



City of Long Beach

2022 State of the Fleet Report

Prepared by the Fleet Services Bureau
Financial Management Department

CITY OF
LONG BEACH

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The Industry in 2022

Globally, after the last few years of navigating a world changed by the COVID-19 pandemic, life slowly began returning to something closer to what it had been pre-pandemic. But as health impacts declined, other impacts remained or even became exacerbated, especially for the parts supply chain, the labor market, and the procurement of new vehicles.

The war in Ukraine led to a disruption in raw materials needed for industrial applications impacting vehicles, such as battery casings and catalytic converters, and caused further strain on a global economic system trying to recover from the impacts of COVID-19. Supply chain issues in the automotive industry that began with microchip shortages expanded to encompass a wide swath of automotive parts causing longer repair times while waiting for parts, which meant vehicles were being kept in service longer than expected and experiencing more failures, and a spike in the prices paid for parts.

These issues also impacted the supply of new vehicles. Difficulty in sourcing new vehicles continued, which also extended the time vehicles are in use beyond their scheduled replacement date. The industry moved to a controlled allocation system for Fleet order banks while retail orders were often given a higher priority, which caused a slowdown in Fleets getting replacement vehicles.

Inflation crept in, putting additional pressure on labor rates and parts prices with costs being passed along by vendors and manufacturers. Fuel, especially gasoline and diesel, jumped to record highs, which exerted upward pressure on inflation and caused the increased costs to be passed on the customers in the form of higher prices for supplies.

Labor shortages continued in all aspects of fleet management, from suppliers to providers to fleet operations. This caused longer turn-around times for everything from getting parts to obtaining new vehicles to timely maintenance and repair of vehicles. There has continued to be shortage of skilled technicians, which is impacting labor rates as wages increase

On a more positive note, industry conferences began returning to in-person instead of virtual, providing in-person networking, engagement with vendors and suppliers, the ability to engage in hands-on demonstrations, and learning from peers and industry experts.



CLB Fleet Services at the AssetWorks 2022 convention

Long Beach Fleet Services

The City of Long Beach, California Fleet Services Bureau (FSB) has a strong Fleet management program that is responsible for most of the City vehicles and equipment. FSB has programs in place to acquire, manage and maintain a fleet of over 2,000 units that includes helicopters, boats, off-road vehicles, equipment, and many different types of motorized vehicles. The Towing division operates a fleet of 15 tow trucks 24/7, keeping the city roads clear and safe.

Despite the challenges to the industry, Fleet Services employees continued to shine. In the annual customer survey, equipment operators and department liaisons gave a resounding approval rating of 92% "satisfied" or "highly satisfied" with the performance and customer support of Fleet.

The Employee Recognition Committee (ERC), which is operated by Fleet volunteers and wholly self-funded, geared up again to hold several events in 2022 after pausing during the pandemic. The annual safety breakfast, car show, and holiday lunch were hosted by the ERC and allowed staff to reconnect in a relaxed atmosphere. Several charity drives were hosted by the ERC that provided material goods to those in need.

Fleet Services has taken extra steps to make sure we continue to protect our most important asset - our people. Fleet has an employee driven committee that looks for improvement on daily operational items and oversees the peer driven Safety Ambassador award which is given out each quarter, and an Executive Safety committee that oversees high level items. Fleet has continued to utilize the Safestart Platform as an additional safety awareness training program on assessing each situation, being aware of your surroundings, and being vigilant while doing even the most mundane task. The City Safety Manager has recognized Fleet Services for having the "Best Safety Program in the City" and looks for other departments in the City to reach out to us and follow our lead.

A pathway was created for 4 paid internships to create a pipeline for potential future employees by working with local trade schools and community colleges to select students for 6-month intervals. Each student will get the opportunity to work on the various types of vehicles and equipment to obtain real-world experience in the industry.



Safety Ambassadors

During crisis, all city departments are hands on. Fleet is no stranger to these incidents. In 2022, Long Beach Tropical Storm Kay brought torrential rain and high surf that threatened the life and property at our peninsula homes near the beach. In conjunction with Parks and Rec, Fleet assisted in these efforts not only in 24-hour coverage for repairs and fueling the equipment to build sand berms to protect properties from the giant swell but, we implemented our staff to run the equipment as Parks and Rec were short operators during this crucial time. We helped issue out sandbags, build sandbags for those unable to do so, and provide world class service for our city and its residents.



Tropical Storm Kay response team



Tropical Storm Kay response team

Awards and Recognition

The City of Long Beach Fleet Services Bureau was proud to receive several awards in 2022.

- Government Fleet Magazine Leading Fleets Competition – 7th place. The City won this award at the GFX Government Fleet Expo (GFX) by, among other things, accomplishing a 93% vehicle availability rate, 75% of the labor hours being productive wrenching, 90% on-time rate for PMs and over \$230k in warranty claim reimbursements. The City has placed in the top ten for the last six years. engendered by pandemic support, our towing services, the increasingly green Fleet, and our responsible fueling and UST programs were all contributing factors.
- National Association of Fleet Administrator's (NAFA) Green Fleet Award – 2nd place. The city moved up from 9th place in 2021 to 2nd place in 2022. FSB was recognized for attaining a fleet with 56% alternative fuel vehicles, putting 80 all-electric vehicles into service, increasing fuel economy by 6.5% over a 2-year period, reducing the use of paper in the shop by 75%, installing solar panels in the parking lot to provide 80% of the electrical needs of the building, moving to 90% of our maintenance products being environmentally friendly, and developing a telematics network of over 690 vehicles.
- Heavy Duty Trucking Magazine's 2022 Green Fleets in America – 6th place. The City was again recognized in this publication, which honors leaders in clean heavy duty truck fleets of major corporations and government organizations. It recognizes areas such as electrification, the use of alternative and renewable fuels, the use of cleaner engines, fuel efficiency, and testing new sustainable technologies.



HDT 2022 Top Green Fleets

Challenges in 2022

2022 challenges were not limited to those confronting the industry as there were some unique challenges presented to FSB.

In September there was a transition to a new Preventive Maintenance program to align with the industry standard. This program is designed to extend maintenance intervals, reduce oil consumption, and service equipment on a schedule most closely in-line with the manufacturer recommendations. The potential savings are estimated to be about \$300k per year. The transition did not go as smoothly as intended when the FMIS system could not correlate the old PMs to the new PMs and thousands of vehicles appeared to be overdue. Staff spent many hours making data corrections and monitoring daily reports to fix any discrepancies while maintaining their normal duties. The effort by the staff paid off in a fully functioning program that is more efficient than the prior program and will be more cost-effective.

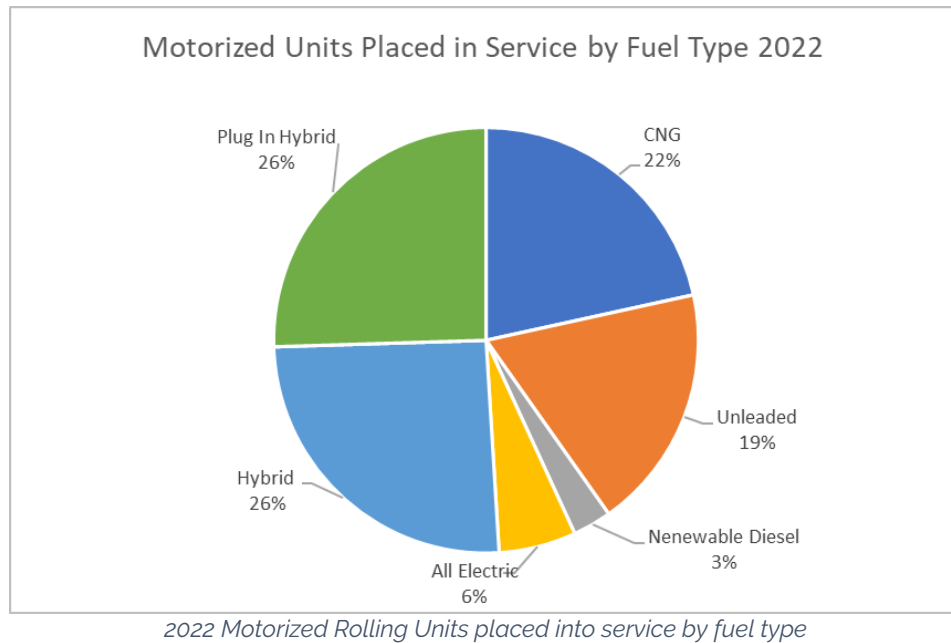
The labor market was very competitive and long-term employees continued to retire. Some vacancies were open for more than a year. To keep up with the workload, outside vendors were utilized more than in the past but they are also experiencing the same labor constrictions, and consequently also had difficulty fielding technicians.

To counteract the tight labor market, especially when competing against private employment opportunities, Fleet Services worked with Human Resources personnel to implement retention and attraction bonuses for new staff. These bonuses are offered to hard-to-recruit new hires to make our positions more attractive relative to other employment opportunities. Bonuses are staggered, with payments being made at the start, as well as incrementally as the new employees gain tenure at their new jobs.

Fuel prices spiked dramatically, increasing overall fuel spending by 22%. The budget held up as the predicted fuel use did not materialize. The Fuel Division lent staff to the Health Department in support of their COVID-19 hotline, causing staff shortages. When the field technician was out unexpectedly other members of the office staff stepped in to perform necessary field tasks to ensure fuel site compliance. Fuel tank replacement projects faced delays largely due to parts and labor shortages.

Managing the Fleet

Chip shortages, steel prices, fuel costs, and closed order banks caused the pipeline to the factories for new vehicles to be nearly closed. Delivery dates for new vehicles continually got pushed back with some vehicles on order delayed until 2024. Despite these challenges, 200 new motorized rolling units were placed in service in 2022, and they reflect the continued push to make the fleet more environmentally friendly.



An innovative new partnership with Uber was launched to promote a citywide ride-sharing program to augment the City motorpool program. City employees can book as-needed transportation, which offers modern convenience along with robust controls. As the ridesharing program increases in popularity the dedicated motor pool units will be reduced.

We partnered with our Fleet Information System Provider, AssetWorks, to exhaustively review over 100 distinct processes and procedures to identify best practices and create efficiencies. Changes included shifts in process, adaptation of newer, modern interfaces, and implementation of a new data analytics platform.

New infrastructure was installed to upgrade/replace the existing data network through all Fleet facilities. This involved the installation of fiber cables, new modules, switches, phones, racks, power poles, and access points.

Maintaining the Fleet

To counteract the continual price increases and supply chain issues, Fleet Services worked to establish as many multi-year, multi-vendor contracts for parts, service, vehicle procurements, and software support as possible. This enables advanced planning for Fleet needs beyond the current fiscal year by forecasting costs and use changes. This document is used by the fiscal leaders, the City Manager, and the City Council to plan and fund a competitive, modern Fleet operation. With over \$15 million in long-term contracts this ensures our customers receive the most reliable and efficient service and support while maintaining our budget. Likewise, the vehicle replacement program has moved from an annual process to a three-year projection to better forecast funding shortfalls and compensate for delivery delays.

Several technology projects were undertaken to streamline processes, get better just-in-time data, and to be more user friendly.

- Switching to a new, more user-friendly platform offered by our FMIS provider that will increase staff productivity by reducing the amount of screen time.
- Piloting a predictive maintenance platform that reads telematics information and predicts potential breakdowns, giving the operator a chance to bring the vehicle in before an actual breakdown.
- New technology to get real-time data on fleet tires, such as the PSI and tread depth, allows for advance planning of replacements. Real-time data alerts Fleet of emergency events, such as a tire losing air, so the operator can be notified in time to minimize tire failures on roadways, reducing risk to the public and the operator.

A 6-month outside audit of Fleet looked at our policies, maintenance operations functions, data management, staffing, use of systems, the budget process, and other aspects of how the City fleet is managed. This information was then analyzed against industry best practices in multiple areas including vehicle utilization, replacement planning, funding, maintenance, and support staffing, FMIS capabilities and take-home vehicles. We saw this process as a positive opportunity for an outside firm to review our operations and help us improve.

The auditor reviewed 400+ supporting documents, policies, and procedures in minute detail. The intensive audit process was managed by Fleet staff in addition to regular duties, and included working with external partners, user departments, the City Auditor, and the City's executive leaders. There were minimal findings by the auditors, who stated "As an overall assessment, the fleet and maintenance services provided by FSB are aligned with industry best practices in almost every area."

Recommendations from the audit included:

- Review the number of mechanics and pay rates and reinstate a mechanic training plan.
- Enhance transparency on mechanic labor rates.
- Bolster the Replacement Plan to include replacement of grant and donated vehicles that are essential to City operations.
- Move departments to apply utilization guidelines, enhance tracking of trailer equipment, and implement motorpool management software.
- Reinstall the Fleet Steering Committee, develop a Driver's Handbook and revise the City's Take-Home Vehicle policy.

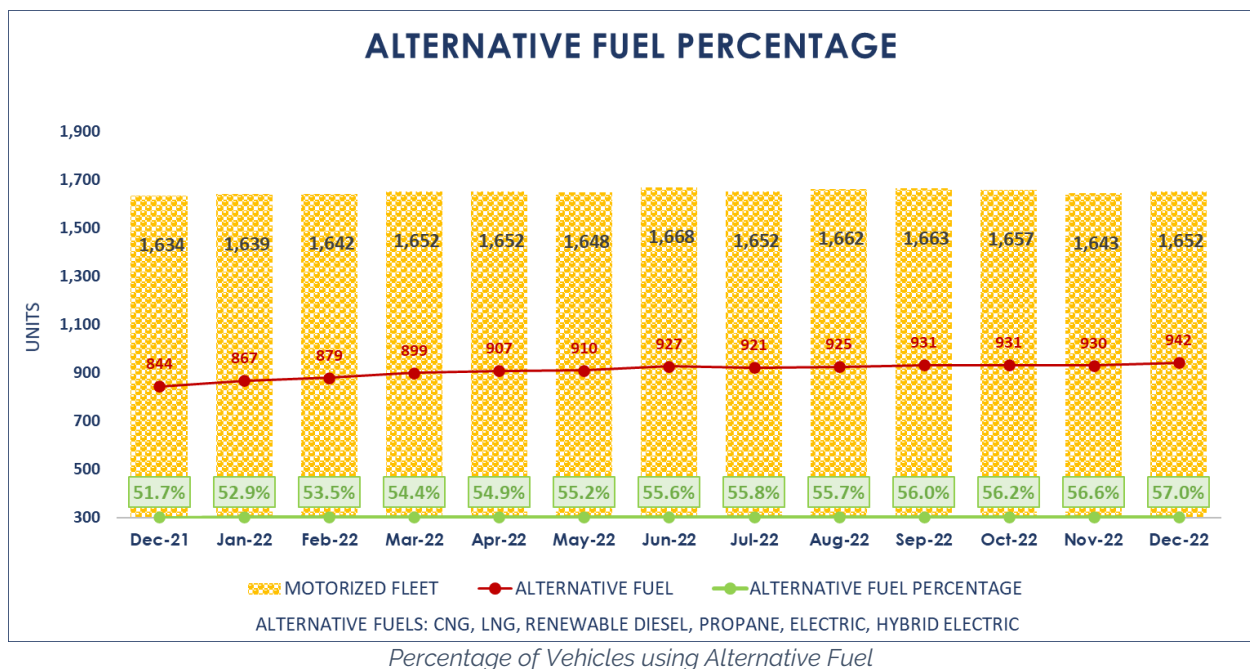
Fueling the Fleet

The City of Long Beach pursues the use of alternative fuels, such as renewable LNG, renewable CNG, renewable Diesel, and propane, whenever possible. This resulted in 54% of the fuel use being renewable in 2022.

There is a fully funded replacement program in place to ensure that fuel storage tanks are replaced before their anticipated end of life, preventing unexpected failures. In 2022, Fleet successfully replaced the Water Department's aging underground tank with a new \$1.2M above-ground storage tank. Normally, there is one tank replacement project at a time but due to supply chain and labor shortages Fleet is aggressively implementing bidding on multiple tanks to offer efficiencies for the vendors and cost savings to the City.

Several programs are in place to ensure we are keeping the environment as clean and safe as possible and to minimize issues with storage tank emissions.

- A new storage tank management database was implemented. This new system will provide an audit trail to track both above-ground and below-ground tank issues and to measure repair responses times to give better data.
- Contracts with 3rd party vendors were obtained to review Hazmat handling at Fleet and Fueling facilities, and to ensure compliance with all local, State, and Federal regulations.
- Annual training sessions for Hazard Materials Management, Designated UST Operator, Spill Prevention Controls and Countermeasures, and PEI Safety Trainings were held for Fuels staff.
- The Fuels Division staff is also trained in airport refueling to support the City's Heliport operations.



Electrifying the Fleet

The City of Long Beach is aggressively pursuing electrification of the fleet. Already a leader in Light-Duty electric and hybrid vehicles, including ZEVs and Plug-in Hybrids, FSB has installed dedicated 102 charging ports, with 200 more specifically planned for Disadvantaged Community Zones.

FSB has hired a new Chief Electrification Officer to spearhead the Electrification program, with the goal to electrify the fleet's Medium- and Heavy-Duty (MHD) trucks by the early 2030s (excluding Public Safety vehicles).

This program also includes applying for and managing several EV grants, with a total of \$3.7 million in funding committed, plus significant infrastructure support by Southern California Edison. We are also collaborating with educators, industry experts, manufacturers, and staff on developing an electric vehicle BEV training program and providing feedback and specifications for the development of new equipment.

FSB has collaborated on a Blueprint for the MDH electrification. The blueprint outlines the action plan, anticipated cost to convert the Fleet, modify the maintenance areas, changes to maintenance costs, and the air quality impacts. Challenges, considerations, and best practices were analyzed and factored into the plan. The Blueprint looks at both battery-electric vehicles and hydrogen fuel cell technologies.

The fuel conversion of MDH is estimated to cost an additional \$86.5M in initial capital costs from 2023 – 2038 relative to purchasing internal combustion engines. This will be offset somewhat by an expected annual savings of \$600K in reduced maintenance costs.

It is estimated there will be a 740-metric ton decrease in the annual greenhouse gas emissions upon conversion of the fleet.

Partnering with SCE through the Charge Ready Transport program will provide evaluation of facilities and integration along with support for designing, permitting, and installing the infrastructure. They will also be a source of information for funding sources to reduce up-front costs. There are multiple state and federal agencies that can be approached for funding of clean transportation programs.

There are anticipated challenges to the program.

- New technology means additional training for the service technicians and those who support the fueling infrastructure. FSB worked with labor unions, equipment manufacturers, and other partners to identify knowledge gaps and is working with several local colleges to develop a training pipeline for a future workforce.
- The MHD ZEV marketplace is relatively new, which means a scarcity of vehicles available until manufacturing capacity increases, although Fleet is already in the process of purchasing 2 electric refuse trucks.
- Many of the MHD vehicles have auxiliary equipment normally powered through the main vehicles' transmission. With BEVs, this could impact the range of the vehicle or require additional battery power.

Towing Division

City Residents rely on Towing to keep alleyways and driveways safe and clear. The Towing Operations and Lien Sales Division is responsible for providing tow response, roadside assistance, and unclaimed vehicle disposition for the City. They also partner with Parking Enforcement and the Long Beach Police Department to ensure all City events, such as the Long Beach Grand Prix, the Long Beach Marathon, and DUI checkpoints are fully staffed, keeping the roadways clear. There were 11,530 tows performed with an average response time of 19 minutes in 2022. Monthly auctions resumed at normal levels in 2022 with 2,810 vehicles being sold, bringing in slightly over \$3 million in revenue.

Employee safety was a priority for Towing in 2022. Lone Worker Devices were implemented for all employees who work alone in the yard or out in the field, providing a higher level of protection and peace of mind, and panic buttons are being installed in the Dispatch Office and at the lobby counters. These measures allow employees to instantly alert the Police Department, Fire Department, or other safety personnel.

As a 24/7 operation, collaboration and communication are key elements. Those in lead roles participate in a rotation that allows them to take part in and understand operational duties. Shift reports give employees the opportunity to give visibility to work accomplished, how the shift went, and what work remains to be done for the day. This provides staff who may not physically see each other due to staggered shifts the opportunity to communicate effectively and efficiently.



Towing Division Keeping City Streets Clear

Fleet Services and the Community in 2022

Although the main role for FSB is keeping the City vehicles up and running, another important function is to support the public and the community.

In 2022 Fleet Services assisted the City during a time of financial crisis when over \$20 million was needed to support general fund operations. FSB conducted a detailed analysis and cash flow projection to provide a temporary loan from the accumulated capital funding. This loan, approved by Financial Management and the City Council, helped prevent over \$20 million worth of cuts to public programs and other City operations.

The Acquisitions group supports the greater public interest by actively working towards increasing air quality, reducing our dependency on foreign oil, and offsetting the use of fossil fuels. We collaborate with management associations such as APWA, MEMA, NTEA, NAFA, AQMD and the Clean Cities Coalition to support the Department of Energy goals and to implement best practices.

The Fuels Division put steps in place to reduce fugitive emissions and protect the soil, reducing fuel tank violations by 33% in 2022. Semi-weekly checks are performed by internal staff, monthly checks by a third-party inspection service, and an annual audit of UST tanks is performed by a third party. This Division is a major participant in the City's Battery Electric Vehicle Task Force.

Maintenance works to minimize the environmental impact of vehicle upkeep by reducing the use of aerosol products, implementing the use of reusable oil filters to reduce filter waste, reducing our oil waste stream by increasing oil life, and using solar panels to provide 80% of the facility's power needs. Staff members are on advisory boards or industry associations such as MEMA, NAFA, Advisory boards for Universal Technical Institute, Long Beach City College Automotive Advisory Board, Cerritos College Advisory Board, and a local mentoring program with local high schools to establish and maintain the automotive trades shops at these schools.

Towing supports the community with various relief programs to reduce the financial burden on those needing assistance when vehicles are towed.

- The Indigent Payment Plan programs provides for the release of vehicles with an approved payment plan,
- The Homelessness Waiver Policy allows for a one-time waiver of towing, storage fees and parking citations for those living in their vehicles. This program also encourages these individuals to take advantage of the City's homeless resources as a path forward to permanent housing.
- The Recovered Stolen Vehicle Waiver program ensures that residents whose vehicles were stolen and recovered by the Police Department will not be responsible for Administrative or Release fees.
- The Deceased Registered Owner Waiver grants a 15-day grace period from the date of contact with the next of kin to obtain the final death certificate in order to release the vehicle with just the cost of the towing and a one-day storage fee, if the vehicle was impounded due to a medical emergency.

2023 and Beyond

As proud public servants, our vision is to provide the best possible service to our residents, with the cleanest, safest, and most efficient fleet possible. We do that through aggressive implementation of zero-emission vehicles, pushing the envelope on new technology and partnering with vendors for early deployment of ZEVs, infrastructure, and new technologies. The Electrification Officer will oversee a dedicated analyst and a new "green" intern position, who will work in unison to meet the City's climate action initiatives and strict state-mandated compliance regulations. Our plans include implementation of medium and heavy-duty electric vehicles, with 100% electric purchases by 2027. The program includes the application and management of EV grant awards, with total committed funding of more than \$3.7 million, plus extensive infrastructure support from Southern California Electric utility.

Resources and training will be provided to Fleet technicians, and new staff with EV background will be hired to work on the new electric vehicles. We are collaborating with educators, industry experts, manufacturers, and staff to develop BEV training programs and providing municipal feedback and specifications for the development of new equipment. In addition, there are pilot programs to evaluate the feasibility of using hydrogen heavy-duty vehicles and adding these vehicles to the Fleet when available. There is a continued focus on the reduction of conventional fuel use by using BEV vehicles, switching to hybrid vehicles for the Police Department and training staff to be more fluent with technology to reduce the amount of paper.

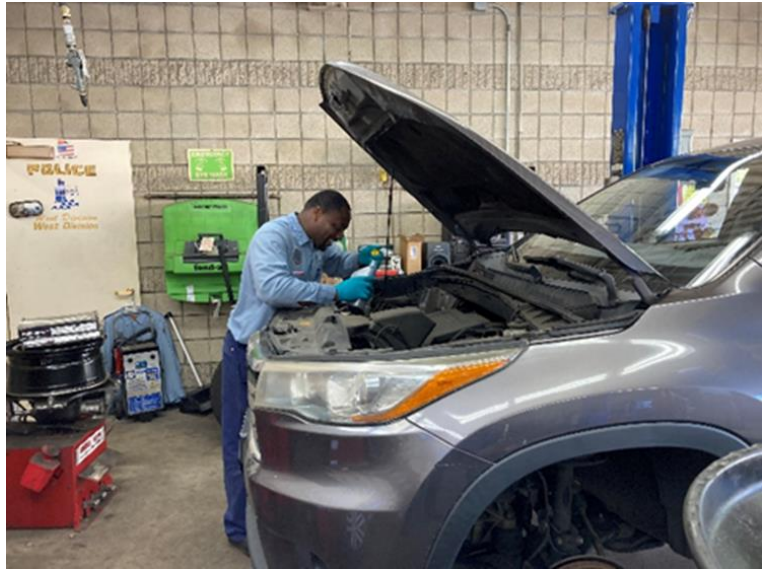
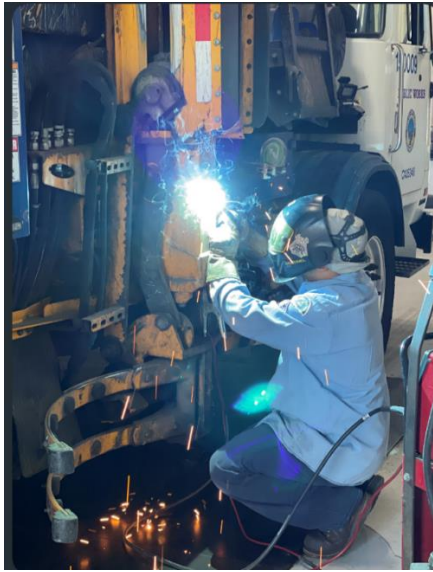
The State of California mandates for electrification will result in our replacing 410 medium and heavy-duty trucks with zero-emission versions starting in 2024. Acquisitions is working closely with Public Works to line up the charging infrastructure and identify the best possible choices for ZE trucks. Training is being conducted to ensure the staff is prepared for the units that will be acquired.

Telematics use will increasingly be incorporated to assist with making data-driven decisions. Metrics and KPIs will continue to be refined to ensure decisions are informed and fact-based.

The Towing division will be implementing new software that will allow the operation to become nearly paperless. Cell phones and tablets will allow drivers and lot attendants to complete tows and releases in the field, relieving dispatchers of having to manually input data from written reports. Payment devices will be implemented to allow for electronic transactions.

While new technology and programs can provide good vehicles and a strong fleet base, it is the Fleet team that makes everything happen. The people of FSB work closely together in multiple capacities to get the right things done, done well, and done on time.

People of Fleet



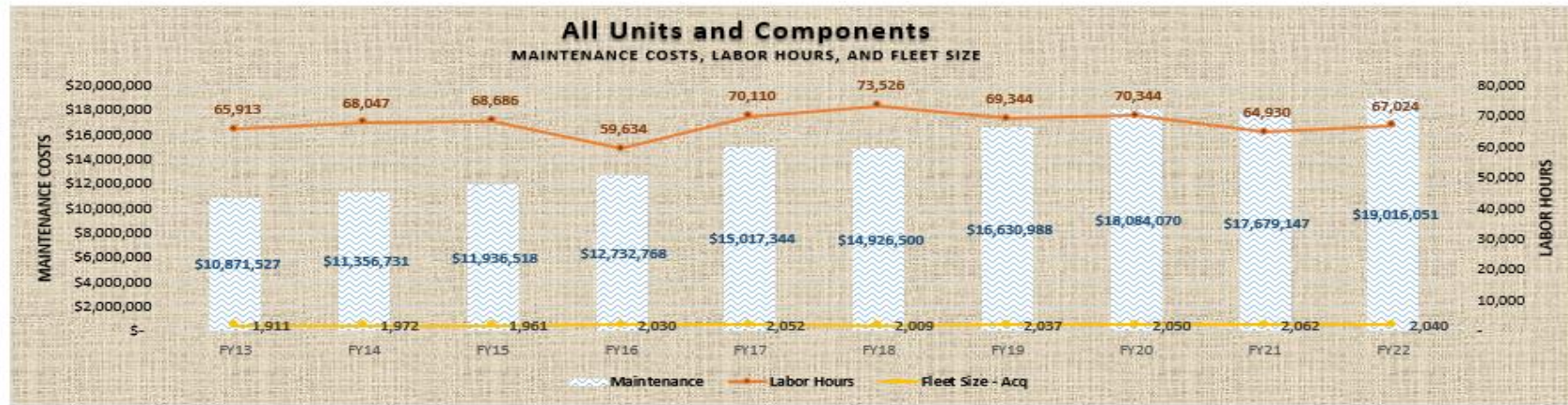


Appendix

10-Year Metrics Attachment

On an annual basis an analysis of the maintenance and fuel costs is performed for the past 10 years. The analysis looks at all units and motorized rolling stock.

Maintenance Cost, Labor Hours, and Fleet Size Comparisons



All Units and Components

*Maintenance Cost – All units and components requiring labor, parts, and/or commercial services (excluding rotorcrafts, Harbor Dept units/components and Water Dept units/components)

*Maintenance costs listed include markup/overhead and taxes (when applicable)

*Maintenance costs consists of labor, parts, and commercial charges

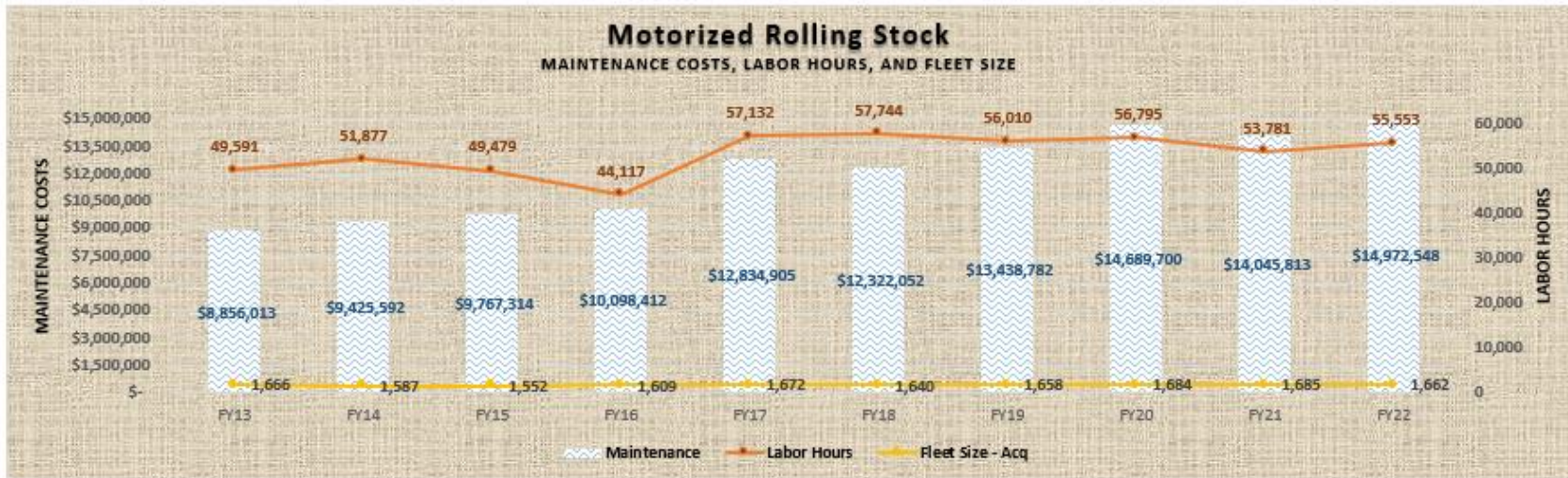
*Inventory – All units and components excluding fuel keys, secondary engines, Harbor Dept units/components, and Water Dept units/components.

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Maintenance	\$ 10,871,527	\$ 11,356,731	\$ 11,936,518	\$ 12,732,768	\$ 15,017,344	\$ 14,926,500	\$16,630,988	\$18,084,070	\$17,679,147	\$19,016,051
Labor Hours	65,913	68,047	68,686	59,634	70,110	73,526	69,344	70,344	64,930	67,024
Fleet Size - Acq	1,911	1,972	1,961	2,030	2,052	2,009	2,037	2,050	2,062	2,040
Avg Age of Fleet (Yrs)							7.86	8.30	7.50	7.00

	Data Source	FY14 vs FY13	FY15 vs FY14	FY16 vs FY15	FY17 vs FY16	FY18 vs FY17	FY18 vs FY19	FY20 vs FY19	FY21 vs FY20	FY22 vs FY21
Maintenance	*LBVAB2	4%	5%	7%	18%	-1%	11%	9%	-2%	8%
Labor Hours	*LBVAB2	3%	1%	-13%	18%	5%	-6%	1%	-8%	3%
Fleet Size - Acq	Carlos Ramirez	3%	-1%	4%	1%	-2%	1%	1%	1%	-1%

*This number may be skewed. Please see note #9 for detailed explanation.

Maintenance Cost, Labor Hours, and Fleet Size Comparisons



Motorized Rolling Stock

*All on road and off road motorized units with wheels excluding rotorcrafts, boats, Harbor Dept units, and Water Dept units.

*excludes (in general) : floor scrubbers, engines, misc marine equip, tractor movers, trailers, air compressors, generators, sand separators, beach cleaners, sprayers, misc construction equip, portable steam cleaners, welders, and helicopters.

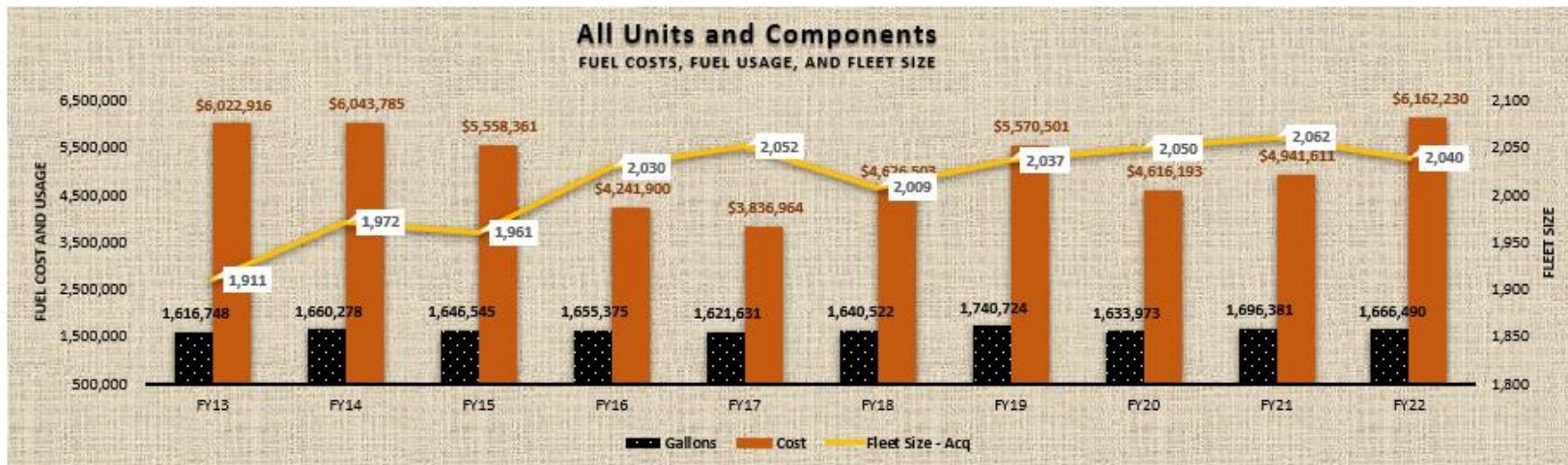
*Maintenance costs listed include markup/overhead and taxes (when applicable)

*Maintenance costs consists of labor, parts, and commercial charges

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Maintenance	\$ 8,856,013	\$ 9,425,592	\$ 9,767,314	\$ 10,098,412	\$ 12,834,905	\$ 12,322,052	\$13,438,782	\$14,689,700	\$14,045,813	\$14,972,548
Labor Hours	49,591	51,877	49,479	44,117	57,132	57,744	56,010	56,795	53,781	55,553
Fleet Size - Acq	1,666	1,587	1,552	1,609	1,672	1,640	1,658	1,684	1,685	1,662
Avg Age of Fleet (Yrs)							7.35	7.50	6.90	6.70

	Data Source	FY14 vs FY13	FY15 vs FY14	FY16 vs FY15	FY17 vs FY16	FY18 vs FY17	FY19 vs FY18	FY20 vs FY19	FY21 vs FY20	FY22 vs FY21
Maintenance	*Unit Main									
	*LBVAB2	6%	4%	3%	27%	-4%	9%	9%	-4%	7%
Labor Hours	*Unit Main									
	*LBVAB2	5%	-5%	-11%	30%	1%	-3%	1%	-5%	3%
Fleet Size - Acq	*Carlos Ramirez	-5%	-2%	4%	4%	-2%	1%	2%	0%	-1%

Fuel Cost, Fuel Usage, and Fleet Size Comparisons



All Units and Components

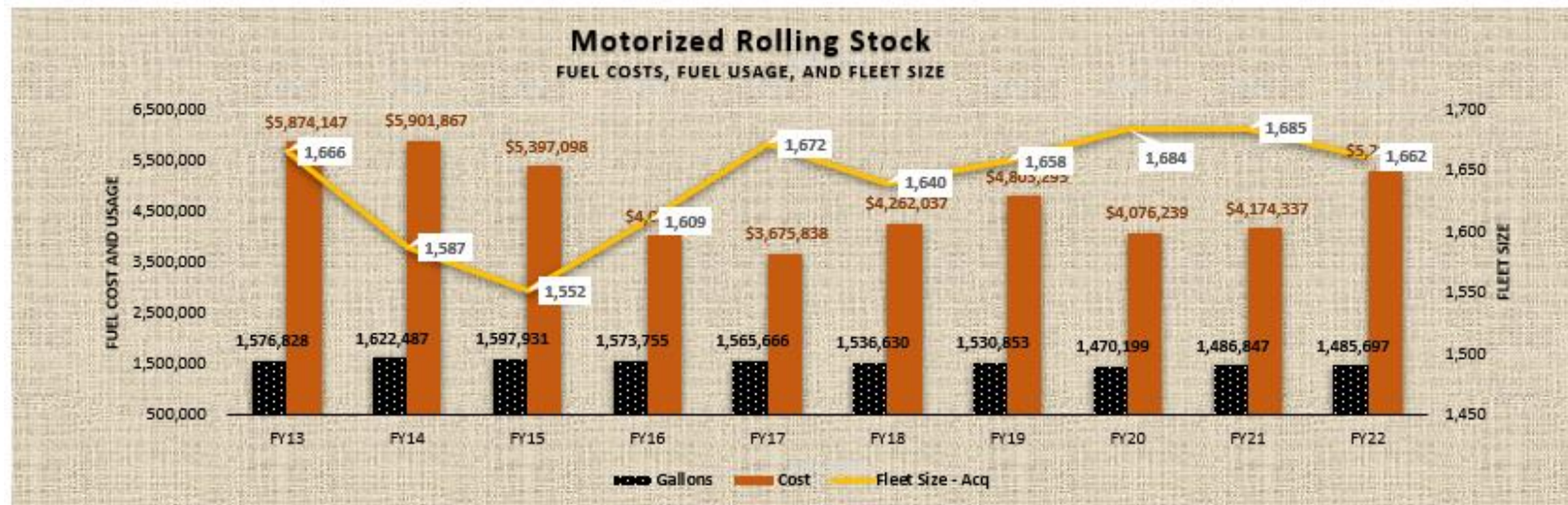
*All units and components that use fuel excluding rotorcrafts, Harbor Dept units/components and Water Dept units/components.

*Fuel costs listed include markups/overhead and taxes (if applicable)

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Gallons	1,616,748	1,660,278	1,646,545	1,655,375	1,621,631	1,640,522	1,740,724	1,633,973	1,696,381	1,666,490
Cost	\$ 6,022,916	\$ 6,043,785	\$ 5,558,361	\$ 4,241,900	\$ 3,836,964	\$ 4,626,503	\$ 5,570,501	\$ 4,616,193	\$ 4,941,611	\$ 6,162,230
Fleet Size - Acq	1,911	1,972	1,961	2,030	2,052	2,009	2,037	2,050	2,062	2,040
Avg Age of Fleet (Yrs)						7.86	8.30	7.50	7.40	7.00

	Data Source	FY14 vs FY13	FY15 vs FY14	FY16 vs FY15	FY17 vs FY16	FY18 vs FY17	FY19 vs FY18	FY20 vs FY19	FY21 vs FY20	FY22 vs FY21
Gallons	*LBVAB2	3%	-1%	1%	-2%	1%	6%	-6%	4%	-2%
Cost	*LBVAB2	0%	-8%	-24%	-10%	21%	20%	-17%	7%	25%
Fleet Size - Acq	Carlos Ramirez	3%	-1%	4%	1%	-2%	1%	1%	1%	-1%

Fuel Cost, Fuel Usage, and Fleet Size Comparisons



Motorized Rolling Stock

- * All on road and off road motorized units with wheels excluding rotorcrafts, boats, Harbor Dept units, and Water Dept units.
- * excludes (in general) : floor scrubbers, engines, misc marine equip, tractor movers, trailers, air compressors, generators, sand separators, beach cleaners, sprayers, misc construction equip, portable steam cleaners, welders, and helicopters.
- * Fuel costs listed include markups/overhead and taxes (if applicable)

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Gallons	1,576,828	1,622,487	1,597,931	1,573,755	1,565,666	1,536,630	1,530,853	1,470,199	1,486,847	1,485,697
Cost	\$ 5,874,147	\$ 5,901,867	\$ 5,397,098	\$ 4,027,479	\$ 3,675,838	\$ 4,262,037	\$ 4,803,293	\$ 4,076,239	\$ 4,174,337	\$5,295,938
Fleet Size - Acq	1,666	1,587	1,552	1,609	1,672	1,640	1,658	1,684	1,685	1,662
Avg Age of Fleet (Yrs)						7	7.50	6.90	6.70	6.00

	Data Source	FY14 vs FY13	FY15 vs FY14	FY16 vs FY15	FY17 vs FY16	FY18 vs FY17	FY19 vs FY18	FY20 vs FY19	FY21 vs F20	FY22 vs FY21
Gallons	*Unit Main *LBVAB2	3%	-2%	-2%	-1%	-2%	0%	-4%	1%	0%
Cost	*Unit Main *LBVAB2	0%	-9%	-25%	-9%	16%	13%	-15%	2%	27%
Fleet Size - Acq	*Carlos Ramirez	-5%	-2%	4%	4%	-2%	1%	2%	0%	-1%