

# Performance Audit: Solid Waste Division

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February 2, 2009

# Service context

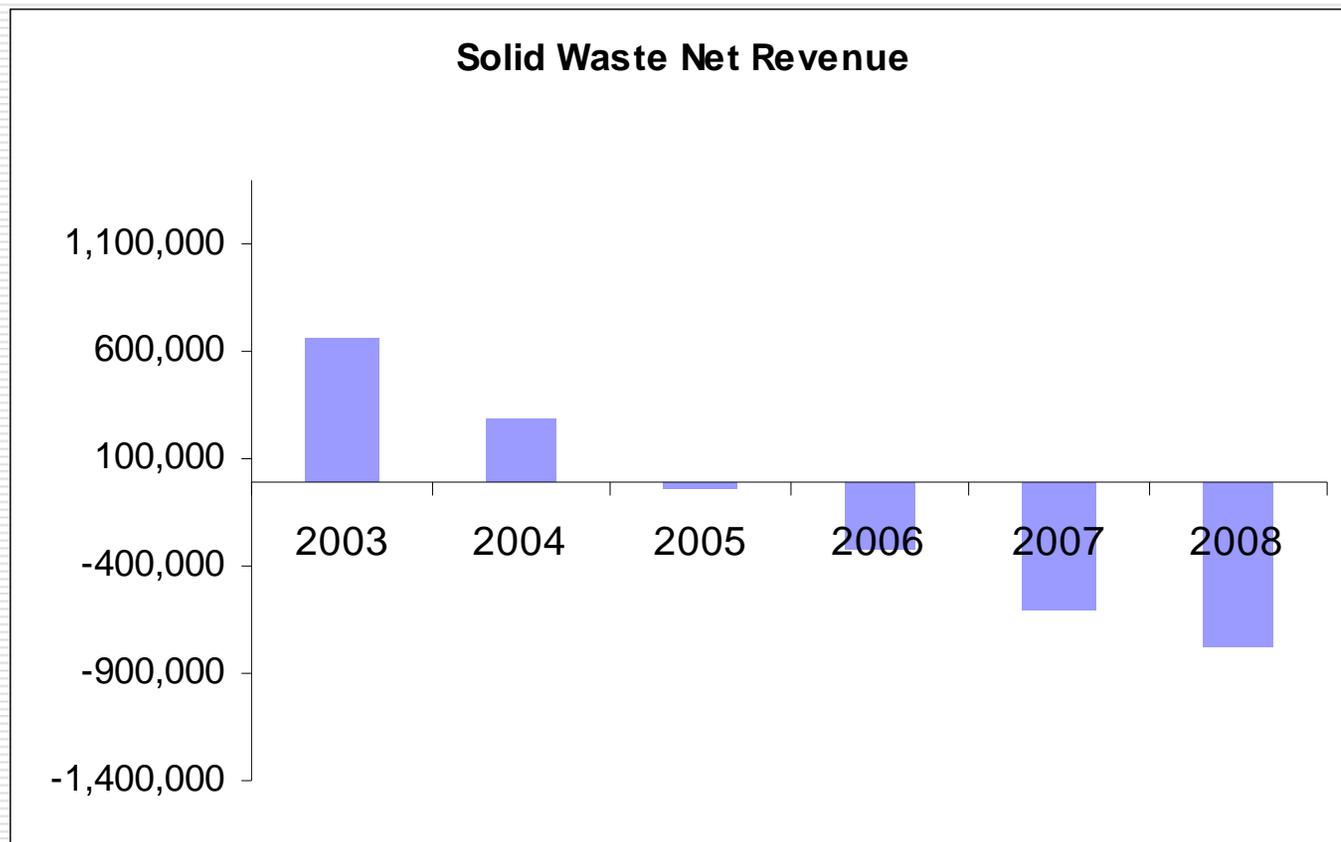
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Customer category	Number of accounts
Residential	28,665
Commercial	1,447
Multi-family residential	513
Industrial and KU	60

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# Financial context

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## Key issues performance audit addressed:

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- Data on recycling rate and customer satisfaction
  - Use of “task incentive”
  - Managing costs and good solid waste practices
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# Recycling estimate

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- Uses the EPA standard equation for recycling rate
  - Adjusts for imports/exports of waste
  - Obtains data on calendar year basis
  - Reports data in tons
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# Improving recycling estimates

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- City has included backyard composting
  - City should remove those items from recycling rate calculations to be consistent with EPA guidelines
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# Improving recycling estimates

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- City relies on “conversion factors” to estimate yard waste
  - City should test conversion factors to ensure they are appropriate
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# Improving recycling estimates

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- ❑ Method requires making calculations, estimates, judgments, and collecting data from several sources (which also make calculations, estimates, judgments and collect data from several sources)
  - ❑ City should develop clear documentation of the method
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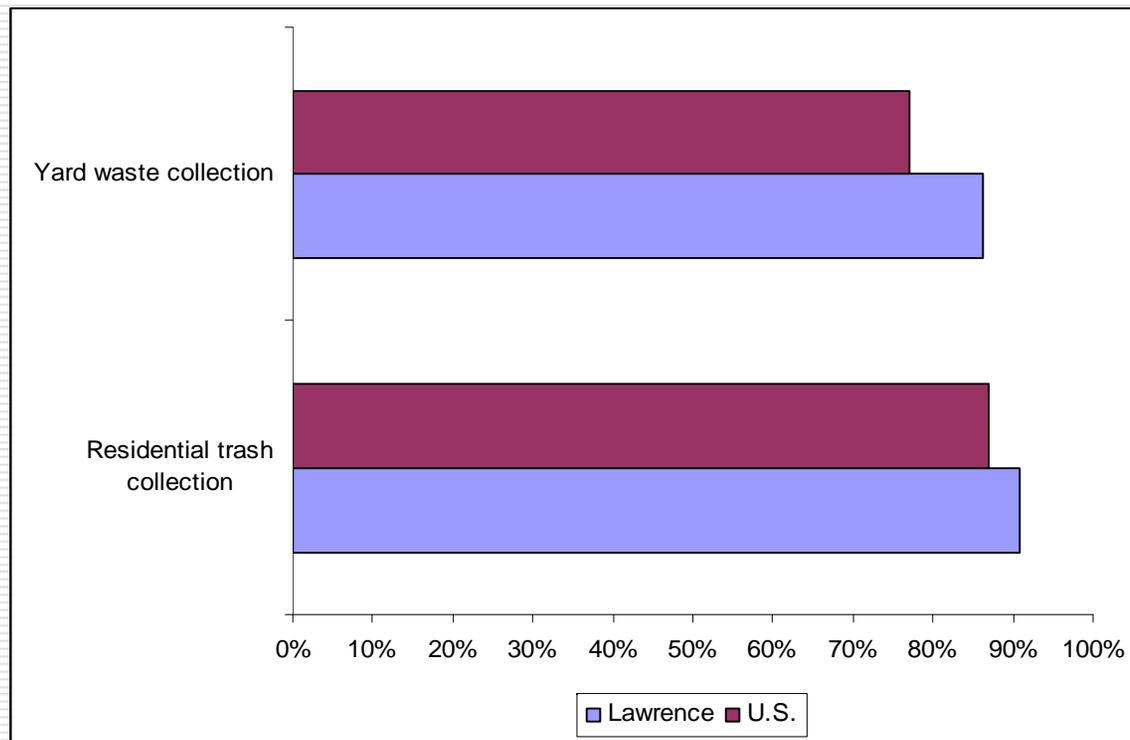
# How the city uses the data

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- ❑ Estimate disposal costs avoided
  - ❑ Conclude Lawrence has above average recycling rate
  - ❑ Compare with prior years to show increased recycling
  - ❑ Estimate recycling rate under curbside programs
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# Citizen satisfaction

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# Citizen satisfaction

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Service	Lawrence (2007)	Columbia, MO (2007)	Norman, OK (2009)	Olathe, KS (2007)
Residential trash collection	91	94	92	93
Curbside recycling	na	93	79	76
Yard waste service	86	80	86	87

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# Task incentive policy

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- If eligible employees complete their assigned task in a safe and timely manner to their supervisor's satisfaction, and in less than 8 hours; then they will be released for the work day.
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# Incentive pros and cons

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- ❑ Incentive to finish routes quickly and completely
  - ❑ Reduces overtime
  - ❑ Positive effect on employee satisfaction
  - ❑ Reduces exposure to weather
  - ❑ Promotes teamwork
  - ❑ Provides supervisory tool
  - ❑ Might place speed over safety
  - ❑ Routes can become unbalanced
  - ❑ Pays for hours not actually worked
  - ❑ No significant difference in productivity based on task incentive
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# Managing a task incentive

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- Written policies
  - Enough supervisors
  - Safety programs
  - Monitoring hours
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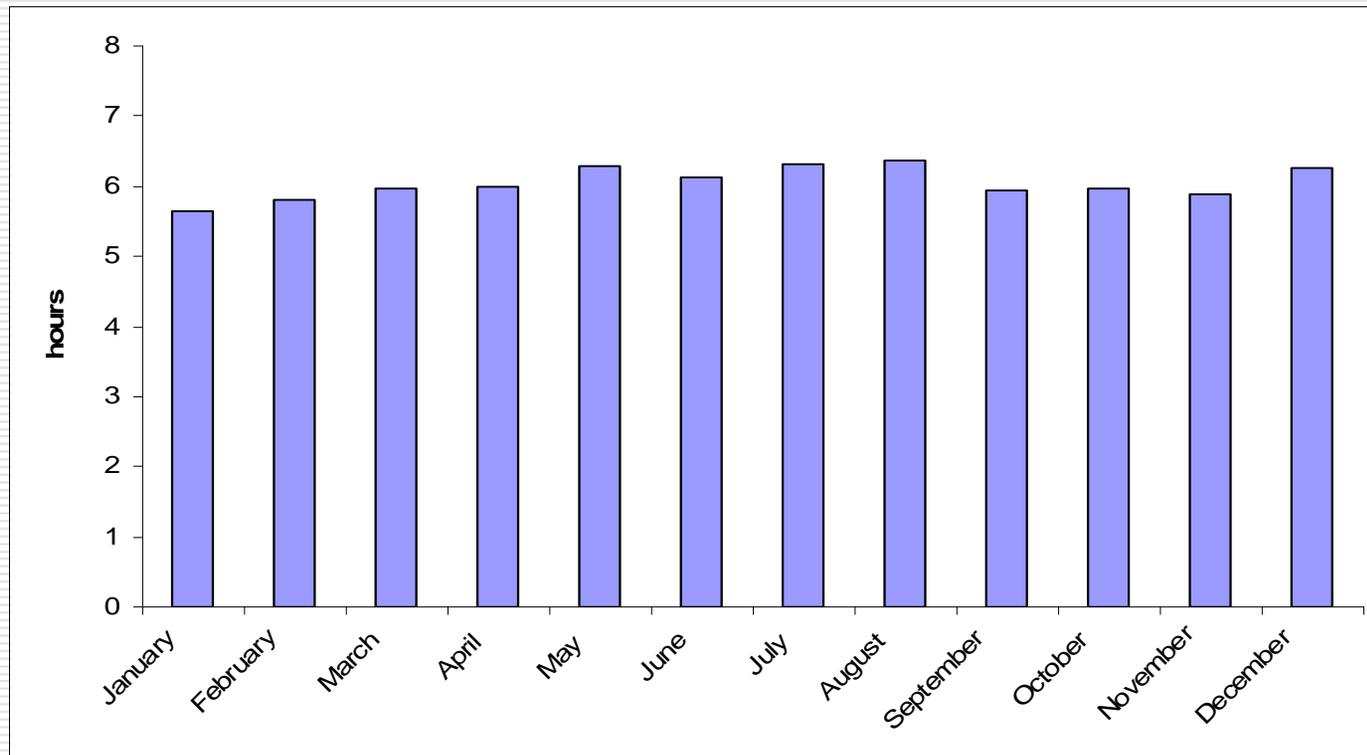
# Improving task incentive

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- City does not track actual hours worked (though employees use timecards to clock in and out each day, so the information is captured)
  - City should monitor and report actual hours worked
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# Estimate of average hours worked under task incentive in 2008

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## Some cost issues of recent years

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- Have added staff as number of accounts grew
  - Health insurance increased
  - Equipment costs increased
  - Relatively low and constant landfill fees
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# Good practices implemented in Lawrence

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- Composting program
  - Household hazardous waste program
  - Enterprise funding
  - Community outreach
  - Employee relations and incentive programs
  - Safety and workers compensation programs
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# Good practices to consider for further implementation in Lawrence

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- Automated collection
  - Use of technology for routing and vehicle/driver performance monitoring
  - Providing volume-based pricing options for residents
  - Benchmarking and measuring/reporting on performance measures
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# Other recommendations

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- Write overtime policies
  - Review equipment depreciation assumptions
  - Charge enterprise operations for solid waste services
  - Write policies on providing free solid waste services
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# Intended benefits of recommendations

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- ❑ Better and more information about solid waste services, costs, and performance
  - ❑ Stronger management controls over hours worked and overtime
  - ❑ Better cost information and some revenue from unpaid services
  - ❑ Consideration of additional good practices
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# Report available online

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[www.lawrenceks.org/auditor](http://www.lawrenceks.org/auditor)

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# Any questions?

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# Yard waste comparison

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Source	Recycled or generated?	Pounds per person
Regional suburban (2002)	Generated	314
Lawrence (1995)	Generated	300
Lawrence (2007)	Recycled	298
Regional urban (2002)	Generated	251
National (2007)	Generated	216
Olathe (2005)	Recycled	215
Regional small city/rural (2002)	Generated	165
National (2007)	Recycled	139

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# Span of control

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<b>Span of control measure</b>	<b>2002</b>	<b>2005</b>	<b>2010</b>
Authorized positions/all management positions	9.3	9.5	8.4
Authorized positions/field supervisors	15.5	15.8	14.4

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# National worker fatality data

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<b>Occupation</b>	<b>Fatalities per 100,000 workers (1992-1997 period)</b>
Refuse collectors	46.0
Law enforcement officers	14.2
Firefighters	16.5

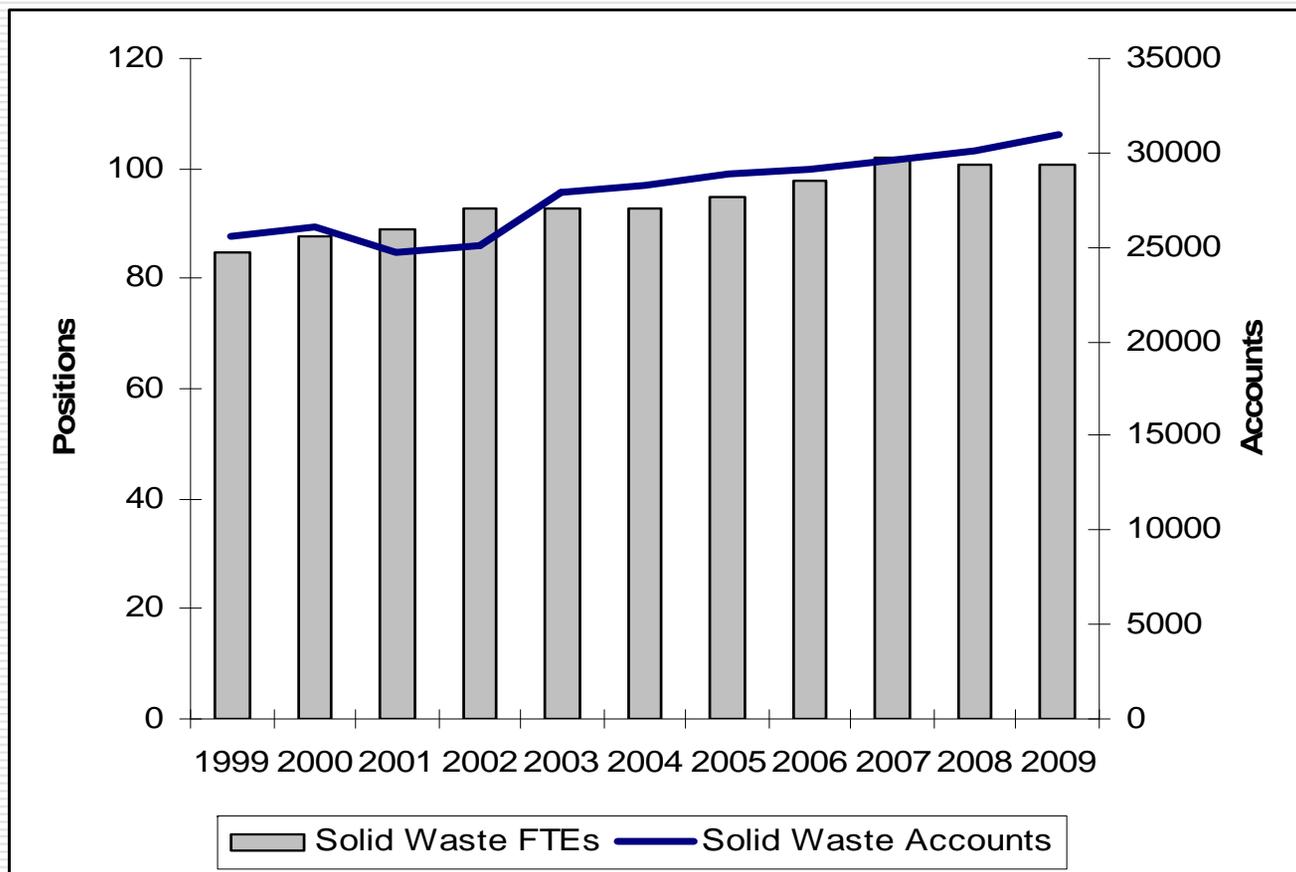
# Authorized solid waste positions

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Year	Authorized Positions	Change from previous year
1999	84.84	na
2000	87.84	3
2001	88.84	1
2002	92.84	4
2003	92.84	0
2004	92.84	0
2005	94.84	2
2006	97.84	3
2007	101.84	4
2008	100.84	-1
2009	100.84	0
2010	100.84	0

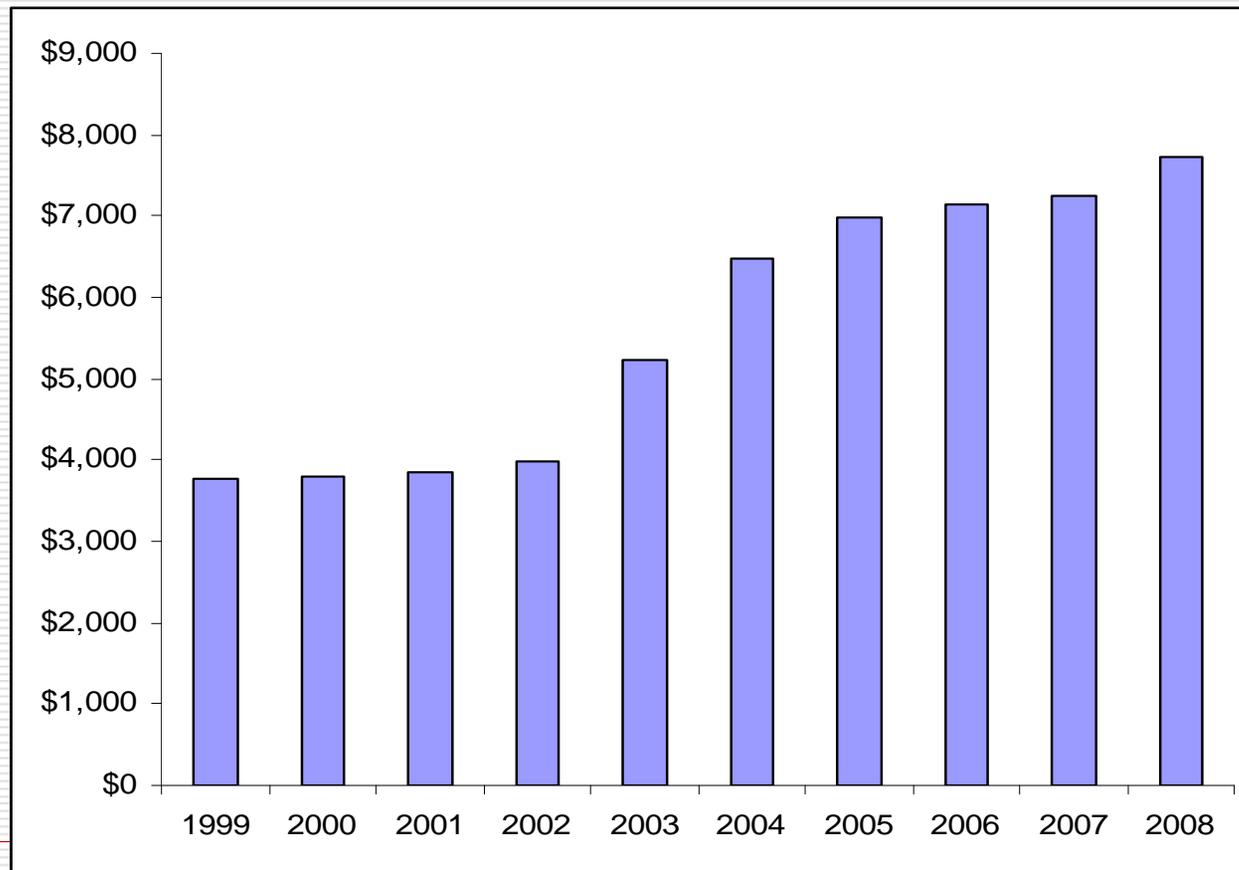
# Positions and accounts

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# Health insurance per position

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# Overtime expenditures

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	<b>2006</b>	<b>2007</b>	<b>2008</b>
Residential	\$72,607	\$67,760	\$68,416
Commercial	\$80,945	\$78,783	\$86,606
Waste reduction	\$7,044	\$7,955	\$11,575
<b>Total</b>	<b>\$160,595</b>	<b>\$154,498</b>	<b>\$166,597</b>

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# Depreciation expenses

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