Salary Increase Less than Expected	(39,770)	(3,356)
Demographic Changes	1,082,463	52,764
Assumption Changes	1,855,773	113,289
Asset Return Less than Expected*	-	66,041
Contributions Less than Expected	-	22,842
Total Actuarial Experience	$ 2,898,466	$ 251,580

*The impact on contribution due to asset performance is based on the Actuarial Value of Assets.

Key demographic changes were discussed in the prior section.

VALUATION OF FUND ASSETS

Market Value of Assets
Actuarial Value of Assets

MARKET VALUE OF ASSETS

Statement of Assets

	Prior Valuation	Current Valuation
Cash and Cash Equivalents	$ 2,380,717	$ 1,155,815
Fixed Income	-	11,050,889
Stock Equities	11,422,291	-
Mutual Funds	18,798,934	21,950,178
Net Assets Available for Pensions	$ 32,601,942	$ 34,156,882

The Total Value of Assets has Increased $1,554,940 from Prior Valuation.

Statement of Changes in Assets

Total Market Value - Prior Valuation	$ 32,601,942
Plus - Employer Contributions	3,124,517
Plus - Employee Contributions	611,755
Plus - Return on Investments	2,077,542
Less - Benefit and Related Payments	(4,204,026)
Less - Other Expenses	(54,848)
Total Market Value - Current Valuation	$ 34,156,882

The Return on Investment on the Market Value of Assets for the Fund was Approximately 6.2% Net of Administrative Expenses.

The return on investments shown has been determined as the Return on Assets from the statement of changes in assets, as a percent of the average of the beginning and ending Market Value of Assets. Return on Investment is net of the Other Expenses as shown. The Return on Investments has been excluded from the Total Market Value of Assets at the end of the year for this calculation.

MARKET VALUE OF ASSETS (GAIN)/LOSS

Current Year (Gain)/Loss on Market Value of Assets

Total Market Value - Prior Valuation	$ 32,601,942
Contributions	3,736,272
Benefit Payments	(4,204,026)
Expected Return on Investments	2,265,765
Expected Total Market Value - Current Valuation	34,399,953
Actual Total Market Value - Current Valuation	34,156,882
Current Market Value (Gain)/Loss	$ 243,071
Expected Return on Investments	$ 2,265,765
Actual Return on Investments (Net of Expenses)	2,022,694
Current Market Value (Gain)/Loss	$ 243,071

The Return on the Market Value of Assets was Lower than Expected Over the Most Recent Year.

The (Gain)/Loss on the Market Value of Assets has been determined based on expected returns at the actuarial rate.

VALUATION OF FUND ASSETS

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

Total Market Value - Current Valuation		$ 34,156,882
Adjustment for Prior (Gains)/Losses		
	Full Amount	
First Preceding Year	$ 243,071	194,456
Second Preceding Year	(924,038)	(554,423)
Third Preceding Year	2,601,944	1,040,778
Fourth Preceding Year	1,459,829	291,966
Total Deferred (Gain)/Loss		972,777
Initial Actuarial Value of Assets - Current Valuation		35,129,659
Less Contributions for the Current Year and Interest		-
Less Adjustment for the Corridor		-
Actuarial Value of Assets - Current Valuation		$ 35,129,659

The Actuarial Value of Assets is Equal to the Fair Market Value of Assets with Unanticipated Gains/Losses Recognized over 5 Years. The Actuarial Value of Assets is Currently 103% of the Market Value.

(GAIN)/LOSS ON THE ACTUARIAL VALUE OF ASSETS

Total Actuarial Value - Prior Valuation	$ 33,891,593
Plus - Employer Contributions	3,124,517
Plus - Employee Contributions	611,755
Plus - Return on Investments	1,760,668
Less - Benefit and Related Payments	(4,204,026)
Less - Other Expenses	(54,848)
Total Actuarial Value - Current Valuation	$ 35,129,659

The Return on Investment on the Actuarial Value of Assets for the Fund was Approximately 5.1% Net of Administrative Expenses.

The Actuarial Value of Assets incorporates portions of gains and losses over multiple years.

HISTORICAL ASSET PERFORMANCE

The chart below shows the historical rates of return on plan assets for both Market Value of Assets and Actuarial Value of Assets.

	Market Value	Actuarial Value
First Preceding Year	6.2%	5.1%

The returns on assets shown above were calculated based on the annual return on investment for the year, as a percentage of the average value of the assets for the year.

For purposes of determining the average value of assets during the year, the ending market value of assets has been adjusted to net out to the portion related to the investment returns themselves. All other cash flows are included.

For purposes of determining the annual return on investment we have adjusted the figures shown on the preceding pages. The figures shown on the preceding pages are net of investment expenses. We have made an additional adjustment to net out administrative expenses. Netting out administrative expenses allows us to capture returns for the year that can be used to make benefit payments as part of the ongoing actuarial process.

The adjustment we make is for actuarial reporting purposes only. By netting out administrative expenses and capturing return dollars that are available to pay benefits, it provides us a comparison to the estimated rate of return on assets, but does not provide a figure that would be consistent with the return rates that are determined by other parties. Therefore this calculated rate of return should not be used to analyze investment performance of the Fund or the performance of the investment professionals.

RECOMMENDED CONTRIBUTION DETAIL

ACTUARIAL ACCRUED LIABILITY

	Current Valuation
Active Employees	$ 29,940,664
Inactive Employees	
Terminated Employees - Vested	778,983
Retired Employees	40,196,803
Disabled Employees	3,793,919
Other Beneficiaries	3,164,683
Total Inactive Employees	47,934,388
Total Actuarial Accrued Liability	$ 77,875,052

The Total Actuarial Liability has Increased $5,398,977 from Prior Valuation.

FUNDED STATUS

	Current Valuation
Total Actuarial Accrued Liability	$ 77,875,052
Total Actuarial Value of Assets	35,129,659
Unfunded Actuarial Accrued Liability	$ 42,745,393
Total Market Value of Assets	$ 34,156,882
Percent Funded	
Actuarial Value of Assets	45.11%
Market Value of Assets	43.86%

Funded Percentage as of the Valuation Date is Subject to Volatility on Assets and Liability in the Short-Term.

RECOMMENDED CONTRIBUTION DETAIL

DEVELOPMENT OF THE EMPLOYER NORMAL COST

	Current Valuation
Total Normal Cost	$ 1,250,907
Estimated Employee Contributions	(554,019)
Employer Normal Cost	$ 696,888

At a 100% Funding Level, the Normal Cost Contribution is Still Required.

NORMAL COST AS A PERCENTAGE OF EXPECTED PAYROLL

	Current Valuation
Expected Payroll	$ 5,590,505
Employee Normal Cost Rate	9.91%
Employer Normal Cost Rate	12.47%
Total Normal Cost Rate	22.38%

Ideally the Employer Normal Cost Rate will Remain Stable.

CONTRIBUTION RECOMMENDATION

	Current Valuation
Employer Normal Cost*	$ 784,451
Amortization of Unfunded Accrued Liability/(Surplus)	2,956,074
Funding Requirement	$ 3,740,525

*Employer Normal Cost Contribution includes interest through the end of the year.

The Recommended Contribution has Increased 8.1% from the Prior Valuation (See the Management Summary).

ACTUARIAL METHODS – RECOMMENDED CONTRIBUTION

Actuarial Valuation Date	January 1, 2015
Data Collection Date	December 31, 2014
Actuarial Cost Method	Entry Age Normal (Level % of Pay)
Amortization Method	Level Dollar (Closed)
Amortization Target	90% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.

ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Minimum Contribution
Methods and Assumptions

STATUTORY MINIMUM CONTRIBUTION

	Minimum Contribution
Contribution Requirement	$2,887,069
Expected Payroll	$5,590,505
Contribution Requirement as a Percent of Expected Payroll	51.64%

FUNDED STATUS – STATUTORY MINIMUM

	Minimum Contribution
Normal Cost	$1,634,434
Market Value of Assets	$34,156,882
Actuarial Value of Assets	$35,129,659
Actuarial Accrued Liability	$70,128,303
Unfunded Actuarial Accrued Liability	$34,998,644
Percent Funded	
Actuarial Value of Assets	50.09%
Market Value of Assets	48.71%

ILLINOIS STATUTORY MINIMUM CONTRIBUTION

The Statutory Minimum Contribution is based on funding methods and funding parameters in the Illinois statutes for pension funding. The resulting contribution is lower than the recommended contribution for the current plan year. The lower contribution amount is not recommended because it represents a deferral of contributions when compared to the recommended contribution method.

The recommended contribution method is intended to allocate pension contributions in a manner that provides for increases that are manageable going forward. When contributions are lowered in current years, the resulting contributions in future years can increase more rapidly, with the risk of becoming unmanageable. The Securities and Exchange Commission in 2013 used the phrase “Statutory Underfunding” to describe situations where contributions appear to be more manageable in the short-term, but set up future contribution requirements that are less likely to be manageable.

ACTUARIAL METHODS – ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Actuarial Valuation Date	January 1, 2015
Data Collection Date	December 31, 2014
Actuarial Cost Method	Projected Unit Credit (Level % of Pay)
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	90% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.

ACTUARIAL VALUATION DATA

Active Employees
Retirees and Beneficiaries

ACTUARIAL VALUATION DATA

ACTIVE EMPLOYEES

	Current Valuation
Vested	56
Nonvested	23
Total Active Employees	79
Total Payroll	$ 5,494,354

INACTIVE EMPLOYEES

	Current Valuation
Terminated Employees - Vested	4
Retired Employees	60
Disabled Employees	7
Other Beneficiaries	13
Total Inactive Employees	84

SUMMARY OF BENEFIT PAYMENTS

	Current Valuation
Terminated Employees - Vested	$ 8,076
Retired Employees	267,186
Disabled Employees	18,371
Other Beneficiaries	34,622
Total Inactive Employees	$ 328,255

Benefits shown for terminated employees under deferred retirement are not currently in pay status.

ACTUARIAL FUNDING POLICIES

Actuarial Cost Method
Financing Unfunded Accrued Liability
Actuarial Value of Assets

ACTUARIAL FUNDING POLICIES

ACTUARIAL COST METHOD

The actuarial cost method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

In accordance with the Pension Fund's Funding Policy the actuarial cost method for the recommended contribution basis is Entry Age Normal (Level Percent of Pay). The Entry Age Normal Cost Method is a method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age. The portion of this actuarial present value allocated to a valuation year is called normal cost. The portion of the actuarial present value not provided at a valuation date by the actuarial present value of future normal costs is called the actuarial liability.

FINANCING UNFUNDED ACTUARIAL ACCRUED LIABILITY

The Unfunded Actuarial Accrued Liability may be amortized over a period either in level dollar amounts or as a level percentage of projected payroll.

In accordance with the Pension Fund's Funding Policy for the recommended contribution the unfunded actuarial accrued liabilities are amortized by level dollar contributions to 90% funding target over the remaining 26 future years including the municipality's fiscal year 2040.

ACTUARIAL VALUE OF ASSETS

The pension fund is an ongoing plan. The employer wishes to smooth the effect of volatility in the market value of assets on the annual contribution. The Actuarial Value of Assets is equal to the Market Value of Assets with unanticipated gains/losses recognized over five years.

The asset valuation method is intended to create an Actuarial Value of Assets that remains reasonable in relation to the Market Value of Assets over time. The method produces results that can fall above and below the Market Value of Assets. The period of recognition is short.

It is intended that the period of recognition is short enough to keep the Actuarial Value of Assets within a decent range of the Market Value. The employer has not placed a specific corridor around the Market Value of Assets.

ACTUARIAL ASSUMPTIONS

Nature of Actuarial Calculations
Actuarial Assumptions in the Valuation Process
Actuarial Assumptions Utilized

ACTUARIAL ASSUMPTIONS

NATURE OF ACTUARIAL CALCULATIONS

The results documented in this report are estimates based on data that may be imperfect and on assumptions about future events. Certain plan provisions may be approximated or deemed immaterial, and, therefore, are not valued. Assumptions may be made about participant data or other factors. Reasonable efforts were made in this valuation to ensure that significant items in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in the calculations. As these differences arise, the expense for accounting purposes will be adjusted in future valuations to reflect such actual experience.

A range of results different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience only and should not imply precision which is not inherent in actuarial calculations.

ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described in the previous section.

The principal areas of financial risk which require assumptions about future experience are:

- Long-term Rates of Investment Return
- Patterns of Pay Increases for Members
- Rates of Mortality Among Members and Beneficiaries
- Rates of Withdrawal of Active Members
- Rates of Disability Among Members
- Age Patterns of Actual Retirement

Actual experience of the Pension Fund will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments to the computed contribution requirement.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations).

Details behind the selection of the actuarial assumptions can be found in the assumption document provided to the client. The client has reviewed and approved the assumptions as a reasonable expectation of the future anticipated experience under the plan.

ACTUARIAL ASSUMPTIONS UTILIZED

Expected Return on Investments 7.0% net of adminstrative expenses.

CPI-U 2.0%

Total Payroll Increases 3.5%

Individual Pay Increases 3.00% - 5.00%

Individual salary increases include a long-term average increase for inflation, average annual increases for promotions, and any additional increases for a step program. Sample Rates as Follows:

Service	Rate	Service	Rate
0	5.00%	8	5.00%
1	5.00%	9	5.00%
2	5.00%	10	5.00%
3	5.00%	15	5.00%
4	5.00%	20	3.00%
5	5.00%	25	3.00%
6	5.00%	30	3.00%
7	5.00%	35	3.00%

Retirement Rates 100% of the L&A Assumption Study Cap Age 65 for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
50	0.170	53	0.170
51	0.170	54	0.220
52	0.170	55	0.220

ACTUARIAL ASSUMPTIONS

Withdrawal Rates

100% of the L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.064	40	0.019
30	0.047	45	0.012
35	0.031	50	0.007

Disability Rates

100% of the L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.001	40	0.005
30	0.002	45	0.006
35	0.004	50	0.007

Mortality Rates

L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.0002	40	0.0009
30	0.0003	45	0.0015
35	0.0005	50	0.0024

Married Participants

85% of Active Participants are Assumed to be Married. Female Spouses are Assumed to be the Same Age as Male Spouses.

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Establishment of the Fund
Administration
Employee Contributions
Normal Retirement Pension Benefits
Pension to Survivors
Termination Benefits
Disability Benefits

ESTABLISHMENT OF THE FUND

The Police Pension Fund is established and administered as prescribed by "Article 3. Police Pension Fund – Municipalities 500,000 and Under" of the Illinois Pension Code.

ADMINISTRATION

The Police Pension Fund is administered by a Board of Trustees located in each municipality maintaining a pension fund for its police officers. Its duties are to control and manage the pension fund, to hear and determine applications for pensions, to authorize payment of pensions, to establish rules, to pay expenses, to invest funds, and to keep records.

EMPLOYEE CONTRIBUTIONS

Employees contribute 9.910% of salary.

NORMAL RETIREMENT PENSION BENEFIT

<u>Hired Prior to January 1, 2011</u>

Eligibility: Age 50 with at least 20 years of creditable service and no longer a police officer.

Benefit: 50% of final salary is payable commencing at retirement for 20 years of service. An additional 2.5% of final salary is added for each additional year of service in excess of 20 years of service (not to exceed 75% of final salary). "Final salary" is the salary attached to rank held on the last day of services or for 1 year prior to the last day, whichever is greater.

Annual Increase in Benefit: An officer will receive an initial increase of 1/12 of 3% for each month that has elapsed since retirement. The initial increase date will be the later of the first day of the month following the attainment of age 55, or the first anniversary of the date of retirement. Subsequent increases of 3% of the current pension amount (including prior increases) will be provided in each January thereafter.

NORMAL RETIREMENT PENSION BENEFIT - CONTINUED

Hired on or After January 1, 2011

Eligibility: Age 55 with at least 10 years of creditable service and no longer a police officer.

Benefit: 2.5% of final average salary for each year of service is payable at retirement (not to exceed 75% of final average salary). "Final average salary" is determined by dividing the highest total salary over 96 consecutive months of service in the last 120 months of service by the total number of months of service in the period. Annual salary for this purpose will not exceed $106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

Annual Increase in Benefit: The initial increase date will be the January 1st following the later of the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original benefit.

EARLY RETIREMENT PENSION BENEFIT

Hired Prior to January 1, 2011

None

Hired on or After January 1, 2011

Eligibility: Age 50 with at least 10 years of creditable service and no longer a police officer.

Benefit: The normal retirement pension benefit reduced by ½ of 1% for each month that the police officer's age is under age 55.

Annual Increase in Benefit: The initial increase date will be the January 1st following the later of the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original benefit.

PENSION TO SURVIVORS

Hired Prior to January 1, 2011

Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the police officer on the last day of service, payable immediately.

Death - Non-Duty

Current Pensioners (Including Disabled Pensioners): Surviving spouse to receive continuation of the pension.

Active Employee with 20+ Years of Service: Surviving spouse is entitled to the full pension earned by the police officer at the time of death.

Active Employee with 10-20 Years of service: Surviving spouse is entitled to 50% of the salary attached to the rank of the police officer on the last day of service, payable immediately

Annual Increase in Benefit: None.

Hired on or After January 1, 2011

Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the police officer on the last day of service, payable immediately.

Death - Non-Duty

Current Pensioners (Including Disabled Pensioners), Active Employee with 20+ Years of Service, and Active Employee with 10-20 Years of service: Surviving spouse to receive 66 ⅔% of the police officer's earned pension at the date of death.

Annual Increase in Benefit: The initial increase date will be the January 1st after the attainment of age 60 by the recipient of the survivor's pension. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original survivor's benefit amount.

TERMINATION BENEFIT

Hired Prior to January 1, 2011

Eligibility: At least 8 years but less than 20 years of creditable service.

Benefit: 2.5% of final salary for each year of service is payable beginning at age 60. "Final salary" is based on the greater of salary during the last year of service prior to termination of employment or the pay rate for the police officer at termination of employment.

Annual Increase in Benefit: An officer will receive an initial increase of 3% on the first anniversary of the date of start of payments. Subsequent increases of 3% of the current pension amount will be provided in each January thereafter.

Hired on or After January 1, 2011

Eligibility: At least 10 years but less than 20 years of creditable service.

Benefit: 2.5% of final salary for each year of service is payable beginning at age 60. "Final salary" is based on the greater of salary during the last year of service prior to termination of employment or the pay rate for the police officer at termination of employment. Annual salary for this purpose will not exceed $106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

Annual Increase in Benefit: The initial increase date will be the January 1st following the first payment. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 mos. ending with the September preceding each November 1, applied to the original benefit amount.

DISABILITY BENEFIT

Hired Prior to January 1, 2011

Eligibility: Disability (duty or non-duty).

Benefit: A police officer who becomes disabled on duty is entitled to receive a pension equal to the greater of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the police officer is entitled to 50% of final salary. "Final salary" is based on the pay rate for the police officer on the last day of service.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60. Subsequent increases will occur on each subsequent January 1st. The first increase is 3% of the original benefit for each full year that has passed since the pension began. Subsequent increases will be the 3% of the original pension benefit amount.

Hired on or after January 1, 2011

Eligibility: Disability (duty or non-duty).

Benefit: A police officer who becomes disabled on duty is entitled to receive a pension equal to the greater of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the police officer is entitled to 50% of final salary. "Final salary" is based on the pay rate for the police officer on the last day of service.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original benefit amount.

GLOSSARY OF TERMS

GLOSSARY OF TERMS

Actuarial Accrued Liability **–**The actuarial present value of future benefits based on employees' service rendered to the measurement date using the selected actuarial cost method. It is that portion of the Actuarial Present Value of plan benefits and expenses allocated to prior years of employment. It is not provided for by future Normal Costs.

Actuarial Cost Method **–** The method used to allocate the projected obligations of the plan over the working lifetimes of the plan participants.

Actuarial Value of Asset **–** The value of the assets used in the determination of the Unfunded Actuarial Accrued Liability. The Actuarial Value of Assets is related to Market Value of Assets, with adjustments made to spread unanticipated gains and losses for a given year over a period of several years. Actuarial Value of Assets is generally equally likely to fall above or below the Market Value of Assets, and generally does not experience as much volatility over time as the Market Value of Assets.

Asset Valuation Method **–** A valuation method designed to smooth random fluctuations in asset values. The objective underlying the use of an asset valuation method is to provide for the long-term stability of employer contributions.

Funding Policy **–** A set of procedures for a Pension Fund that outlines the "best practices" for funding the pension benefits based on the goals of the plan sponsor. A Funding Policy discusses items such as assumptions, Actuarial Cost Method, assets, and other parameters that will best help the sponsor meet their goal of working in the best interest of the plan participant.

Market Value of Assets **–** The value of the cash, bonds, securities and other assets held in the pension trust as of the measurement date.

Normal Cost **–**The present value of future benefits earned by employees during the current fiscal year. It is that portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Unfunded Actuarial Accrued Liability **–** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The Unfunded Actuarial Accrued Liability is amortized over a period either in level dollar amounts or as a level percentage of projected payroll

Police and Firefighters' Pensions City Contributions

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Police	$1,317,184	$1,475,079	$2,071,356	$2,222,982	$2,280,805	$3,075,321	$3,114,871	$3,542,595	$3,740,525
Fire	$1,578,334	$1,770,872	$2,330,188	$2,622,169	$2,679,017	$3,279,523	$3,479,730	$3,488,751	$4,574,174
Total	$2,895,518	$3,245,951	$4,401,544	$4,845,151	$4,959,822	$6,354,844	$6,594,601	$7,031,346	$8,314,699

Police and Fire Pensions Unfunded Actuarial Accrued Liabilities

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Police	$16,832,351	$18,095,305	$27,395,186	$28,250,696	$30,638,486	$32,579,825	$34,519,965	$39,602,507	$42,745,052
Fire	$19,394,473	$20,978,977	$29,466,587	$32,351,338	$32,849,218	$36,946,538	$38,993,485	$39,776,039	$52,863,733
Total	$36,226,824	$39,074,282	$56,861,773	$60,602,034	$63,487,704	$69,526,363	$73,513,450	$79,378,546	$95,608,785

Police and Fire Pensions Assets (Actuarial Value)

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Police	$27,746,093	$29,143,824	$25,291,113	$26,204,232	$30,552,244	$31,613,555	$32,154,576	$33,891,593	$35,129,659
Fire	$28,512,971	$29,178,270	$25,012,439	$24,987,381	$29,183,658	$27,715,000	$26,794,893	$27,599,873	$28,245,379
Total	$56,259,064	$58,322,094	$50,303,552	$51,191,613	$59,735,902	$59,328,555	$58,949,469	$61,491,466	$63,375,038