



PUBLIC WORKS

The mission of the Public Works Department is to provide for the design, construction and maintenance of the City's streets, bridges, sidewalks and traffic control devices; provide maintenance and custodial services for City buildings; provide management oversight of the landfill and associated solid waste programs; operate and maintain the City's storm water drainage system; and manage and operate the City's vehicle fleet.















DEPARTMENT GOALS AND OBJECTIVES

1. Implement proactive preventative maintenance program for the City's streets. (Strategic Priority II and III)
 - a. Provide temporary and permanent repairs to paved streets.
 - b. Maintain dirt streets and alleyways.
2. Improve cleanliness and appearance of the City through an enhanced street sweeping program. (Strategic Priority II and III)
 - a. Provide sweeping programs targeting downtown, arterial and residential streets.
3. Maintain flood protection capacity of the Wichita-Valley Center Flood Control Project. (Strategic Priority II and III)
 - a. Control vegetation.
 - b. Repair channels and clear debris to ensure that flow rates are maintained.
 - c. Maintain secondary floodway control structures.

(Continued on next page)

PERFORMANCE MEASURES

	Building Owners & Managers Association		U.S. Department of Commerce		Federal Highway Administration
	City of Wichita - Internal Benchmark				

Dept. Objective	Program Measure Description	Benchmark	2004 Actual	2005 Projected	2006 Target	2007 Target
1a	Total number of potholes patched	 54,779	69,240	60,000	60,000	60,000
1a	Square yards of permanent pavement repairs	 26,800	21,681	30,000	30,000	30,000
1b	Blocks of dirt streets maintained	 18,207	19,044	20,000	20,000	20,000
1b	Blocks of alleys maintained	 469	561	500	500	500
2a	Rounds of residential street sweeping	 2.7	2.8	3	3	3
2a	Rounds of arterial street sweeping	 12	11	10	10	10
2a	Rounds of downtown street sweeping	 126	121	120	120	120
3a	Acres of floodway mowing	 8,951	10,773	8,267	8,267	8,267
3a	Acres of noxious weed control	 1,254	404	1,920	1,920	1,920
3b	Cubic yards of debris removal	 4,372	2,664	3,360	3,360	3,360
3b	Cubic yards of floodway erosion repair	 50,944	34,706	35,000	35,000	35,000
3c	Number of flap gates inspected/repared	 1,462	1,762	960	960	960
3c	Linear feet of floodway fence repaired	 4,472	2,450	1,920	1,920	1,920
3c	Linear feet of floodway levee grading	 5,168	4,378	4,000	4,000	4,000



DEPARTMENT GOALS AND OBJECTIVES (CONT.)

4. Maintain the integrity and capacity of the urban drainage system. *(Strategic Priority II and III)*
 - a. Provide routine cleaning of existing above and below ground drainage systems to maximize carrying capacity.
 - b. Inspect drainage system to ensure repairs can be completed when necessary.
 - c. Construct neighborhood drainage improvements.
5. Complete Capital Improvement Program projects within budget and on schedule. *(Strategic Priority I, II and III)*
 - a. Support growth and development by designing and constructing projects as expeditiously as possible.
6. Maximize fleet availability. *(Strategic Priority III and IV)*
 - a. Keep the fleet in service to the fullest extent possible.
7. Provide high quality, reliable fleet maintenance service. *(Strategic Priority III and IV)*
 - a. Minimize the number of vehicle repairs requiring rework.
8. Minimize the direct maintenance costs for the fleet. *(Strategic Priority III and IV)*
 - a. Provide economical service for fleet vehicles.
 - b. Purchase fuel in bulk to reduce costs.
9. Provide routine building maintenance and custodial services that are competitive with area average costs. *(Strategic Priority III and IV)*
 - a. Reduce maintenance and custodial costs per square foot by contracting out where possible.

PERFORMANCE MEASURES (CONT.)

Dept. Objective	Program Measure Description	Benchmark	2004 Actual	2005 Projected	2006 Target	2007 Target
4a	Linear feet of storm sewers cleaned	1,010,895	956,869	900,000	900,000	900,000
4a	Number of catch basins cleaned	65,037	80,054	60,000	60,000	60,000
4a	Number of inlets/manholes repaired	216	281	240	240	240
4b	Linear feet of storm sewers televised	62,092	116,899	50,000	50,000	50,000
4a	Cubic yards of debris removal	2,102	2,315	1,920	1,920	1,920
4a	Acres of ditch mowing	4,367	4,409	3,744	3,744	3,744
4a	Cubic yards of erosion repair	29,803	36,341	30,000	30,000	30,000
4b	Linear feet of storm line repairs	230	202	285	285	285
4c	Value of Hot Spot projects completed	\$468,829	\$334,150	\$500,000	\$400,000	\$400,000
5a	Compliance with FHWA regulations to ensure continued Federal Funding	100%	100%	100%	100%	100%
5a	Compliance with USDotC regulations to ensure continued Federal Funding	100%	100%	100%	100%	100%
5a	Percentage of projects completed within budget	100%	98%	100%	100%	100%
6a	Average percentage of fleet available for use	95.1%	95.3%	97.1%	97.1%	97.1%
7a	Percentage of vehicle work orders requiring rework	1.03%	1.0%	1.0%	1.0%	1.0%
8a	Maintenance cost per mile for marked Police vehicles (including accidents)	\$0.14	\$0.1197	\$0.12	\$0.12	\$0.12
8a	Maintenance cost per mile for non-Police vehicles (including accidents)	\$0.19	\$0.1927	\$0.15	\$0.17	\$0.17
8b	Fuel costs per mile for Police vehicles	N/A	\$0.1160	\$0.36	\$0.43	\$0.43
8b	Fuel costs per mile for non-Police vehicles	N/A	\$0.1592	\$0.32	\$0.41	\$0.41
9a	Total direct building maintenance costs per square foot	\$2.10	\$0.64	\$0.66	\$0.68	\$0.68
9a	Total direct custodial costs per square foot for areas cleaned by City personnel	\$1.58	\$1.32	\$1.34	\$1.40	\$1.40
9a	Total direct custodial costs per square foot for areas cleaned by contract personnel	\$1.58	\$0.79	\$0.80	\$0.80	\$0.80



RECENT ACCOMPLISHMENTS

Administered construction projects. Initiated 317 construction contracts totaling over \$74.5 million. Of the 317 projects, 204 were subdivision projects. The 204 projects totaled almost \$26 million. From 2002 to 2003 subdivision construction activity increased by 52%. There was very little slowdown in activity level from 2003 to 2004.

K-96 Borrow Pit. Completed the restoration of the old Northeast Substation rubble stockpile site at K-96 and Hillside, including new road construction and fencing. The road connects the K-96 Lake to Hillside, making the fishing lake much more accessible to citizens.

Duke's Docks Cleanup. The Duke's Docks site is just west of the Central Maintenance Facility (CMF). In 2002 the structure on the site burned and was abandoned by the tenant, leaving debris piles that encouraged illegal dumping and created a health hazard. In addition to clearing the site, staff received permission from the railroad to build a road across the rail spur. The crossing allows staff to move equipment and materials between the CMF and the Duke's Docks areas without entering public streets.

New computer system. Implemented Datastream in the Buildings Division. The City's new asset management system was implemented in the Fleet Division in 2003. The new system is used to track work orders, warranties, and City investment on a building-by-building basis.

Newly annexed areas. Continued the standard of providing routine services such as sign replacement/repair, street sweeping, street grading and ditching to newly annexed areas within one month of annexation. Legally required documentation provided to the County Commission has been distributed to other City departments to use as a model.

Centralized Buildings operations. Building Services established their first ever centralized base of operations at the facility at 500 S. Topeka, which formerly housed Fire Fleet maintenance. The Building Maintenance Center (BMC) is expected to increase efficiency and productivity.

Building security systems. In coordination with the Police Department, assumed responsibility for installation and maintenance of building security systems.

Met pollution prevention requirements. Met NPDES (National Pollution Discharge Elimination System) requirements for storm water system cleaning and street sweeping.

CMF campus improvements. Improved the CMF by replacing the oversized and aged propane fueling tank with a smaller unit from another City facility, widened drives for pedestrian and vehicle safety and increased parking space for City equipment and employee vehicles.

OVERVIEW

Public Works is organized into five divisions: Administration, Engineering, Building Services, Street Maintenance, Storm Water Management and Fleet Maintenance.

Administration staff coordinate and manage all department activities. The Engineering Division plans, designs, administers and inspects the construction of all infrastructure, such as freeways, bridges, streets, traffic signals, sewer and water lines, drainage systems and railways. Building Services provides maintenance and custodial services for more than 300 public buildings. Street Maintenance maintains curb-to-curb infrastructure, including streets, alleys, vehicular and pedestrian bridges, signalized intersections and crosswalks, street signs and pavement markings. Street Maintenance is also responsible for the operation of the construction and demolition (C&D) landfill, and oversight of the post-closure of the sanitary landfill. The Storm Water Utility is responsible for construction and maintenance of the City's storm water drainage system, including storm sewers, catch basins, streams and drainage ways. Fleet Maintenance maintains and replaces most City vehicles and equipment.

DIVISION DESCRIPTIONS

ADMINISTRATION communicates public infrastructure needs to the City Council through the City Manager, and communicates with State and Federal transportation and highway agencies. Additional responsibilities include ensuring department compliance with internal and external regulations, policies, and procedures and recovering costs of damaged department property. The Division's other responsibilities include monitoring and negotiating the utility franchise agreements, researching municipal utility matters and exercising leadership in the City's response to the changing telecommunications environment.

Administration Performance Measures				
Goal: Collect funds to reimburse the City for property damage.				
	2003 Actual	2004 Actual	2005 Projected	2006 Projected
Property damage cases billed	81	109	100	100
Amount billed (thousands)	\$72	\$98.5	\$90	\$90
Amount collected (thousands)	\$63	\$90	\$76.5	\$76.5
Percentage collected	87.2%	91.3%	85.0%	85.0%



ENGINEERING is responsible for planning, designing, administering, inspecting and overseeing the construction of all infrastructure including freeways, bridges, streets, traffic signals, sewers, water mains, storm drains, park and railway projects, including privately funded projects for public use. Activities include project planning and initiation, design review, right of way and utility coordination, cost estimating, contract administration, project financing and engineering advice for the Capital Improvement Program (CIP) and City departments.

In 2004 the Engineering Division administered 317 construction contracts totaling over \$74.5 million.

Engineering Performance Measures				
Goal: Close projects as soon as practical following final payment to the contractor.				
	2003	2004	2005	2006
	Actual	Actual	Projected	Projected
Statements of cost prepared	202	272	175	175
Days to complete statements	90	90	90	90

The Division issues permits for utility street cuts, driveway and sidewalk construction, and performs inspections of contractors' work. Engineering also administers the street lighting system and investigates traffic concerns.

Construction contracts numbered 317 and exceeded \$74.5 million in 2004, including 204 projects for almost \$26 million for streets, sewers, water lines and other public improvements for newly developing areas in the City. Major projects for which Engineering provided oversight in 2004 included Hoover, from south of 31st St. South to Harry; Hydraulic, between 57th St. South and 47th St. South; Rock, between 21st St. North and 29th St. North; Harry, from Oliver to Woodlawn and early phases of the Kellogg and Rock Road Interchange. Construction continued on earlier phases of west Kellogg interchanges at Maize and Tyler, and the east Kellogg interchange at Woodlawn.

In 2004, 179 contracts were awarded to consultant engineers valued at more than \$6.3 million for design and construction engineering services of City projects. Projects included design services for several projects including Pawnee, Washington to Hydraulic; MacArthur, Meridian to Seneca; West, Maple to Central; Oliver, Harry to Kellogg. Construction engineering (inspection) projects included the Murdock Bridge; Kellogg and Rock Road freeway intersection; Kellogg and Woodlawn freeway intersection; Hoover Road and K-42; 21st St. North, Oliver to Woodlawn; 17th St. North and Hillside intersection; Central, 135th St. West to 119th St. West; Central from Oliver to Woodlawn, Meridian from 31st St. South to Pawnee, McCormick west of K-42, and the Central Rail Corridor.

Engineering is responsible for the planning and design of traffic control devices such as signalized intersections, traffic signs and pavement markings. Engineering also supports the Planning Commission on development issues, monitors traffic and responds to citizen traffic concerns. In addition, Engineering administers the \$2.8 million annual street lighting program, provided contractually through Westar Energy.

In 2005 Engineering staffing is increased to handle the increasing project inspection workload. The additional inspectors and survey crew are expected to speed up the project inspection process for developers, home builders and home buyers. New staff positions include one three-person survey crew, five inspectors, one engineer, one materials testing position and one administrative position, for a total of 11 new positions. There is no cost to the taxing (General) fund, as all position costs will either be charged directly to projects or will be recovered through an overhead charge to projects. As a result of the increased staffing, the use of outside firms for construction engineering services is expected to decrease.

BUILDING SERVICES provides custodial, maintenance and repair services to more than 300 City-owned buildings, including City Hall, Central Maintenance Facility, Mid-America All-Indian Center, libraries, Art Museum, Wichita/Sedgwick County Historical Museum, Century II and Expo Hall, Lawrence-Dumont Stadium, park shelter buildings and restrooms, community and recreation centers, Botanica, Farm and Art Market, Wichita Boathouse, Wellington Place and Fire facilities.

Building Services maintains over 300 City buildings.

In 2003 maintenance of all Park facilities was consolidated in Building Services. Technical building maintenance, including plumbing and electrical maintenance, as well as exterior maintenance such as fountains are now the responsibility of Building Services. The division received four full-time and three part-time positions and a total budget amount of \$302,000 from Park Department to support the consolidated responsibilities.

The Adopted 2005 – 2014 capital budget (CIP) addresses major maintenance needs for the City's buildings through a supplemental building maintenance allocation. For three years,

Cooperative Labor Program Performance Measures				
Goal: Provide cost savings to Wichita taxpayers through the use of inmate labor.				
	2003	2004	2005	2006
	Actual	Actual	Projected	Projected
Inmate labor hours	51,048	35,584	45,000	45,000
Estimated cost savings after program costs	\$511,042	\$317,418	\$445,000	\$445,000



\$750,000 is proposed to be allocated each year, for a total of \$2.25 million in supplemental building maintenance funding. The funding is expected to be used for extraordinary repairs.

Increasing custodial and maintenance responsibilities for more than 300 buildings have challenged the capacity of existing staff and resources. Between 2001 and 2003, five positions were added to Building Services to support the increasing number of City facilities. The 2005 budget included a new clerical position to track refrigerants and hazardous materials to meet EPA and KDHE reporting requirements. The 2006 budget includes an Electronics Technician to assist with security systems at City Hall and other City facilities.



The Hotel at Old Town parking garage is one of over 300 buildings maintained by Building Services.

Building Services participates in the management, specification writing and administration of building construction and major building maintenance projects, in conjunction with other departments. To assist with the increasing number of public building capital projects, a Special Projects Coordinator was added in 2002. Position costs are charged to the projects.

Some of the major 2004 capital projects administered by Building Services include the completion of the Riverside Park improvements, relocation of Fire Station #10, construction of the new CityArts building on the Old Town Cinema Plaza, renovation of an old warehouse to become the new Police Property and Evidence facility, demolition required for the WaterWalk development, City Hall security enhancements, the Kansas Aviation Museum and City compliance with the Americans with Disabilities Act (ADA).

Building Services also oversees the Cooperative Labor Program that transports and supervises inmates from the Winfield Correctional Facility. The value of labor received through this program more than offsets the costs of program administration. In 2004, 35,584 labor hours were provided at minimal cost to the City through this program.

The State Office Building and garage facilities are also maintained by Building Services. The building previously housed a department store and was remodeled extensively for use as an office building, opening in July 1994.

Offices housed in the State Office Building include the Human Rights Commission, Department of Social and Rehabilitation Services, Department of Revenue, Department of Health and Environment, Bureau of Investigation and the Corporation Commission. The City's Career Development Division operates out of offices on the lower level of the garage, providing a one-stop career development, training, and placement services center. Programs include the Job Training Partnership Act and Welfare to Work.

Revenue from the State finances custodial, maintenance and operating expenses of the State Office Building and garage. A private contractor provides custodial services and garage operations, while the City maintains a staff of three full-time and one part-time employee. Major maintenance projects are completed contractually. \$50,000 is included each year for major maintenance on the parking garage, which has received only minor maintenance since opening. By agreement, operating expenses in excess of revenues are funded equally by the City and Sedgewick County.

State Office Building Financial Summary of Operations \$ in Thousands				
	2004	2005	2006	2007
Revenues	980	991	991	991
Expenditures	985	1,310	1,342	1,023
Budgeted income (loss)	(5)	(319)	(351)	(32)
Fund balance	734	414	63	31

The **MAINTENANCE DIVISION** maintains curb-to-curb infrastructure, including 1,869 miles of streets and alleyways, 261 vehicular bridges, 30 pedestrian bridges, 395 signalized intersections, 150 signalized crosswalks and 60,000 street signs. In a typical year, about 60,000 tons of street sweepings are collected and delivered to the landfill. Maintenance manages snow and ice removal and coordinates the City's response to floods and damage caused by high winds and other storm events. Operations are conducted out of three City facilities: the Central Maintenance Facility (CMF), Northeast Substation and West Substation.

Traffic Maintenance Performance Measures				
Goal: Maintain the signal and signage system to provide smooth traffic flow and traffic safety for the traveling public.				
	2003	2004	2005	2006
	Actual	Actual	Projected	Projected
Hours of service and repair of signals	13,584	9,560	13,000	13,000
Sign locations serviced	14,258	13,527	15,000	15,000
Rounds of pavement markings	2	2	2	2



Traffic Maintenance maintains traffic signals, signs, pavement markings and pedestrian crossings.



Traffic maintenance spent 9,560 hours servicing and repairing traffic signals in 2004.

The 2005 budget added an Engineering Aide to collect data on the City's street signs and traffic signals. A comprehensive database is needed to catalog and locate all of the street signs. The database will also include maintenance and replacement scheduling information, as well as warranty information on each sign. The new position is paid for by an offsetting cut in the temporary labor budget.

A program to systematically replace 200 traffic signal heads and 120 pedestrian signal heads each year is continued in the 2006 budget. Replacing signal heads simplifies the replacement of lenses and bulbs, as the newer heads are less prone to breakage when handled than are the older heads, which tend to become brittle over time.

The 2003 budget included a program to replace green lenses and walk/don't walk panels at all 150 of the City's mid-block signals (pedestrian and school crosswalks). Savings are captured through the use of light emitting diode (LED) technology, which uses a fraction of the electricity consumed by incandescent bulbs, and have a life cycle from 5 to 10 times longer than a traditional bulb. The program is expected to recover all initial costs after four years, and savings generated in years five through eight will exceed the cost of replacing the LEDs after eight years. Use of LEDs at all signalized intersections is a possibility for the future, and cost payback models will be refined based on the City's experience with the mid-block signals. To date, savings from this program have exceeded expectations.

The Maintenance Division, with an annual budget of over \$20 million, is larger than 13 City departments.

Thermoplastic marking equipment allows crews to use liquefied plastic to mark intersections and crosswalks. Thermoplastic marking lasts five to seven times longer than reflective paint, increasing the maintenance interval for remarking intersections and crosswalks.

A systematic program to replace traffic signal controllers and conflict monitors began in 2002. The replacement of 20 controllers each year will allow all of the old-model controllers to be replaced in 13 years. The replacement of 40 conflict monitors annually will result in the replacement of all of the old-model conflict monitors by 2006.

Street Maintenance monitors the condition of City streets using the Pavement Management System (PMS). The PMS is a computerized street inventory and decision-making tool that rates the condition of streets and assists in determining the most cost-effective application of street maintenance resources. Streets are rated once every two to three years. The PMS compiles the pavement condition data and assigns a Pavement Quality Index (PQI) number between 10 (new condition) and zero. Streets with a PQI under seven are considered substandard. Currently, 21 percent of Wichita's streets are rated substandard.

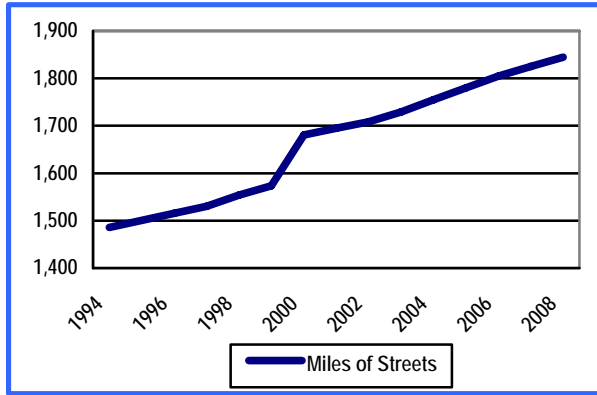
**Maintenance Division Expenditures
\$ in Thousands**

	2004	2005	2006	2007
Snow and Ice	255,260	483,070	403,700	409,080
Traffic Maintenance	2,440,467	2,686,470	2,788,830	2,869,880
Street Maintenance	11,434,705	12,557,570	13,239,280	13,530,200
Street Cleaning	1,728,783	1,796,780	1,898,410	1,968,350
Landfill Operations	460,797	1,782,900	4,062,270	667,510
Landfill Post Closure	1,158,452	5,346,570	23,556,910	1,862,780
Total Expenditures	17,478,464	24,653,360	45,949,400	21,307,800

Over the last decade, the miles of City streets have grown with annexations and newly paved streets. More than 243 miles of streets were added from 1994 to 2003, an increase of 16.4%. During the same time period, lane miles increased by over 717, an increase of 21.4%. The added mileage includes almost 25 miles of dirt streets and over 70 miles of substandard asphalt streets. About 20 miles are projected to be added each year in 2005 – 2007.

The increasing miles of streets are addressed with additional budgeted resources. The 2006 budget includes \$130,000 more per year for street maintenance. In 2005, \$600,000 was restored to the Contract Maintenance Program that was deferred in 2003 and 2004. With the \$130,000 addition and the \$600,000 restoration, total Contract Maintenance Program annual resources are \$5.65 million. The added funding reflects the City's ongoing commitment to high-quality streets and roadways, both in the older areas of the City and for the newest neighborhoods.

The City added over 243 miles of streets in the last 10 years. About 20 miles are projected to be added each year in the future.



A crack seal crew was also added in 2005. Five positions will seal at least 1 million lineal feet of cracks per year. Crack sealing is critical to long-term preventative maintenance, since it reduces water infiltration into and under road surfaces, reducing the negative effects of freeze-thaw cycles. The equipment for the new crew was purchased in 2004.

Street Maintenance has also upgraded and added equipment in the past several years, including: the upgrade of two dump trucks to pothole patch trucks, which are capable of providing hot asphalt for longer lasting pothole patches and help with larger asphalt repairs; a new concrete mixer to improve productivity of maintenance crews; and two asphalt paving machines to improve productivity on major street repairs. The addition of an asphalt roller placed a roller in each maintenance substation.

Downtown and Old Town maintenance efforts are addressed by a riding sweeper to improve productivity when cleaning sidewalks, parking lots and other pedestrian areas. A second five-person maintenance crew and equipment was added in 2001 to maintain the new Douglas Avenue Streetscape and Reflection Square Park, as well as to improve maintenance in the Old Town area.

Street Cleaning operates a fleet of seven mechanical street sweepers for sweeping downtown, arterial and residential streets. Residential streets are swept during the daytime, while arterials and highways are swept in the evening and night times to minimize inconvenience to citizens. Street sweepings are transported to the City's Construction and Demolition (C&D) Landfill, where the sweepings are screened to remove litter and then used as cover material for C&D operations.

In order to meet National Pollution Discharge Elimination Standards (NPDES) requirements, in 2003 the City implemented a new approach to neighborhood street sweeping. Neighborhoods are now swept on a staggered basis, with older neighborhoods and neighborhoods having mature trees swept three times a year and newer neighborhoods with limited foliage levels swept once per year.

City residential streets were swept an average of 2.8 times in 2004.

Areas that are in-between (moderate numbers of trees) are swept twice per year. As a result of the new approach, street sweeping cycles in residential areas increased from 2.5 in 2002 to 2.8 each year in 2003 and 2004.

Street Cleaning is also responsible for graffiti removal and litter pickup, primarily responding to community requests for service.



The City patched over 69,000 potholes in 2004 and projects to patch 60,000 potholes each year in the future.

The Construction and Demolition (C&D) Landfill Fund finances operation and management of Brooks Landfill. Owned by the City, Brooks C&D Landfill serves all of Sedgwick County. The 323-acre landfill receives non-putrefying waste and non-friable asbestos, the only landfill in the region licensed by KDHE to accept asbestos.

Revenues for landfill operations and solid waste programs are generated from tipping fees collected at the landfill. A private contractor operates the landfill and collects the \$20 per ton tipping fee.

Sedgwick County assumed responsibility for solid waste disposal beginning on October 10, 2001. The County has implemented a transfer station system to collect and ship trash to distant landfills. Tipping fees increased from \$26 per ton to \$38 per ton. If the City were to dispose of its C&D waste through the transfer station, operating expenses would increase by about \$2.5 million per year, and most of the increase would occur in the tax-supported (General) fund.

Landfill Post Closure Financial Summary of Operations \$ in Thousands				
	2004	2005	2006	2007
Revenues	307	457	596	736
Expenditures	1,158	5,347	23,602	1,763
Budgeted income (loss)	(851)	(4,890)	(23,006)	(1,027)
Fund balance	28,923	24,033	1,027	1



C&D Landfill Financial Summary of Operations \$ in Thousands				
	2004	2005	2006	2007
Revenues	799	501	538	575
Expenditures	461	1,783	4,062	668
Budgeted income (loss)	338	(1,282)	(3,524)	(93)
Fund balance	4,915	3,633	108	16

To avoid this costly scenario, the City converted Brooks to a C&D landfill. Operating funds for the C&D landfill are included in the 2005 – 2007 Budgets. The Neighborhood Cleanup and Bulky Waste programs are funded from C&D landfill revenues. Funding for these programs is \$250,000 per year.

Citizens benefit from the C&D operation in two ways. City tax increases or service reductions are not necessary to cover the cost of waste disposal and continue the neighborhood cleanup programs. Additionally, the C&D landfill is open to the public, allowing citizens a low-cost waste disposal alternative to the transfer stations. Business and industry can also save money, to the extent their waste streams are construction and demolition waste.

The City is responsible for post closure costs at Brooks landfill until 2033.

The City is also reducing the volume of waste flowing into the landfill. A tub grinder planned for 2005 will reduce the volume of wood waste by about 60%. In addition, wood waste will be processed and made available for re-use. City park and landscaping projects, and golf courses can use the wood mulch produced by the tub grinder. The mulch can also be made available to contractors on City capital improvement projects, reducing project landscape costs. Any material not used would be stored and composted.

The Landfill Post Closure Fund is the City's savings account that will finance the environmental and maintenance expenses of Brooks Landfill for 30 years after closure, through 2033. Post closure landfill expenses include closed cell maintenance, groundwater monitoring to detect contaminants, operation and maintenance of the air sparging system (installed to address previously discovered contamination) and monitoring of the gas collection system.

Now that the landfill is closed, revenue to the Landfill Post Closure Fund is limited to interest. The fund balance is projected to be at least \$24.03 million at 2005 year-end, and is projected to be sufficient to fund maintenance and monitoring activities. Certification to KDHE requires the City to be able to fund up to \$24.77 million for landfill post closure costs.

The **STORM WATER UTILITY** constructs, reconstructs and maintains the City's storm water drainage system, including storm sewers, catch basins, streams and drainage-ways. The utility is also required to ensure the City's compliance with

water quality provisions of the National Pollutant Discharge Elimination System (NPDES) permit.

Storm Water maintenance crews clean and maintain 400 miles of storm sewers, 15,000 catch basins and 130 miles of drainage ditches annually. Storm sewers are cleaned and televised to assess condition and repair needs. Catch basins are cleaned and repairs made when needed. Erosion repairs are made to drainage ditches and banks are stabilized as required. A private vendor provides contractual mowing of ditches and drains.

The Storm Water Utility operates and maintains six pump stations that move excess water in times of heavy rains or flooding. As additional pump stations are constructed in conjunction with the East Kellogg improvements, additional maintenance resources will become necessary.

Storm Water Utility Financial Summary of Operations \$ in Thousands				
	2004	2005	2006	2007
Revenues	6,021	5,572	6,573	7,598
Expenditures	5,190	6,133	8,811	7,574
Budgeted income (loss)	831	(561)	(2,238)	25
Fund balance	2,815	2,254	16	41

The Utility is responsible for the design and construction of drainage projects approved in the Capital Improvement Program. The Utility also investigates drainage concerns from citizens and determines possible solutions. The "Hot Spots" (neighborhood drainage problems) budget is proposed to be \$500,000 in

The Storm Water Utility budget includes funding each year for neighborhood drainage projects.

2005 and \$400,000 per year thereafter. To the greatest extent possible, Utility staff seek to integrate neighborhood solutions with systemic solutions, to further increase the impact of Hot Spot funds.

Storm Water Utility operations are funded with fees paid by property owners in the City. The fee is determined by the number of equivalent residential units (ERU). One ERU is the average amount of impervious area (rooftops and pavement) for a typical residence. The fee for all single-family dwellings is based on one ERU. Businesses and industrial site fees are based on the number of ERUs on the property. The current ERU rate is \$1.50.

Construction sites in the City are monitored by the Utility to ensure compliance with the Storm Water Pollution Prevention Ordinance. All sites must use Best Management Practices to minimize the erosion sediment and chemicals entering the drainage system, which ultimately end up in streams and rivers. To ensure compliance, industrial sites in the City are



also monitored with water samples and tests to show trends in amounts and types of pollutants present.



This construction site incorporates Best Management Practices (BMPs). The barriers allow water to drain but prevent silt from flowing into the storm drainage system and ultimately into the streams and rivers.

Departments that work or make inspections in and around the drainage system assist with enforcement of the ordinance. The Utility provides education and coordination with cooperating departments including Police, Fire, Central Inspection, Public Works, Park and Environmental Health.

Capital projects currently underway include the 1st and 2nd Street West Drainage Outfall, which provides drainage to West Street between Maple and Central, and areas adjacent to 1st and 2nd Streets from West Street to the Arkansas River. That project is expected to cost almost \$7 million to construct. The Murdock, Wabash to Wichita Drainage Canal project will solve a serious flooding issue on Murdock and is expected to cost about \$1.35 million to construct.

Storm Water Management also includes **City/County Flood Control**, which is responsible for inspecting, operating and maintaining the Wichita-Valley Center Flood Control Project in accordance with standards established by the Corps of Engineers. The Wichita-Valley Center Flood Control Project was a joint undertaking of the U.S. Army Corps of Engineers, Sedgwick County and the City of Wichita, and was completed in 1960. The project includes the "Big Ditch" and the Big and Little Arkansas Rivers from Valley Center to Derby. Included are 41 miles of channels, 97 miles of levees, 60 interior drainage structures and a total area of 5,613 acres.

The floodway is maintained by the Storm Water Utility and is funded equally by the City of Wichita and Sedgwick County. Maintenance includes mowing, cleaning drainage structures, removing debris from around bridges and other structures, grading levees and roadways, erosion repair, bank stabilization and repair of fences and gates. Mowing alone requires four positions plus tractors and mowing equipment. As time and supplies permit, Flood Control staff are also channelizing the floodway, which is expected to contain normal flows and limit erosion damage in the future.

FLEET MAINTENANCE consists of three sections: Fleet Maintenance, Fire Fleet Maintenance and Central Stores. In 2002 the Fleet and Buildings Division was broken into two separate operations. The Fleet Maintenance Services Manager directs and oversees the Fleet Division.

Fleet Maintenance is responsible for the operation and maintenance of approximately 2,200 automobiles, light trucks, heavy trucks, heavy equipment and light equipment used by City departments, but does not provide vehicles or service for Wichita Transit's large buses or Airport equipment. Internal customers pay rent on vehicles and equipment to offset the operation, maintenance, and future replacement costs. Services include preventive maintenance, repairs, tire service, mobile service, fueling, overhauls, towing, body shop and major mechanical repairs. Repairs to electrical components, cooling systems and tires for heavy equipment are contracted to outside vendors. Major repairs for specialized heavy equipment are managed contractually with local businesses.

Fleet maintains over 2,200 vehicles and pieces of equipment.

	2004	2005	2006	2007
Revenues	10,459	10,406	10,864	11,024
Expenditures	11,028	11,204	13,564	11,406
Budgeted income (loss)	(569)	(798)	(2,700)	(382)
Fund balance	3,904	3,106	406	25

Central Stores procures and maintains an inventory of parts and supplies for Fleet Maintenance and other City departments. Sales to City departments average over \$1 million annually, consisting of over 6,000 unique items stored in small inventories and purchased on a just-in-time basis. Central Stores is also responsible for collecting and disposing of used chemicals, lubricants, metals and tires.

Improving the Stores operation is an ongoing task, with dual goals of improving service delivery to field operations and reducing the cost of service provision to the City organization. Much of the benefit comes from conversion from warehousing to a just-in-time (JIT) inventory operation. More contracts have been put into place to ensure the lowest price and highest availability of materials for operations, and some contracts include provisions for delivery and vendor warehousing. By allowing vendors to store materials and keeping smaller inventories at the CMF, the City freed up space previously consumed by warehousing operations.

The new DataStream asset management system debuted in late 2003.



The Fleet operation is using a new asset management computer system. Datastream 7i went live in the 4th quarter of 2003. Datastream tracks inventory, warranties and schedules preventative maintenance (PM) on equipment. The new system helps Fleet track costs on a per unit (vehicle or equipment) basis and improves PM scheduling and implementation. Later, when more information has been gathered, rental rates can be examined using the cost information in Datastream.

Fire Fleet Maintenance (FFM) operations merged with the rest of the City's fleet maintenance operations in 2002. Inventory management, financial management and supervision is now coordinated through the Fleet Division. The former warehouse space at the CMF has been converted to house Fire Fleet Maintenance operations, with move-in occurring in late 2003.

The majority of vehicle work is performed at the Central Maintenance Facility. Vehicles are also serviced in garages at the Northeast and West Public Works Substations.



This gradall is one of more than 250 pieces of heavy equipment maintained by Fleet.

The budget includes safety equipment and inspections to ensure a safe and secure work environment at the garages. Three new vehicle lifts were added in 2001, and additional inspections of shop heavy equipment were funded. The inspection activities led to replacement of the overhead crane and electrical system improvements in 2002.

In 2005 – 2007 the capital replacement budget increases by \$100,000 each year to address the increasing need for capital equipment replacement, in response to a 2001 external study which called for significant increases in capital investments.

New fuel pumps and the information system used to track fuel usage are also included in the 2005 and 2006 budgets. New technology will be used to electronically record each time a vehicle fuels up, allowing better tracking of fuel usage and allowing the City to apply for rebates on gas taxes for fuel used in off-road vehicles.

Additionally, the Transit fleet operation is under review for possible functional consolidation with other fleet maintenance functions. The Airport fleet operation is considered a poor candidate for functional consolidation due to the numerous Federal Aviation Administration restrictions on Airport fleet equipment location and movement.

FINANCE AND OPERATIONS

Public Works operates from eight different funds and subfunds. The Department's street (curb-to-curb) functions are funded with the City's share of gas tax revenues collected by the State. Gas-tax funded activities include street maintenance, street cleaning, traffic maintenance, snow and ice control, engineering and the street portion of the capital investment maintenance program.

Many other activities beyond curb-to-curb projects are paid from the General Fund, including department administration, natural resource conservation, design review for non right-of-way projects (not gas tax eligible), building services, street lighting, and the public buildings portion of the capital investment maintenance program.

Public Works operates from numerous funds besides the General Fund. Operational funds include the State Office Building, Construction & Demolition Landfill, Landfill Post Closure, Storm Water Utility, City-County Flood Control and Fleet.

FUTURE CHALLENGES

- Drainage studies are needed throughout Wichita to identify problem areas and recommend solutions.
- Additional funds are needed for street maintenance. Maintenance needs for the next 10 years total at least \$70 million. Currently there is \$5.65 million per year budgeted for maintenance. In order to fully fund estimated maintenance costs an additional \$1.5 million per year is needed.
- Street sweeping resources have been reduced even as the City has continued to grow. In addition to the cleanliness and beautification provided by street sweeping, the City must meet NPDES guidelines. At current staffing and equipment levels, one major storm cleanup (such as after a tornado) could cause Wichita to fail to meet NPDES guidelines for street sweeping.
- Currently the Fleet capital equipment replacement backlog is over \$10 million, based on mileage/hours. The backlog would be larger if age were also considered.
- Transform the Fleet operation to a preventative maintenance function, to lower fleet costs and increase fleet unit availability.
- Continue to restructure and refine Central Stores operations, procedures and processes. Control inventory levels and improve accountability of employees and Stores operation.



- In many older neighborhoods the storm sewer systems are seriously undersized, resulting in flooding even during relatively small rain events. These old systems need to be reconstructed and enlarged to handle the runoff generated in the neighborhoods.
- Generally, maintenance resources should be increased as maintenance responsibilities increase, usually through annexation.
- Additional automation is needed in Public Works. For example, many Public Works operations could be aided through the use of Geographic Information Systems (GIS) technology, but those data layers do not currently exist. Street signs, storm water pipes, street segments and other information could be stored and accessed electronically.

Public Works Department Budget Summary					
	2004 Actual	2005 Adopted	2005 Revised	2006 Adopted	2007 Approved
Personal Services	17,703,719	20,012,330	18,930,820	20,463,010	21,455,280
Contractual Services	18,881,575	20,829,150	20,654,710	21,593,290	21,627,670
Commodities	4,793,576	5,475,390	5,784,570	5,484,560	5,471,760
Capital Outlay	3,414,241	3,834,940	4,372,740	4,904,090	4,157,540
Other	5,093,751	37,143,560	9,761,560	34,483,100	5,501,440
Total Local Expenditures	49,886,862	87,295,370	59,504,400	86,928,050	58,213,690
General Fund	9,408,555	10,224,960	9,969,190	10,006,290	10,250,360
Gas Tax	20,227,000	22,605,250	22,330,820	23,962,580	23,905,210
Construction and Demolition Landfill	460,797	3,586,470	1,782,900	4,062,270	667,510
Landfill Post Closure	1,158,452	27,253,410	5,346,570	23,601,910	1,762,780
State Office Building	985,285	1,600,640	1,310,180	1,341,750	1,022,650
City-County Flood Control	1,428,547	1,582,540	1,427,880	1,578,620	1,625,600
Storm Water Utility	5,189,966	6,823,310	6,132,740	8,810,810	7,573,610
Fleet	11,028,260	13,618,790	11,204,120	13,563,820	11,405,970
Total Local Expenditures	49,886,862	87,295,370	59,504,400	86,928,050	58,213,690
Total full-time positions	453	470	467	467	467
Total part-time positions	19	19	16	16	16
Total FTE positions	461.5	*478.5	**473.5	473.5	473.5
<i>* The 2005 Adopted Budget included eleven (11) additional Engineering positions for project inspection, five (5) additional Street Maintenance staff and an additional Plumber in Building Maintenance.</i>					
<i>** The 2005 Revised Budget reduced five (5) custodial positions due to outsourcing.</i>					

For additional information on the Public Works Department visit www.wichita.gov



PUBLIC WORKS

Pictured above is the Central Maintenance Facility located on McLean Blvd. Wichita's Public Works Department is responsible for street maintenance of 1,500 miles of City streets and 125 bridges, street cleaning, traffic maintenance, Brooks landfill, storm water management & maintenance, flood control, fleet maintenance, engineering construction and survey and natural resources.