



Memo

October 26, 2019

TO: Ad Hoc Committee on Sustainability
Supervisor John Gioia, District I
Supervisor Federal Glover, District V

FROM: Brian M. Balbas, Public Works Director

SUBJECT: 2018 Fleet and Equipment Sustainability Report

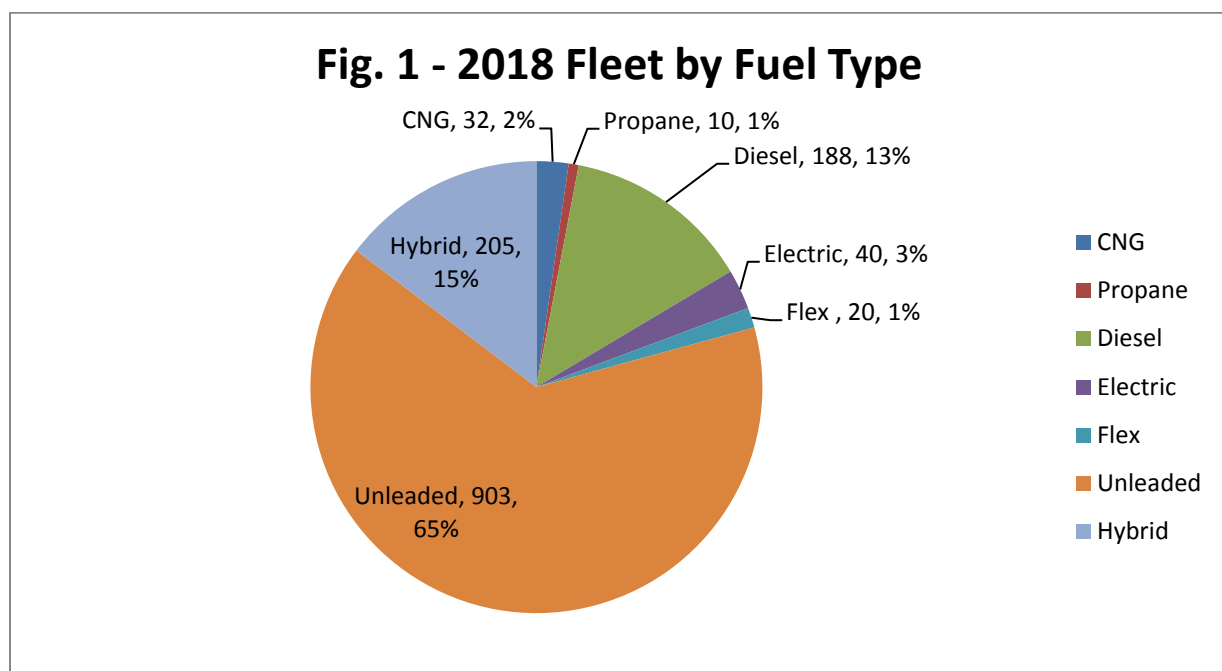
Recommendation

ACCEPT the 2018 Fleet and Equipment Sustainability Report and PROVIDE DIRECTION as appropriate

Background

Our Fleet

The County uses a variety of vehicles and equipment that are powered with an array of fuel types as shown in Fig. 1 below:



Administrative Bulletin 508.5 provides guidance on the purchase of vehicles and equipment including a clean air vehicle policy and goals. (Attachment A)

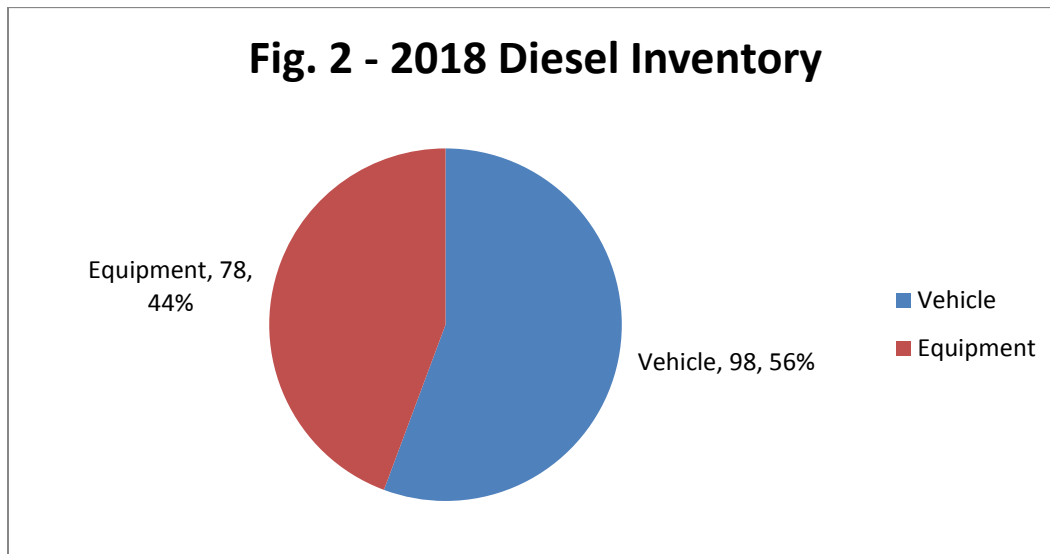
Public Works Fleet Services has been proactively working under the County's Clean Air Vehicle Policy guidelines with the intent of achieving a greener fleet. Fleet Services continues to educate our customer departments regarding the advantages and benefits of downsizing and right-sizing the Fleet. This includes the practice of replacing vehicles with Hybrid, Electric or Compressed Natural Gas units where applicable.

The chart below shows the vehicles and equipment added the past three years by fuel type. Please note the information is only intended to show the variety of alternative fuel vehicles and equipment purchased. Since we do not have a monolithic fleet, each vehicle and equipment will reach replacement criteria at different times so annual replacement composition does not necessary indicate a trend for any fuel type.

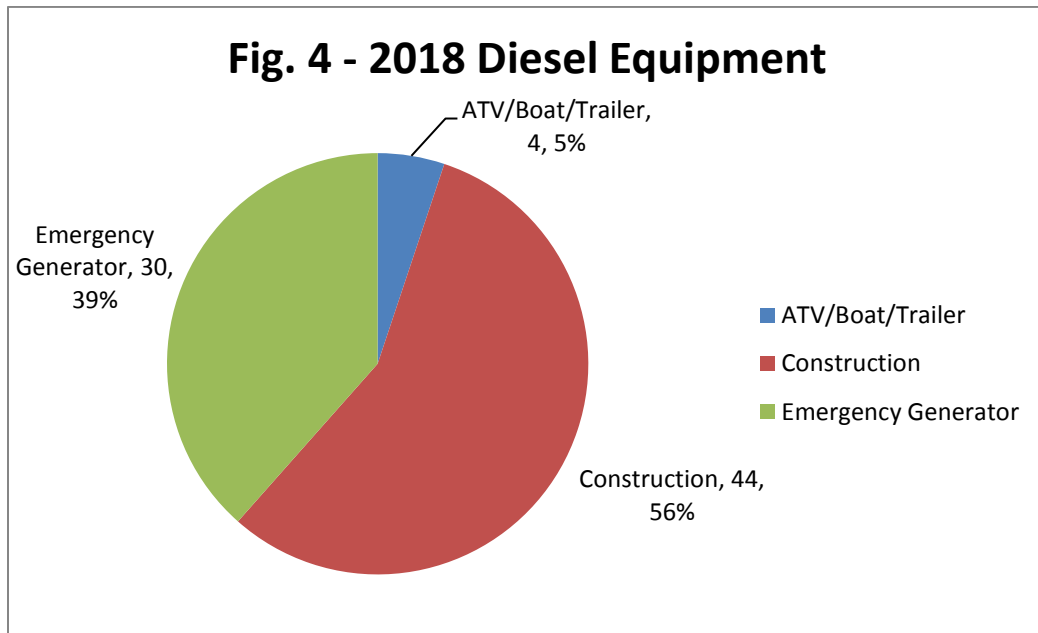
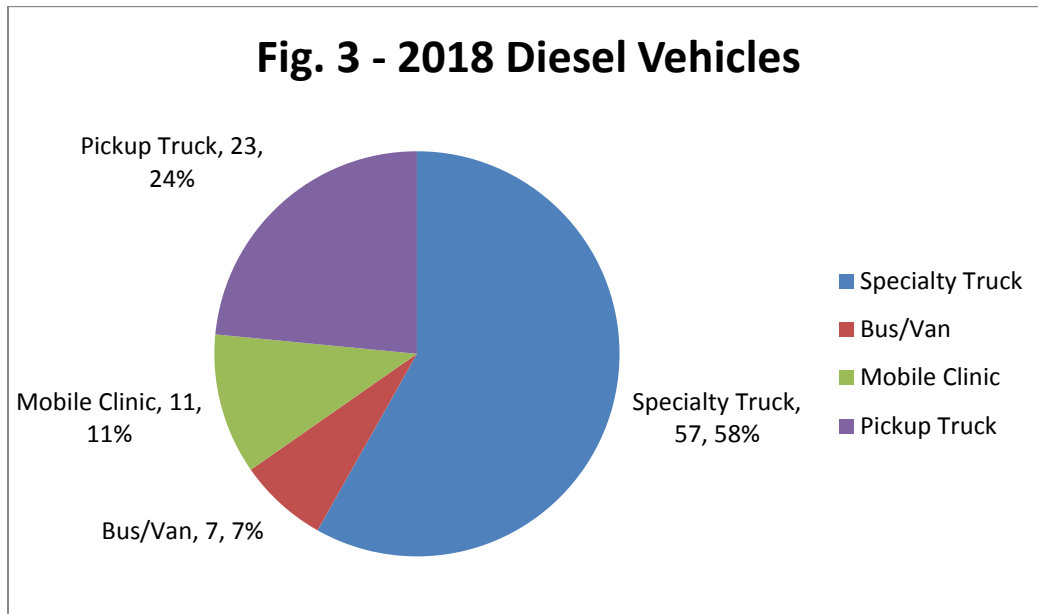
Vehicle & Equipment Purchases				
	2015	2016	2017	2018
CNG	10	1	0	0
Diesel	2	2	10	0
Electric	9	4	0	1
Flex	2	15	3	0
Unleaded	82	43	60	41
Hybrid	37	17	14	14
Total	142	82	87	56

Diesel Details

As shown in Fig. 1, diesel fuel is used in 13% of the vehicles and equipment utilized by County staff. Figure 2 below shows the breakdown of diesel vehicles and equipment.



Figures 3 & 4 further illustrate the types of vehicles and equipment, respectively.



The above charts help illustrate what vehicle or equipment types may be replaced with non-diesel options. For example, 24% of our diesel vehicles are pickup trucks. There are non-diesel pickup trucks available now which can be considered in lieu of a diesel engine if they meet operational and functional needs.

We have taken advantage of diesel/electric hybrid technology with the purchase of several Hino box trucks to reduce diesel emissions. We are also purchasing diesel/electric hybrid aerial

trucks so our electricians no longer need to keep the diesel engine running to provide power to operate the bucket lift as they work on overhead traffic signals and street lights.

However, not all current types of vehicles/equipment have viable non-diesel options. For example, manufacturers are slow to produce non-diesel alternatives for medium and heavy duty trucks, so there is currently no real feasible option for our fleet of specialty trucks such as dump trucks and construction equipment.

It should be noted that the County has been dispensing biodiesel at the Waterbird Fueling Station since 2005 and switched over to renewable diesel in 2016 to further reduce emissions of greenhouse gases from our diesel vehicles.

Idle Free

The impacts of unnecessary idling of vehicles and equipment negatively affect the environment, human health, and a waste of funds due to wasted fuel and excessive wear on vehicles/equipment.

Administrative Bulletin 507.9 (Attachment B) provides guidance on County Vehicle Operation. Interestingly, there is no anti-idling policy in AB 507.9.

Public Works' Vehicle Asset Management policy (Attachment C) does require the decal below when the vehicle is equipped with a device to track vehicle performance and location.

**NO SMOKING IN ANY COUNTY VEHICLES, AT ANY TIME
ALWAYS AVOID UNNECESSARY ENGINE IDLING**

There should be no expectation of privacy in any County vehicle at any time.

There should always be an expectation that GPS/monitoring system(s) are installed and active in every County vehicle.

Also, in 2016, Public Works prepared a short idle free presentation that was presented at a Department Head meeting and utilized internally to bring awareness of the impacts of unnecessary idling of vehicles. (Attachment D)

While not all vehicles in the County fleet are equipped with a tracking device, the decal can be installed in all County vehicles and the anti-idling presentation made available to County employees so they are informed. Also, AB 507.9 will need to be revised to include an Anti-Idling Policy.