City Engineer.....Brian McManus

Service Statement

The Engineering Department is responsible for the planning, design and construction of City projects such as roads, sewers, water mains, drains, sidewalks, trails and soil erosion control.

Major responsibilities include in-house design and oversight of public works projects and oversight of consulting engineers engaged in design, construction engineering, inspection and materials testing on City projects.

Engineering develops master plans, cost estimates and funding strategies for public improvement projects during the annual project priority process. Engineering reviews plans for public and private improvements in City rights-of-way for compliance with City ordinances and development standards. Engineering is responsible for all records of City utilities, local and major streets, pavement management and pavement markings, traffic counts, traffic sign and signal maintenance and traffic control orders. Engineering receives requests for installation of new traffic control devices and processes these requests in coordination with the City's traffic consultant and Midland City Council.

Residents, property owners, developers, builders and consulting engineers obtain a variety of information from Engineering such as utility, wetland and floodplain locations, development standards, construction specifications, permit and inspection requirements, and location and availability of City utilities. Property owners can receive information on special assessment procedures for implementing road, water, sewer or sidewalk improvements. Engineering is responsible for setting the right-of-way standards, issuing right-of-way construction permits for sewer connections, driveways, sidewalks, curb cuts, gas mains, electric lines and communication wires and performs all permit inspections. Plans for private development are submitted to the Engineering Department to review for conformance with City development standards and traffic requirements.

Construction inspection is conducted to ensure conformance with City, State and County requirements and contract specifications.

Engineering develops and administers the City's storm water ordinance by implementing programs and projects to promote sustainable storm water management and reduce soil erosion to improve and protect water quality in drains and rivers.

Engineering is actively using the City's Geographic Information System (G.I.S.) to address public concerns, review and maintain street and utility infrastructure and manage street signs.

Engineering manages daily operations for Jack Barstow Municipal Airport that includes snow plowing, grounds mowing, pavement maintenance, grounds maintenance and building maintenance.

Functions

Administration

- Prepares and administers department budget
- Prepares and administers capital improvement budget for roads, sanitary sewers, water mains, drains and detention, and sidewalks
- Liaison with Federal, State and County agencies to implement projects and programs
- Liaison with developers to implement public improvements for new residential, commercial and industrial developments
- Liaison with utility companies for private utility construction in City right-of-way
- Prepares and maintains development standards for new development
- Assists with development of master plans for capital improvements
- Administers a Storm Water Management program and ordinance
- Coordinates the City's street light program
- Manages operations for Barstow Municipal Airport

Engineering

- Designs public improvement projects such as roads, bridges, storm drains, sanitary sewers, stream bank stabilization and water mains
- Design reviews and recommendations with MDOT for projects on State Highway System and Midland County Road Commission for County projects
- Technical consultant and project implementation manager for DDA and Project for Public Spaces projects
- Reviews development-related public improvement plans for compliance with City standards and specifications
- Reviews development-related site grading, drainage and soil erosion control plans for compliance with City, County and State requirements
- Maintains street utility maps and G.I.S.
- Maintains City development standards, construction specifications and standard construction details
- Investigates construction-related concerns from the public regarding construction and development projects
- Answers utility questions
- Performs modeling for sanitary and storm sewer systems
- Obtains permits from MDEQ and MDOT for construction of sewers, water mains and street improvements
- Participates in implementation and maintenance of the City's pavement management system and analyzes roads for defects and deficiencies
- Issues permits and performs inspections for right-of-way permits, sewer connections, curb cuts , sidewalks and soil erosion control
- Prepares special assessment district projects for paving, sanitary sewers, water mains and sidewalks
- Provides professional engineering and survey services for all City departments
- Maintains sewer lead location data for all connections to the sanitary systems
- Prepares applications for grants for State and Federal funding

Surveying and Inspection

- Conducts surveys for design and construction layout of public improvements
- Maintains the City's benchmark systems
- Participates in data collection and maintenance of the City's geographic information system
- Inspects public improvements for compliance with development standards, construction specifications and soil erosion control requirements
- Inspects construction of city road, water, sidewalks and sewer projects
- Prepares and reviews legal descriptions for all real estate issues for the City of Midland

Functions (cont.)

Traffic Services & Traffic Engineering

- Reviews and approves traffic control for capital improvement projects and private work in City right-of-way
- Maintains and upgrades traffic signals and related signal equipment for the City of Midland, Midland County and City of Auburn
- Maintains records of traffic signals and signs
- Conducts, analyzes and maintains traffic volume counts
- Develops and maintains city-wide traffic signal progression
- Reviews plans of new developments for compliance with traffic standards
- Responds to requests for new traffic control devices such as signals and signs
- Installs and/or coordinates installation of new traffic control devices
- Liaison to the Midland County Road Commission and City of Auburn for traffic signal complaints
- Investigates traffic vision obstructions
- Prepares traffic control orders for all new devices that are made permanent by City Council
- Conducts and oversees traffic impact studies
- Maintains traffic signal software
- Identifies/reviews traffic safety concerns and implements corrective actions
- Maintains and replaces street signage
- Maintains pavement marking for city streets annually and public parking lot areas as needed
- Maintains street lights for downtown, custom street lights in various locations, and in public parking areas
- Coordinates new public street light projects

Storm Water Drainage

- Manages storm water ordinance requirements for developments and subdivisions
- Evaluates storm water drainage system for needed improvements
- Develops and implements projects to improve watersheds and storm water drainage system
- Monitors Federal, State and County information regarding changes in storm water drainage by regulations and mandates
- Performs required Storm Water Operator duties required by MDEQ for projects on City property
- Obtains field and office data for creation of storm water model on G.I.S.
- Surveys drainage problems on private property and makes recommendation for corrections

Department at a Glance

Funding Level Summary	2007-08 Actual	2008-09 Actual	Adjusted 2009-10 Budget	Estimated 2009-10 Budget	Adopted 2010-11 Budget	% of Change
Engineering	$ 94,983	$ 140,460	$ 157,040	$ 261,375	$ 122,033	-53.3%
Public Lighting	461,187	520,869	534,499	586,611	656,980	12.0%
Traffic Services	57,724	40,089	64,367	63,267	58,781	-7.1%
Barstow Airport	316,207	309,191	485,078	333,875	318,650	-4.6%
Total Department	**$ 930,101**	**$ 1,010,609**	**$ 1,240,984**	**$ 1,245,128**	**$ 1,156,444**	**-7.1%**
Personal Services	$ 66,315	$ 106,706	$ 144,902	$ 259,087	$ 123,399	-52.4%
Supplies	47,749	50,552	59,305	53,832	48,064	-10.7%
Other Services/Charges	797,023	829,932	872,767	904,787	969,981	7.2%
Capital Outlay	19,014	23,419	164,010	27,422	15,000	-45.3%
Total Department	**$ 930,101**	**$ 1,010,609**	**$ 1,240,984**	**$ 1,245,128**	**$ 1,156,444**	**-7.1%**

Personnel Summary					
Full-Time	15	15	14	14	12
Regular Part-Time	-	-	-	-	-
Total Department	**15**	**15**	**14**	**14**	**12**

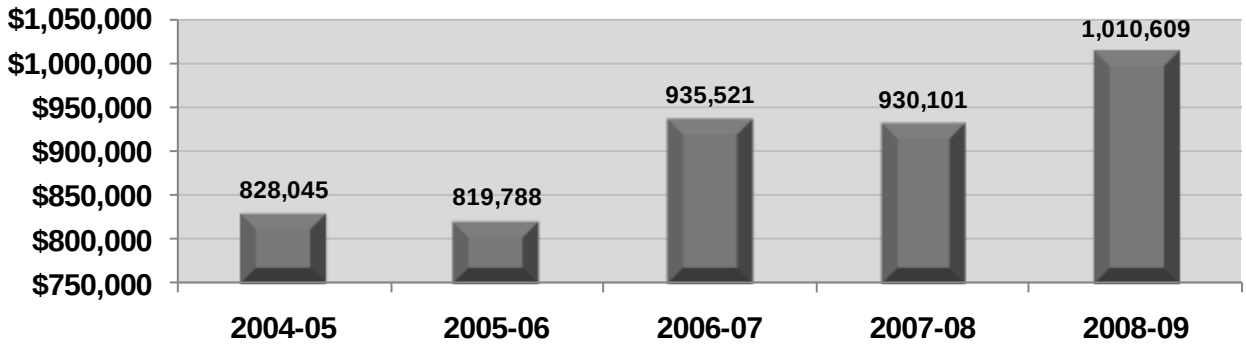
Summary of Budget Changes

Significant Notes – 2010-11 Budget Compared to 2009-10 Budget

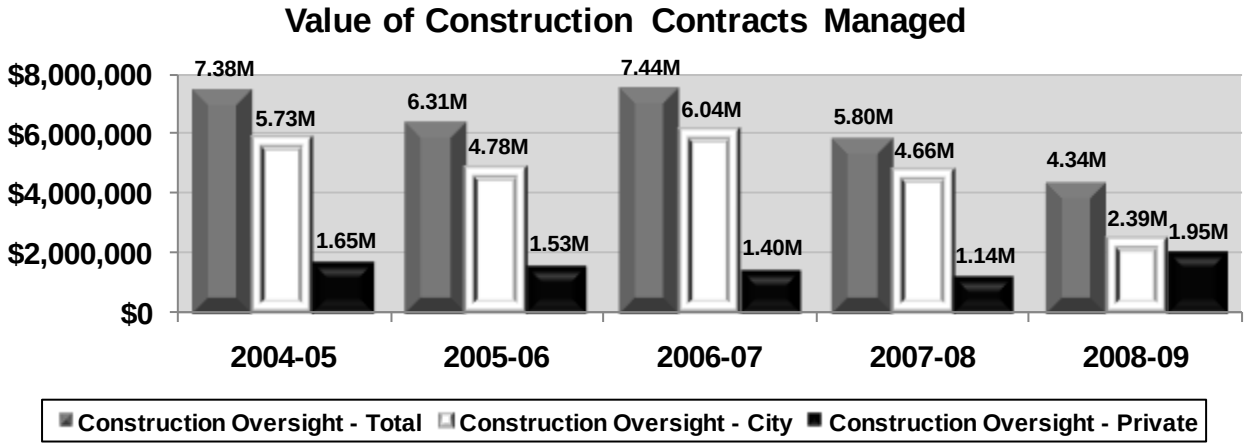
Energy costs associated with street lights continue to increase rapidly on the order of 8% per year and continue to have a significant impact on annual overall budgets. Barstow Airport has received less revenue from a lease with the Fair Board and declining fuel sales have impacted the budget. Capital costs are lower because a snow plow tractor was purchased in 2009-2010 for Barstow Airport. Engineering Department staffing has been reduced by 27% over the last two budgets to account for declining street revenues.

Summary of Budget Changes (cont.)

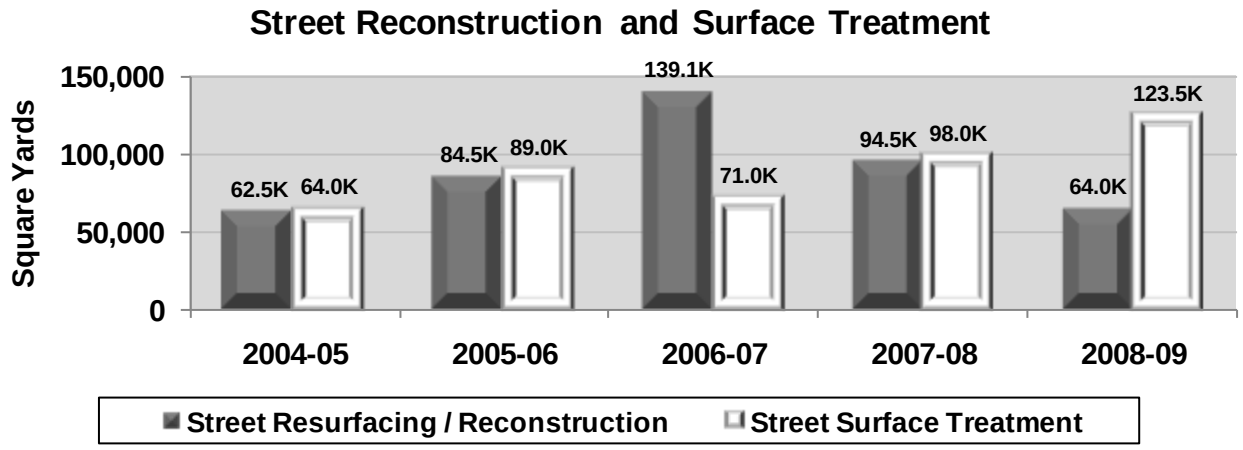
5-Year Operating Budget History

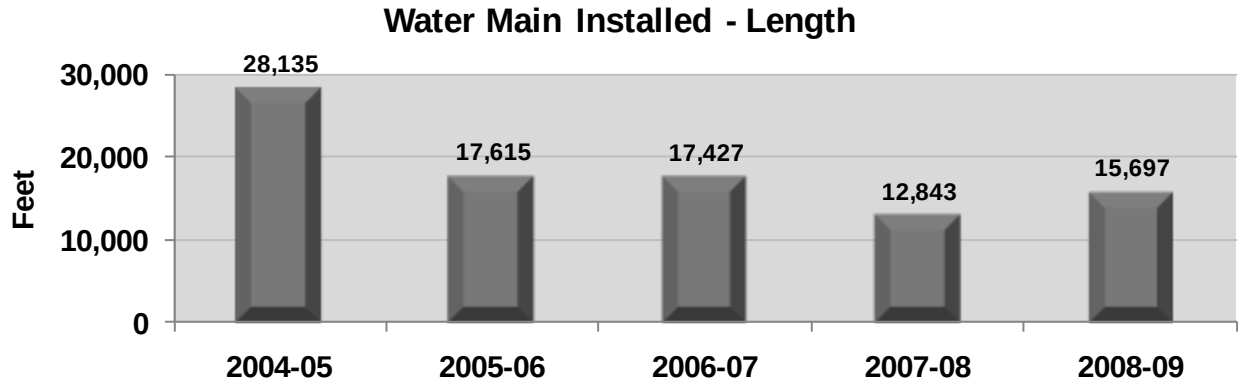


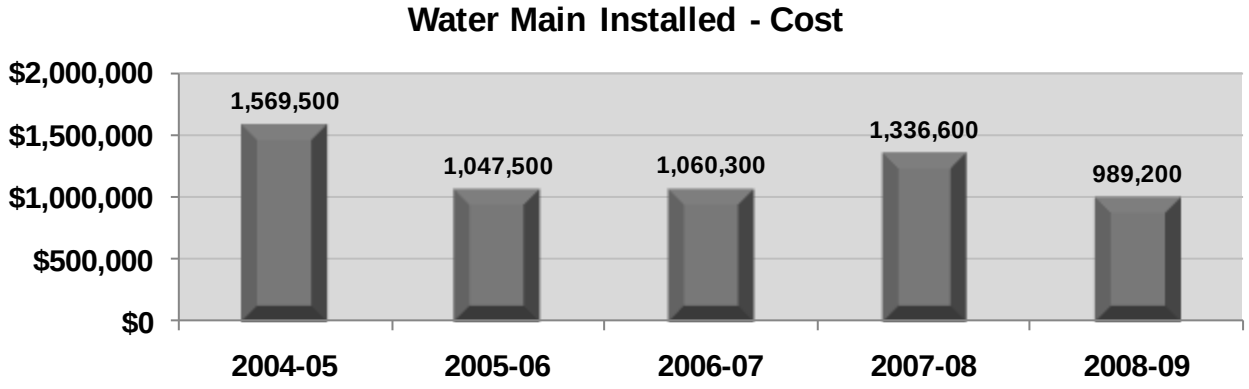
Key Departmental Trends



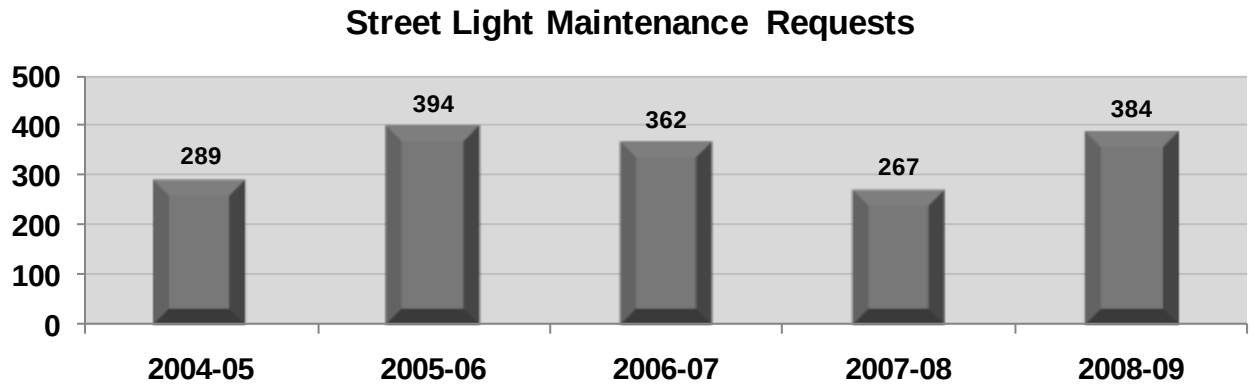
Key Departmental Trends (cont.)

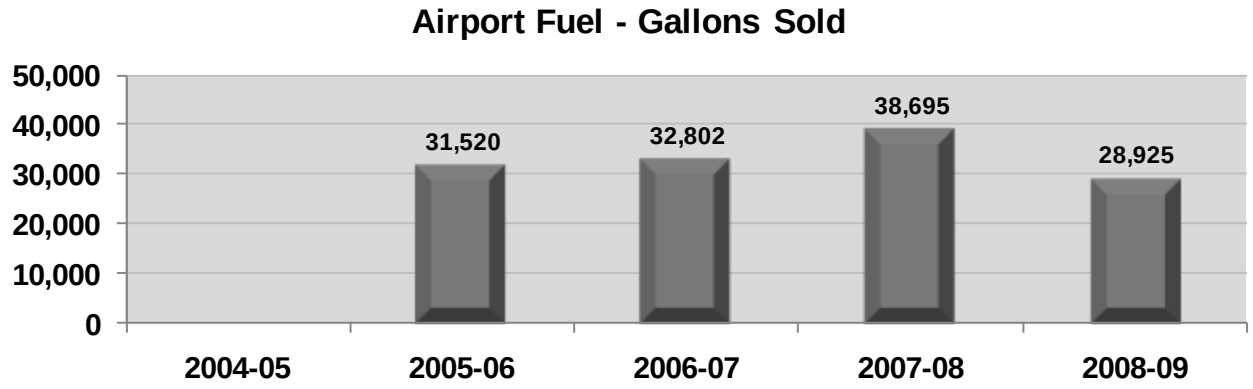


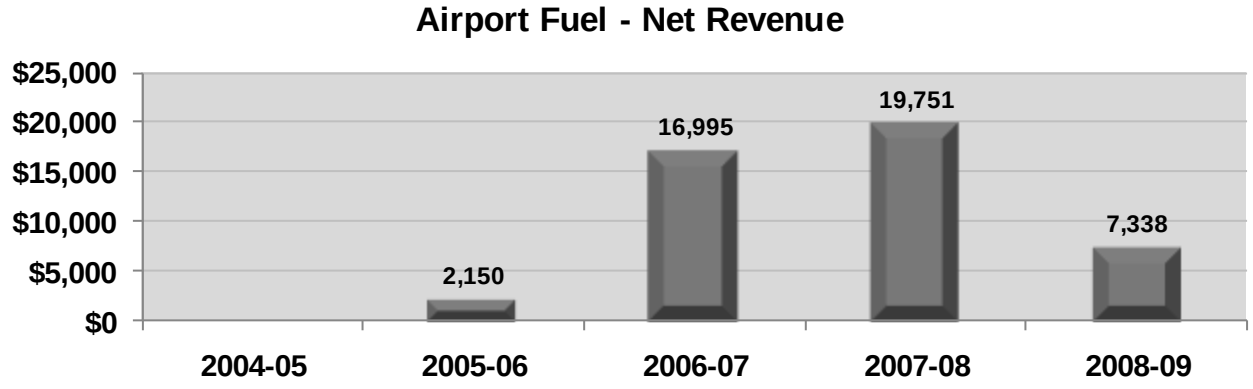




Key Departmental Trends (cont.)





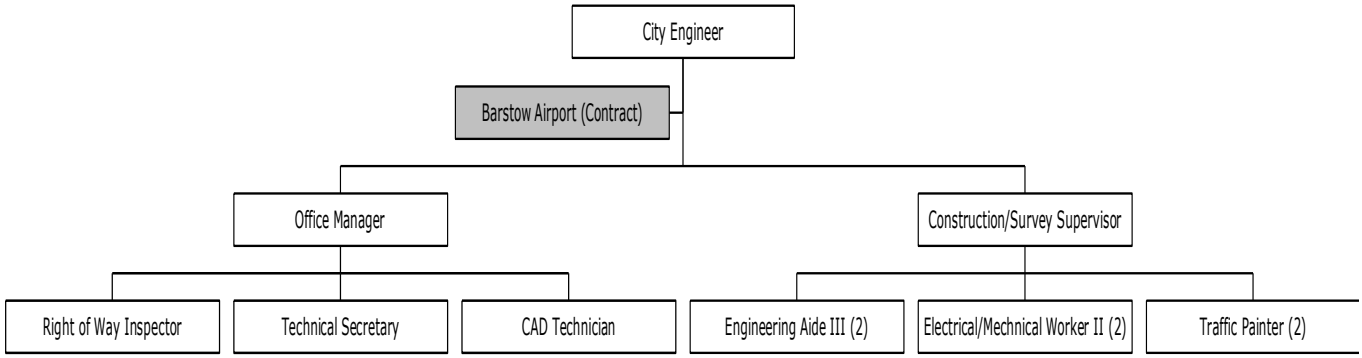


Performance Objectives

Performance Indicators (OUTPUT)	2007-08 Actual	2008-09 Actual	% Change
Value of Construction Contracts Awarded & Supervised	$5,799,000	$4,337,200	-25.2%
Street Reconstruction Costs Per Lane Mile	$205,000	$199,000	-2.9%
Sidewalk Ramps to Meet ADA Compliance	99	114	15.2%
Miscellaneous Recorded Inquiry Files	38	28	-26.3%
Street Segments Reviewed for Deterioration	405	348	-14.1%
Private Developments Requiring Utility Inspection	5	9	80.0%
Traffic Studies	53	54	1.9%
Gallons of Fuel Sold at Airport	38,695	28,925	-25.2%
Storm Water Plans Reviewed	35	37	5.7%
Storm Water Facilities Reviewed	180	203	12.8%
Street Light Maintenance Requests	267	384	43.8%
Utility Company Permits, Field Reviewed	86	91	5.8%

Performance Indicators (EFFICIENCY)	2007-08 Actual	2008-09 Actual	% Change
Contracts Completed within 10% of Bid Award	100%	100%	0.0%
Airport Fuel Net Revenue	$19,751	$7,338	-62.8%
Airport City Hangar Occupancy (Monthly Avg.)	100.0%	100.0%	0.0%
Traffic Signal After Hours Call out costs	$10,581	$9,317	-11.9%
Traffic Signs Replaced	932	804	-13.7%
Percent Sidewalk Miles versus Street Curb Miles	74.8%	74.8%	0.0%

Organizational Chart



Staff Summary	Approved 2008-09	Approved 2009-10	Adopted 2010-11
Full-Time			
City Engineer	1	1	1
Assistant City Engineer	1	1	0
Office Manager	1	1	1
Construction/Survey Supervisor	1	1	1
Right of Way Inspector	1	1	1
CAD Technician	1	1	1
Engineering Aide III	4	3	2
Electrical/Mechanical Worker II	2	2	2
Traffic Painter	2	2	2
Technical Secretary	1	1	1
Total Full-Time	**15**	**14**	**12**
Regular Part-Time			
None	-	-	-
Total Regular Part-Time	**0**	**0**	**0**
Department Total	**15**	**14**	**12**