#### Memorandum



DATE June 10, 2011

Honorable Mayor and Members of the City Council

SUBJECT Fleet Operations Update

On Wednesday, June 15, 2011 you will be briefed on the Fleet Operations Update. The briefing material is attached for your review.

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

Forest E. Turner

**Assistant City Manager** 

Attachment

Cc:

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 Librio, Public Information Officer
Edward Scott, Director, Controller's Office
Helena Stevens-Thompson, Assistant to the City Manager — Council Office
Errick Thompson, P.E., Director, Equipment and Building Services



# Fleet Operations Update

### Presented to the Dallas City Council June 15, 2011







#### Briefing Outline

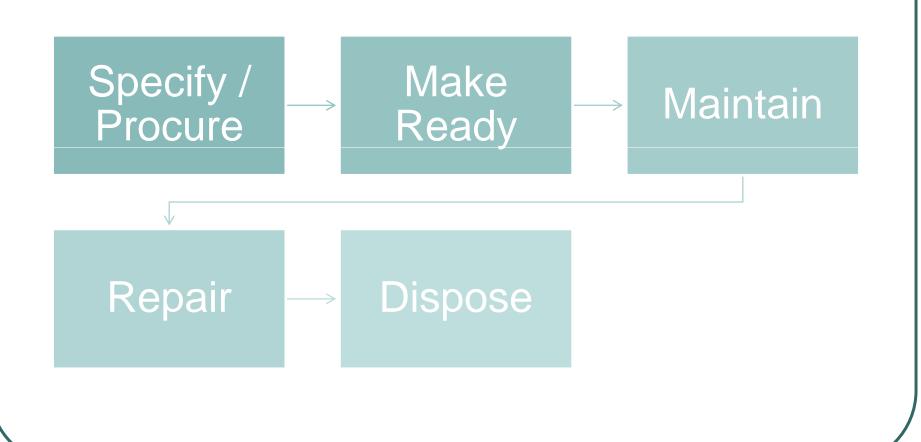
- Overview of Fleet Services
- Updates
- Operational Efficiencies
- Cost-saving Strategies

#### Fleet Services Overview

# Life-cycle coordination of fleet used for service delivery by 24 City departments

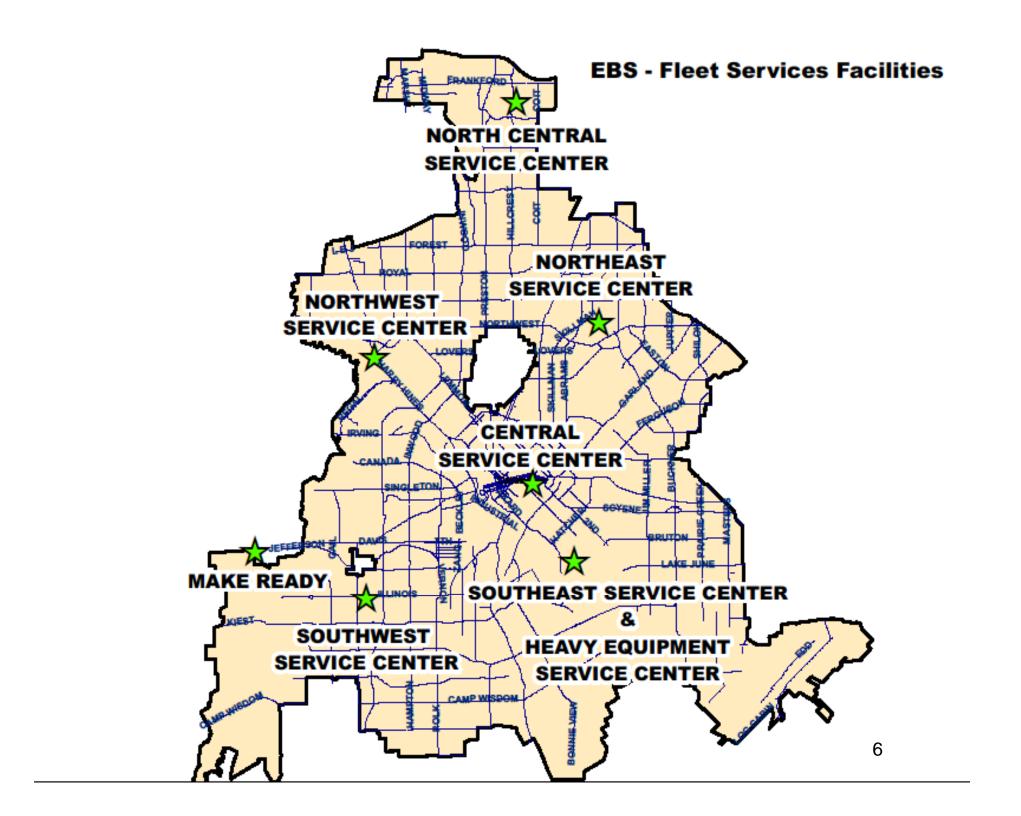
- \$47M budget (FY10-11 including fuel)
- 247 FTE
- 5,211 units of vehicles/equipment with \$237M replacement value
- Six automotive service centers
- Make Ready facility
- Salvage Yard
- Tire Repair Shop

#### Life Cycle Coordination



Larger Fleet Departments	Total # of units			
Dallas Police (DPD)	1,727			
Dallas Water Utilities (DWU)	988			
Sanitation Services (SAN)	483			
Streets Services (STS)	459			
Park and Recreation (PKR)	356			
Code Compliance (CCS)	350			
Other Fleet Departments				
Equipment & Building Services (EBS)	199			
Public Works & Transportation (PWT)	151			
Trinity Watershed Management (TWM)	136			
Smaller Departments & Offices	362			
TOTAL	5,211			

Critical to service delivery in all five of Council's Key Focus Areas Average age: 6 yrs – nearly 40% alternative fuel vehicles



# Maintenance Facility Overview

Location	Units	Mechanics	Shifts/day (M-F)	Shifts/day (Sat)	Shifts/day (Sun)
Central	1,445	23	3	3	3
N Central	142	2	2	0	0
NE	811	9	2	0	0
NW	762	17	2	1	1
SE	1,025	23	2	1	1
SW	786	19	2	1	1
Heavy	240	4	1	0	0
TOTAL	5,211	102			

## **UPDATES**

# Actions to Date on Previously Identified Issues

- Assigned a manager to each service center who is responsible for assigned vehicles and meeting performance targets for that facility
- Modified service center hours of operation to better support Police and Sanitation operations
- Held auction in March 2011 that generated \$497,325 in revenue - additional auctions will be held as inventory supports (see slide 39 for auction details)
- Implemented features of fleet management software to improve customer notification regarding repairs and conducted additional training for EBS staff on the software
- Compiling data fleet size/utilization data for multidepartmental committee review

#### Internal / External Relationships

- Major fleet departments committee
  - Includes DPD, DWU, EBS, SAN, and TWM
  - Meets approximately monthly
- Regular CIS/DPD/EBS fleet coordination meetings
- Local trade school / community college placement offices

## Staffing Challenges

- Significant number of retirements / other attrition
- Pre-employment drug screens (major concern for private sector as well)
- Criminal background checks per City criteria working with Civil Service and Human Resources to address
- Strategies to address challenges
  - Recruitment and relationship building at tech schools & community colleges
  - Recruiting for more part-time positions (tough economy = larger pool of candidates seeking 2<sup>nd</sup> jobs)
  - Renewed focus on training and other incentives to retain skilled workforce

#### Training and Incentives

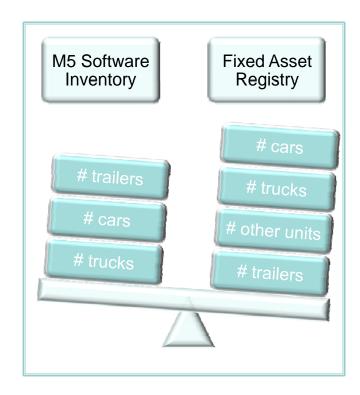
- Developing significantly enhanced program for mechanics and technicians
- Using grant funds for partial funding of training focused on alternative fuel vehicles
- Working with manufacturers for additional OEM-specific training
- Reviving tool allowances and exploring incentive pay tied to productivity, safety, and other factors

#### Fleet Procurement Manager Hired

- 30 years of fleet operations, fleet management and service center management experience on light/medium/heavy duty units
- Wide variety of fleet including vehicles and equipment (construction, solid waste, public safety, and recreational)
- Direct experience with consultant assessment and auditing of public sector fleet maintenance operations
- Primary author of the preventive maintenance process adopted by one of the largest maintenance management software companies in the nation
- Extensive experience identifying and addressing customer service, shop operations and unique concerns related to repairs
- Major areas of responsibility to include procurement, training, and asset management (including replacement criteria review and updates)

#### Fixed Asset Registry (FAR) Reconciliation

- Partnership with City Controller's Office
- Records for 5,083 of 5,211 units in inventory matched initially (97.5%)
- Steps to complete:
  - Physical inventory of units not in FAR
  - Physical inventory of random sample of units matched in FAR
  - Additional research for vehicles shown in FAR, but not in inventory
  - Update FAR based on physical inventory and documentation



By July 31<sup>st</sup>, the two are anticipated to be in balance

# OPERATIONAL EFFICIENCIES

### Independent Fleet Consultant Assessment

- Consultant hired to:
  - Review fleet operations at each service center
  - Serve as a resource to service center managers/staff
  - Establish dedicated bays & lot configurations
  - Develop Customer Service Survey Instrument
  - Provide input on:
    - Industry standards for average repair timeframes
    - Incentive programs
    - Administrative fleet management topics
- Three of six service center assessments well underway

#### M5 Software System

- Used since 2006 by EBS for fleet management & maintenance, and fuel management
- Also used to some extent by Aviation, Dallas Fire Rescue, Park & Recreation, and Sanitation
- Key functionalities include:
  - Asset Tracking & Assignments
  - Unit Acquisition & Disposal
  - Unit Warranty Tracking
  - Vehicle & Equipment Maintenance
    - Workflow
  - Parts & Inventory Management
  - Stock Parts Auto Re-Ordering
  - Preventative Maintenance Due
  - Unit Availability
  - Unit Downtime

- Accident Management
- Fuel Management
- Lotted Parts e.g. Pharmaceuticals
- Quartermaster
- Bar Coding
- Dashboards
- Performance Measures & Monitoring
- Ad Hoc Reporting

#### M5 Software System

Management Review and Gap Analysis of the City's use of M5 conducted in late 2009 and early 2010.

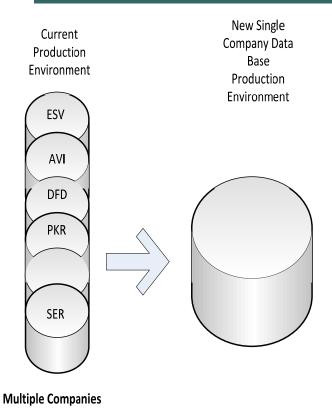
#### Major findings:

- M5 software is currently under-utilized
- 273 high/medium/low priority recommendations to improve utilization
- Multiple methods and software solutions being used across the City to track fleet – recommendation to implement single fleet management system

#### Actions taken:

- Gathered requirements from / reviewed functionality of existing systems with 15 departments February - May, 2011
- Developed draft M5 Expansion Roadmap
  - Anticipate finalizing early summer with additional input from key stakeholders
  - Anticipate 16 18 months to fully implement including updating fuel management

#### M5 Expansion Project



- More than doubles current utilization
- Individual department configurations and set-up of functions as specified by departments - No customization ("Off the Shelf" functionality)
- Instructor-led, hands-on, classroom training for designated users
- External database conversion as required
- Fuel management system upgrade enables general diagnostic information to be captured at each fueling and strengthens internal controls

## Outsourced Oil Change Pilot

- Implemented November 2010
  - DPD squad cars
  - Far North Dallas pilot area
- Average time (see slide 40 for additional data)

Period	Vendor	EBS
11/2010 — 1/2011	23 min	47 min
2/2011 – 4/2011	16 min	38 min
May 2011	15 min	22 min

While comparison was not a primary objective, preliminary results indicate outsourcing this service is not cost-effective

EBS is making significant progress

# COST SAVING STRATEGIES

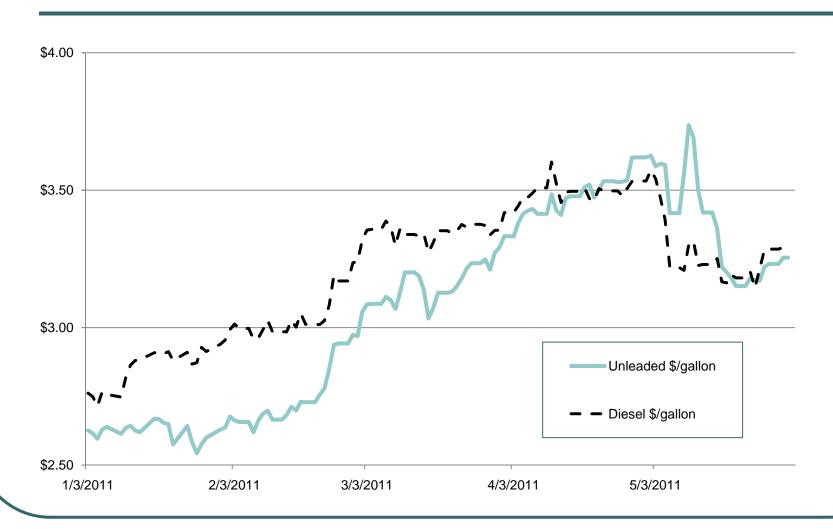
# Enhanced Auto Body and Collision Repair Contract

- Awarded by Council March 2011
- Strengthened specifications to require:
  - Certified technicians and collision repair facility
  - Minimum 3 years experience
  - Independent appraiser to give estimate on all accident claims
  - No repairs rendered without prior approval by City or its independent appraiser
  - Secured property and dust-free paint booth
  - Separate contract labor rates for body repairs (mechanical and frame repairs are often required – previous contract provided only one labor rate)
  - Anticipate \$675,000 reduction in expenses based on new contract

# Examples of Ideas Being Developed for FY12 Budget

- Increase use of parts from City salvage yard reduce new parts purchases (potential savings: \$300,000)
- Increase part-time positions in order to reduce outside repairs and overtime (potential savings: \$140,000)
- Develop capability to perform light duty vehicle alignments in-house (potential savings: \$12,000)
- Increase use of EBS tow trucks as staffing allows - reduce contract towing expenses (potential savings: \$8,000)

#### City Fuel Prices This Year



#### Active Fuel Management Program

#### General Strategy

- Manage timing and volume of fuel purchases based on market conditions to minimize long term costs
- Increase inventory levels prior to when prices are expected to rise in the future
- Use excess fuel inventory in lieu of new purchases when prices begin peaking

#### Active Fuel Management Program

#### **Program Results**

- Fuel purchases completely suspended for 18 days in May (while maintaining adequate supply)
- Fuel purchases resumed on a limited basis May 26<sup>th</sup> (at prices last experienced Mar 23<sup>rd</sup> for unleaded and February 25<sup>th</sup> for diesel)
- Typical purchases for this time of year average 16,100 gallons per day, excluding CNG
- Savings realized approximately \$40,000

# Summary of Potential Reductions for FY12 Budget

Strategy	Preliminary Amount
Auto Paint and Body Repairs	\$675,000
Salvage Parts	\$300,000
Reduced Outside Repairs and OT	\$140,000
In-house Vehicle Alignments	\$12,000
Reduced Contract Towing	\$8,000
Total	\$1,135,000

All of these ideas and others are being further developed as part of the on-going FY12 budget development process

#### Upcoming Additional Focus Areas

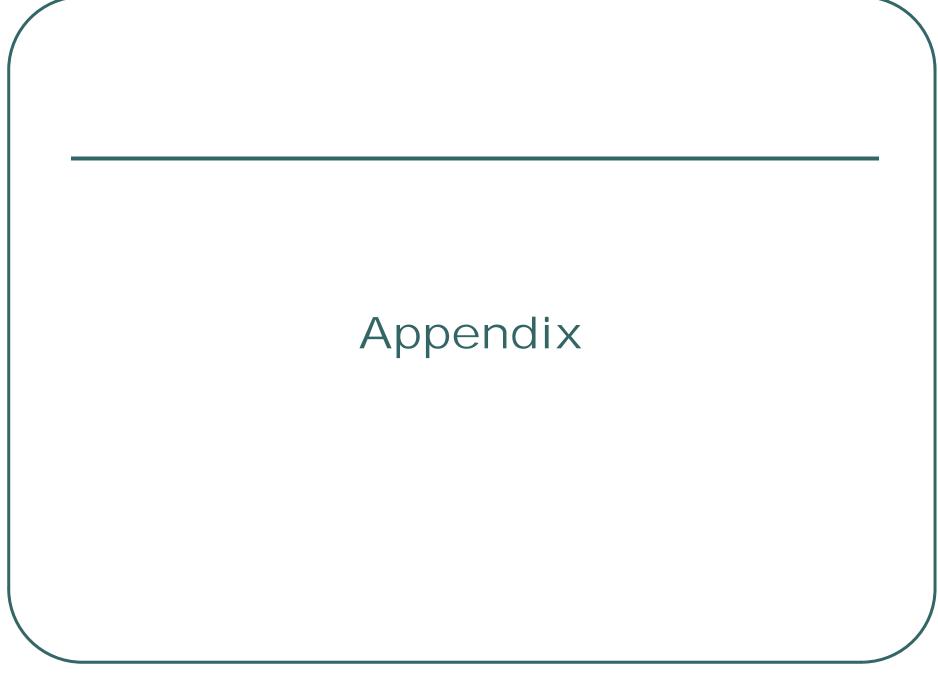
- Increasing percentage of alternative fuel fleet
- Expanding use of anti-idling technologies
- Continuing to aggressively pursue grants
- Updating replacement criteria / utilization policy
- Exploring fleet standardization
- Reducing fuel consumption

#### At the end of the day, EBS is . . .

- Rising to the challenges presented by current circumstances and previously identified issues
- Enhancing / building internal and external relationships
- Strengthening internal controls
- Enhancing operational efficiencies
- Seeking and implementing cost efficiencies

. . . EBS is making significant progress

#### Questions / Discussion



#### Dallas Police Department - 1727 Units

- 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 Vehicles**
- **Trucks & Horse Trailers**



#### Dallas Water Utilities - 988 Units

- 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







#### Sanitation Services - 483 Units

- Collection staff drives on average 3,440,820 miles per year driving their assigned routes
  - Automated garbage trucks
  - Rotobooms
  - Transfer trucks and trailers



- Rear Loader garbage trucks
- Brush trucks and trailers
- Heavy trucks



#### Street Services - 459 Units

- Maintenance crews drive on average 2,935,092 miles per year
  - Dump Trucks
  - Backhoes and Trailers
  - Mixers

- Wheel Loaders
- Light Trucks
- Skid Steer Loaders





#### Park and Recreation - 356 Units

- Maintenance crews drive on average 2,161,166 miles per year
  - Light Trucks
  - Backhoes and trailers
  - Air Compressors

- Dump Trucks
- Skid Steer Loaders
- Mixers





## Maintenance Facility Staffing

Title	Authorized	Vacancies	Avg Years Experience	Avg Years with City
Service Center Manager	6	1	32.8	19.4
Supervisor	8	2	34.3	14.7

Experienced supervision is critical to effective operations and continuous improvement

## Maintenance Facility Staffing

Title	Authorized	Vacancies	Avg Years with City
Senior Certified Technician	2	1	11.4
Certified Technician	19	5	17.5
Senior Mechanic	6	3	10.7
Mechanic II-Automotive	84	9	9.1
Mechanic II-Heavy	4	3	12.2
Mechanic I	16	5	7.7
Senior Welder	6	4	13.6
Trades Helper	21	3	9.3

Human resources are critical to achieving availability goals

### Mechanic / Technician Certification 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.

#### Most Recent Auctions

	September 2010 Auction (140 bidders)		March 2011 Auction (142 bidders)	
Make and Type of Vehicle	Units Average Price		Units	Average Price
2000 Ford Crown Vic - Running	19	\$1,373.68	1	\$1,900.00
2000 Ford Crown Vic - Not Running	1	\$900.00	1	\$1,100.00
2001 Ford Crown Vic - Running	8	\$1,562.50	7	\$2,000.00
2003 Ford Crown Vic - Running	13	\$1,246.15	23	\$2,513.00
2003 Ford Crown Vic - Not Running	n/a	n/a	8	\$1,287.50
2004 Dodge Intrepid - Running	21	\$1,364.28	11	\$1,968.18
2004 Dodge Intrepid - Not Running	1	\$600.00	3	\$950.00
Chevrolet Caprice - Running	6	\$1,616.66	3	\$2,100.00
Chevrolet Impala - Running	1	\$2,400.00	20	\$2,850.00
CNG Pick Ups - Running	17	\$1,000.00	26	\$1,784.61
Pick Ups - Running	11	\$1,763.63	2	\$1,900.00
Pick Ups - Not Running	2	\$650.00	1	\$700.00
Diesel Side Loader (refuse truck) -Running	10	\$2,380.00	9	\$5,150.00
Diesel Side Loader (refuse truck) - Not Running	6	\$1,150.00	n/a	n/a
Diesel Rear Loader (refuse truck) - Running	1	\$11,000.00	1	\$16,500.00
Totals	210	\$468.900	201	\$497.325

#### Private vs. EBS Oil Change

- EBS preventive maintenance provides service beyond the basic lube, oil, and filter change
- Additional time is directly related to additional inspection and assessment of vehicles' systems
- Major benefit is early or advanced detection of maintenance concerns which results in avoided elevated repair costs and extended downtime (and potential impacts to service delivery)