

Memorandum



CITY OF DALLAS

DATE December 29, 2010

TO **Honorable Mayor and Members of the City Council**

SUBJECT City Fleet Operations Update

On Wednesday, January 5, 2011 you will be briefed on the City Fleet Operations Update. The briefing material is attached for your review.

If you have questions or need additional information, please let me know.

A handwritten signature in black ink, appearing to read 'Forest E. Turner'.

Forest E. Turner
Assistant City Manager

Attachment

c: Mary K. Suhm, City Manager
Thomas P. Perkins, Jr., City Attorney
Deborah Watkins, City Secretary
Craig Kinton, City Auditor
Judge C. Victor Lander, Administrative Judge
Ryan S. Evans, First Assistant City Manager
A.C. Gonzalez, Assistant City Manager
Jill A. Jordan, P.E., Assistant City Manager
Jeanne Chipperfield, Chief Financial Officer
Frank Libro, Public Information Officer
Helena Stevens-Thompson, Assistant to the City Manager – Council Office

City Fleet Operations Update

Presented to the Dallas City Council
January 5, 2011



Introduction

- In addition to maintaining day-to-day operations/service delivery to 1.3M residents covering 386 sq miles (\$2.8B Budget) a continuous review of operations/processes is carried on to keep service efficient and cost effective
- Proactive analysis and improvement to processes and procedures requires detailed data collection and comprehensive analysis
- During very tight budget times where staff is reduced/reassigned to service delivery, this type of work may be delayed/limited

Introduction

- Over the past several years various mechanisms have been used to identify and analyze opportunities for service improvements and operations efficiencies including:
 - Quality Management System ISO9001
 - E-Team Reviews
 - ZIP team process reviews
 - Reorganizations
 - Partner with City Auditor's Office for performance audits

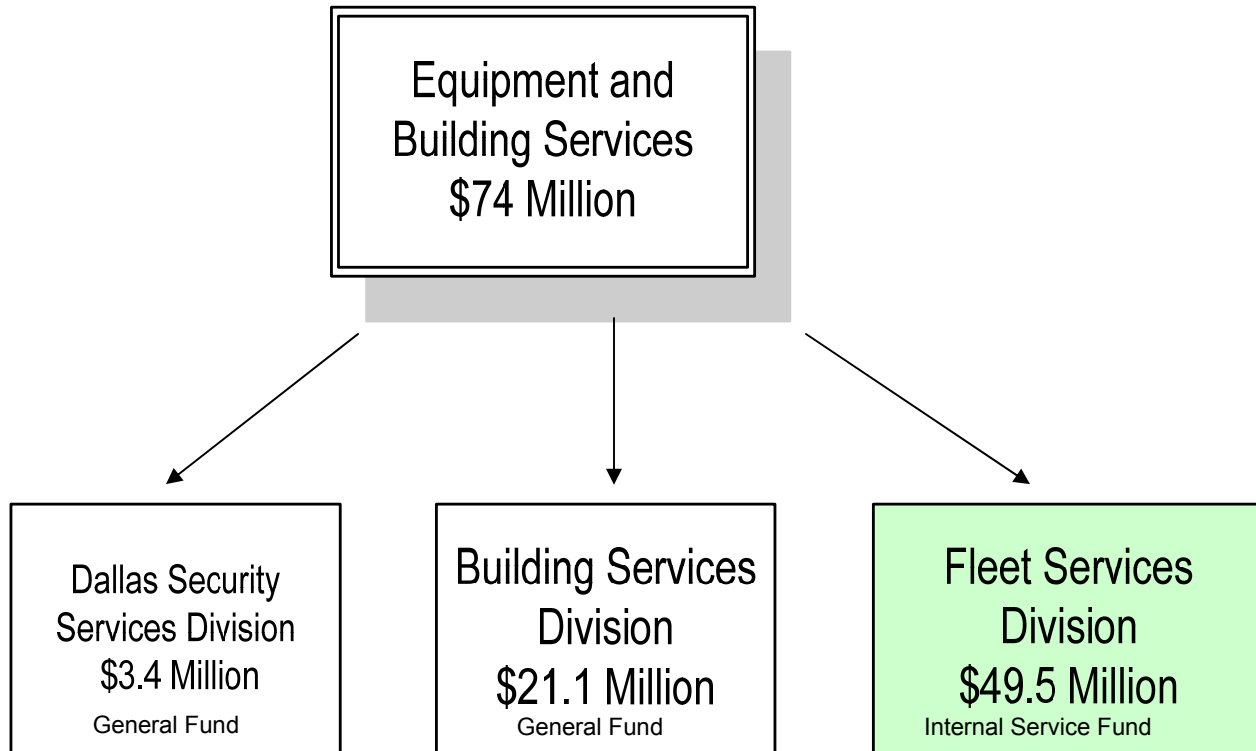
Introduction

- A year ago, City Management began comprehensive analysis of Equipment & Building Services Department
 - Appointed new executive team to lead the department
 - Assembled a team consisting of representatives from various departments to examine all facets of fleet operation
 - Implemented departmental review and reorganization
 - Reassigned architectural review, design and construction to PWT
 - Conducted comprehensive security review, led by DPD
 - Conducting process review of building maintenance and custodial services

Introduction

- October 20, 2010 Council was provided a general overview related to Fleet Services which included, key operation functions and process improvements
- This briefing will address how Fleet Services operates and meets Citywide service delivery needs through fleet purchase, utilization and inventory control
- Current examination of fleet and its processes is at the midpoint. Data analysis will be continued with additional recommendations included with the FY2011-12 budget development process

Department Overview



Internal Service Funds provide service exclusively to city departments. Fleet Services' costs for fuel and vehicle maintenance are charged back to user departments on a monthly basis.

Department Overview

- Fleet Services is a division within EBS responsible for procurement, maintenance, repair and disposal of vehicles and equipment assigned to 24 city departments
 - \$49.5M budget
 - 230 employees
 - Seven automotive service centers
 - One make ready facility

Budget Summary

- Fleet Services Division is an Internal Service Fund with 230 employees and a budget of \$49.5 million

FY 10-11 Budget

Salaries and Benefits	\$11,910,175
Supplies and Auto Parts	\$ 7,655,769
Fuel	\$16,919,410
Contracts w/External Vendors*	\$12,934,906
Capital Outlays	<u>\$ 147,503</u>
TOTAL	\$49,567,763

*This provides for contracts for additional automotive services such as auto body repair, wrecker services and transmission and engine overhaul.

Fleet Services Operations

- Fleet Services Division provides the following services:
 - Vehicle Procurement
 - Parts Management
 - Fuel Operations
 - Maintenance/Repair
 - Make Ready
 - Auction Sales
- The majority of the budget and most important service is maintenance and repairs performed at the seven automotive service centers
- Keeping vehicles on the road is critical to ensuring fleet availability and extending life cycles.

Fleet Services Operations

- Fleet consists of police cars, garbage trucks, brush trucks, sedans, light trucks/vans, dump trucks, construction equipment, and trailers
- Average age of the vehicles in the fleet is 7 years
- Alternative fuel vehicles represent 37% of the entire fleet
- 5,130 units in the fleet are used by departments to deliver services to citizens

Fleet Profile

Departments/Offices (24)	Total # of units
Code Compliance	347
Dallas Police (DPD)*	1,701
Dallas Water Utilities (DWU)	987
Sanitation Services (SAN)*	507
Streets Services (STS)	458
Park and Recreation (PKR)	352
Other Departments & Offices	
Equipment & Building Services	200
Public Works & Transportation	220
Trinity Watershed Management	115
Smaller Departments & Offices	243
TOTAL:	5,130

***Priority customers with critical demand for daily fleet availability**

Fleet Profile

Dallas Police Department - 1701 Units

- Organized into 5 Specialty Bureaus with 3600 officers assigned
 - Patrol Bureau (7 Patrol Divisions)
 - Support Bureau
 - Administrative Bureau
 - Criminal Investigation Bureau
 - Strategic Deployment Bureau
- Patrol Bureau serves as the first responders to citizens' requests with 5 overlapping work schedules (3rd shift busiest)
- Criminal Investigation Bureau provides investigation for all crimes with 400 officers assigned
- Police Officers drive on average 24,812,525 miles per year (Equivalent to 996 times around the world)
 - Marked Squad Cars
 - Decoy ENP
 - SUV for K9 Units
 - Motorcycles
 - Prisoner Transport Vehicle
 - Trucks & Horse Trailers

Fleet Profile

Dallas Water Utilities – 987 Units

- Operate and maintain water and wastewater treatment facilities and provide maintenance and repair for over 9,000 miles of water and wastewater mains
- Approximately 1,500 employees who make repairs to water and wastewater main breaks, conduct meter reading activities and operate and service activities at Pump Stations
- Department has facilities as far as 70 miles from downtown
- Fleet vehicles are needed to transport work crews and materials to various job sites throughout their service districts. Work crews drive on average 6,418,697 miles per year
 - Dump Trucks
 - Light trucks
 - Excavators
 - Backhoes
 - Vans
 - Wheel Loaders

Fleet Profile

Sanitation Services – 507 Units

- Sanitation Services has 470 employees whose primary function is the collection, recycling and disposal of household solid waste
 - Serve approximately 259,762 household accounts
 - Collects approximately 260,000 tons of residential waste; 170,000 tons of brush/bulky items; and 50,000 tons of recyclables annually
 - Receives approximately 1.6M tons of waste at city owned landfill
- Collection staff drives on average 3,440,820 miles per year driving their assigned routes
 - Automated garbage trucks
 - Rotobooms
 - Transfer trucks and Transfer trailers
 - Rear Loader garbage trucks
 - Brush trucks and trailers
 - Heavy trucks

Fleet Profile

Street Services – 458 Units

- Street services has 500 employees who are responsible for maintenance and repair of streets, alleys, medians, storm water inlets, roadside drainage and city-owned guardrail.
- Additionally Street's staff respond to emergencies including, Snow & Ice, High Wind Damage, Flooding, and removal of debris from the roadway
- Street Services has 4 Service Maintenance Areas that respond to 35,000 service maintenance requests annually
 - Providing 72,000 square yards of asphalt level-up and 28,000 potholes repairs
 - Restores 14 lane miles, rehabs 30 lane miles and provides full-depth repair of 60 lane miles of asphalt streets
 - Partially reconstructs 62 lane miles of concrete streets, permanently repairs 56,000 square yards of concrete and repairs 74,000 linear feet of curbs and gutters
 - Sweeps 25,000 gutter miles and mows and cleans almost 80,000 acres of Right-of Way
- Maintenance crews drive on average 2,935,092 miles per year
 - Dump Trucks
 - Backhoes and Trailers
 - Mixers
 - Wheel Loaders
 - Light Trucks
 - Skid Steer Loaders

Fleet Profile

Park and Recreation – 352 Units

- Dallas Park & recreation has 978 employees who are responsible for quality leisure experiences at Dallas Parks, recreation centers and developed trails
- Facilities maintained and/or operated by staff include:
 - 374 parks totaling 18,618 acres
 - 104 developed trail miles
 - 20 community pools
 - Cotton Bowl
 - Over 200 athletic fields
 - 43 recreation centers
 - Kiest Softball Complex
 - 3 dog parks, Disc golf course
- Maintenance activities include:
 - Mowing
 - Playground Maintenance
 - Pool Cleaning
 - Litter Pickup
 - Ball Field Maintenance
 - Trail Maintenance
- Maintenance crews drive on average 2,161,166 miles per year
 - Light Trucks
 - Backhoes and trailers
 - Air Compressors and
 - Dump Trucks
 - Skid Steer Loaders
 - Mixers

-
- Benchmarking (ICMA Comparison)
 - Revenue/Expenditure Trends
 - Fleet Purchase History
 - Observations & Challenges

ICMA FY09 Survey

- FY09 report is latest available
- Cities included have comparable populations, fleet size and provided data for most categories
 - Dallas (386 sq miles)
 - Phoenix (517 sq miles)
 - San Antonio (368 sq miles)
- Comparisons made from ICMA data to other similar sized cities must include examination of services, policies and procedures in order to assure “apples-to-apples”
- Contacts will be made with appropriate staff in cities where differing data may indicate areas for improvement
- City costs impacted by age of fleet and higher mileage

ICMA Comparison Data

	Number of Vehicles	Average Total Maintenance Cost per Vehicle
Phoenix	6,574	\$5,609
Dallas (without Landfill, light equipment)	4,856	\$4,920
San Antonio	4,210	N/A

- San Antonio did not provide information on light or medium duty vehicles, therefore total average maintenance costs are not available
- Approximately 300 units of light equipment such as air compressors and trailers are not included in the ICMA analysis but are included in equipment maintained by EBS

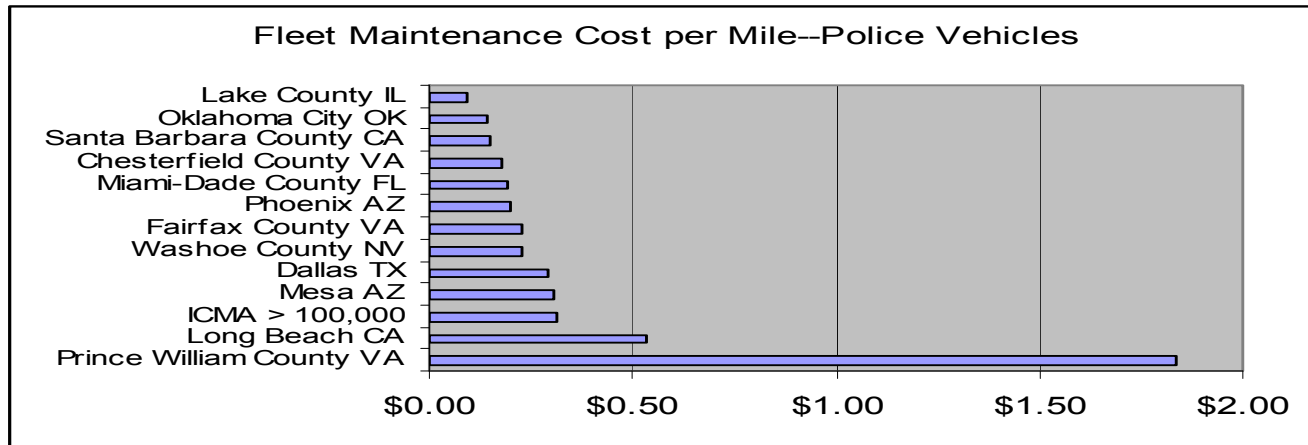
ICMA Comparison Data

Police Vehicles (Marked Sedans, SUVs, Motorcycles)

	Number of Vehicles	Average Age (Months)	Average Mileage per Vehicle	Average Cost per Mile	Average Total Maintenance Cost per Vehicle
Dallas	1096	32	17,539	29¢	\$5,139
San Antonio	847	19	N/A	N/A	\$3,796
Phoenix	1134	40	16,130	20¢	\$3,265

- San Antonio replaces vehicles at 60,000 miles
- San Antonio did not report mileage data, therefore cost per mile is not available

ICMA Comparison Data



- Chart contains jurisdictions over 300,000 population
- Comparison to other cities
 - Oklahoma City – Large percentage of vehicles are take-home thus work only one shift per day
 - San Antonio did not submit mileage information

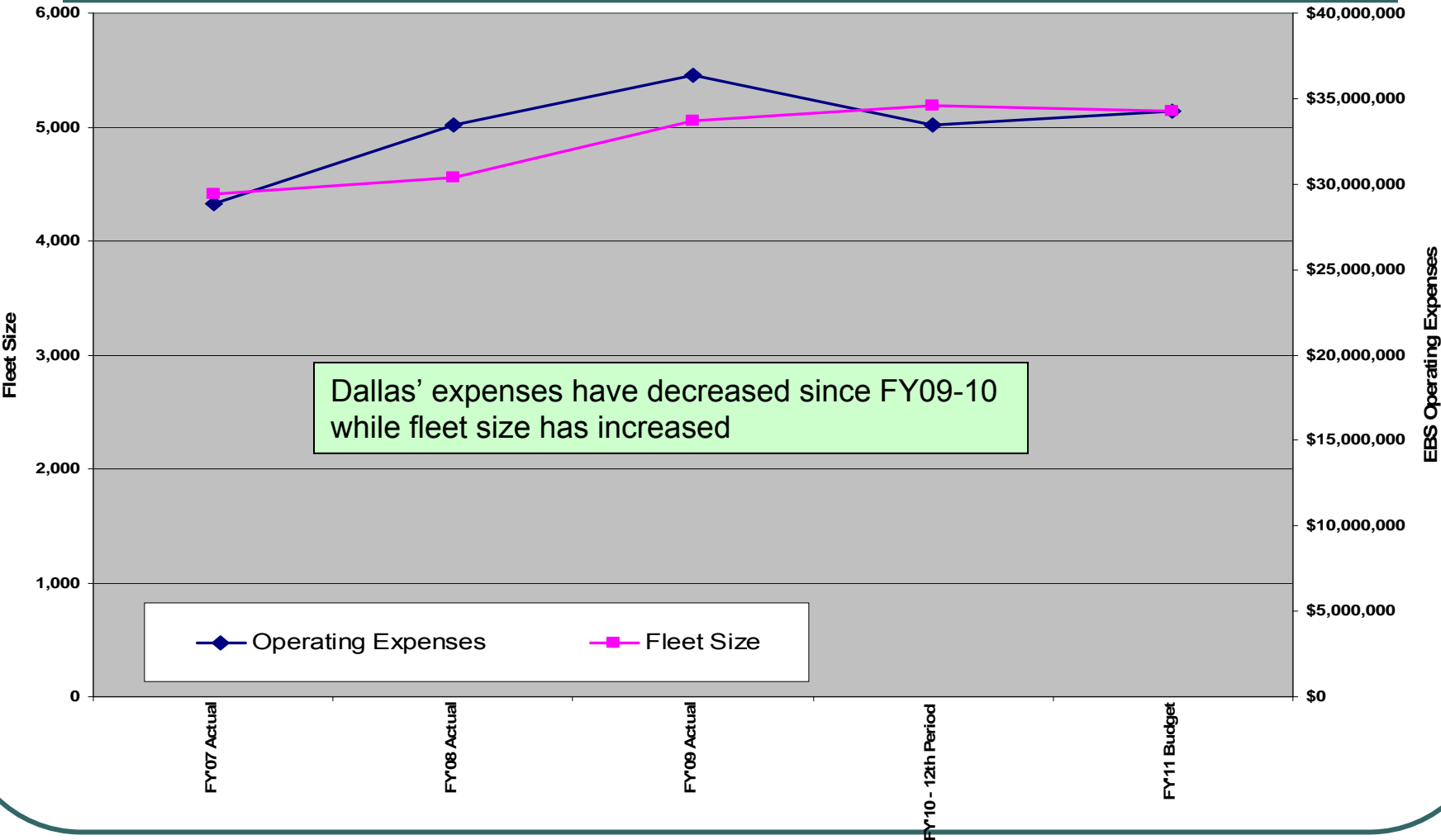
ICMA Comparison Data

Solid Waste (Automatic side-, front- and rear-loaders, Transfer Trailers, Roll-offs, Brush Trucks, and Rotobooms; Excludes Landfill)

	Number of Vehicles	Average Age in Months	Average Mileage per Vehicle	Average Cost per Mile	Average Total Maintenance Cost per Vehicle
San Antonio	379	45	N/A	N/A	\$14,550
Dallas	441	75	6,562	\$3.35	\$22,006
Phoenix	316	57	12,209	\$3.09	\$37,776

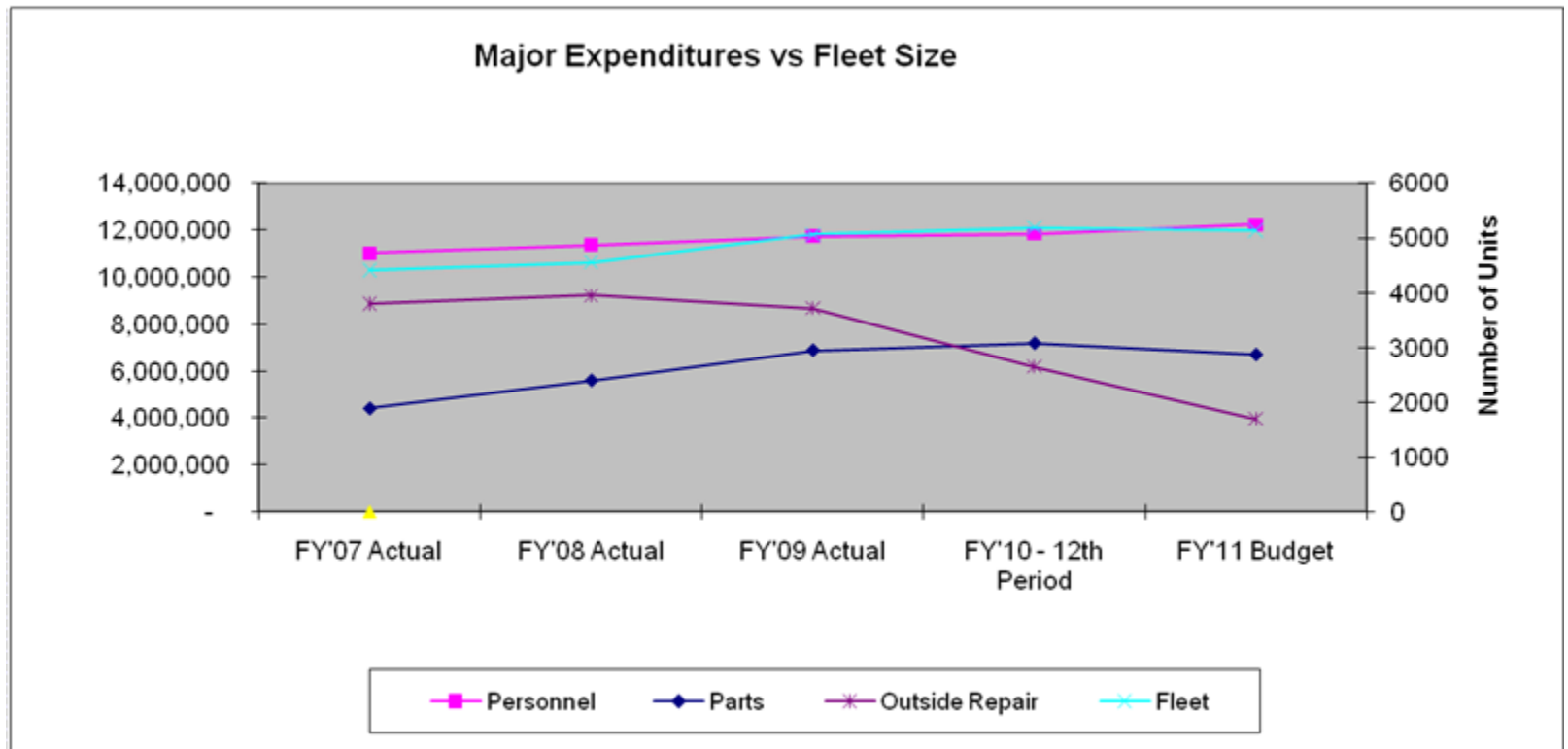
- Dallas fleet is significantly older than others

4 Yr. History - Operating Expenses vs. Fleet Size



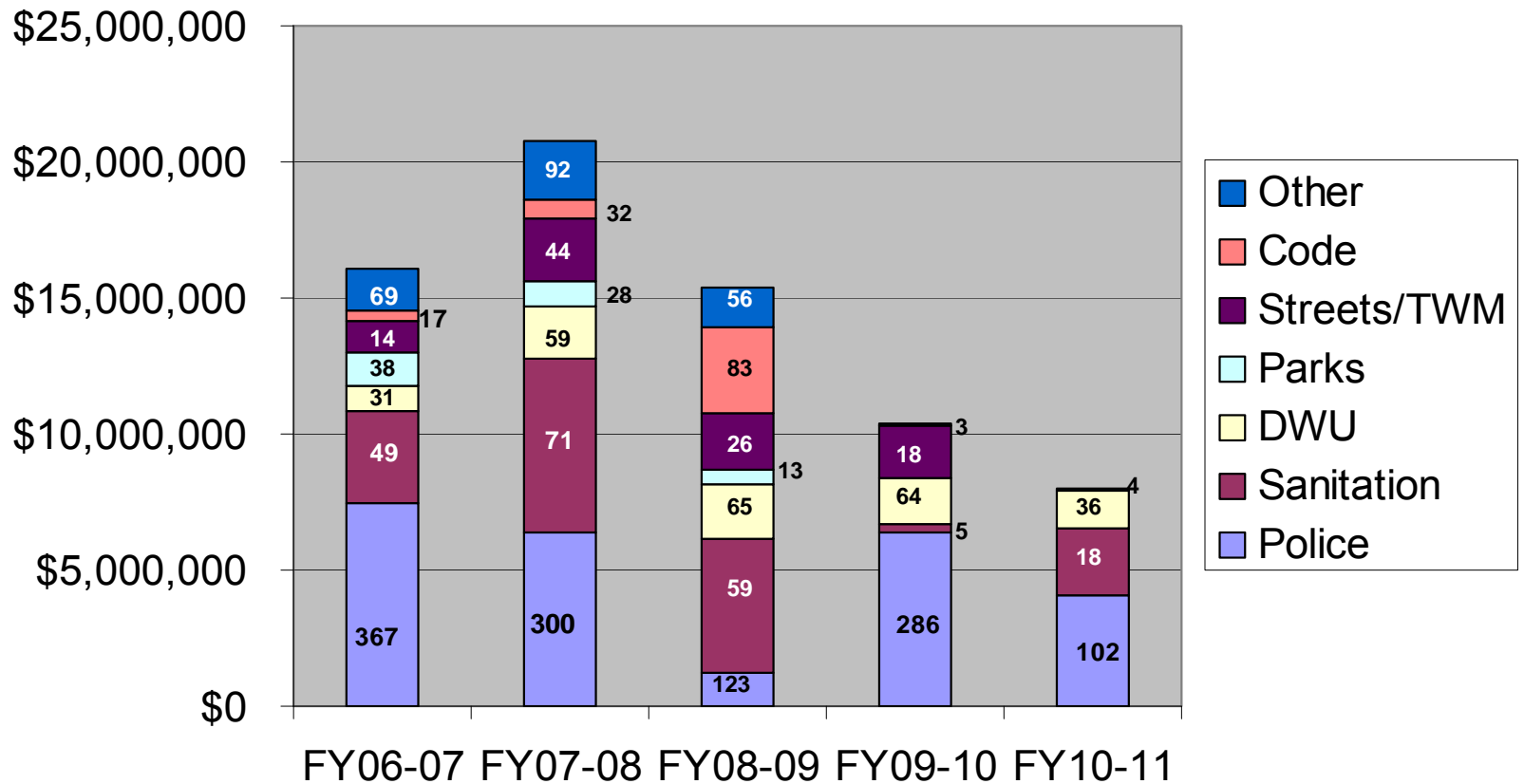
*Inflation adjusted numbers are shown in the appendix

Major Expenditures vs Fleet Size



Outside repair increased in '07 and '08 due to Serco contract. After cancellation, parts costs and personnel costs increased as EBS resumed repair of the Sanitation Heavy fleet.

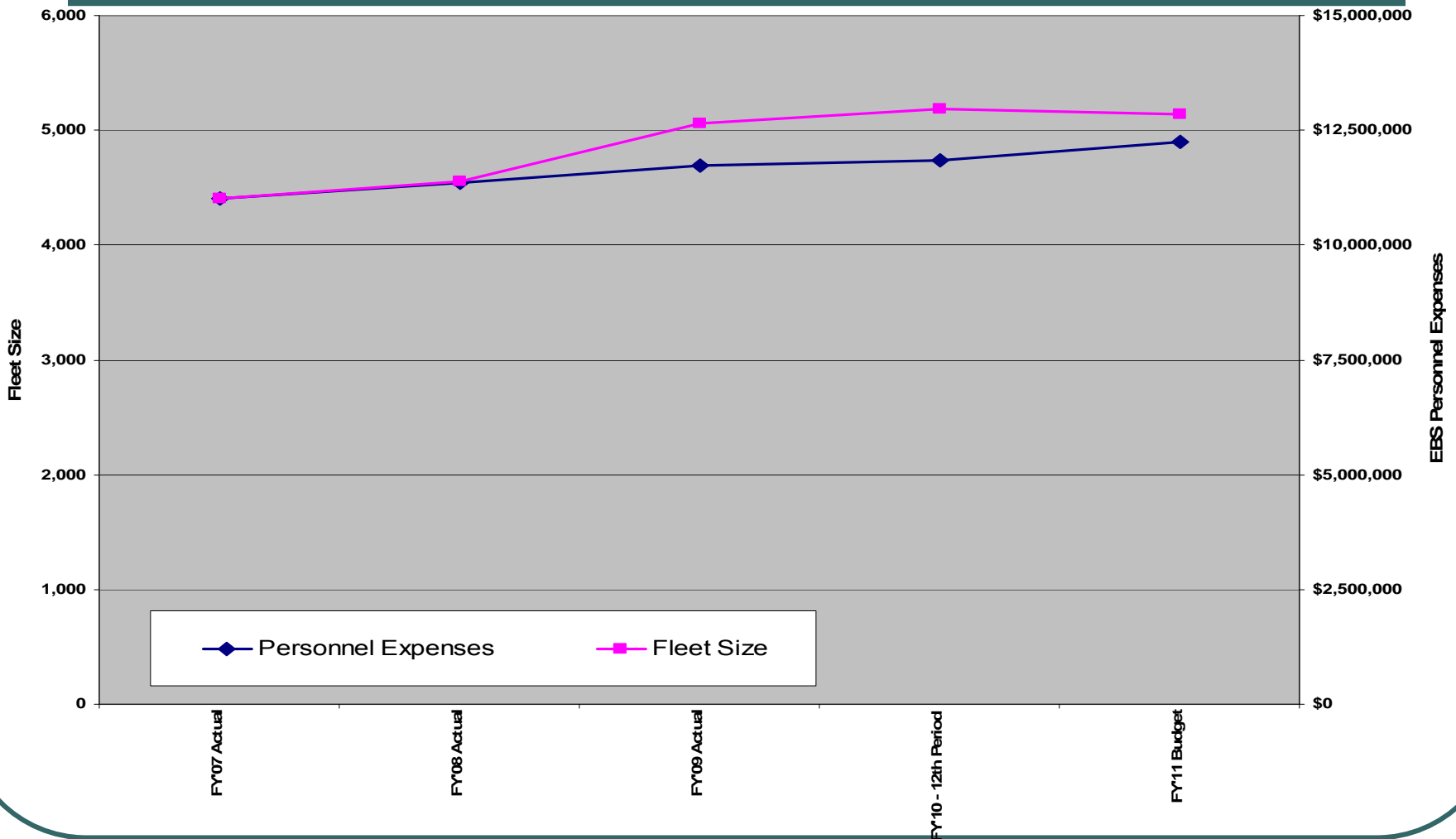
4 Yr. History - Fleet Purchases



Fleet replacements have been decreasing since FY07-08 which could result in higher maintenance costs in coming years.

Est.

4 Yr. History – Personnel Expenses vs. Fleet Size



*Inflation adjusted numbers are shown in the appendix

Observations/Challenges

- From FY07 through FY11, staffing levels have remained relatively constant
- Fleet inventory averaged 4,600 units up until FY08, when inventory of squad cars began growing to accommodate the planned hiring of additional Police Officers
 - The fleet size has increased by approximately 500 units (11% increase) to 5,130 in FY10
 - Planned hiring of additional mechanics in FY09 not fully implemented due to hiring freeze
- Failure to hire in a timely manner caused availability goals not to be met impacting service levels
 - DPD's availability goal for marked squad vehicles is 90%
 - FY08 actual = 89%
 - FY09 actual = 89%
 - FY10 actual = 85%
 - SAN's average availability goal for garbage trucks is 88%
 - FY08 actual = 82% average
 - FY09 actual = 87% average
 - FY10 actual = 84% average

Observations/Challenges

- Increase in the number of marked squad cars in inventory without corresponding increases in staffing has led to an increase in the number of “lower priority” vehicles missing preventive maintenance within prescribed timeframes
 - In FY10, 17% of maintenance was not performed at scheduled intervals (based on the manufacturer’s recommendation)
- Delays generally lead to increased unscheduled repairs and greater vehicle downtimes and reduces departments’ ability to deliver services
- Few if any private companies have such a variety of fleet as Dallas
 - The range of services provided by the City of Dallas requires a large and versatile array of fleet

Observations/Challenges

- Fleet inventory consists of 78 different makes/models
 - Difficult to manage the various requirements of manufacturers
 - Staff requires training on each new make/model introduced into the fleet
 - Increases parts inventory
- Observations from the City Auditor's Report
 - New vehicles are not placed in service in a timely manner
 - Insufficient number of auctions per year
 - Fleet focus database system is under utilized

Actions to Date & Upcoming Actions

Actions to Date

- Revised the business model to focus on performance measures to improve service delivery
- Created geographic service maintenance districts to match customer department service areas
- Assigned one manager to each geographic service district who is responsible for the vehicles maintained by that service district and for meeting performance measures
- Developed specific performance measures for each one of the managers and their respective geographic service district
 - **Service Centers Performance Measures**
 - Number of preventive maintenance work orders on time
 - Number of target repair work orders on time
 - **Make-Ready Shop Performance Measures**
 - Number of new vehicles processed on time
 - Number of completed auctions on time

Actions to Date - Continued

- Expanded work schedules to increase availability of cars for DPD and garbage trucks for Sanitation during weekend hours
- Continuing to fill critical vacant positions such as mechanics and trades helpers by constant posting of positions
- Currently advertising and accepting applications for a procurement fleet manager. The hiring panel will consist of critical customer departments (DPD, SAN, DWU, STS)
- Held two additional vehicle auctions which has improved revenue. Additional auctions will be held as inventory allows
- Enhanced features of the FleetFocus M5 Database to improve customer notification regarding repairs
- Strengthened controls of FleetFocus M5 Database to ensure maintenance information is timely and accurate

Upcoming Actions

Items	Completion Date
Convene committee of departments with larger fleet usage to examine vehicle requirements and improve selection to determine the optimal size and mix of equipment comprising the fleet Conclude committee	January 2011 July 2011
Continue a peer city and best-practice process review to further streamline the fleet	June 2011
Complete the hiring process for a procurement manager	January 2011
Establish standard vehicle utilization criteria	July 2011
Complete Oil Change Pilot Program and conduct analysis	May 2011

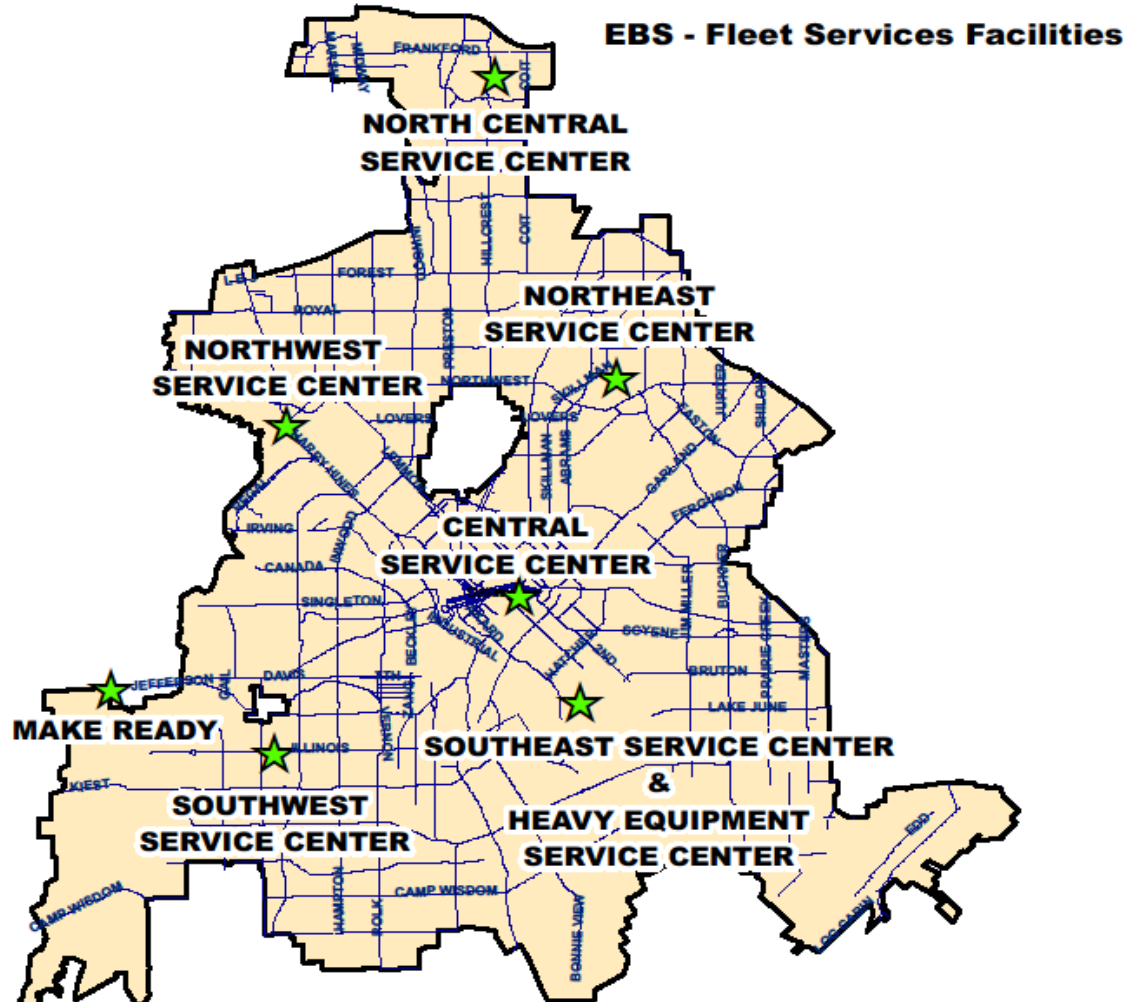
Summary

- New management team in place
- Department has undergone reorganization:
 - Design & Construction has been transferred to PWT
 - Reviewed and implemented security enhancements
- Initial analysis of fleet management is complete:
 - Districts have been aligned with customer departments
 - One manager assigned to each district
 - Performance measures have been established for each district
 - Consolidated make ready functions (CIS & EBS)
- City Auditor review has been completed
 - Audit confirms management observations
- Procurement manager hiring underway
- Customer departments stakeholders group being formed
 - Standardization of fleet
 - Vehicle utilization criteria
 - Replacement criteria updates
- Additional recommendations to be included in the FY2011-12 budget

Appendix

- Fleet Facilities Map
- Experience and Training Requirements
- Fleet Type
- Inflation Adjusted Charts

Service Center Locations



Staff Experience and Training Requirements

Position	Number	Average Years of Experience	Average Years with City of Dallas
Service Center Manager	6	32.8	19.4
Supervisor	8	34.3	14.7

- Experienced supervision is critical to effective operations

Staff Experience and Training Requirements

Position	Average Years with City of Dallas	Authorized Positions	Vacant Positions
Certified Technician	17.5	19	4
Mechanic II-Automotive	9.1	84	10
Mechanic II-Heavy	12.2	4	3
Mechanic I	7.7	16	4
Senior Certified Technician	11.4	2	1
Senior Mechanic	10.7	6	2
Senior Welder	13.6	6	3
Trades Helper	9.3	21	3

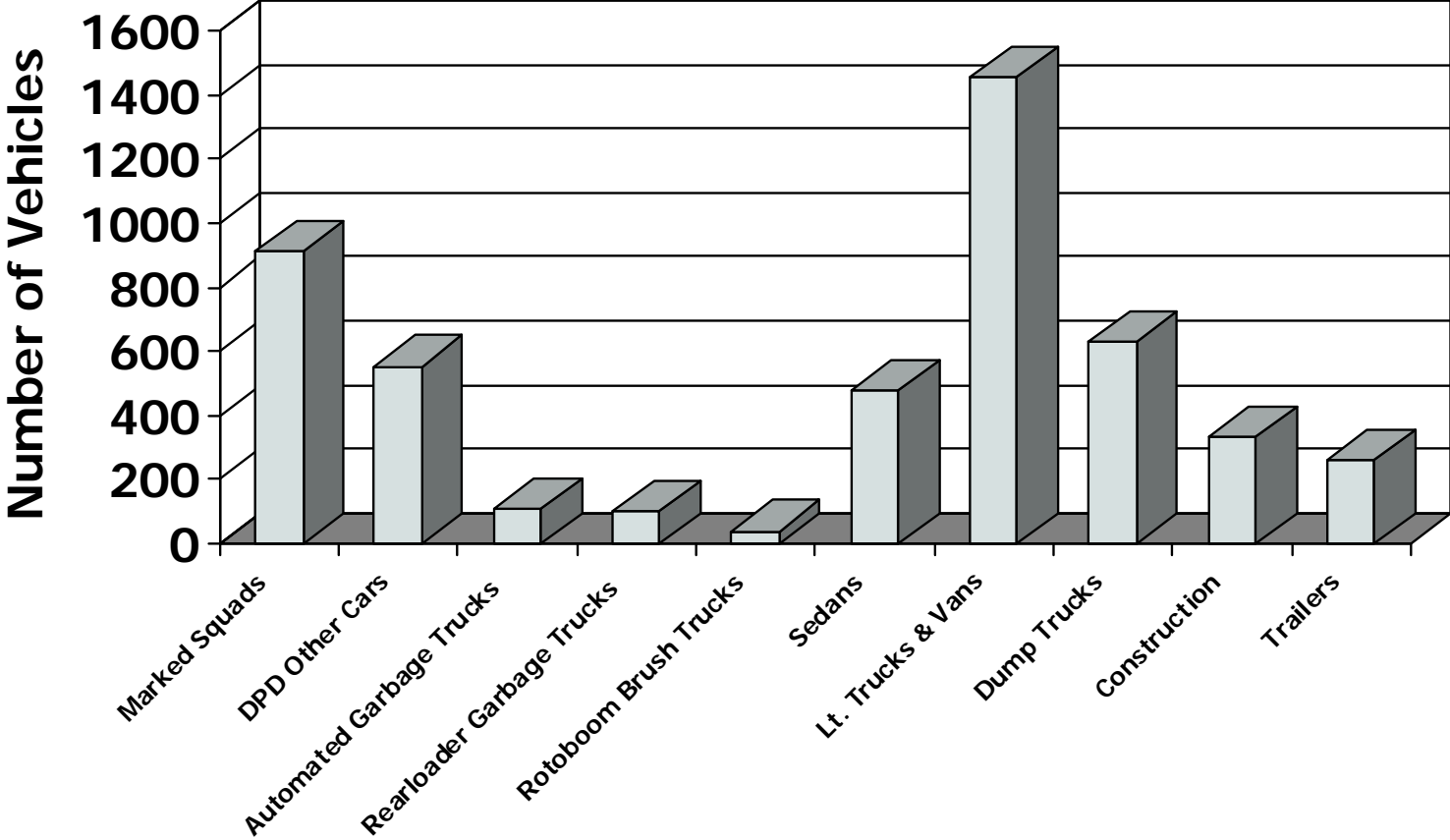
- Vacancies impact ability to reach availability goals

Staff Experience and Training Requirements

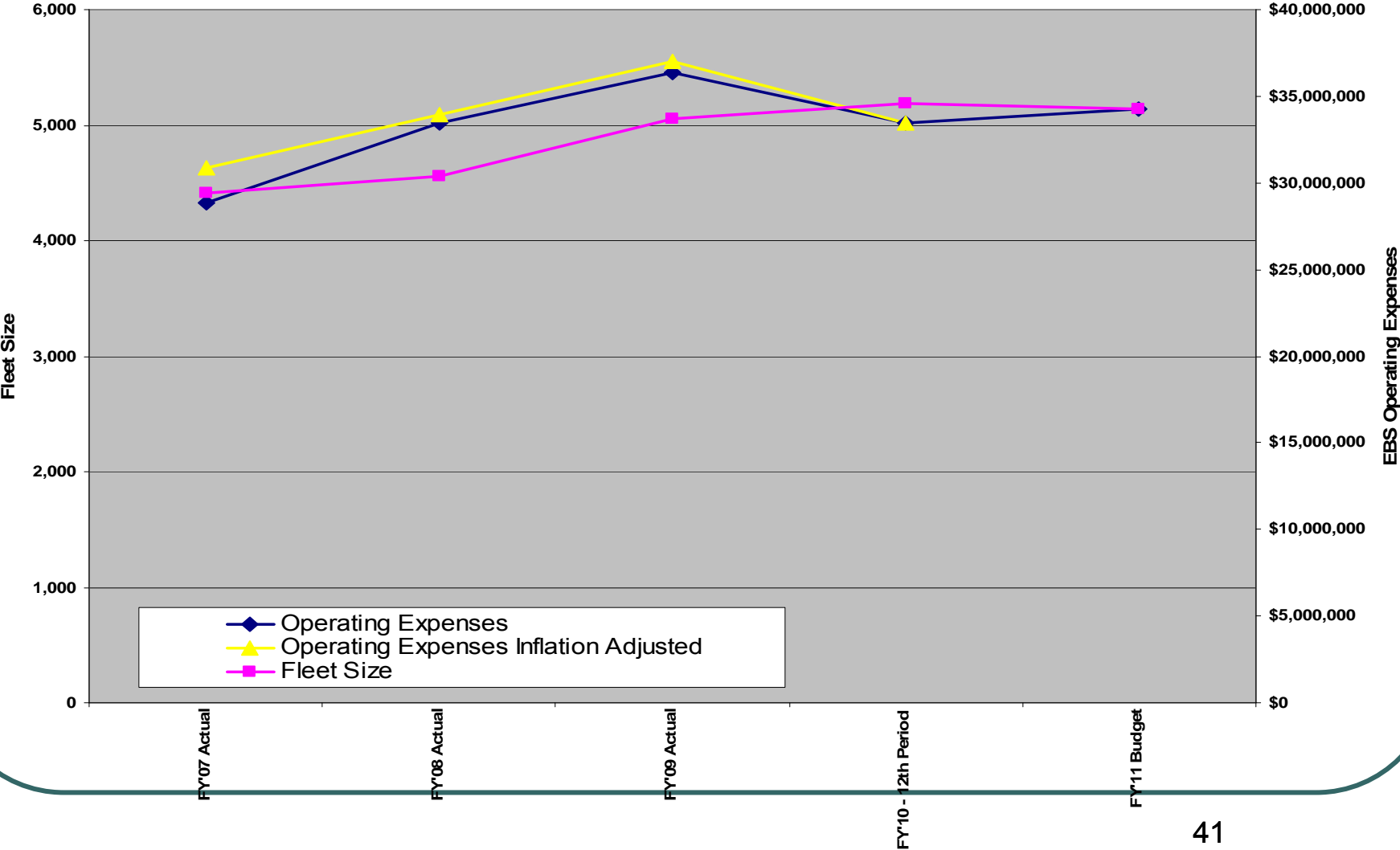
Position	Requirement
Mechanic I - Entry Level	One year to obtain 1 ASE Certification
Mechanic II	1 ASE Certification
Senior Mechanic	4 ASE Certifications
Certified Technician	3 ASE Certifications with one year to obtain 5 more (Reaching the level of Master Automotive Mechanic)
Senior Certified Technician	8 ASE Certifications

Note: National Institute of Automotive Service Excellence offers testing for certification on maintenance and repair of major systems.

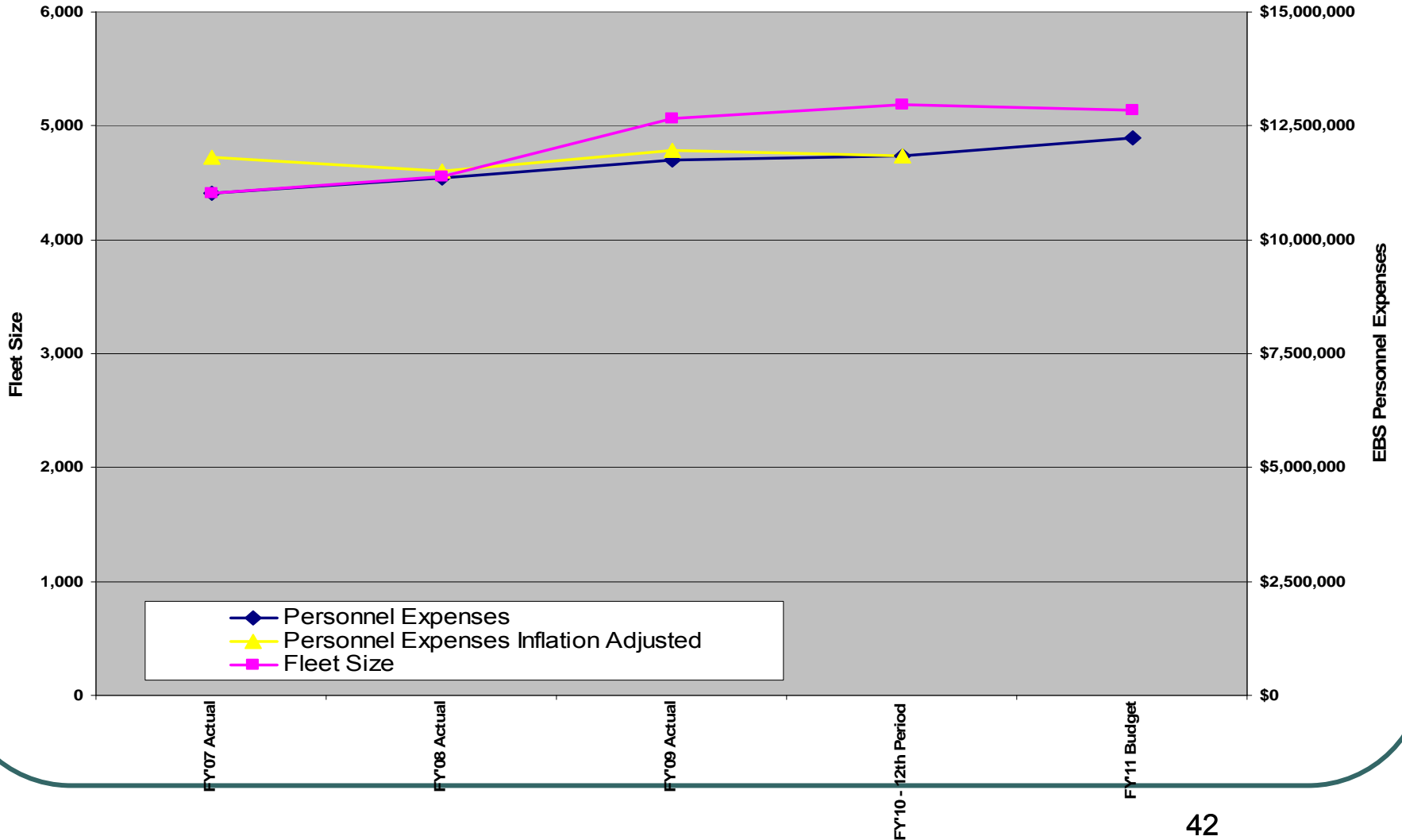
Fleet By Type



4 Yr. History - Operating Expenses vs. Fleet Size



4 Yr. History - Personnel Expenses vs. Fleet Size



Questions?
