

MEMORANDUM

TO: Board of Trustees

THROUGH: Indra Winquest
District General Manager

FROM: Brad Underwood, P.E.
Director of Public Works

SUBJECT: Fleet Division Presentation

**RELATED STRATEGIC
PLAN INITIATIVE(S):**

Long Range Principle #5 – Assets and Infrastructure: The District will practice perpetual asset renewal, replacement and improvement to provide safe and superior long term utility services and recreation venues, facilities, and services.

**RELATED DISCRICT
POLICIES, PRACTICES,
RESOLUTIONS OR**

ORDINANCES: Board Policy 12.1.0 - Multi-Year Capital Planning
Board Policy 13.1.0 - Capital Project Budgeting
Board Policy 20.1.0 - Purchasing Policy for Goods and Services

DATE: February 22, 2023

I. RECOMMENDATION

This is an informational report, no action is required by the Board of Trustees.

II. BACKGROUND

The original Fleet garage began operations in the early 1960's and was located in the lower level of the current Administration building. The District's initial fleet consisted of four vehicles: a dump truck, a backhoe and two pick-up trucks.

Today, Fleet is a Division of the Public Works Department and looks much

different from the early days of the 1960's. The Fleet Division has seven full-time staff (six mechanics and a Fleet Superintendent) maintaining 647 pieces of equipment (inclusive of vehicles), ranging from golf carts to loaders and everything in between. The maintenance occurs in three separate repair facilities, with the main facility located at Sweetwater and satellite facilities at Diamond Peak Ski Resort and Championship Golf Course, all operating year round. An additional seasonal facility is located at Mountain Golf Course.

The Fleet Division's primary responsibility is to maintain all of the District's equipment (inclusive of vehicles) throughout their service life. Additionally, they have the following responsibilities: preparing fleet capital budgets for all IVGID Departments, purchase of new equipment to include writing technical specifications, disposal of equipment that has reached its life expectancy, training of equipment operators for safe operations, set-up of new equipment, District welding and fabrication services, tracking equipment maintenance and fuel costs, and managing the underground fuel storage tanks.

There are industry standards that provide a guide for proper staffing levels for fleet operations. The National Association of Fleet Administration (NAFA) sets these standards using Vehicle Equivalency Units (VEU). One VEU represents the labor required to maintain a 4-door, two-wheel drive vehicle. VEUs for other equipment varies based upon their maintenance requirements in relationship to this baseline vehicle.

The standard set for one journeyman mechanic to maintain on a yearly basis is between 62.5 and 73 VEUs. The VEU count for all equipment is 594. Using the higher performing mark of 73 VEUs per mechanic, results in eight fulltime mechanics needed per the guidelines of NAFA to maintain the District's equipment. However, the Fleet Division currently performs the necessary maintenance work with six mechanics, two fewer than the recommended National Standards. These industry standards for VEU measurements do not take into account the activities of administration, budgeting, accounting, parts purchasing and inventory, welding and fabrication, and operator training. Many of these additional activities are performed by the Superintendent, but some are performed by IVGID Fleet mechanics.

The Fleet Division charges out the maintenance performed on each piece of equipment or vehicle to the various departments as an internal service allocation. The labor rate used for this allocation takes into account all expenses including wages and benefits, depreciation of fleet shop equipment, and outside services and operating supplies. The service labor rate for FY 22/23 was determined to be \$99 per hour and equipment parts are billed at cost.

The Fleet Superintendent has established a fleet replacement schedule for the District's equipment and vehicles based upon National Standards and the historical useful life of the District's fleet. The Fleet Replacement plan tracks each venue's fleet detailing each vehicle and equipment. This information is the basis for the eventual capital budget for fleet and equipment replacement. The procurement process for fleet is primarily done through government contracts such as Sourcewell, GSA, HGCA, Nevada State Purchasing Program and the District is eligible to buy from other state contracts.

The Fleet Superintendent may adjust the replacement schedule based upon an individual piece of equipment's performance. The equipment is inspected and evaluated annually for condition and usage before being officially scheduled for replacement in the Capital Improvement Program. The evaluation includes a review of total lifetime to date repair costs, oil analysis for condition assessment (engines, transmissions, drivetrains and hydraulic systems), annual and lifetime usage. Replaced vehicles may be repurposed to other areas within the District. Traditionally, these vehicles have been repurposed to the Fleet, Golf, Buildings, or IT Divisions.

Currently, fleet replacement is budgeted each year in the specific Department's budget. This can create extreme high's or low's in the Capital budget for a Department depending on the equipment replacement needs in any single year. The Board may consider another option by establishing an Equipment Replacement Fund by venue that would be used to fund Capital equipment replacement purchases. Each Department would be charged a monthly vehicle "rental" fee that would be based upon the total projected cost of the equipment and the established life expectancy, which would be transferred into the Equipment Replacement Fund. In establishing such a fund, each Department would have a full understanding of the annual budget impact of fleet costs and may consider adjustments to their fleet to manage costs.

III. BID RESULTS

There are no bid results associated with this Memorandum.

IV. FINANCIAL IMPACT AND BUDGET

There is no financial impact from the information contained in this Memorandum.

V. ALTERNATIVES

Not applicable.

VI. COMMENTS

There are no comments associated with this Memorandum.

VII. DISTRICT IMPROVEMENT, COST REDUCTION, RETURN ON INVESTMENT OR PRODUCTIVITY ENHANCEMENT

The Fleet Division is responsible for the ongoing improvement of the District's rolling stock.

VIII. BUSINESS IMPACT

This item is not a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, and does not require a Business Impact Statement.

IX. ATTACHMENTS

1. Fleet Division PowerPoint Presentation by Rich Allen, Fleet Superintendent

X. DECISION POINTS NEEDED FROM THE BOARD OF TRUSTEES

This Memorandum is for informational purposes and no decision is needed from the Board of Trustees.

Board of Trustees
Fleet Division Presentation
February 22, 2023





Fleet Beginnings

Original Garage

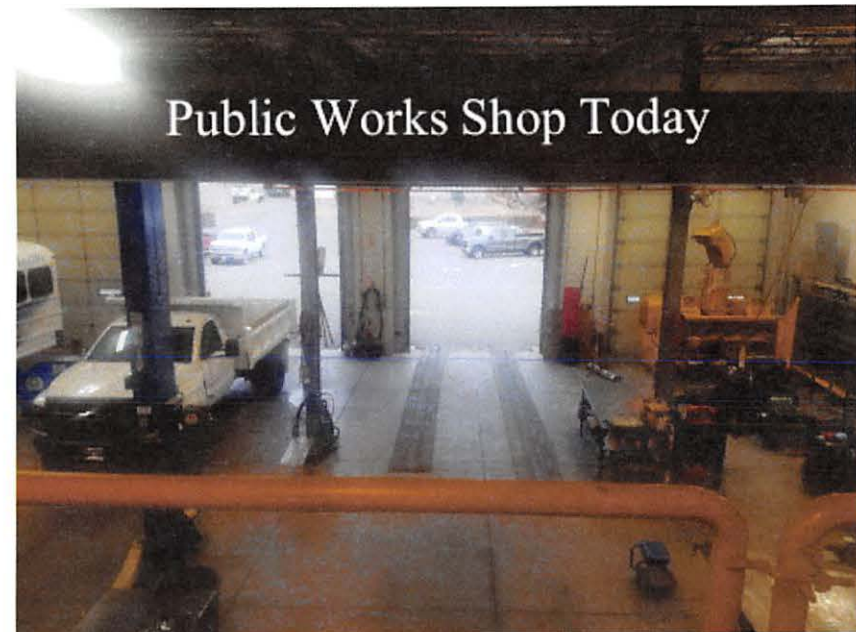
- Early 1960's downstairs at the back of Administration building

Original Fleet

- One 5-yard dump truck
- One backhoe
- Two pick-up trucks

Fleet Statistics - 2023

- Equipment Total: 647
- Seven (7) full time year-round Staff
- Three (3) full time year-round repair facilities:
 - Public Works Sweetwater facility
 - Diamond Peak Ski Resort
 - Championship Golf Course
- One (1) seasonal repair facility:
 - Mountain Golf Course



Fleet Division Responsibilities

- Capital Improvement Plan budgets
- Equipment purchase bid technical specifications
- Purchase, replace and dispose of vehicles and equipment
- Operator training (Occupational Safety Health Administration and State Laws)



Championship Golf Shop

Fleet Division Responsibilities

(continued)

- Prepare/set-up vehicles & equipment for specific service requirements
- Maintain/repair vehicles & equipment throughout their service life
- Welding & metal fabrication services
- Captures all maintenance/fuel costs & bill customers
- Manage underground fuel storage tanks & waste oil disposal





Measurement of Staffing Levels

- Industry Standards: Vehicle Equivalency Units (VEU)
- One VEU represents the maintenance labor created by a 4-door two-wheel drive midsize car.
- A journeyman mechanic in an efficiently run shop can maintain between 62.5 and 73 VEUs per year.
- More information at <https://www.government-fleet.com/146344/calculating-mechanic-staffing-requirements>
- Current VEU count for IVGID is 594 and should employ 8 fulltime mechanics (594 VEUs divided by 73 VEUs per year).
- VEU measurements do not take into account activities of Budgeting, Administrative, Accounting, Parts Purchasing/Inventory, Welding and Fabrication, and Operator Training that all fall into Fleet Responsibilities



Fleet Staffing

- Fiscal Year 2014/2015
 - 6 Employees: 1 Superintendent, 5 Mechanics
 - 613 pieces of equipment
 - Total VEU of 528
 - 106 VEU per mechanic
- Fiscal Year 2015/2016
 - 7 employees: 1 Superintendent, 5 Mechanics, 1 Assistant Mechanic
 - 647 pieces of equipment
 - Total VEU of 588
 - 98 VEU per mechanic
- Fiscal Year 2022/2023
 - 7 employees: 1 Superintendent, 6 Mechanics
 - 647 pieces of equipment
 - Total VEU of 594
 - 99 VEU per mechanic

VEU Examples by Equipment Type

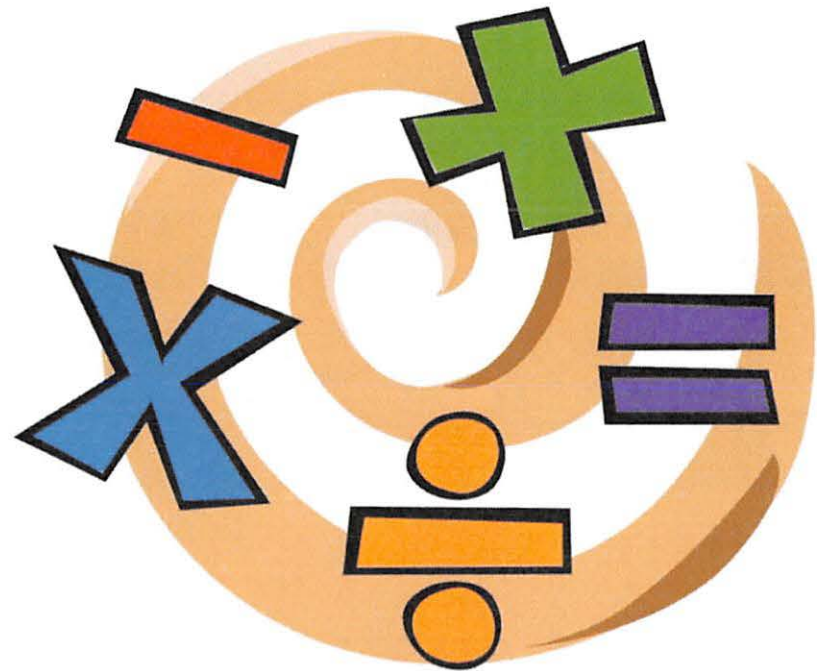
Equipment/Vehicles	Average VEUs
4 door, two-wheel drive vehicle	1 each
Brush Saws	.27 each
Snowblower	.78 each
Small Water Pump	.96 each
Three SUVs	1.34 each
One Backhoe	1.82 each
Two 36 Passenger Bus	3.762 each
Three 950G Wheel Loader	2.373 each
Seventeen ½ ton pickups	1.341 each
Five Snowcats (without attachment)	10.045 each
One Fairway Mower	7.262 each



Snowcat

Fleet Unit of Service (Labor Rate)

- All expenses incurred by Fleet include wages and benefits, depreciation of shop equipment, and services/operating supplies divided by total labor hours
- 2022/23 Budget internal service labor rate is \$99 per hour
- Equipment parts are billed at cost





Current Outside Vendor Labor Rates

- **Cashman Equipment** (Heavy Equipment Repair)
\$168 per hour in shop \$198 field service plus \$153 per hour travel
- **Cashman Power Generation** (Standby Generator Repair)
\$165 per hour plus \$120 per hour travel
- **Kassbohrer All Terrain Vehicles** (Snow Grooming Equipment Repair)
\$145 per hour plus \$85 per hour plus \$1.95 per mile travel
- **Silver State International** (Large Truck and Trailer Repair)
\$192 per hour plus \$192 per hour travel time plus \$3.00 per mile
- **Belkorp Ag** (John Deere Turf Equipment) - \$190 per hour and \$190 per hour travel
- **Turf Star** (Toro Turf Equipment Repair)
\$170 per hour plus \$350 travel for Incline Village
- **Champion Chevrolet** (Light Trucks and Vehicles Repair) - \$178 per hour
- **Wolf Machine** (Machine Shop & Welding/ Fabrication Service) - \$125 per hour
- **Auto Service by Allan** (Local Incline Village Shop) - \$140 per hour

Equipment Count and Fleet Charges

Fiscal year 2021/2022

Department	Equipment Count	Fleet Department Charges
Administration	10	\$3,490
Public Works	159	\$232,842
Golf	328	\$472,587
Facilities	6	\$1,444
Ski	65	\$340,544
Recreation Center	4	\$8,076
Parks	62	\$23,515
Beaches		\$30,801
Engineering	3	\$2,016
Buildings	10	\$15,302
	Total Fleet Interfund Services Revenue	\$1,130,616



Fleet Department Costs

Fiscal year 2021/2022

Expense Item	Cost
Labor (Fully Burdened)	\$738,638
Material	\$374,137
Other Operating Costs	\$31,806
Contractual Services	\$101,860



Methods used in Equipment Replacement Process

- Begin with recommended years of service life
- Total lifetime cost of repairs
- Oil analysis for condition assessment
- Annual and lifetime usage are evaluated



Equipment Replacement Schedule Guidelines

Equipment / Vehicle	Replacement Schedule
Pickup & Service Trucks	10 years
Fairway Mowers	10 years
Snowmobiles	6 years
Snowcats	10 years
Fairway Aerator	3 years
Senior Transportation SUV	3 years
Greens Mower	8 years

Vehicle Useful Life Example

- Pickups and service trucks are scheduled for 10 years.
- Public Works trucks adhere to this replacement schedule due to emergency response required
- Repurposing of vehicles
 - Fleet Department
 - Golf, Buildings and IT



Truck # 543

Life of a Snowcat Data Example

	2008 Pisten Bully	#628		Snowcat Life Data	
	Parts	Labor hrs	Labor \$	Usage hrs	Purchase \$
FY 2008/09	\$ 620.84	204.4	\$ 12,877.20	854	\$ 239,850.00
FY2009/10	\$ 1,191.57	235.55	\$ 14,375.51	724	
FY 2010/11	\$ 2,145.04	234.1	\$ 14,287.11	934	
FY 2011/12	\$ 2,760.13	183.9	\$ 11,223.40	684	
FY 2012/13	\$ 5,112.75	310.1	\$ 18,942.36	751	
FY 2013/14	\$ 19,588.52	288.7	\$ 17,619.40	780	
FY 2014/15	\$ 14,632.21	325.5	\$ 22,677.59	691	
FY 2015/16	\$ 14,480.61	399.7	\$ 28,406.89	1064	
FY 2016/17	\$ 18,593.18	370.5	\$ 26,331.53	975	
FY 2017/18	\$ 9,626.55	309.1	\$ 23,809.73	584	
FY 2018/19	\$ 8,364.87	208.95	\$ 16,298.10	1142	
Totals #628	\$ 97,116.27	3070.5	\$ 206,848.82	9183	
Lifetime Total Cost Repairs & Maint:			\$ 303,965.09		

From IVGID Department Fleet Records

Replaced in 2019 by 2019 Pisten Bully Equip. # 804 value of \$399,500 less trade in value of \$25,000 for total cost of \$374,500



Questions?