



Multnomah
County Oregon

Auditor's Office

Accounts Payable Audit -June 2010 Supplementary Trends and Charts

- Part I Introduction
- Part II AP Invoices and Payments
- Part III AP Testing
- Part IV Appendix - Scope and Methodology



Multnomah
County Oregon

Auditor's Office

Accounts Payable Audit -June 2010 Supplementary Trends and Charts

Part I Introduction



Introduction

- This document provides supplementary charts and trend information relating to our audit of Multnomah County's accounts payable data.
- The purpose of our review was to provide management with accounts payable trends over five years and to perform traditional post audit tests for accounts payable.
- Our review employed CAAT (computer analytical auditing techniques) using ACL software and data from SAP.



Introduction (continued)

- Summary of audit findings
 - County's management of AP follows best practices
 - Trends reflect increasing use of electronic payment methods
 - Some changes would improve efficiencies and controls:
 - Target selected vendors for electronic payments
 - Clean up vendor master files
 - Monitor and revise guidelines for direct pay and one-time vendors
 - Details about our findings and recommendations from this audit can be found in our audit report "Accounts Payable Audit" on our web site at www.co.multnomah.or.us/auditor.



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Accounts Payable Audit -June 2010 Supplementary Trends and Charts

Part II AP Invoices and Payments

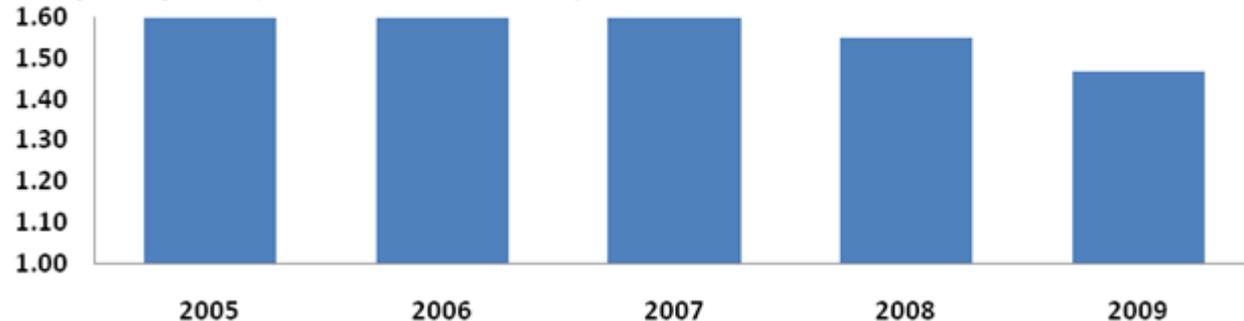


AP Invoices and Payments

Invoices to Payments

- This ratio is based on the total number of invoices to the total number of payments. A high number of invoices per payment is more efficient – requiring fewer checks.
- The County's ratio of invoice to payments has been declining.
- This decline is due to increase in use of electronic payments which result in slightly more frequent payments; but these are more efficient than payment by check.

Invoices per Payment (Fiscal Years 2005 - 2009)

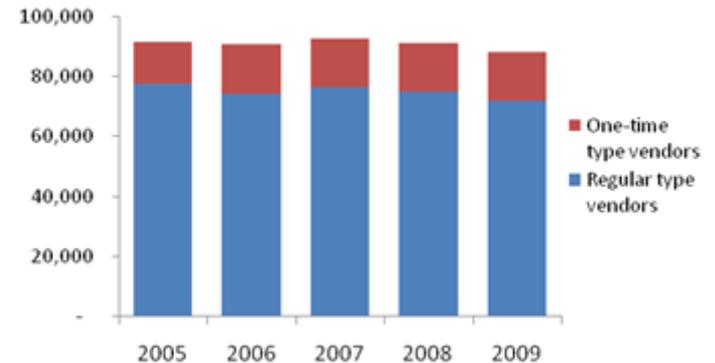




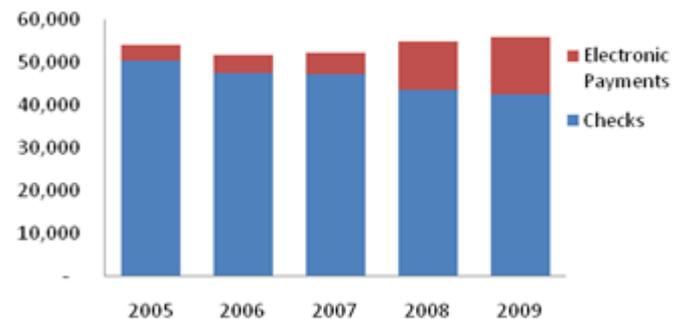
AP Invoices and Payments Invoices to Payments

- From fiscal year 2005 to 2009:
 - Total number of invoices decreased 4%
 - Decrease was 7% for regular type vendors (includes vendors who have vendor numbers)
 - Increase was 15% for one-time type vendors (includes one-time vendors, P-cards, and AP tax refund vendors)
 - Total number of payments increased 8%
 - Decrease of 16% for checks
 - Increase of 233% for electronic payments

Number of AP Invoices - Fiscal years 2005 - 2009



Number of AP Payments - Fiscal years 2005 - 2009





AP Invoices and Payments

Types of AP Invoices

- Departments use several methods for purchasing and recording invoices.
 - Three-way match for formal or informal procurement; is the standard method for county purchases
 - Direct pay for purchases not requiring formal or informal procurement and generally less than \$5,000
 - Vendors for specific programs and small purchases where a vendor account is not set up are
 - One-time vendors
 - AP Tax refunds
 - P-card (procurement card) for small dollar items or for specific vendors

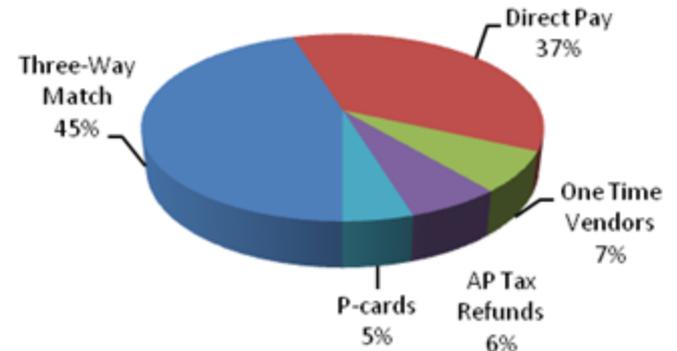


AP Invoices and Payments

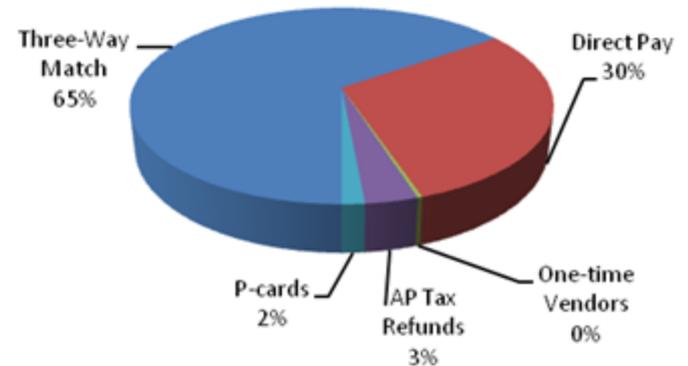
AP Invoices by Type

- Comparison of number of invoices to dollar amounts by type for fiscal year 2009
 - Three-way match invoices made up 45% of the invoices and 65% of the dollars
 - Direct pay made up 37% of the invoices and 30% of the dollars
 - One-time vendors made up 7% of the invoices but less than 1% of the total dollars
 - AP tax refunds made up 6% of the invoices and 3% of the dollars
 - P-cards made up 5% of the invoices and 2% of the dollars

Number of Invoices (Fiscal Year 2009)



Total Dollars Invoices (Fiscal Year 2009)



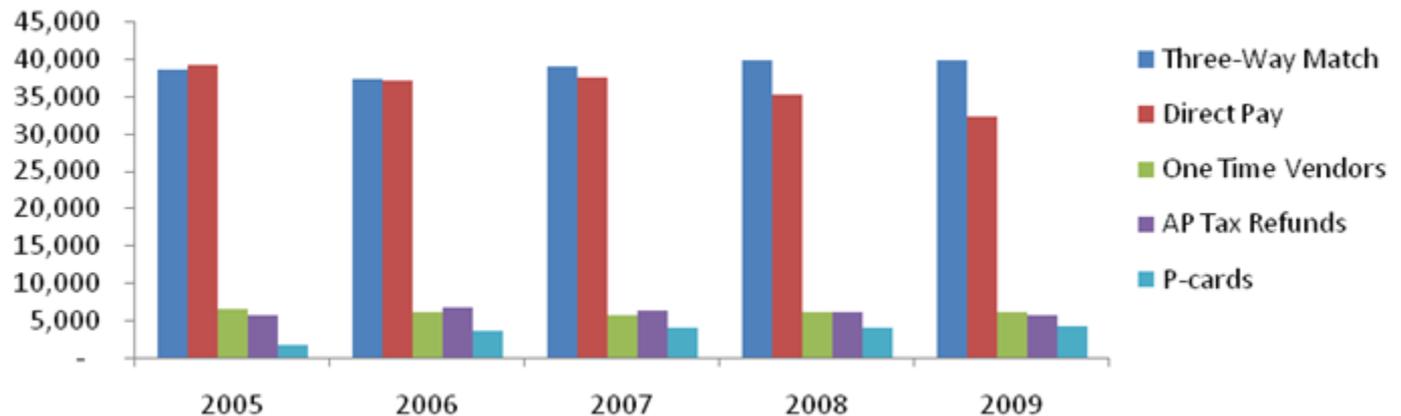


AP Invoices and Payments

Trends in Number of Invoices

- Number of invoices from fiscal year 2005 to 2009 overall decreased by 4%, changes by type was:
 - Three-way match invoices increased 3%
 - Direct pay invoices decreased 17%
 - One-time vendor invoices decreased 5%
 - AP tax refunds decreased 2%
 - P-card transactions increased 159%

Number of AP Invoices by Type (Fiscal Years 2005 - 2009)

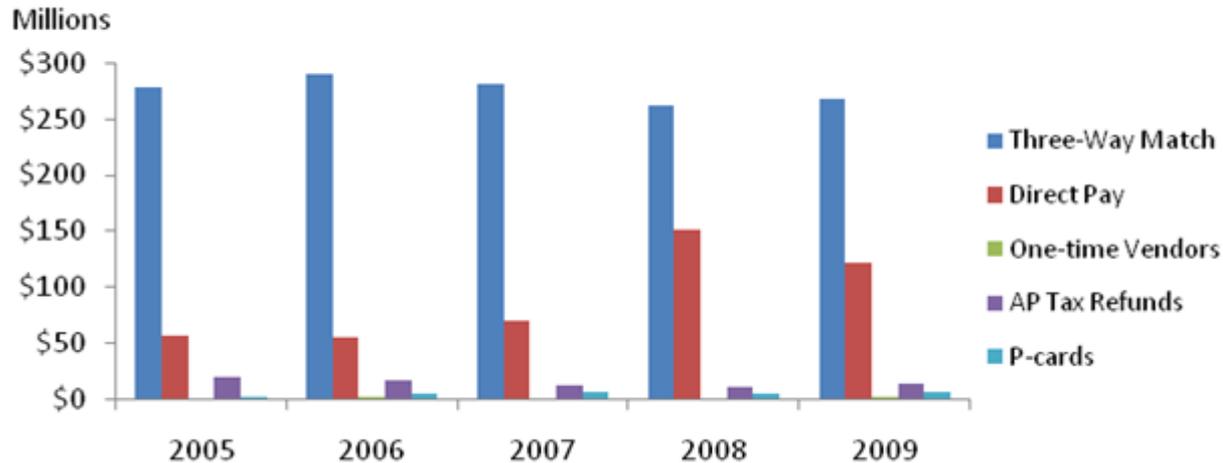




AP Invoices and Payments Trends in Dollar Amounts

- Total dollar amounts for invoices increased by 15% from fiscal year 2005 to 2009
 - Three-way match invoices decreased by \$9.3 million (3%)
 - Direct pay invoices increased \$65 million (115%)
 - One-time vendor invoices increased \$½ million (30%)
 - AP tax refunds decreased \$6 million (2%)
 - P-card transactions increased \$3.5 million (159%)

Dollar Volume of Invoices (Fiscal Years 2005 - 2009)



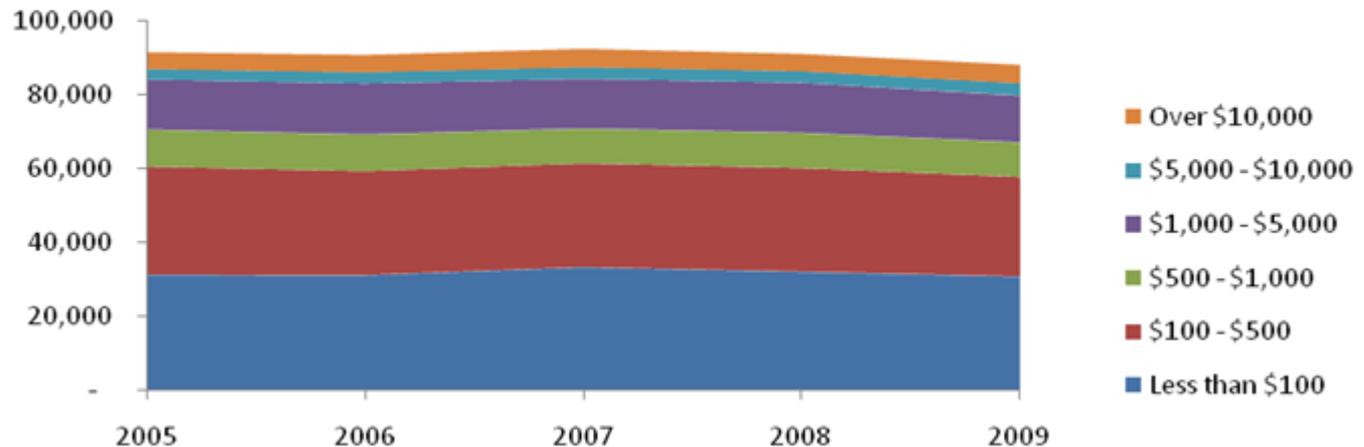


AP Invoices and Payments

Invoices Stratified

- Total change in number of invoices from fiscal year 2005 to 2009 was a decrease of 7% (note: invoices in this chart do not include P-card transactions)
 - Number of invoices under \$100 decreased 3%
 - Number of invoices between \$100 - \$500 decreased 12%
 - Number of invoices between \$500 and \$1,000 decreased 11%
 - Number of invoices over \$1,000 decreased 2%

Invoice Values Stratified (Fiscal Years 2005 - 2009)



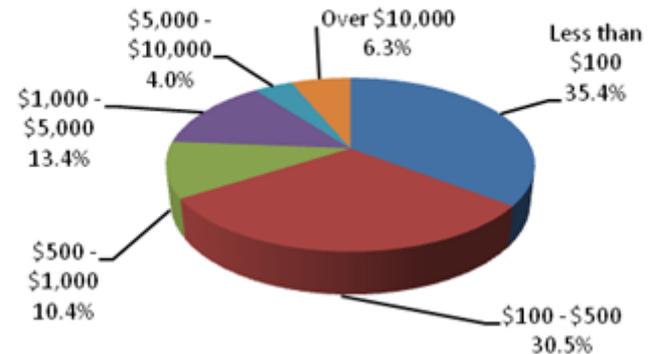


AP Invoices and Payments

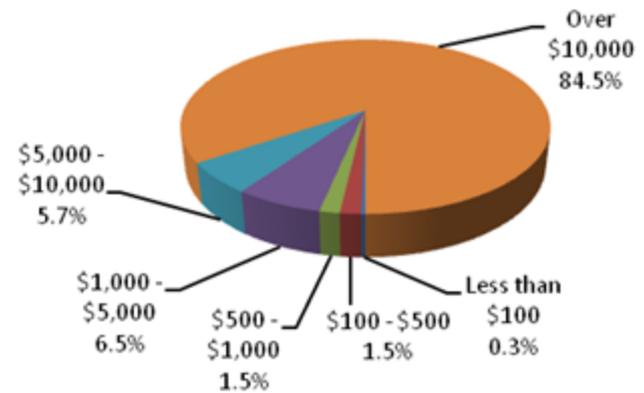
Invoices Stratified Fiscal Year 2009

- AP was made up of many small dollar invoices:
 - 36% were under \$100 (but these made up less than 1% of the total dollars). Of this 36%:
 - 35% three-way match
 - 41% direct pay
 - 17% one-time vendors
 - 7% AP tax refunds.
- Nearly 85% of the total dollars were from 6% of the total invoices.

Number of Transactions (Fiscal Year 2009)



Dollar Values - In Millions (Fiscal Year 2009)





AP Invoices and Payments

Number of AP Payments

- The county's AP payments and purchasing is primarily done by check, but it is increasing its use of electronic payments.
 - The total number of all AP payments increased from fiscal year 2005 to 2009 by (8%)
 - Checks represented 91% of total AP payments in fiscal year 2005, down to 71% in fiscal year 2009
 - Number of checks decreased (16%)
 - Number of electronic payments increased (233%)



AP Invoices and Payments

Electronic Payment Types

- Electronic payments are considered best practices as they are more efficient and provide added controls. The county pays AP invoices by various electronic methods:
 - P-cards which include procurement cards, ghost cards (credit cards to specific vendors), and travel cards
 - ACH (Automated Clearing House) payments represent bank transfers from the county's bank to the vendor bank
 - Wire transfers are used primarily for very large dollar amounts
 - State treasury pool transfers are used to make payments to the state or other local governments

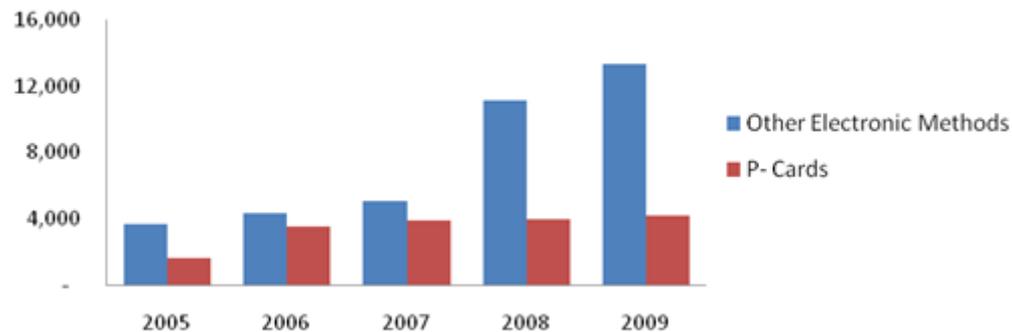


AP Invoices and Payments

Electronic Payments - Trends

- Total use of electronic payments has grown substantially between fiscal year 2005 and 2009 (an increase of 266%). In fiscal year 2009, 142 vendors used some form of electronic payment.
- The use of P-cards is also considered best practice. Although P-cards more than doubled from fiscal year 2005 to 2006, growth since then has been small.

Electronic Payment Methods (Fiscal Years 2005 - 2009)





AP Invoices and Payments Checks

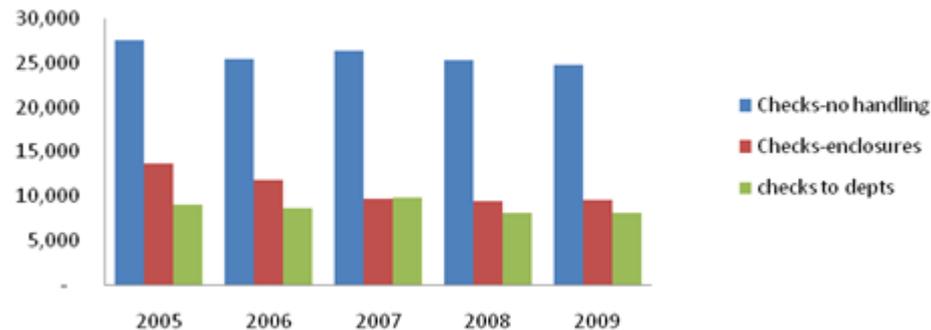
- Although the number of checks has declined by 16% from fiscal year 2005 to 2009, they still represent the primary method of paying county vendors.
- Departments flag invoices in the system that will require special handling for check printing and distribution. In fiscal year 2009:
 - 65% of the AP checks had no special handling (these were simply printed and mailed)
 - 18% of the AP checks required enclosures before mailing
 - 17% of the AP checks were separated to be distributed to departments by interoffice mail or to be picked up at central AP



AP Invoices and Payments Checks (continued)

- Between fiscal years 2005 and 2009, the total number of checks decreased 16%
 - The number of checks requiring no additional handling decreased 9%
 - The number of checks requiring enclosures decreased 35%
 - The number of checks distributed to departments decreased 12%

Checks by payment type (Fiscal Years 2005 - 2009)

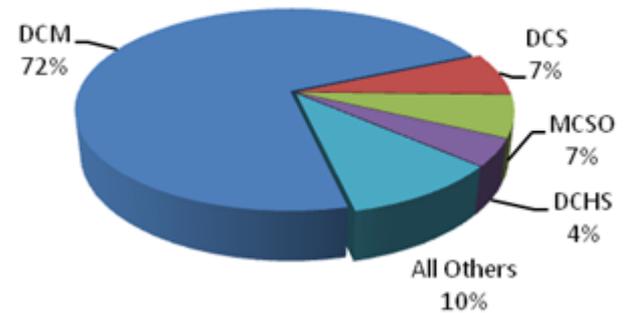




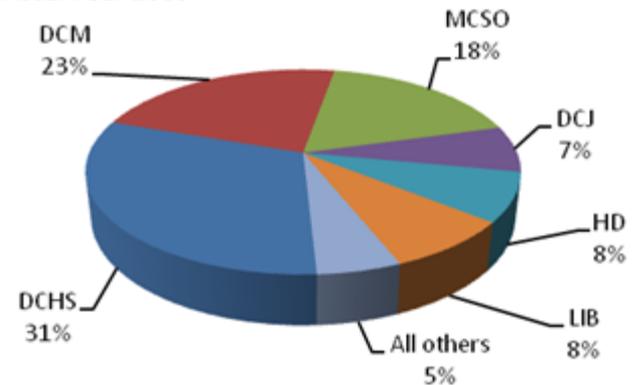
AP Invoices and Payments Checks (continued)

- Checks requiring enclosures for fiscal year 2009
 - DCM is largest at 72%
 - DCS was 7%, MCSO 7%, DCHS 4%
- Checks distributed to departments for fiscal year 2009
 - Largest were DCHS 31%, DCM 22%, MCSO 18%
 - Other departments made up the remaining 28%

Payments Requiring Enclosures
Fiscal Year 2009



Checks to Departments
Fiscal Year 2009





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Accounts Payable Audit June 2010 Supplementary Trends and Charts

Part III AP Testing

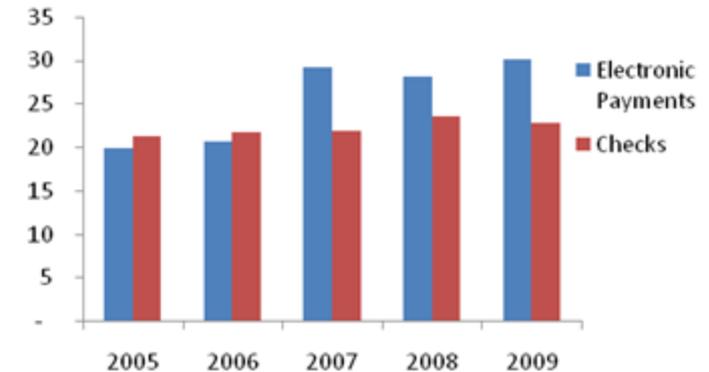


AP Testing

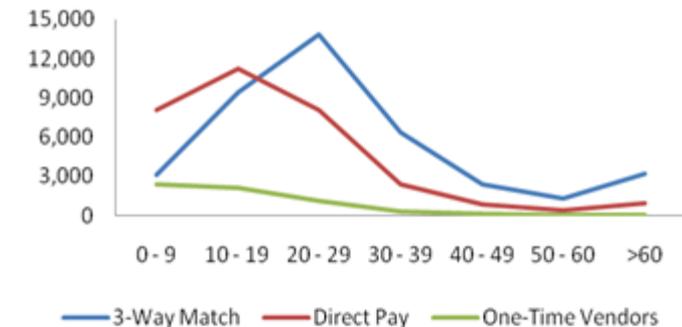
Days-to-Payment – Fiscal Year 2009

- Average days to payment has increased from 21 days in fiscal year 2005 to 24 days in fiscal year 2009
- In fiscal year 2009 checks averaged 23 days and electronic payments averaged 30 days.
- In fiscal year 2009 days-to-payment for all AP checks was:
 - Less than 10 days - 17%
 - Less than 20 days - 47%
 - Less than 30 days - 76%
 - 30 or more days - 24%
- We have no recommendations relating to days-to-payment for checks or electronic payments

Average days to payment (Fiscal years 2005 - 2009)



Days to Payment (Fiscal Year 2009)

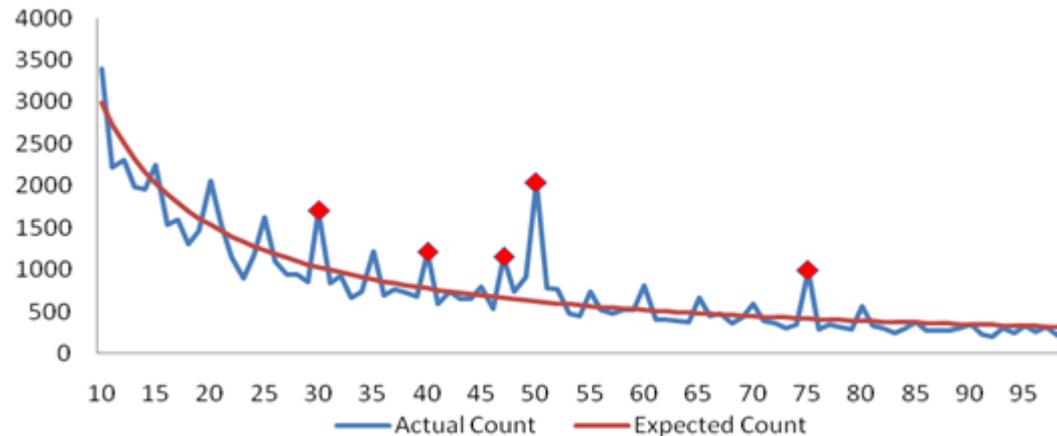




AP Testing Benford's Analysis

- Benford's law predicts the occurrence of a number of expected digits in a large amount of data. This analysis is often used to identify transactions more likely at risk for duplicate payments.
- Next slide has list of payments which exceed the expected numbers: 30's, 40's, 47's, 50's, 75's.
- We have provided management with a more detail list of types of AP transactions which might warrant closer monitoring.

Benford Analysis - General AP invoices FY2009





AP Testing Benford's Analysis (continued)

Dollar Values	Number of Invoices	Vendor Name
\$30.00	290	EMANUEL HOSPITAL & HEALTH CTR
\$30.00	33	GOODWILL INDUSTRIES
\$30.40	30	ALSCO
\$300.00	15	MULTNOMAH COUNTY CIRCUIT COURT
total 30x	368	accounts for 54% of the variance from expected ratio
\$4.01-\$4.05	77	CARQUEST AUTO PARTS
\$40.00	56	ARTISAN DENTAL LAB
\$40.00	39	PROVIDENCE LIFELINE PROGRAM
\$40.19-\$40.85	66	QWEST
\$400.00	15	COMPREHENSIVE OPTIONS FOR DRUG
total 40x	253	accounts for 58% of the variance from expected ratio
\$47.50	608	OREG ST OF 4TH JUDICIAL COURT
total 47x	608	accounts for 100% of the variance from expected ratio
\$5.00	18	OLSON PHARMACY SERVICES
\$50.46	41	various veterinary clinics
\$50.46	162	VERIZON SELECT SERVICES INC
\$50.00	45	WB SPRAGUE CO INC
\$500.00	578	MULTNOMAH COUNTY CIRCUIT COURT
\$500.00	17	PEGASUS SOCIAL SERVICES
\$5,000.00	38	MULTNOMAH COUNTY CIRCUIT COURT
total 5xx	899	accounts for 63% of the variance from expected ratio
\$75.00	21	GATEWAY CARE & RETIREMENT CNTR
\$75.00	49	WB SPRAGUE CO INC
\$75.69	196	VERIZON SELECT SERVICES INC
\$750.00	62	MULTNOMAH COUNTY CIRCUIT COURT
\$753.20	30	DEPAUL INDUSTRIES
total 75x	358	accounts for 62% of the variance from expected ratio



AP Testing Duplicate Payments

- SAP prevents duplicate invoices from being entered into the system based on vendor number, document date, and invoice number.
 - We tested all years based on these criteria and found no exceptions
 - However, risk for duplicate payments exist because:
 - Some vendors are paid using multiple vendor numbers
 - Some vendors are paid using a vendor number, as a one-time vendor or as P-card purchase
 - System checks are ineffective when invoice numbers are changed by users accidentally or deliberately
 - Most controls to prevent duplicate payments are at the department level



AP Testing Duplicate Payments

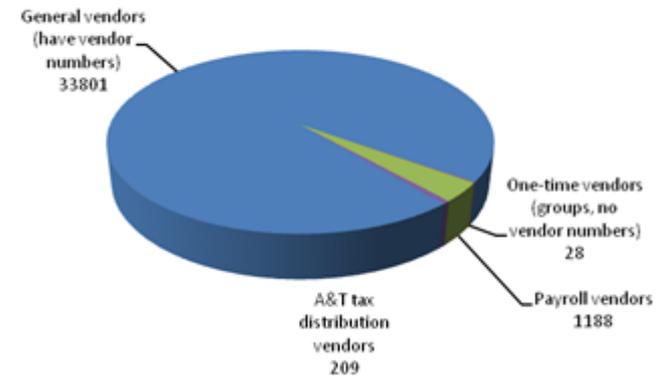
- RECOMMENDATION:
 - Report Recommendation #4(b)
 - Department management should review and document their processes and internal controls:
 - a) For check handling and disbursement and the need for inserts mailed with checks.
 - b) That would prevent duplicate payments.



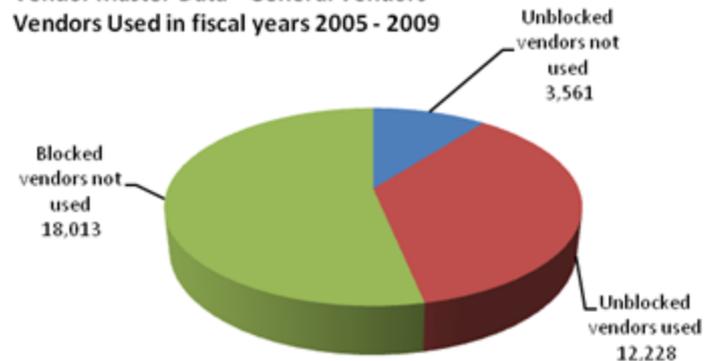
AP Testing Vendor File Analysis

- In our review of vendor master records, we included only general vendors and those that were not blocked from use.
- Vendor master data is maintained separately from central AP which is a best practice.
- Vendor master data:
 - 14,722 (44%) of the general vendors were used during the last five fiscal years
 - 15,519 (46%) were blocked from use
 - 3,561 (10%) unblocked vendor numbers were not used during this period.

Vendor Master Data - All Vendors as of February 2010



Vendor Master Data - General Vendors
Vendors Used in fiscal years 2005 - 2009





AP Testing Vendor File Analysis (continued)

- Duplicate vendor master records for vendors that were not blocked for use.
 - Duplicate names: we found 941 vendor names with more than one vendor number, of these 103 had three or more vendor numbers. These duplicates were exact name matches and did not include the variations in names (for example "VALLEY RIVER INN" and "VALLEY RIVER INN THE")
 - Duplicate addresses: we found 1445 duplicate addresses, only 166 of these were duplicate vendor names
 - Duplicate tax ID numbers: we found 1926 duplicate tax ID numbers, only 564 of these were duplicate vendor names



AP Testing Vendor File Analysis (continued)

- Information of type of vendor business is useful for:
 - Purchasing analysis
 - Risk analysis by type of vendor
 - Analysis for electronic payment candidates
- Only 55% of the general vendors which were not blocked for use had an indication of type of business.
- Next slide provides a listing of the number of general vendors by type of business for vendors that not blocked for use.



AP Testing Vendor File Analysis (continued)

Vendor Master (General Section) Type of Business	Count	Vendor Master (General Section) Type of Business	Count
	7,195	LABORATORY SERVICES	19
ACCOUNTING / AUDIT	2	LOCAL TRANSPORTATION (CABS)	7
ADVERTISING	89	LODGING	107
AMBULANCE SVS	2	M	1
ATTORNEY FEES/LEGAL	71	MANAGEMENT & CONSULTING SVC	962
BEHAVIORAL HEALTH	64	NON EMPLOYEE REIMB	166
CHILD CARE PROVIDER (BABYSIT)	106	NURSING SERVICES	43
CLINIC	29	PETTY CASH REIMBURSEMENTS	144
COUNTY CONSTRUCTION CONTRACTS	66	PHYSICIAN SERVICES	184
COURT RELATED (CRT REPORTERS)	26	PUBLIC GUARDIAN NON TAXABLE P	87
DECEASED WORKERS WAGES	4	REGISTRATION	412
DENTAL SERVICE PROVIDERS	54	RENT	2,572
DENTAL SERVICE PROVIDERS	2	RESPITE	5
DUES AND SUBSCRIPTIONS	222	RESPITE CARE	406
EMPLOYEE REIMBURSEMENT	1,180	REVENUE CONTRACTS ONLY	1
EMPLOYMENT TEMP SERVICES	48	SETTLEMENT PAYMENT	8
ENTERTAINMENT	582	UTILITIES	49
GARNISHMENTS	2	VETERINARIAN	102
GOVERNMENTAL AGENCIES	623	VOLUNTEER TRAVEL	112
HOSPITAL SVS	77	Totals	15,832
INTER LIBRARY LOANS	1	45% of vendors have no business designation	



AP Testing Vendor File Analysis (continued)

- RECOMMENDATION:
 - Report Recommendation #2
 - Central accounts payable should work with purchasing and departments to better manage and clean up vendor master files including removal of duplicate vendors and unused vendors.



AP Testing EDI Candidates

- Changes in how vendors are paid:
 - From fiscal year 2005 to 2009:
 - The percentage of payments by check decreased from 91% to 71%
 - The percentage of payments made electronically increased from 9% to 29%
 - Number of vendors:
 - 142 vendors were paid by electronic payments rather than by check in fiscal year 2009.
 - Use of P-cards:
 - Increased 121% between fiscal years 2005 and 2006
 - Increased 17% between fiscal years 2006 and 2009



AP Testing EDI Candidates (continued)

- RECOMMENDATIONS:
 - Report Recommendation #1 – Central accounts payable should continue efforts to convert vendors to electronic payments as follows:
 - (a) Focus efforts on vendors that require additional check handling and those that have a high volume of payments.
 - (b) Review use of P-cards and expand to the fullest extent possible.



AP Testing Top Vendor Analysis

- Analysis of an organization's top vendors provides information useful for purchasing and contracting.
 - To possibly negotiate better contract terms.
 - To better understand where the organization's dollars are being spent.
 - To target efforts for electronic payments.
- The next slide has a short list of some of the county's top vendors for fiscal year 2009.
 - We have provided a longer list to management showing spending for top vendors over the last five years.
 - We have no audit findings or recommendations for this part of our analysis.



AP Tests

Top Vendors Over \$1 million (fiscal year 2009)

VENDOR NAME	FY09 in millions
CASCADIA BEHAVIORAL HLTHCARE INC	16.2
CENTRAL CITY CONCERN	10.1
LIFEWORKS NORTHWEST	7.5
CARDINAL HEALTH INC	7.3
VOLUNTEERS OF AMERICA INC	6.9
MORRISON CHILD & FAMILY SERVICES	5.9
PORTLAND GENERAL ELECTRIC (TU)	5.5
CAREMARK	4.5
COMPREHENSIVE OPTIONS FOR DRUG	4.0
PORTLAND IMPACT INC	3.5
DE PAUL TREATMENT CENTERS INC	3.2
METROPOLITAN FAMILY SERVICE	3.2
PORTLAND GENERAL ELECTRIC 4438	2.9
INGRAM LIBRARY SERVICES	2.9
ARAMARK	2.7
IRCO-IMMIGRANT AND REFUGEE	2.7
OR TECHNICAL ASSIST CORP (OTAC)	2.7
ACUMEN FISCAL AGENT LLC	2.6
TRILLIUM FAMILY SERVICES INC	2.4
VERIZON SELECT SERVICES INC	2.3
JANUS YOUTH PROGRAMS INC	2.3
BUCKAROO THERMOSEAL INC	1.9
LUKE DORF INC	1.9
SELF ENHANCEMENT INC	1.8

VENDOR NAME (continued)	FY09 in millions
BRCPJUNICO LINCOLN LLC	1.8
NEIGHBORHOOD HOUSE INC	1.7
LOAVES & FISHES CTR INC	1.6
CATHOLIC CHARITIES	1.6
PORTLAND HABILITATION CENTER INC	1.5
PORTLAND ADVENTIST MED CTR	1.5
REHN & ASSOCIATES	1.5
NW NATURAL GAS	1.4
PACIFIC POWER & LIGHT COMPANY	1.4
NATIVE AMERICAN REHABILITATION	1.4
ASAP SOFTWARE	1.4
OREGON COMMUNITY HLTH INFORMATION	1.3
ALBERTINA KERR CENTERS	1.2
OUTSIDE IN	1.2
MIDWEST TAPE	1.1
RICHART FAMILY INC	1.1
BEECHER CARLSON INSURANCE AGENCY LL	1.1
PORTLAND CITY OF WATER BUREAU	1.0
IKON OFFICE SOLUTIONS INC	1.0
NEW AVENUES FOR YOUTH INC	1.0
DEPAUL INDUSTRIES	1.0
FIRST AMERICAN TITLE INSURANCE COMP	1.0

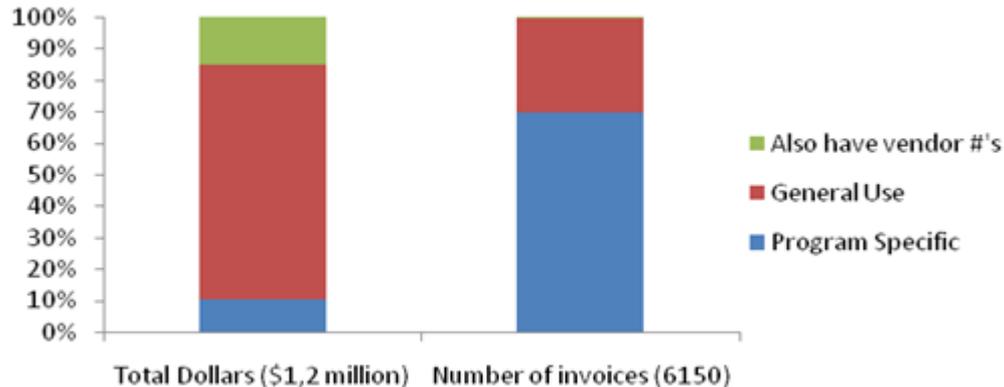


AP Tests

Compliance Test – One Time Vendors

- In fiscal year 2009 one-time vendors made up 7% of the total AP invoices, but only \$1.2 million dollars
 - 15% of the dollars (\$188,000) went to specific vendors. These vendors also had payments as direct pay and may be at risk for duplicate payments.
 - 75% of the dollars (\$929,000) was for specific categories such as dues, registrations, publications, and employee reimbursements. Departments are not following county guidelines in their use of these one-time vendors.
 - 10% of the dollars (\$128,000) were for limited program uses.

One-time Vendors (Fiscal Year 2009)

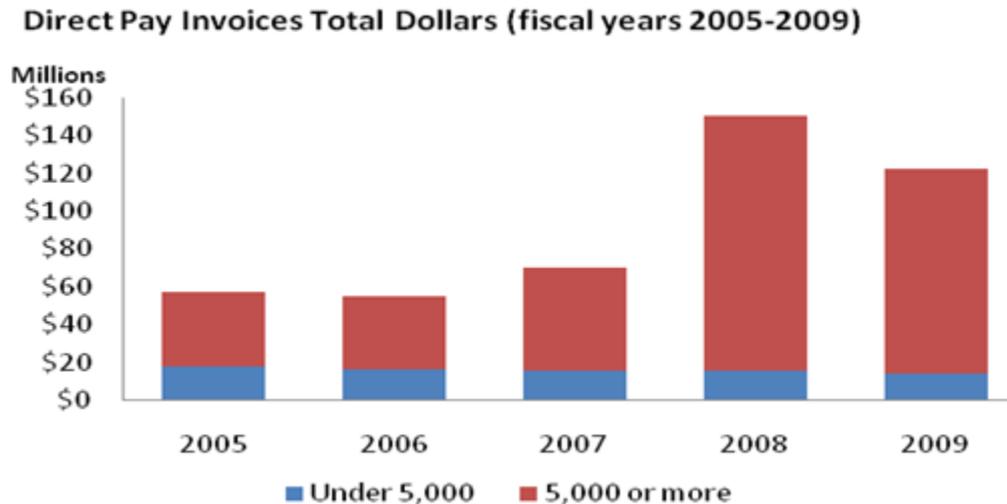




AP Tests

Compliance Test – Direct Pay

- In fiscal year 2009:
 - 201 vendors had at least one direct pay invoice over \$5,000 and
 - 482 vendors had direct pay invoices totaling over \$5,000
 - 499 vendors were paid by both direct pay and 3-way match
- County rules have exceptions to the \$5,000 limitation for direct pay. We have provided management with a list of these vendors for additional review to determine if the transactions are in compliance with county rules.





AP Tests

Compliance Test

- RECOMMENDATIONS:
 - Report Recommendation #3 – The county's chief finance officer and accounts payable manager should review the use of direct payment invoices and contracting rules and one-time vendors to:
 - a) Revise guidelines for one-time vendors and clarify contracting rules and exceptions for use of direct pay invoices.
 - b) Increase monitoring compliance with the county's rules and guidelines for direct pay invoices and one-time vendors.



Appendix

AP Data Source

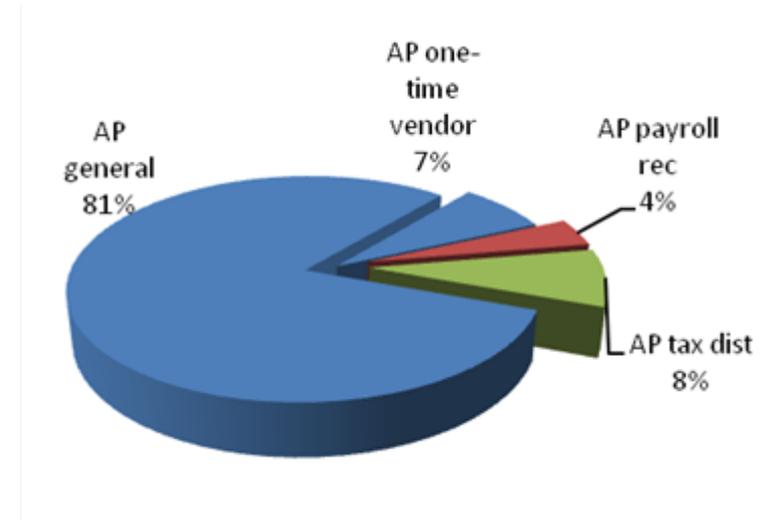
- Data for this review are from SAP tables for the period including five fiscal years, based on the fiscal year of the clearing document, from 2005 to 2009
 - BSAK – cleared accounts payable 867,139 records
 - PAYR – check register 382,238 records
 - LFA1, LFB1 and LFBK – vendor master tables (data was as of the end of December 2009)
 - BKPF – accounting document header 2,663,992 records
 - PA0001 and PA0105 HR organization and communication master tables



Appendix

AP Data Source (continued)

- Accounts payable for our analysis:
 - Includes general ledger accounts 70000 (AP General) and 70100 (AP one time); does not include general ledger accounts 70110 (AP payroll) or 70120 (AP tax distribution)
 - Includes clearing document numbers beginning with 94xxxxxx; excludes all other document number ranges
 - Includes only transactions which have a "payment method"





Appendix

AP Data Source (continued)

- We categorized and analyzed the AP data by document types as follows:
 - AP invoices include document types KR and RE (excludes posting key 21 – credits)
 - KR – direct pay
 - RE – three way match
 - AP payments includes document type ZP
 - Credits and adjustments includes document types AB, KA, KG, KZ, RA, Z1, Z9, ZY and document types KR or RE if the posting key is 21
 - P-card transactions include document type KB and KC



Appendix

Audit Methodology

- We conducted this performance 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 conclusions 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.
- This report provides supplementary charts and trends for our written report "Accounts Payable Audit – Data analytics show generally strong system, but room for improvement" issued on June 28, 2010, which can be obtained on our web site at www.co.multnomah.or.us/auditor



Summary of Recommendations

- 1 Continue efforts to convert vendors to electronic payments.
 - (a) Focus on vendors requiring additional check handling and high volume of payments
 - (b) Expand use of P-cards
- 2 Better manage and update vendor master files
- 3 Review use of direct payment invoices and one-time vendors
 - (a) Revise guidelines and clarify rules
 - (b) Increase monitoring
- 4 Departments review internal controls:
 - (a) For prevention of duplicate payments
 - (b) Over check disbursements
- 5 Consider benefits for SAP imaging and workflow



Management's Response Summary

- Letter June 16, 2010 from Mindy Harris, Interim Department Director & Chief Financial Officer and Mark Campbell, Interim Director Finance & Risk Management
- Finance and Risk Management is continuing to pursue several initiatives that will address the recommendations noted in your report.
 - Accounts Payable Manager will be assigned ownership of vendor master data.
 - Management will continue to strengthen compliance on one-time vendors and direct pay type invoices, and will review and update Administrative Procedures and other operating procedures.
 - Management supports your recommendation to implement imaging and business workflow to improve controls and efficiency.