



CITY PAYROLL CYCLES

SPECIAL AUDIT

JANUARY 1, 2017 THROUGH AUGUST 31, 2018

**CITY OF CHESAPEAKE, VIRGINIA
AUDIT SERVICES DEPARTMENT**

April 12, 2019

The Honorable Rick W. West and
Members of the City Council
City of Chesapeake
City Hall – 6th Floor
Chesapeake, Virginia 23328

Dear Mayor West and Members of the City Council:

We have completed our review of the City of Chesapeake's (City's) Payroll Cycles for the period January 1, 2017 to August 31, 2018. Our review was conducted for the purpose of assessing the impact the City's June 2017 change to nine-day arrears was having on citywide payroll processing, and whether there was a need to also change the City's pay cycles as recommended in a June 2014 Audit Services report.

We conducted this special audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusion based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The City's payroll system was designed to collect accurate and timely records of employee work and provide accurate and timely payment for that work. Prior to June 2017, the City paid either weekly with five days arrears, or semi-monthly in current time. The City included approximately \$3.6 million in the Fiscal Year 2017 budget to transition to arrears for semi-monthly employees. Payroll was paid current until the June 15, 2017 payday. The City then went to nine days arrears for semi-monthly employees. As of February 2018, the City had 52 weekly and 24 semi-monthly payrolls for 3,800 employees. 837 employees were paid weekly and 2,963 were paid semi-monthly.

To conduct this audit, we reviewed and evaluated City and Department policies and procedures, and operations documents and reports, both internal and external. We held discussions with the Department Heads, Fiscal Administrators and Payroll Clerks in the City's ten largest departments, as well as the Finance Director and the Payroll Division of Finance. We reviewed historical corrections, pay cycle, FLSA status, and pay rule information. We also gathered benchmark data from other cities.

Based on our review, we determined that the City's change to arrears had provided several benefits to the City, including a reduction in payout errors for certain types of payments such as final separation payments and overtime. However, these benefits were largely offset by an increase in historical edits that occurred because 1) the turnaround time provided departments prior to payroll submission was insufficient, and 2) the constant changes in the pay period end date during the week often created situations where employee time records needed historical edits to correct them. For this reason, we are recommending that the City consider changing to a bi-weekly payroll cycle, although it may also consider a weekly payroll cycle as an alternative. We are also recommending ongoing Kronos training for supervisors and payroll clerks.

This report, in draft, was provided to management for review and response. Their comments have been considered in the preparation of this report. These comments have been included in the Managerial Summary, the Audit Report, and Appendix A. Management, Department Heads, Fiscal Administrators, Payroll Clerks, Information Technology (IT), and Finance were very helpful throughout the course of this audit. We appreciated their courtesy and cooperation on this assignment.

Sincerely,



Jay Poole
City Auditor
City of Chesapeake, Virginia

C: James Baker, City Manager
Laura Fitzpatrick, Deputy City Manager
Nancy Tracy, Director of Finance

Managerial Summary

City of Chesapeake
Audit Services
April 12, 2019

City Payroll Cycles
January 1, 2017 to August 31, 2018

A. Objectives, Scope, and Methodology

We have completed our review of the City of Chesapeake's (City's) Payroll Cycles for the period January 1, 2017 to August 31, 2018. Our review was conducted for the purpose of assessing the impact the City's June 2017 change to nine-day arrears was having on citywide payroll processing, and whether there was a need to also change the City's pay cycles as recommended in a June 2014 Audit Services report.

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Major Observations and Conclusions

Based on our review, we determined that the City's change to arrears had provided several benefits to the City, including a reduction in payout errors for certain types of payments such as final separation payments and overtime. However, these benefits were largely offset by an increase in historical edits that occurred because 1) the turnaround

time provided departments prior to payroll submission was insufficient, and 2) the constant changes in the pay period end date during the week often created situations where employee time records needed historical edits to correct them. For this reason, we are recommending that the City consider changing to a bi-weekly payroll cycle, although it may also consider a weekly payroll cycle as an alternative. We are also recommending ongoing Kronos training for supervisors and payroll clerks.

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B. Performance Information

The City's payroll system was designed to collect accurate and timely records of employee work and provide accurate and timely payment for that work. Prior to June 2017, the City paid either weekly with five days arrears, or semi-monthly in current time. The City included approximately \$3.6 million in the Fiscal Year 2017 budget to transition to arrears for semi-monthly employees. Payroll was paid current until the June 15, 2017 payday. The City then went to nine days arrears for semi-monthly employees. As of February 2018, the City had 52 weekly and 24 semi-monthly payrolls for 3,800 employees. 837 employees were paid weekly and 2,963 were paid semi-monthly.

1. Arrears and Transition to Arrears.

City Council approved the Fiscal Year (FY) 2016-2017 Budget with approximately \$3.6 million dollars to transition semi-monthly employees to nine days arrears. The City Manager also directed that employee information training sessions be held, and training materials were provided.

Semi-monthly employees (the vast majority accepted) signed an agreement with the City that the City would forgive 20% of the advance for each additional year of employment completed by the employee. Separation from the City (whether voluntary or involuntary) would require the former employee to repay the remainder of the advance. Departmental payroll clerks were required to calculate the unpaid balance and report it to Finance.

2. Existing Conditions

a. Fair Labor Standards Act Requirements

The federal overtime provisions were contained in the Fair Labor Standards Act (FLSA). Unless exempt, employees covered by the Act must receive overtime pay for hours worked over 40 in a workweek at a rate not less than time and one-half their regular rates of pay. The Act did not require overtime pay for work on Saturdays, Sundays, holidays, or regular days of rest, unless overtime was worked on such days.

b. Shift Schedules

Departments had many shift cycles and several workweek periods and employees were moved from one shift to another to ensure adequate staffing to minimize overtime and to render services as required. The employee's work time was captured by Kronos time clocks (located at various places), computer login, or by supervisors entering their employee's time because of special events or schedules. Employees were required to review and approve their timecard at least weekly. Supervisors also were required to review the timecard. Department Heads (or their designees) were required to approve their employees' timecard at the end of the pay period.

c. Concerns Expressed by Departments

Some of the concerns noted during interviews were as follows:

- There was insufficient time allotted to departments for review and approval of payroll. Department Heads and payroll clerks sometimes had four hours or less to verify and ensure the accuracy of timecard information.
- Supervisors and employees faced challenges with the shifting end dates during the week for pay periods, which often created errors in time reporting.

d. Processing Issues

After Department Heads approved payroll and Finance accepted the data, payroll clerks verified Kronos data against the Munis Time and Detail payroll report. Payroll clerks then submitted a printed copy of this report to Finance/Payroll. Any differences were documented as exceptions.

All exception sheets were not truly exceptions. For example, one time pay advances exception sheets were not true exceptions. Payroll clerks submitted them for new hires and terminations. Payroll Clerks were not able to see regular hours they sent to Finance on exception sheets because they were not certain what Munis would calculate as Regular Pay. Munis calculated the pay based on the dates of the hire or termination. Finance/Payroll normally did not have to make any manual adjustments in Munis Time Entry for these items.

3. Smoothing

The semimonthly pay cycle required smoothing since regular hours worked did not coincide with the semi-monthly payment. Therefore, employees pay was calculated on an annual basis then divided into 24 payments equal to 86.6666 hours pay, not actual work during a regular work week. Overtime and other adjustments might or might not appear in the pay day immediately following the regular work week (including the special exemptions for public safety). The City's semi-monthly pay cycle payments did not reflect the actual hours worked during the previous pay period because none of the City's schedules matched the 86.6666 hours paid on the semi-monthly pay schedule.

4. Previous Audit – Citywide Kronos/Munis

A special audit Citywide Kronos/Munis was presented to City Council on July 8, 2014. The report included the following recommendations and responses.

a. Recommendation 1 – Payroll Schedule

Recommendation – To reduce workarounds, errors, and adjustments, the City should evaluate whether the time is appropriate to consider 1) moving to arrears, and 2) implementing a bi-weekly payroll schedule.

Response – Although using a bi-weekly payroll in arrears could eliminate workarounds the City currently performs each semi-monthly pay period, alternative work schedules that do not align exactly with the proposed pay schedule will require further discussion across departments in the City to provide greater understanding of advantages and disadvantages. Once the budget process is complete, a committee comprised of both administrative and operational departments under the direction of the City Manager, including those with unique alternative work schedules, will create a task force to evaluate the feasibility and practicality of moving the City to a bi-weekly payroll in arrears. The City Attorney's office will be asked to provide guidance on alternative work schedules as they relate to the Fair Labor Standards Act (FLSA) that govern work schedules and overtime calculations for Public Safety and those that operate 24 hours seven days a week.

b. Recommendation 5 – Training

Recommendation - The City should explore methods of increasing the frequency of HRIS system-related training.

Response – We currently offer training to all departmental payroll clerks on a quarterly basis. These training sessions focus on a variety of payroll and HR issues and include HRIS-related topics such as how to process sick leave repayments in Kronos and how to enter performance evaluation scores and address changes in MUNIS. In January 2014, Human Resources began offering monthly Kronos training sessions and providing hands on computer assistance to all supervisors. Monthly training sessions will be offered for approximately 6 months to meet current demand, and then a regular schedule of quarterly Kronos training will be established. We will continue to monitor the demand for training and work to address the needs identified.

5. Actions and Status of Other Cities.

Since our 2014 special audit, some of the surrounding cities took action to change their pay schedules. Norfolk, Virginia Beach and Hampton shifted from semi-monthly to bi-weekly and/or arrears. These changes are highlighted in Exhibit C below.

**Exhibit C
Surrounding Cities Payroll Cycles**

CITY	PAYROLL CYCLE	NOTES
Virginia Beach	Bi-weekly	Full-time employees paid 9 days arrears; Part-time/seasonal paid 16 days arrears
Norfolk	Bi-weekly	Employees paid 9 days arrears
Hampton	Bi-weekly	Full-time employees paid current; Part-time paid 2 weeks arrears
Suffolk	Semi-monthly	All employees paid current
Newport News	Bi-weekly	All employees paid current
Portsmouth	Bi-weekly	All employees paid current

We also surveyed the 200 largest cities in the U.S. to identify their payroll schedules. The overwhelming majority (179 or 89.5%) paid employees on a Bi-weekly Only schedule. Less popular were Weekly/Bi-weekly (4%), Semi-monthly Only (4%), and Semi-monthly/Bi-weekly (1%). None of the Cities had a standalone Weekly payroll, although Dallas paid a portion of its workforce one week and the remainder the next week, resulting in 52 payrolls processed per year. Chesapeake was the lone City with a Semi-monthly/Weekly payroll. One other City besides Chesapeake had both a semi-monthly and weekly payroll (Worcester, MA), but they also had a bi-weekly payroll.

C. Operational Findings

Based on our review, we determined that the City's change to arrears had provided several benefits to the City, including a reduction in payout errors for certain types of payments such as final separation payments and overtime. However, these benefits were largely offset by an increase in historical edits that occurred because 1) the turnaround time provided departments prior to payroll submission was insufficient, and 2) the constant changes in the pay period end date during the week often created situations where employee time records needed historical edits to correct them. For this reason, we are recommending that the City consider changing to a bi-weekly payroll cycle, although it may also consider a weekly payroll cycle as an alternative. We are also recommending ongoing Kronos training for supervisors and payroll clerks.

1. Impact of Change to Arrears

Finding - The City's change to arrears, while generating some anticipated benefits, was also creating some unanticipated burdens. The benefits included a reduced number of certain payroll corrections, such as overtime. The burdens included an increase in the number of historical edits citywide.

Recommendation – The City should consider implementing the 2014 recommendation to adjust the City's pay schedule. Based upon all of the options, the City should consider moving to a bi-weekly payroll, with two weeks arrears. However, the City may also consider a weekly payroll as an alternative to maintain employee morale.

Response – **This Special Audit was initiated in response to a request from the City Manager's Office. Specifically, the Auditor was asked to evaluate the impact of the April 2017 change in the City's semi-monthly payroll processing from a current basis to one that is nine days in arrears. In addition, we asked the Auditor to re-evaluate and assess the potential incremental benefits that may still be available should the City make an additional change from its current predominant payroll cycle (semi-monthly) to either a weekly or a bi-weekly one.**

In retrospect, this request was far more challenging and fraught with considerably more complications than initially anticipated. Given the number and variety of Chesapeake's 7, 15, 21, 24, and 28 day overtime cycles coupled with the multiple "smoothing" protocols currently in place, it may not be realistically possible to isolate and compare the specific impacts of using a semi-monthly payroll cycle as opposed to either a bi-weekly or weekly one. (Note: The full text of the response is included in the body of the audit report.)

2. Kronos Training

Finding – Departmental Users expressed a desire for ongoing Kronos training

Recommendation – The City should develop an ongoing Kronos training program for departmental supervisors and payroll clerks.

Response – Finance has begun the process of creating and piloting a multi-tiered, role based instructional program. Training of the Payroll Clerks through intensive one-on-one sessions will be continued; supervisors and other employees will in turn be trained by Payroll Clerks in a “train the trainer” model. This will reinforce standardizing timekeeping Best Practices throughout the City, with the goal of reducing questions and errors. (Note: The full text of the response is included in the body of the audit report.)

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JANUARY 1, 2017 TO AUGUST 31, 2018

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A. Objectives, Scope, and Methodology

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Methodology

To conduct this audit, we reviewed and evaluated City and Department policies and procedures, and operations documents and reports, both internal and external. We held discussions with Department Heads, Directors, the Payroll Division of Finance, and payroll clerks and fiscal administrators in the top ten largest departments. We reviewed historical corrections, pay cycles, FLSA status, and pay rule information.

In addition, we reviewed the various shifts and schedules and compared them with the semi-monthly pay period schedule. We also reviewed the transition process to arrears; conducted a benchmarking survey of the surrounding cities; analyzed pay schedule information for the 200 largest U.S. cities; and reviewed various departments' employee time detail reports.

B. Performance Information

The City's payroll system was designed to collect accurate and timely records of employee work and provide accurate and timely payment for that work. Prior to June 2017, the City paid either weekly with five days arrears, or semi-monthly in current time. The City included approximately \$3.6 million in the Fiscal Year 2017 budget to transition to arrears for semi-monthly employees. Payroll was paid current until the June 15, 2017 payday. The City then went to nine days arrears for semi-monthly employees. As of February 2018, the City had 52 weekly and 24 semi-monthly payrolls for 3,800 employees: 837 employees were paid weekly and 2,963 were paid semi-monthly.

1. Arrears and Transition to Arrears.

City Council approved the Fiscal Year (FY) 2016-2017 Budget with approximately \$3.6 million dollars to transition semi-monthly employees to nine days arrears. The City Manager also directed that employee information training sessions be held, and training materials were provided.

A timeline and process was developed to facilitate the transition to arrears:

- May 30, 2017 – Semi-monthly employees received their last check paid on a current basis for the period May 16 – May 31;
- June 15, 2017 Semi-monthly employees were paid nine days in arrears with the June 15, 2017 paycheck;
- June 15, 2017 – Pay was unaffected for those employees who signed to accept the one-time pay advance agreement; pay included:
 - June 1 – June 6, 2017 work period;
 - Nine days' arrears payment as a one-time pay advance
- June 15, 2017 – For those who declined signing the pay advance agreement:
 - Paycheck was pay for June 1-6, 2017 only;
 - 34.66 hours for a typical general employee
 - Nine days' arrears payment was not included
- June 30, 2017 – Second arrears pay period was June 7 – June 21 paid on June 30, 2017, a standard semi-monthly paycheck (1/24 of annual salary or 86.6666 hours at the hourly rate).

Semi-monthly employees (the vast majority accepted) signed an agreement where the City would forgive 20% of the advance for each additional year of employment completed by the employee. Separation from the City (whether voluntary or involuntary) would require the former employee to repay the remainder of the advance. Departmental payroll clerks were required to calculate the unpaid balance and report it to Finance.

2. Existing Conditions

a. Fair Labor Standards Act Requirements

Federal overtime provisions were contained in the Fair Labor Standards Act (FLSA). Unless exempt, employees covered by FLSA must receive overtime pay for hours worked over 40 in a workweek at a rate not less than time and one-half their regular rates of pay. FLSA did not require overtime pay for work on Saturdays, Sundays, holidays, or regular days of rest, unless overtime was worked on such days.

Section 13(a)(1) of the FLSA provided an exemption from both minimum wage and overtime pay for employees employed as bona fide executive, administrative, professional and outside sales employees. Section 13(a)(1) and Section 13(a)(17) also exempted certain computer employees. To qualify for exemption, employees generally had to meet certain tests regarding their job duties and be paid on a salary basis at not less than \$455 per week.

FLSA applied on a workweek basis. An employee's workweek was a fixed and regularly recurring period of 168 hours — seven consecutive 24-hour periods. It did not need to coincide with the calendar week, but could begin on any day and at any hour of the day. Different workweeks could be established for different employees or groups of employees. Averaging of hours over two or more weeks was not permitted. Normally, overtime pay earned in a particular workweek must be paid on the regular pay day for the pay period in which the wages were earned.

Section 7(k) of the FLSA provided a partial overtime pay exemption for public employees in fire protection or law enforcement activities. Under section 7(k), when a public employer established a work period between 7 and 28 consecutive days, overtime compensation was not required until the employee satisfied the maximum hours standard under the regulations. The maximum hour standard for fire protection personnel ranged from 53 hours worked in a 7-day period to 212 hours worked in a 28-day period.

b. Shift Schedules

Departments had many shift cycles and several workweek periods, and employees were moved from one shift to another to ensure adequate staffing, minimize overtime, and render services as required. The employee's work time was captured by Kronos time clocks (located at various places), computer login, or by supervisors entering their employee's time because of special events or schedules. Employees were required to review and approve their timecard at least weekly. Supervisors also were required to review the timecard. Department Heads (or their designees) were required to approve their employees' timecard at the end of the pay period.

Some of the various shifts included:

- Public Utilities' water treatment plants operated 24 hours per day. Public Utilities used two-week rotating shifts consisting of a 36 hour work week one week (Department policy allowed the worker to work an additional four hours or take four hours of personal time to have 40 hours in the week) and 48 hours the next week.
- Fire had three rotating shift schedules:
 - One shift group worked Monday and Friday one week;
 - Same shift group worked Sunday and Wednesday the next week;
 - Same shift group worked Tuesday, Thursday, and Saturday the last week.
- Public Works' Waste Management worked four ten-hour days from Tuesday through Friday and occasionally on Saturday.
- Chesapeake Integrated Behavioral Healthcare also provided 24-hour services.
- Police Department sworn officers were partially exempt from the FLSA overtime rules. Their overtime was calculated based on the assigned shift rotation. Some of the shift rotations included:
 - K-9 officers worked 24-day cycles of 144 hours. They worked 16 7.5-hour days plus 24 one-hour days for kennel time.
 - Marine Patrol had a 15-day cycle (85 hours) or a 28-day cycle (160 hours).
 - Most Police officers worked 15-day cycles.
 - Others worked a 28-day cycle (160 hours) during which the officer worked 20 8-hour days.
- Additionally, the Police had other shifts which were not included in the special exemption for FLSA overtime.
 - Dispatchers worked 12-hour shift rotations with their work week beginning Saturday noon.
 - Animal Control Officers work week started Wednesday and ended Tuesday.
- Human Services Juvenile Services had shift work.
- The Sheriff's Department also had shift work.

c. Concerns Expressed by Departments

Some of the concerns noted during interviews were as follows:

- There was insufficient time allotted to departments for review and approval of payroll. Department Heads and payroll clerks sometimes had four hours or less to verify and ensure the accuracy of timecard information.
- Supervisors and employees faced challenges with the shifting end dates during the week for pay periods, which often created errors in time reporting.
- Weekly pay cycle timecard approvals were done on Mondays which often were holidays, and divisions like Waste Management worked 10-hour days, Tuesday through Friday (and some Saturdays); Firefighters might be responding when timecards were due for approval; the firefighter's supervisor might be unavailable which required another supervisor to review and approve despite not having direct personal knowledge of the work; and, inclement weather might prevent an

employee or supervisor from reviewing and approving timecards (there was a Kronos app with limited licenses in use).

- Payroll clerks often worked from home or at a City facility on holidays and weekends when pay cycle closing dates fell on a holiday or weekend.

d. Processing Issues

After Department Heads approved payroll and Finance accepted the data, payroll clerks verified Kronos data against the Munis Time and Detail payroll report. Payroll clerks then submitted a printed copy of this report to Finance/Payroll. Any differences were documented as exceptions.

Exception sheets (both semi-monthly and weekly) were not captured electronically. Payroll clerks sent signed payroll exception sheets either by e-mail or fax. Finance/Payroll printed out and updated the Munis Time Entry module to match the exception sheets. Once payroll was entered into the Earnings and Deductions File Maintenance process, Finance/Payroll verified that the exception sheets emailed/faxed by payroll clerks to Finance mirrored the information in Munis.

All exception sheets were not truly exceptions. For example, one-time pay advances exception sheets were not true exceptions. Payroll clerks submitted them for new hires and terminations. Payroll Clerks were not able to see regular hours they sent to Finance on exception sheets because they were not certain what Munis would calculate as Regular Pay. Munis calculated the pay based on the dates of the hire or termination. Finance/Payroll normally did not have to make any manual adjustments in Munis Time Entry for these items.

There were 83 different pay rules in Kronos/Munis for each employee’s schedule and classification. Additionally, there were some employees who were required to work outside the schedule of the pay rule, and Kronos generated warning notices to supervisors for the exceptions. (COC-City of Chesapeake, OT(L)-Overtime (Leave))

**Exhibit A
Pay Rules (Schedule & Classification)
Employee Counts Greater Than 100**

Pay Rule (for Payout)	Employee Count (# > 100)
COC – Default	331
COC Exempt, Holiday 8,1HR Meal	342
COC Exempt, Holiday 8,30m Meal	130
COC Holiday 8, OT, 30m, 002*	308
COC Holiday 8, OT,1HR, 002*	186

Pay Rule (for Payout)	Employee Count (# > 100)
COC Holiday 8, OTL, 30m, 002*	213
COC Holiday 8, OTL, 1HR, 002*	260
COC-Fire, A Shift, Non-Exempt	102
COC-Fire, B Shift, Non-Exempt	102
COC-Fire, C Shift, Non-Exempt	108
COC-Police 15 Day, Non-Exempt	148
COC-Police 28 Day, Non-Exempt	143
COC-Sheriff- 28 Day, 159.25 hr	182
COC-Sheriff- 28 Day, 160hr	155
COC-Weekly Holiday 8, OT, 30m, 002*	194
COC-Weekly No Holiday, OT, No Meal,002*	100

(*002 denotes employees who punch twice a day and don't need to punch out for lunch)

3. Smoothing

The number of regular hours worked in a year (per FLSA) was 2,080, based upon 40 hours per week X 52 weeks in a year. For years with more than 2,080 hours, FLSA mandated that the hourly rate for 2,080 annual hours worked be used. A work week was 168 hours (7 continuous days). The start day was not mandated, but it was required to be consistent for the employee.

Exhibit B Pay Cycles – Hours Paid (excluding overtime)

Pay Cycle	# pay periods / year	# work weeks / pay	# of hours paid
Weekly	52	1	40
Bi-weekly	26	2	80
Semi-monthly	24	2 to 3	86.6666

The semi-monthly pay cycle required smoothing since regular hours worked did not coincide with the semimonthly payment. Therefore, employee pay was calculated on an annual basis, then divided into 24 payments equal to 86.6666 hours pay (not actual work) during a regular work week. Overtime and other adjustments might or might not appear on the pay date immediately following the regular work week (including the special exemptions for public safety). The City's semi-monthly pay cycle payments did not reflect the actual hours worked during the previous pay period because none of the City's schedules matched the 86.6666 hours paid on the semi-monthly pay schedule.

As noted, no shift or work schedules matched the 86.6666 hours most semi-monthly employees were paid during a typical pay period. Instead, employees usually worked 80, 88, or 96 hours, depending on the calendar. Also, although most employees were assigned Monday through Sunday work periods, multiple shift and work cycles were utilized by the various departments. For example, firefighters worked 21-day shifts with seven 24-hour work periods, totaling 168 hours during the cycle. However, since they were paid for 2,912 hours annually, they were paid for 121.3333 hours in each of the 24 semi-monthly pay periods.

4. Previous Audit – Citywide Kronos/Munis

A special audit Citywide Kronos/Munis was presented to City Council on July 8, 2014. The report included the following recommendations and responses.

a. Recommendation 1 – Payroll Schedule

Recommendation – To reduce workarounds, errors, and adjustments, the City should evaluate whether the time is appropriate to consider 1) moving to arrears, and 2) implementing a bi-weekly payroll schedule.

Moving to arrears will allow supervisors to more comprehensively account for the pay of their employees with fewer required adjustments, resulting in greater payroll accuracy. Moving to a bi-weekly payroll and adjusting the work cycles accordingly would reduce the confusion associated with reconciling the differences between the work cycles and pay cycles, allowing both supervisors and employees to better match hours worked against hours paid. Furthermore, this reconciliation could occur for all the City's existing work schedules.

We also believe that this may be an appropriate time for the City to consider these options. We noted that, on October 22, 2013, Virginia Beach City Council appropriated \$3.45 million dollars to transition from making payroll payments on a current basis to paying them nine days in arrears. This funding was used to provide employees with a regular scheduled paycheck during the arrears transition process. Virginia Beach originally had also implemented their new system with a semi-monthly payroll, but had appropriated these funds to transition to arrears. Virginia Beach was also considering transitioning to bi-weekly payrolls.

Response – Currently, the City prepares 76 payrolls per year. Of those 76 payrolls, 52 (weekly) are paid in arrears (Monday through Sunday paid the following Friday). The remaining 24 (semi-monthly) payrolls are paid currently with the hours earned on and through the 15th and the 30th (31st) of the month. Paying employees simultaneously with hours earned results in some employees receiving paychecks which contain hours for which they have not yet worked.

Although using a bi-weekly payroll in arrears could eliminate workarounds the City currently performs each semi-monthly pay period, alternative work schedules that do not align exactly with the proposed pay schedule will require further discussion across departments in the City to provide greater understanding of advantages and disadvantages. Once the budget process is complete, a committee comprised of both administrative and operational departments under the direction of the City Manager, including those with unique alternative work schedules, will create a task force to evaluate the feasibility and practicality of moving the City to a bi-weekly payroll in arrears. The City Attorney's office will be asked to provide guidance on alternative work schedules as they relate to the Fair Labor Standards Act (FLSA) that govern work schedules and overtime calculations for Public Safety and those that operate 24 hours seven days a week.

b. Recommendation 5 – Training

Recommendation - The City should explore methods of increasing the frequency of HRIS system-related training

The City should analyze the causes of training-related concerns such as the ones identified above (Note: these included timekeeping, flex schedules, and leave requests) and take steps to ensure that these items are addressed periodically, either through updating emails, periodic training, or a combination of the two. The City should also review data submission errors so that the training can be adapted and targeted as the Kronos/MUNIS system undergoes future changes.

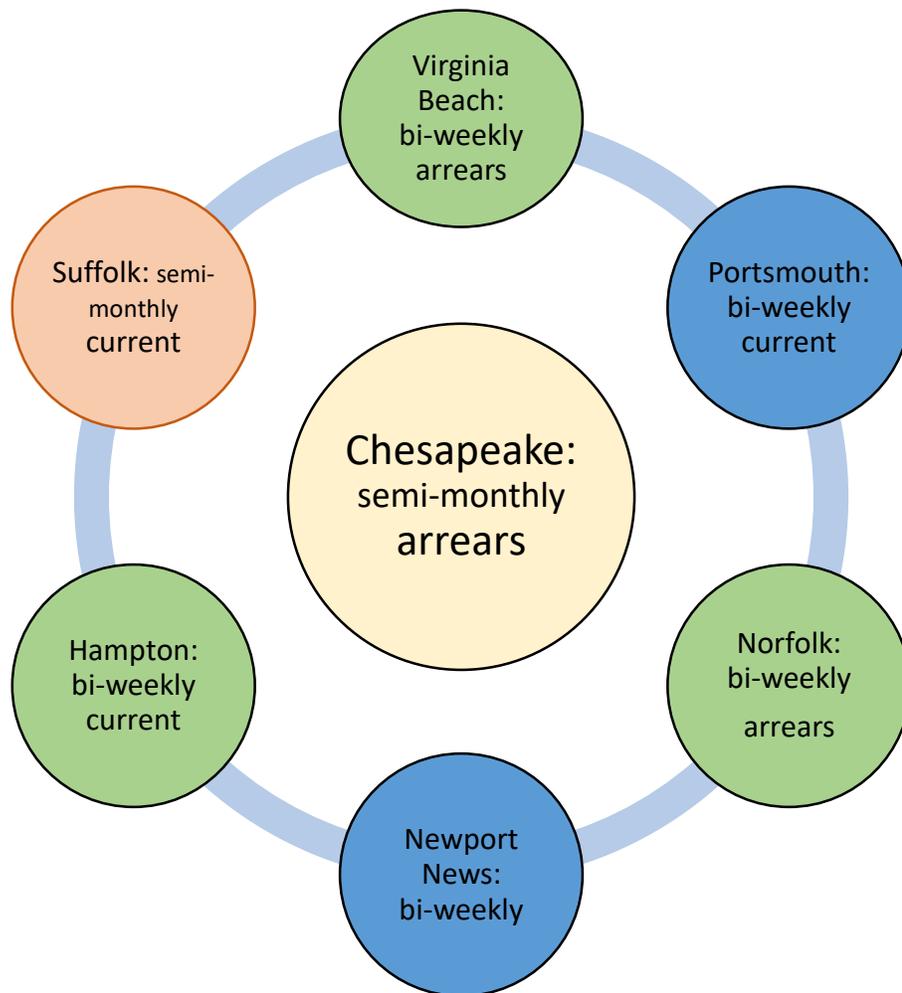
Response – We currently offer training to all departmental payroll clerks on a quarterly basis. These training sessions focus on a variety of payroll and HR issues and include HRIS-related topics such as how to process sick leave repayments in Kronos and how to enter performance evaluation scores and address changes in MUNIS. In January 2014, Human Resources began offering monthly Kronos training sessions and providing hands on computer assistance to all supervisors. Monthly training sessions will be offered for approximately 6 months to meet current demand, and then a regular schedule of quarterly Kronos training will be established. We will continue to monitor the demand for training and work to address the needs identified.

5. Actions and Status of Other Cities.

Since our 2014 special audit, some of the surrounding cities took action to change their pay schedules. Norfolk, Virginia Beach and Hampton shifted from semi-monthly to bi-weekly and/or arrears. These changes are highlighted in Exhibit C below.

**Exhibit C
Surrounding Cities Payroll Cycles**

CITY	PAYROLL CYCLE	NOTES
Virginia Beach	Bi-weekly	Full-time employees paid 9 days arrears; Part-time/seasonal paid 16 days arrears
Norfolk	Bi-weekly	Employees paid 9 days arrears
Hampton	Bi-weekly	Full-time employees paid current; Part-time paid 2 weeks arrears
Suffolk	Semi-monthly	All employees paid current
Newport News	Bi-weekly	All employees paid current
Portsmouth	Bi-weekly	All employees paid current



Pay Cycle for Chesapeake and Surrounding Cities

We also surveyed the 200 largest cities in the U.S. to identify their payroll schedules. The overwhelming majority (179 or 89.5%) paid employees on a Bi-weekly Only schedule. Less popular were Weekly/Bi-weekly (4%), Semi-monthly Only (4%), and Semi-monthly/Bi-weekly (1%). None of the Cities had a standalone Weekly payroll, although Dallas paid a portion of its workforce one week and the remainder the next week, resulting in 52 payrolls processed per year. Chesapeake was the lone City with a Semi-monthly/Weekly payroll. One other City besides Chesapeake had both a semi-monthly and weekly payroll (Worcester, MA), but they also had a bi-weekly payroll. The results are highlighted in Exhibit D below as well as Appendix B of this report.

Exhibit D
Pay Schedule Summary
Top 200 U.S. Cities by Population

Pay Schedule	Number	Percentage
Bi-weekly Only	179	89.50%
Weekly/Bi-weekly	8	4.00%
Semi-monthly Only	8	4.00%
Semi-monthly/Bi-weekly	2	1.00%
Semi-monthly/Weekly	1	0.50%
Weekly/Bi-weekly/Semi-monthly	1	0.50%
Unknown	1	0.50%
Totals	200	100.00%

C. Operational Findings

Based on our review, we determined that the City's change to arrears had provided several benefits to the City, including a reduction in payout errors for certain types of payments such as final separation payments and overtime. However, these benefits were largely offset by an increase in historical edits that occurred because 1) the turnaround time provided departments prior to payroll submission was insufficient, and 2) the constant changes in the pay period end date during the week often created situations where employee time records needed historical edits to correct them. For this reason, we are recommending that the City consider changing to a bi-weekly payroll cycle, although it may also consider a weekly payroll cycle as an alternative. We are also recommending ongoing Kronos training for supervisors and payroll clerks.

1. Impact of Change to Arrears

Finding - The City's change to arrears, while generating some anticipated benefits, was also creating some unanticipated burdens. The benefits included a reduced number of certain payroll corrections, such as overtime. The burdens included an increase in the number of historical edits citywide.

Best practices of the American Payroll Association cited payment in arrears as the most efficient method for payroll processing. Similarly, many private sector, state, and local government entities utilized a bi-weekly payroll cycle. Using a bi-weekly payroll cycle allowed these organizations to better match hours worked with hours paid, because total hours worked (including leave time used) could be more easily reconciled against total hours paid (i.e. 80 hours in a two-week period for most employees).

The City's Finance Department had a nine-step process for the initiation of payroll processing. The final three steps were as follows: (Audit Services has added *italics*)

7. "The Payroll Clerks will either submit their Approved Time & Attendance Report or a *manual exception sheet in excel* to Finance payroll."
8. "Exception Sheets are compared against Munis Time & Attendance and Munis is *updated manually as necessary. Some items listed on an exception sheet require no action on the Munis Payroll Side.* They are simply Payroll Clerks showing caution."
9. "*Once Exception Sheets are keyed in Munis*, we notify the Departmental Payroll Clerk to review their Time & Attendance reports again. If no other adjustments are needed, the Payroll Clerk submits the Approved Time & Attendance Report to Finance/Payroll."

Finance also noted the following related to historical edits:

"During our conversation you mentioned Historical Edits. These are done by a Payroll Clerk in Kronos for multiple reasons most of which do not affect payroll.

Kronos tracks hours and leave accruals. *If a Historical Edit is done to correct leave this information does not need to pull into Munis Payroll.* It is up to the Payroll Clerk to send the information over by clicking a yes or no selection after the edit is entered.”

We noted that the City’s change to arrears had created a number of positive benefits. These benefits included a reduced number of Payroll correction transactions for items such as Regular Overtime. However, from the first quarter of calendar year 2017 to the first quarter of calendar year 2018, the overall number of payroll edits (which were derived from exception reports) increased by 8.81% excluding pay advance repayments, and 25.77% overall. Exhibit E below highlights these changes.

**Exhibit E
Payroll Audit Reports by Transaction Type**

TYPES OF EDITS	# of Edits 1st Qtr 2017	# of Edits 1st Qtr 2018	Percentage Change
Salary	159	165	3.77%
Weekly Regular	12	17	41.67%
Regular OT	50	8	(84.00%)
Semi Annual Leave	21	41	95.24%
Semi Annual FMLA	15	10	(33.33%)
Annual Leave Payout	54	73	35.19%
Semi Sick FMLA	11	11	0.00%
Sick Leave Payout	28	40	42.86%
Semi LWOP	18	13	(27.78%)
Pay Advance Repay	-	77	inf
Short Term Disability 60	4	25	525.00%
Vehicle Usage	11	16	45.45%
Other	71	75	5.63%
TOTAL EDITS	454	571	25.77%
TOTAL w/o PAY ADV REPAYS	454	494	8.81%

After the City’s transition from paying current to nine days arrears, payroll had to be reviewed by the employee, supervisor, department head, and payroll clerk to identify and make adjustments prior to approval and posting to the Finance payroll. Historical edits occurred after the payroll period ended.

Historical edits were edits that were completed after the payroll had been closed out by Finance to correct errors in employee leave, transactions, or pay. We noted that, subsequent to the implementation of arrears, the number of historical edits increased by 46.82% excluding inclement weather adjustments and 63.71% overall from the first quarter of 2017 to the first quarter of 2018. It is highlighted in Exhibit F below.

Exhibit F
Historical Edits Processed by Departments
1st Quarter 2017 vs. First Quarter 2018

Department	Full Count			w/o Inclement Weather		
	2017 Count	2018 Count	Percent Change	2017 Count	2018 Count	Percent Change
Airport Authority	-	20	100.00%	-	20	100.00%
Budget	-	4	100.00%	-	4	100.00%
Bureau of Community Programs	1	1	0.00%	1	1	0.00%
Call Center	1	4	300.00%	1	4	300.00%
Central Fleet Management	7	62	785.71%	7	62	785.71%
Chesapeake Integrated Behavioral Healthcare	133	576	333.08%	130	526	304.62%
Circuit Court Clerk	25	-	(100.00%)	21	-	(100.00%)
City Attorney	-	30	100.00%	-	30	100.00%
City Clerk	-	2	100.00%	-	2	100.00%
City Manager	6	13	116.67%	6	13	116.67%
Commissioner of Revenue	2	-	(100.00%)	2	-	(100.00%)
Commonwealth's Attorney	-	13	100.00%	-	13	100.00%
Development and Permits	26	75	188.46%	26	62	138.46%
Economic Development	235	4	(98.30%)	234	4	(98.29%)
Finance	54	11	(79.63%)	54	11	(79.63%)
Fire	384	525	36.72%	299	331	10.70%
Health	4	1	(75.00%)	4	1	(75.00%)
Human Resources	40	1	(97.50%)	40	1	(97.50%)
Human Svcs - Ches Juvenile Services	114	252	121.05%	114	170	49.12%
Human Svcs - Community Corrections	56	5	(91.07%)	56	5	(91.07%)
Human Svcs - Interagency	-	8	100.00%	-	8	100.00%
Human Svcs - Social Service	126	520	312.70%	126	516	309.52%
Information Technology	3	79	2533.33%	3	75	2400.00%
Library	45	138	206.67%	41	99	141.46%
Parks, Recreation and Tourism - Conventions-Tourism	20	-	(100.00%)	20	-	(100.00%)
Parks, Recreation and Tourism	204	147	(27.94%)	197	128	(35.03%)
Planning	-	2	100.00%	-	2	100.00%
Police	749	1,090	45.53%	595	961	61.51%
Public Communications	13	13	0.00%	13	13	0.00%
Public Utilities	75	329	338.67%	75	290	286.67%
Public Works	460	804	74.78%	458	628	37.12%
Purchasing	-	22	100.00%	-	22	100.00%
Real Estate Assessor	-	9	100.00%	-	7	100.00%
Sheriff	416	475	14.18%	416	304	(26.92%)
Treasurer	-	2	100.00%	-	2	100.00%
Totals	3,199	5,237	63.71%	2,939	4,315	46.82%

The largest number of historical edits resulted from inclement weather. However, there were sizable numbers other adjustments including Additional Regular Leave, Regular Leave, and Paid Time Off. They are shown in Exhibit G below. As it indicates, while historical edits (minus inclement weather) were virtually unchanged on the weekly payroll, they jumped 59.17% in total from the 2017 1st quarter to the 2018 1st quarter for the semi-monthly payroll.

Exhibit G
Pay Codes for Historical Edits Processed by Departments
1st Quarter 2017 vs. First Quarter 2018

PAY CODE	2017 WEEKLY	2017 SEMI MONTHLY	2018 WEEKLY	2018 SEMI MONTHLY	Weekly Percent Change	Semi-Monthly Percent Change
Additional Regular	8	59	64	338	700.00%	472.88%
Annual	65	680	56	690	(13.85%)	1.47%
Annual Ext	31	73	15	102	(51.61%)	39.73%
FMLA-Annual	19	116	38	56	100.00%	(51.72%)
FMLA-LWOP	112	110	60	128	(46.43%)	16.36%
FMLA-Sick	24	234	23	133	(4.17%)	(43.16%)
Holiday	33	30	19	84	(42.42%)	180.00%
Inclement Weather	49	211	260	662	430.61%	213.74%
LWOP	119	85	60	104	(49.58%)	22.35%
Overtime Sworn		68		107		57.35%
Paid Time Off-PTO	21	55	34	215	61.90%	290.91%
Regular	34	281	99	763	191.18%	171.53%
Sick	38	221	31	318	(18.42%)	43.89%
Other Transactions	108	315	112	666	3.70%	111.43%
Grand Total	661	2538	871	4366	31.77%	72.03%
Minus Inclement Weather	612	2327	611	3704	(0.16%)	59.17%

This situation had several causes. The primary cause appeared to be the short turnaround time between the end of the payroll period and the time payroll had to be submitted to Finance. For example, under arrears, payroll periods for semi-monthly employees ended on the 6th and 21st, respectively. Payroll was due in Finance anywhere from 10am to noon the following day. Therefore, departments only had two to four hours to process their payrolls. It took some larger departments longer than that. For example, Development and Permits had created an analysis of how long it took to obtain the required departmental approvals. Their analysis indicated that it took at least 6.5 hours.

Exhibit H
Department Approval Time Required – Development and Permits

Kronos Approval Process	Approximate Time	Completion Date	Completion Time
I. Employee			
a. Sign off last day of pay period	1 minute	22-Jun	5:00
b. Weekly Review & Approval	5 minutes	23-Jun	8:05
II. Supervisors			
	Varies on # of Employees (using average of 5 employees)		
Pay Period Sign Off	30 minutes	23-Jun	8:35
III. Payroll Clerk			
Pay Period Sign Off (approx. 85 employees)	3.5 hours	23-Jun	12:05
IV. Department Head/Payroll Manager			
Pay Period Sign Off (approx. 85 employees)	2.5 hours	23-Jun	2:35
Total Processing Time	6.5 hours approximately		
* Non exempt employees require more review because over time hours lead to adjustments in any leave usage within the same week			

Another cause was the end dates for the pay cycles. Because the pay cycles ended each month on the 6th and 21st, the ending date constantly shifted within the weeks. The shifting dates made it difficult for departments to develop a schedule around the signoffs, and they were often missed. Additionally, since the date was often on a Friday or weekend, and payroll information had to be submitted to Finance by the following Monday morning, payroll clerks in some of the larger departments, such as Public Works and Fire, often had to come in on weekends to process the time. Furthermore, if some unusual event happened on the last day of the cycle, such as a fire, there often wasn't time to make required adjustments, and historical edits resulted. Additionally, not all departments and divisions started their FLSA-required seven consecutive workdays at the same day and time. This difference affected the adjustments and historical edits because supervisors and department heads did not always account for the differences between their work schedules and the pay cycle end dates accurately.

Exhibit I
2018 Semi-monthly Pay Period Schedule
(w/added days of week for required activities)

Cycle	Pay Period Begin Date	Pay Period End Date	End Date Day of Week	Semi Monthly Time Approved by Dept Head 12:00 Noon	Dept Applvl Day of Week	Semi Monthly Kronos Finance Sign-off by 12:30 PM	Fin. Sign-off Day of Week	Semi Monthly Kronos Hrs Upload to MUNIS by 1:00 PM	Check Date
Semi Monthly**	12/22/2017	1/06/2018	Saturday	5PM - 1/5/2018	Friday	1/07/2018	Sunday	1/07/2018	1/11/2018
Semi Monthly	1/07/2018	1/21/2018	Sunday	1/22/2018	Monday	1/22/2018	Monday	1/22/2018	1/30/2018
Semi Monthly	1/22/2018	2/06/2018	Tuesday	2/07/2018	Wednesday	2/07/2018	Wednesday	2/07/2018	2/15/2018
Semi Monthly	2/07/2018	2/21/2018	Wednesday	2/22/2018	Thursday	2/22/2018	Thursday	2/22/2018	2/28/2018
Semi Monthly	2/22/2018	3/06/2018	Tuesday	3/07/2018	Wednesday	3/07/2018	Wednesday	3/07/2018	3/15/2018
Semi Monthly	3/07/2018	3/21/2018	Wednesday	3/22/2018	Thursday	3/22/2018	Thursday	3/22/2018	3/30/2018
Semi Monthly**	3/22/2018	4/06/2018	Friday	5PM - 4/6/2018	Friday	4/08/2018	Sunday	4/08/2018	4/13/2018
Semi Monthly***	4/07/2018	4/21/2018	Saturday	9AM -04/23/18	Monday	9AM -04/23/18	Monday	9AM -04/23/18	4/30/2018
Semi Monthly	4/22/2018	5/06/2018	Sunday	5/07/2018	Monday	5/07/2018	Monday	5/07/2018	5/15/2018
Semi Monthly	5/07/2018	5/21/2018	Monday	5/22/2018	Tuesday	5/22/2018	Tuesday	5/22/2018	5/30/2018
Semi Monthly	5/22/2018	6/06/2018	Wednesday	6/07/2018	Thursday	6/07/2018	Thursday	6/07/2018	6/15/2018
Semi Monthly	6/07/2018	6/21/2018	Thursday	6/22/2018	Friday	6/22/2018	Friday	6/22/2018	6/29/2018
Semi Monthly**	6/22/2018	7/06/2018	Friday	5PM - 7/6/2018	Friday	7/08/2018	Sunday	7/08/2018	7/13/2018
Semi Monthly***	7/07/2018	7/21/2018	Saturday	9AM -07/23/18	Monday	9AM -07/23/18	Monday	9AM -07/23/18	7/30/2018
Semi Monthly	7/22/2018	8/06/2018	Monday	8/07/2018	Tuesday	8/07/2018	Tuesday	8/07/2018	8/15/2018
Semi Monthly	8/07/2018	8/21/2018	Tuesday	8/22/2018	Wednesday	8/22/2018	Wednesday	8/22/2018	8/30/2018
Semi Monthly	8/22/2018	9/06/2018	Thursday	9/07/2018	Friday	9/07/2018	Friday	9/07/2018	9/14/2018
Semi Monthly**	9/07/2018	9/21/2018	Friday	5PM - 9/21/2018	Friday	9/23/2018	Sunday	9/23/2018	9/28/2018
Semi Monthly**	9/22/2018	10/06/2018	Saturday	5PM - 10/5/2018	Friday	10/07/2018	Sunday	10/07/2018	10/15/2018
Semi Monthly	10/07/2018	10/21/2018	Sunday	10/22/2018	Monday	10/22/2018	Monday	10/22/2018	10/30/2018
Semi Monthly**	10/22/2018	11/06/2018	Tuesday	11/07/2018	Wednesday	11/07/2018	Wednesday	11/07/2018	11/15/2018
Semi Monthly**	11/07/2018	11/21/2018	Wednesday	5PM - 11/21/2018	Wednesday	11/25/2018	Sunday	11/25/2018	11/30/2018
Semi Monthly	11/22/2018	12/06/2018	Thursday	12/07/2018	Friday	12/07/2018	Friday	12/07/2018	12/14/2018
Semi Monthly**	12/07/2018	12/21/2018	Friday	5PM - 12/21/2018	Friday	12/23/2018	Sunday	12/23/2018	12/28/2018

**** Early Processing due to holiday(s) during the pay period - timecards must be approved by end of day****

*****Early Approvals due to limited payroll processing days during the pay period - timecards must be approved by 9:00 AM*****

Revised 12/28/2016 - Source - Finance Department

While the City has experienced some benefits from to arrears in the form of reduced payment errors on certain transactions, these benefits have been offset by an increase in the number of historical edits processed by the departments. While many of these transactions do not have an immediate impact on payroll accuracy, they are nonetheless important in ensuring that employee's time and attendance records are accurate. If this situation is not addressed, the City will likely continue to undergo a large number of these historical edits, along with the time and attendance accuracy challenges they represent.

Recommendation – The City should consider implementing the 2014 recommendation to adjust the City’s pay schedule. Based upon all of the options, the City should consider moving to a bi-weekly payroll, with two weeks arrears. However, the City may also consider a weekly payroll as an alternative to maintain employee morale.

We evaluated three potential payroll scheduling options for the City:

- Maintain the both the semi-monthly and weekly payrolls
- Move all City employees to a weekly payroll
- Move all City employees to a bi-weekly payroll

Maintaining the semi-monthly and weekly payrolls would likely continue the same situation. While the City would likely continue to experience the benefits of arrears such as additional Finance processing time and reduced payroll exceptions in some cases, the City would continue to process 76 payrolls annually. Because of the constant changes in in the cutoff date during the week and the short turnaround time between the payroll period ending and the time the payroll had to be submitted to Finance, the increase that the City has experienced in historical edits since the change to arrears would likely continue. In addition, the need to process the payroll by the due date would likely result in continued overuse of manual processes.

Moving all City employees to a weekly payroll (with a week in arrears) would have the advantage of putting everyone in the City on the same payroll schedule and eliminate the issue with the shifting cutoff dates during the week. However, there would be some disadvantages. The reduced turnaround time would also create challenges since many of the City’s larger departments (Police, Fire, Sheriff, CIBH, Public Utilities) had rotating schedules that extended beyond one week. The difference between the schedules and the weekly cutoff would likely create more historical edits, at least initially. The reduced processing time and the increased number of staff on the weekly payroll would also likely result in additional historical edits and potential payroll exceptions. Finally, such a move would require a significant financial adjustment for some employees. A semi-monthly employee earning \$48,000 per year would go from receiving \$2,000 on the 15th and 30th to \$923.08 each week. There would also likely be reprogramming costs for Kronos and Munis. However, given the resistance the City has experienced in the past to implementing a bi-weekly payroll, a weekly payroll may be a viable alternative. Such an option would optimize the matching of employee hours worked with hours paid.

Moving all City employees to a bi-weekly payroll (with two weeks in arrears) would have the same advantages as weekly payrolls, putting everyone in the City on the same payroll schedule and eliminating the issue with the shifting cutoff dates during the week. It would also have the additional advantage of increasing turnaround time for both the City Departments and Finance. Also, many of the City’s larger departments (Fire, Sheriff, CIBH, Public Utilities) had rotating schedules that could be correlated against bi-weekly payrolls. The increased processing time would also likely result in fewer historical edits

and payroll exceptions. There would, however, still be some financial adjustment for some employees. A semimonthly employee earning \$48,000 per year would go from receiving \$2,000 on the 15th and 30th to \$1,846.15 every two weeks. Additionally, while there would be at least two months every year where employees were paid three times there would usually be 10 months where they were only paid twice. Also, as with weekly, there would be costs associated with reprogramming Kronos and Munis to their “normal” function.

Finally, although some public service employees had shift schedules lasting longer than one or two weeks, all but the 15-day cycle shift could be matched to both weekly and bi-weekly payroll schedules. Management should evaluate the 15-day shift cycles.

We believe that the bi-weekly option remains the best option for the City, consistent with the consultant’s recommendation from 2007 and our previous audit recommendation in 2014. However, we also recognize that the City has been heretofore unable to implement this recommendation, due at least in part to employee resistance to the lower payout amount in most months. Therefore, as part of any implementation, the City may wish to consider some of the following items:

- Provide a one-time salary increment for employees – One department suggested this as a means of easing any burdens associated with the somewhat reduced individual check amounts associated with bi-weekly payrolls for lower paid staff.
- Provide an advance similar to the advance provide to implement arrears – in 2017, most semimonthly employees received an advance equivalent to 60 percent of their regular semimonthly salary. We would suggest providing an additional advance for the remaining 40 percent for semi-monthly employees.
- Provide an advance of up to nine days for weekly employees. The exact number of days would depend upon the payout dates selected by the City.
- Allow employees to use leave time accrued (annual, sick, or paid time off) to purchase the advance so that it did not have to be repaid upon separation. Previously, City employees repaid advances with each year of City service reducing the repayment amount by 20 percent until it was repaid in full after five years.
- Consider increasing the maximum leave payouts for annual leave, sick leave and paid time off in conjunction with the transition and any associated advances. Such an action might be seen as adding to the benefits employees receive and, by encouraging more judicious use of leave, might help to reduce the number of historical edits.

While these challenges and costs would initially be significant, we believe the benefits associated with standardizing the pay cycles and matching employee pay with the hours they actually work would justify the costs. Furthermore, the standardization with reduce the number of historical edits processed, thereby increasing the accuracy of individual time and attendance.

The neighboring cities of Norfolk and Virginia Beach have switched to bi-weekly payrolls in the last several years. We believe Chesapeake should consider doing the same. However, we do recognize that the historical opposition of the City's workforce to a bi-weekly payroll may be difficult to overcome. In that instance we believe the weekly payroll may be a viable alternative, since it provides the best matching of hours worked and hours paid.

Response – This Special Audit was initiated in response to a request from the City Manager's Office. Specifically, the Auditor was asked to evaluate the impact of the April 2017 change in the City's semi-monthly payroll processing from a current basis to one that is nine days in arrears. In addition, we asked the Auditor to re-evaluate and assess the potential incremental benefits that may still be available should the City make an additional change from its current predominant payroll cycle (semi-monthly) to either a weekly or a bi-weekly one.

In retrospect, this request was far more challenging and fraught with considerably more complications than initially anticipated. Given the number and variety of Chesapeake's 7, 15, 21, 24, and 28 day overtime cycles coupled with the multiple "smoothing" protocols currently in place, it may not be realistically possible to isolate and compare the specific impacts of using a semi-monthly payroll cycle as opposed to either a bi-weekly or weekly one.

As the Audit Report notes, the City's change to arrears has provided several benefits to the City, including a reduction in paycheck errors for certain types of payments. The other significant improvement is that employees, department payroll clerks, supervisors and department heads are now signing off on the actual hours worked during the pay cycle, rather than blindly approving the number of hours an employee was scheduled to work and then adjusting these hours to reflect the actual time worked, after the fact. These successes match the stated goals for the transition to arrears.

However, the Audit report also notes a dramatic increase in historical edits during the first three months of 2018 as compared to 2017 and concludes this occurred "because 1) the turnaround time provided departments prior to submission was insufficient, and 2) the constant changes in the pay period end date during the week often created situations where employee time records needed historical edits to correct them". Yet, while these observations and conclusions undoubtedly contributed to the increased edit rates observed, we believe they paint an incomplete picture of the causes involved.

Since the Audit, the Finance Department has delved deeper into the historical edits identified in the Audit Report as well as other payroll exception reports. They discovered that the increased historical edits occurred

disproportionally in January, 2018 and were likely attributable to an unusual pattern of City closures due to inclement weather interspersed with scheduled holidays that resulted in dramatically limiting the time available for payroll processing tasks to be completed. The Finance Department also found meaningful reductions in other payroll exceptions rates and historical edit processing times that had not been sampled in the Audit. This detailed analysis will be provided to the Auditor under separate cover for his reference. Nonetheless, the Finance Department and I both concur that historical edits have not declined following the transition to arrears payroll processing. Edits related to absence management will continue to occur no matter what payroll cycle the City uses. However, we agree that the number of historical edits could be reduced if the City eliminated its use of a semi-monthly payroll cycle with equalized salary payments.

The number of working days differ significantly from month to month. There is even a difference in working days between individual employees, based on which days of the week they work. Yet, for purposes of consistency, the City currently pays most of our employees for the equivalent of eighty-six and two-thirds hours in each of twenty-four semi-monthly payroll periods. This means that employees seldom get paid for the exact number of hours they work in a given pay period. As a result of this “smoothing” process and the requirement to reconcile the actual hours worked with the “smoothed” hours each employee was paid for, historical edits are inevitable. Moving to either a bi-weekly or weekly payroll cycle will undoubtedly eliminate this specific type of “smoothing” error. However, it will not eliminate errors for those employees whose time is “smoothed” for other reasons.

Therefore, it is important to note that the potential benefits in moving from a semi-monthly payroll cycle to a bi-weekly or weekly one will still be limited as long as the City utilizes a variety of overtime cycles and separately “smooths” the pay of many Fire, Police and Sheriff Department employees to accommodate their unique work schedules. While the Audit Report notes the inconsistency between these unique cycles and a semi-monthly payroll, it fails to note that changing to a bi-weekly or weekly pay cycle would not eliminate this inconsistency for as many as 44% of the employees involved whose paid time would still need to be “smoothed”.

We agree that the City would benefit from changing to a bi-weekly or weekly pay period. Further, despite the bi-weekly payroll cycle being the most common pay period in use by public and private employers, a weekly payroll cycle presents cash flow advantages for City employees. The weekly cycle is a better match with some of the City’s existing overtime cycles than a bi-weekly payroll and it can better integrate with the existing weekly payroll cycle the City employs for part-time and other designated employees. However, we cannot fully evaluate the

magnitude of these benefits because we cannot effectively isolate edits that may be driven by the semi-monthly pay cycle from those due to various other “smoothing” activities or unrelated issues.

If the City chooses to switch to a bi-weekly or weekly payroll cycle, we believe the City should also re-evaluate its current overtime cycles and other specialized payroll processing practices to further minimize the variety and number of routine adjustments that must be made. Finally, the financial impact to employees and the City’s costs of transition should be carefully assessed. For instance, the 14 day arrears period suggested by the Audit Report could present significant financial challenges for employees and/or the City. Still, such a change can be implemented with no adverse impact on our employees. This would present some additional cost to the City but these costs can be effectively managed with careful planning and appropriate timing.

2. Kronos Training

Finding – Departmental Users expressed a desire for ongoing Kronos training

According to the *Kronos Education Training Services* brochure (2017):

“By focusing on employee awareness and engagement, you can increase the adoption of new technology, business processes, and policies — and take a significant step toward making your implementation successful and helping your organization achieve its desired business and return-on-investment goals.”

In discussing Kronos training issues with the departments, we noted that the City had not yet established an ongoing Kronos training program for supervisors or payroll clerks. Several departments indicated that they could benefit from such training. Audit Services also noted instances where it appeared that departments might benefit from such training. For example, as Finance noted in their memorandum to us

If a Historical Edit is done to correct leave this information does not need to pull into Munis Payroll. It is up to the Payroll Clerk to send the information over by clicking a yes or no selection after the edit is entered.”

We noted several instances where Payroll Clerks in different departments appeared to be treating similar transactions differently. For example, a clerk in one department might complete a transaction substituting overtime for regular time and click yes, while a clerk in another department might have the same transaction and click no.

This situation occurred because of a lack of ongoing Kronos training for departmental supervisors and payroll clerks. If it is not addressed, payroll errors may result.

Recommendation – The City should develop an ongoing Kronos training program for departmental supervisors and payroll clerks.

The Finance Department was in the process of developing a training program for the City that had three tiers: one for new employees, one for departmental supervisors, and one for departmental payroll clerks. We suggest that the City move forward this training, not only for the knowledge provided by the training itself, but also to help improve the accuracy of both the City's timekeeping and the payroll.

Response – Finance has begun the process of creating and piloting a multi-tiered, role based instructional program. Training of the Payroll Clerks through intensive one-on-one sessions will be continued; supervisors and other employees will in turn be trained by Payroll Clerks in a “train the trainer” model. This will reinforce standardizing timekeeping Best Practices throughout the City, with the goal of reducing questions and errors.

The Kronos Business Analyst in Finance has and will continue to maintain an open door approach to assisting supervisors and payroll clerks with Kronos timekeeping and payroll processes, ensuring that anyone who requests help receives timely assistance to prevent errors from being made. This open door practice has led to the Kronos Business Analyst going directly to the department to give hands on training and troubleshooting of technical issues. These “house calls” have been very effective in improving Kronos accuracy from supervisors and payroll clerks alike.

All of the above training methods have been incorporated into the City's existing traditional methods. The City continues to maintain Job Aids on the CityPoint Intranet site and training for payroll clerks and Human Resources liaisons three to four times a year at the HR/Payroll Liaison meetings. The payroll team page on CityPoint contains a vast amount of information and is continuing to be updated.

APPENDIX A

RESPONSE FROM CITY MANAGER'S OFFICE

Response to the City Payroll Cycles – Special Audit

Recommendation - The City should consider implementing the 2014 recommendation to adjust the City's pay schedule. Based upon all of the options, the City should consider moving to a biweekly payroll, with two weeks arrears. However, the City may also consider a weekly payroll as an alternative to maintain employee morale.

Response –

This Special Audit was initiated in response to a request from the City Manager's Office. Specifically, the Auditor was asked to evaluate the impact of the April 2017 change in the City's semi-monthly payroll processing from a current basis to one that is nine days in arrears. In addition, we asked the Auditor to re-evaluate and assess the potential incremental benefits that may still be available should the City make an additional change from its current predominant payroll cycle (semi-monthly) to either a weekly or a bi-weekly one.

In retrospect, this request was far more challenging and fraught with considerably more complications than initially anticipated. Given the number and variety of Chesapeake's 7, 15, 21, 24, and 28 day overtime cycles coupled with the multiple "smoothing" protocols currently in place, it may not be realistically possible to isolate and compare the specific impacts of using a semi-monthly payroll cycle as opposed to either a bi-weekly or weekly one.

As the Audit Report notes, the City's change to arrears has provided several benefits to the City, including a reduction in paycheck errors for certain types of payments. The other significant improvement is that employees, department payroll clerks, supervisors and department heads are now signing off on the actual hours worked during the pay cycle, rather than blindly approving the number of hours an employee was scheduled to work and then adjusting these hours to reflect the actual time worked, after the fact. These successes match the stated goals for the transition to arrears.

However, the Audit report also notes a dramatic increase in historical edits during the first three months of 2018 as compared to 2017 and concludes this occurred "because 1) the turnaround time provided departments prior to submission was insufficient, and 2) the constant changes in the pay period end date during the week often created situations where employee time records needed historical edits to correct them". Yet, while these observations and conclusions undoubtedly contributed to the increased edit rates observed, we believe they paint an incomplete picture of the causes involved.

Since the Audit, the Finance Department has delved deeper into the historical edits identified in the Audit Report as well as other payroll exception reports. They discovered that the increased historical edits occurred disproportionately in January, 2018 and were likely attributable to an unusual pattern of City closures due to inclement weather interspersed with scheduled holidays that resulted in dramatically limiting the time available for payroll processing tasks to be completed. The Finance Department also found meaningful reductions in other payroll exceptions rates and historical edit processing times that had not been sampled in the Audit. This detailed analysis will be provided to the Auditor under separate cover for his reference. Nonetheless, the Finance Department and I both concur that historical edits have not declined following the transition to arrears payroll processing. Edits related to absence management will continue to occur no matter what payroll cycle the City uses.

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We agree that the City would benefit from changing to a bi-weekly or weekly pay period. Further, despite the bi-weekly payroll cycle being the most common pay period in use by public and private employers, a weekly payroll cycle presents cash flow advantages for City employees. The weekly cycle is a better match with some of the City’s existing overtime cycles than a bi-weekly payroll and it can better integrate with the existing weekly payroll cycle the City employs for part-time and other designated employees. However, we cannot fully evaluate the magnitude of these benefits because we cannot effectively isolate edits that may be driven by the semi-monthly pay cycle from those due to various other “smoothing” activities or unrelated issues.

If the City chooses to switch to a bi-weekly or weekly payroll cycle, we believe the City should also re-evaluate its current overtime cycles and other specialized payroll processing practices to further minimize the variety and number of routine adjustments that must be made. Finally, the financial impact to employees and the City’s costs of transition should be carefully assessed. For instance, the 14 day arrears period suggested by the Audit Report could present significant financial challenges for employees and/or the City. Still, such a change can be implemented with no adverse impact on our employees. This would present some additional cost to the City but these costs can be effectively managed with careful planning and appropriate timing.

Recommendation – The City should develop an ongoing Kronos training program for department supervisors and payroll clerks.

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APPENDIX B

PAY FREQUENCY

TOP 200 CITIES BY POPULATION

APPENDIX B
Pay Frequency
Top 200 Cities by Population

Rank	Locality	Population Estimate	Pay Frequency
1	New York city, New York	8,622,698	Bi-Weekly
2	Los Angeles city, California	3,999,759	Bi-Weekly
3	Chicago city, Illinois	2,716,450	Bi-Weekly
4	Houston city, Texas	2,312,717	Bi-Weekly
5	Phoenix city, Arizona	1,626,078	Bi-Weekly
6	Philadelphia city, Pennsylvania	1,580,863	Bi-Weekly
7	San Antonio city, Texas	1,511,946	Semi-Monthly/Bi-Weekly
8	San Diego city, California	1,419,516	Bi-Weekly
9	Dallas city, Texas	1,341,075	Weekly
10	San Jose city, California	1,035,317	Semi-Monthly
11	Austin city, Texas	950,715	Bi-Weekly
12	Jacksonville city, Florida	892,062	Weekly/Bi-Weekly
13	San Francisco city, California	884,363	Bi-Weekly
14	Columbus city, Ohio	879,170	Bi-Weekly
15	Fort Worth city, Texas	874,168	Bi-Weekly
16	Indianapolis city (balance), Indiana	863,002	Weekly/Bi-Weekly
17	Charlotte city, North Carolina	859,035	Bi-Weekly
18	Seattle city, Washington	724,745	Bi-Weekly
19	Denver city, Colorado	704,621	Bi-Weekly
20	Washington city, District of Columbia	693,972	Bi-Weekly
21	Boston city, Massachusetts	685,094	Weekly/Bi-Weekly
22	El Paso city, Texas	683,577	Bi-Weekly
23	Detroit city, Michigan	673,104	Bi-Weekly
24	Nashville-Davidson, Tennessee	667,560	Bi-Weekly
25	Memphis city, Tennessee	652,236	Bi-Weekly
26	Portland city, Oregon	647,805	Bi-Weekly
27	Oklahoma City city, Oklahoma	643,648	Bi-Weekly
28	Las Vegas city, Nevada	641,676	Bi-Weekly
29	Louisville/Jefferson County, Kentucky	621,349	Bi-Weekly
30	Baltimore city, Maryland	611,648	Bi-Weekly
31	Milwaukee city, Wisconsin	595,351	Bi-Weekly
32	Albuquerque city, New Mexico	558,545	Bi-Weekly
33	Tucson city, Arizona	535,677	Bi-Weekly
34	Fresno city, California	527,438	Bi-Weekly
35	Sacramento city, California	501,901	Bi-Weekly
36	Mesa city, Arizona	496,401	Bi-Weekly
37	Kansas City city, Missouri	488,943	Bi-Weekly
38	Atlanta city, Georgia	486,290	Bi-Weekly
39	Long Beach city, California	469,450	Bi-Weekly
40	Omaha city, Nebraska	466,893	Bi-Weekly
41	Raleigh city, North Carolina	464,758	Bi-Weekly
42	Colorado Springs city, Colorado	464,474	Bi-Weekly
43	Miami city, Florida	463,347	Bi-Weekly
44	Virginia Beach city, Virginia	450,435	Bi-Weekly
45	Oakland city, California	425,195	Bi-Weekly
46	Minneapolis city, Minnesota	422,331	Bi-Weekly
47	Tulsa city, Oklahoma	401,800	Bi-Weekly
48	Arlington city, Texas	396,394	Bi-Weekly
49	New Orleans city, Louisiana	393,292	Bi-Weekly
50	Wichita city, Kansas	390,591	Bi-Weekly

Summary: Bi-Weekly: 178 Weekly/ Bi-Weekly: 8 Semi-Monthly: 8 Semi-Monthly/Bi-Weekly: 2
 Unknown: 1 Weekly/Semi-Monthly: 1 Weekly: 1 Weekly/Bi-Weekly/Semi-Monthly: 1

APPENDIX B
Pay Frequency
Top 200 Cities by Population

Rank	Locality	Population Estimate	Pay Frequency
51	Cleveland city, Ohio	385,525	Bi-Weekly
52	Tampa city, Florida	385,430	Bi-Weekly
53	Bakersfield city, California	380,874	Bi-Weekly
54	Aurora city, Colorado	366,623	Bi-Weekly
55	Anaheim city, California	352,497	Bi-Weekly
56	Urban Honolulu CDP, Hawaii	350,395	Semi-Monthly
57	Santa Ana city, California	334,136	Semi-Monthly
58	Riverside city, California	327,728	Bi-Weekly
59	Corpus Christi city, Texas	325,605	Bi-Weekly
60	Lexington-Fayette urban county, Kentucky	321,959	Bi-Weekly
61	Stockton city, California	310,496	Semi-Monthly
62	St. Louis city, Missouri	308,626	Bi-Weekly
63	St. Paul city, Minnesota	306,621	Bi-Weekly
64	Henderson city, Nevada	302,539	Bi-Weekly
65	Pittsburgh city, Pennsylvania	302,407	Bi-Weekly
66	Cincinnati city, Ohio	301,301	Bi-Weekly
67	Anchorage municipality, Alaska	294,356	Bi-Weekly
68	Greensboro city, North Carolina	290,222	Semi-Monthly
69	Plano city, Texas	286,143	Bi-Weekly
70	Newark city, New Jersey	285,154	Bi-Weekly
71	Lincoln city, Nebraska	284,736	Bi-Weekly
72	Orlando city, Florida	280,257	Weekly/Bi-Weekly
73	Irvine city, California	277,453	Bi-Weekly
74	Toledo city, Ohio	276,491	Bi-Weekly
75	Jersey City city, New Jersey	270,753	Bi-Weekly
76	Chula Vista city, California	270,471	Bi-Weekly
77	Durham city, North Carolina	267,743	Bi-Weekly
78	Fort Wayne city, Indiana	265,904	Bi-Weekly
79	St. Petersburg city, Florida	263,255	Bi-Weekly
80	Laredo city, Texas	260,654	Bi-Weekly
81	Buffalo city, New York	258,612	Bi-Weekly
82	Madison city, Wisconsin	255,214	Bi-Weekly
83	Lubbock city, Texas	253,888	Bi-Weekly
84	Chandler city, Arizona	253,458	Bi-Weekly
85	Scottsdale city, Arizona	249,950	Bi-Weekly
86	Reno city, Nevada	248,853	Bi-Weekly
87	Glendale city, Arizona	246,709	Bi-Weekly
88	Norfolk city, Virginia	244,703	Bi-Weekly
89	Winston-Salem city, North Carolina	244,605	Bi-Weekly
90	North Las Vegas city, Nevada	242,975	Bi-Weekly
91	Gilbert town, Arizona	242,354	Bi-Weekly
92	Chesapeake city, Virginia	240,397	Weekly/Semi-Monthly
93	Irving city, Texas	240,373	Bi-Weekly
94	Hialeah city, Florida	239,673	Bi-Weekly
95	Garland city, Texas	238,002	Bi-Weekly
96	Fremont city, California	234,962	Bi-Weekly
97	Richmond city, Virginia	227,032	Bi-Weekly
98	Boise City city, Idaho	226,570	Bi-Weekly
99	Baton Rouge city, Louisiana	225,374	Bi-Weekly
100	Des Moines city, Iowa	217,521	Bi-Weekly

Summary: Bi-Weekly: 178 Weekly/ Bi-Weekly: 8 Semi-Monthly: 8 Semi-Monthly/Bi-Weekly: 2
 Unknown: 1 Weekly/Semi-Monthly: 1 Weekly: 1 Weekly/Bi-Weekly/Semi-Monthly: 1

APPENDIX B
Pay Frequency
Top 200 Cities by Population

Rank	Locality	Population Estimate	Pay Frequency
101	Spokane city, Washington	217,108	Bi-Weekly
102	San Bernardino city, California	216,995	Bi-Weekly
103	Modesto city, California	214,221	Bi-Weekly
104	Tacoma city, Washington	213,418	Bi-Weekly
105	Fontana city, California	211,815	Bi-Weekly
106	Santa Clarita city, California	210,888	Bi-Weekly
107	Birmingham city, Alabama	210,710	Bi-Weekly
108	Oxnard city, California	210,037	Bi-Weekly
109	Fayetteville city, North Carolina	209,889	Bi-Weekly
110	Rochester city, New York	208,046	Bi-Weekly
111	Moreno Valley city, California	207,226	Bi-Weekly
112	Glendale city, California	203,054	Bi-Weekly
113	Yonkers city, New York	202,019	Bi-Weekly
114	Huntington Beach city, California	201,874	Bi-Weekly
115	Aurora city, Illinois	200,965	Bi-Weekly
116	Salt Lake City city, Utah	200,544	Bi-Weekly
117	Amarillo city, Texas	199,826	Bi-Weekly
118	Montgomery city, Alabama	199,518	Bi-Weekly
119	Grand Rapids city, Michigan	198,829	Bi-Weekly
120	Little Rock city, Arkansas	198,606	Bi-Weekly
121	Akron city, Ohio	197,846	Bi-Weekly
122	Augusta-Richmond County , Georgia	197,166	Bi-Weekly
123	Huntsville city, Alabama	194,585	Bi-Weekly
124	Columbus city, Georgia	194,058	Bi-Weekly
125	Grand Prairie city, Texas	193,837	Bi-Weekly
126	Shreveport city, Louisiana	192,036	Semi-Monthly/Bi-Weekly
127	Overland Park city, Kansas	191,278	Bi-Weekly
128	Tallahassee city, Florida	191,049	Bi-Weekly
129	Mobile city, Alabama	190,265	Bi-Weekly
130	Port St. Lucie city, Florida	189,344	Bi-Weekly
131	Knoxville city, Tennessee	187,347	Bi-Weekly
132	Worcester city, Massachusetts	185,677	Weekly/Bi-Weekly/Semi-Monthly
133	Tempe city, Arizona	185,038	Bi-Weekly
134	Cape Coral city, Florida	183,365	Bi-Weekly
135	Brownsville city, Texas	183,299	Bi-Weekly
136	McKinney city, Texas	181,330	Bi-Weekly
137	Providence city, Rhode Island	180,393	Bi-Weekly
138	Fort Lauderdale city, Florida	180,072	Bi-Weekly
139	Newport News city, Virginia	179,388	Bi-Weekly
140	Chattanooga city, Tennessee	179,139	Bi-Weekly
141	Rancho Cucamonga city, California	177,452	Bi-Weekly
142	Frisco city, Texas	177,286	Bi-Weekly
143	Sioux Falls city, South Dakota	176,888	Bi-Weekly
144	Oceanside city, California	176,193	Bi-Weekly
145	Ontario city, California	175,841	Bi-Weekly
146	Vancouver city, Washington	175,673	Semi-Monthly
147	Santa Rosa city, California	175,269	Bi-Weekly
148	Garden Grove city, California	174,226	Bi-Weekly
149	Elk Grove city, California	171,844	Bi-Weekly
150	Pembroke Pines city, Florida	170,712	Bi-Weekly

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