State Vehicle Report

Each October the Division of Fleet Operations prepares a State Vehicle Report for the Legislature. October is a good month to take a snapshot of the fleet size as seasonal fluctuations for Transportation and Natural Resources subside. For daily analysis, DFO maintains a live database that provides access to instant vehicle reports. The real time nature of the database often shows significant daily changes in vehicle counts due to acquisitions, sales or salvaging of state vehicles. Beginning with the new fiscal year, DFO will take a monthly snapshot of vehicle ownership to provide monthly comparisons.

As reported in Attachment B, the state owned 7,037 vehicles (not counting UDOT heavy equipment) on June 19, 2000. Of the total, 77 percent of the vehicles are light duty passenger vehicles for daily business. Nearly 20 percent of the total is made up of 4x4 pickups and sport utility vehicles.

Vehicle Type	**Count**
Cars and 4x2 Trucks	4105
4x4	1336
One Ton Trucks	976
Patrol	533
Buses	55
Motorcycles	26
Total	7031

Source: DFO

Four Wheel Drive Vehicles

Utah clearly needs to own 4x4 vehicles to access mountainous terrain and to drive over snow covered passes. However, it seems unlikely that the State needs 20 percent of its passenger vehicles (25 percent if heavy trucks, patrol vehicles and buses are omitted) to have four wheel drive capability. According to *Edmund's*, a leading pricing service, four wheel drive options increase vehicle prices by $2,000 to $4,000 depending on the model. If the state were to convert half of its 4x4 vehicles to standard vehicles, the savings from assuming a $2,000 increment would total more than $1.3 million. *The Analyst recommends that the Legislature adopt a policy that requires all agencies to get legislative approval to replace any four wheel drive vehicle.* Absent such approval, the Division of Fleet Operations should replace vehicles with a standard sedan or 4x2 pickup.

Alternative Fuel Vehicles

Federal mandates require the state fleet to include alternative fuel vehicles (AFVs) in new purchases (regardless of whether the vehicles are replacements or expansions). The mandate allows exemptions for certain types of vehicles, including patrol cars. With these exemptions, the State of Utah must now ensure that AFVs make up seventy-five percent of new vehicles purchased for Wasatch Front agencies. Two principal goals of the federal mandate include reducing dependence on foreign oil and cleaning the air by using cleaner burning fuels.

Alternative fuel vehicles carry some incremental costs in the purchase price. The Division of Fleet Operations estimates that each dedicated Compressed Natural Gas (CNG) vehicle costs about $5,000 more than it's gasoline powered counterpart. To offset this cost, DFO assesses a charge of $3.63 per month on all leased vehicles to spread the cost of compliance equitably across the state fleet. DFO holds that fuel and maintenance savings over the life of a CNG vehicle offset up-front costs.[1] If this is true, then there should be no added costs to agencies since savings will be made over the life of the vehicle. The Analyst is not convinced that this is the case, but does that there are alternatives to CNG that do not cost more than the purchase of standard vehicles and can provide significant savings to the state.

The Analyst believes that the State can comply with the federal mandate without adding costs to user agencies and recommends eliminating the AFV add on rate for vehicles in Fiscal Year 2001.

One way to save money on fleet compliance would be to purchase "flexible fuel vehicles" (FFVs) rather than CNG vehicles. FFVs can run on E85 – a mixture of eight-five percent ethanol and fifteen percent gasoline. Although there is little or no infrastructure in place now for E85, the cars can also run on standard gasoline with no modifications. FFVs cost only $200 more than gasoline-only vehicles, and recent rebates have even made the FFV $1,000 cheaper than it's traditional counterpart.

The DFO report correctly notes that fuel costs for E85 are higher than those for CNG. However the DFO analysis in Attachment K does not provide a full picture of the cost of operating CNG and FFV automobiles.

Fuel	**Natural Gas**	**E85**
Vehicle	**Chevrolet Cavalier**	**Ford Taurus**
Cost per gallon	$0.62	$1.75
Miles Expected at Resale	75,000	75,000
Miles Per Gallon	28	23
Expected gallons fo fuel for vehicle to go 75,000 miles	2679	3261
Cost of fuel for the life of the vehicle	$1,661	$5,707

Source: DFO Fleet Report, Attachment K

[1] DFO Intent Language Report (page ix).

DFO shows fuel savings of $4,046 over the life of the vehicle. However, the incremental cost associated with a Chevrolet Cavalier is $5,935,[2] resulting in a life cycle cost of an extra $989. To get a more accurate estimate, the $1.1 million cost of infrastructure must be added to the 393 CNG vehicles (of which 383 are converted gasoline vehicles) currently in the fleet and the estimated loss on resale must also be considered. Following discussions with DFO and with national resale experts, the Analyst has been unable to find any source for resale prices of CNG vehicles. CNG does not provide appealing transportation to the public due to a lack of fueling sites, restricted range and the lack of trunk space created by the oversized fuel tank. It appears that there is no market for used CNG vehicles, leaving the state with no equity in many of its AFVs. Assuming no resale value and an infrastructure cost of $1,000 per vehicle for E85, a conservative estimate shows that the purchase of dedicated CNG vehicles actually costs the state approximately $10,000 per vehicle.

	Chevrolet Cavalier	**Ford Taurus**
AFV Add on	$5,935	$200
Fuel Costs	$1,661	$5,707
Infrastructure	$2,857	$1,000
Resale (at 5 years)	$0	($6,850)
Added Costs	$10,453	$57

This gap could be closed by using other CNG vehicles in the example[3] or by assuming that growth of the CNG fleet would reduce infrastructure costs. It also would be fair to omit the CNG infrastructure cost calculation since it is already in place and needs little ongoing funding for maintenance. Although they should not be left out, infrastructure costs for E85 are likely overstated in that ethanol fuels are stored and dispensed in the same manner as regular gasoline. Even if the Analyst estimate doubles the actual impact, the cost of 393 CNG vehicles still totals approximately $2 million more than the cost would be if FFVs were purchased to meet federal mandates.

[2] Office of Transportation Technologies. *Alternative Fuel Vehicle Fleet Buyer's Guide*. Located at http://www.fleets.doe.gov.

[3] The Honda Civic CNG carries an incremental cost of $2500.

DFO Operating Costs

From time to time the notion of fleet privatization is raised as a way to save money and streamline operations. This is a difficult proposition because the state enjoys tax exempt status and needs only to cover costs (rather than make a profit) from operations. While there may be short term opportunities for colleges and technology centers to use the private sector, it is not likely that any private entity could match the rates the state pays for vehicle operation.

Monthly Costs	State Rate	Private Cost	Difference
Compact Sedan	$191.00	$237.60	$46.60
Midsize Sedan	$209.00	$303.60	$94.60
Mini Pass Van	$214.00	$339.60	$125.60

Source: DFO and The Associates, Inc.

A monthly advantage of just $46 over 12 months for five years can save the state more than $11 million when you consider that the state operates more than 4100 vehicles in the sedan/small pickup class.

Idle Vehicles

Prior to the development of the real time database, tracking utilization on specific vehicles was a difficult, time consuming chore. Now DFO can track any vehicle or group of vehicles for usage. The new technology allows the Division to write queries that will identify vehicles that have set idle for any amount of time. DFO recently implemented a tracking program that will look for vehicles that sat idle for more than 20 days. The monthly report will be maintained within the division and will be shared with agencies when appropriate.

Closely related to idle vehicles is the notion of under-utilization. Attachment C of the DFO report details vehicle rentals by agency, vehicle type and location. The data is taken from the reservation program that is an integral part of the DFO management and information system. The data appear to show that for many pools rental frequency is less than optimal. Reported low frequencies may be worse than actual rental frequencies if agencies do not fully utilize the reservation system that is an integral component of the management and information system. However, intent language passed during the 1999 General Session required all agencies to fully utilize the management and information system, so the Analyst must assume that reported numbers are accurate data elements that may be used in providing information to the Legislature.

Rental Frequencies and Utilization

It is important to note that the following numbers represent only vehicles in pools – less than 700 vehicles total. The data spans July 1, 1999 to April 1, 2000 – a total of 186 potential rental days. The calculation of potential rental days does remove days that colleges and applied technology centers are not in session. The utilization rate is obtained by dividing average monthly miles by 1,250 – the optimal monthly mileage for fleet to be most efficient.

Agency	*Number of Vehicles*	*Potential Rental Days*	*Actual Rental Days*	*Rental Rate*	*Avg. Monthly Mileage*	*Utilization Rate*
Bridgerland ATC Pool	13	2,418	528	22%	578	46%
Capitol Motor Pool	47	8,742	3,506	40%	564	45%
CEU Mini Pool	8	1,488	791	53%	1,715	137%
Corrections Mini Pool	7	1,302	140	11%	172	14%
Davis ATC	15	2,790	3,539	127%	251	20%
Developmental Center	4	744	290	39%	283	23%
Dixie College Pool	13	2,418	983	41%	1,359	109%
Heber Wells Pool	5	930	244	26%	807	65%
Human Services	23	4,278	2,042	48%	1,075	86%
Main Motor Pool	160	29,760	18,705	63%	767	61%
Ogden Regional Pool	20	3,720	2,439	66%	892	71%
Provo Regional Pool	7	1,302	125	10%	294	24%
School For Deaf and Blind	35	6,510	3,153	48%	797	64%
Short Tem DFO Pool	101	18,786	7,771	41%	421	34%
SLCC Main Pool	14	2,604	1,050	40%	544	44%
SLCC Mini Pool	2	372	116	31%	301	24%
SLCC South City Pool	1	186	54	29%	390	31%
Snow College Pool	6	1,116	39	3%	165	13%
State Hospital Pool	13	2,418	2,011	83%	613	49%
SUU Pool	32	5,952	1,994	33%	1,608	129%
U of U Pool	1	186	1	1%	N/A	
UCI Motor Pool	1	186	3	2%	28	2%
UDOT Central Pool	44	8,184	10,564	129%	970	78%
Uintah Basin ATC Pool	12	2,232	793	36%	496	40%
USU Pool	72	13,392	20,439	153%	1,205	96%
UVSC Pool	22	4,092	299	7%	171	14%
WSU Pool	18	3,348	762	23%	949	76%
Average	**696**	**129,456**	**82,380**	**64%**	**772**	**62%**

Source: DFO Intent Language Report, Attachment C

Other Issues

The Analyst believes that the Division of Fleet Operations has appropriately responded to Legislative intent language. However, there are two other issues that have arisen since the end of the Legislative session that are beyond the scope of intent language but merit discussion at this time.

Acquisition of New Vehicles

When new vehicles are purchased to replace old vehicles, it is imperative that agencies pick up their new vehicles as soon as possible. In the past DFO needed 40 days to equip a state vehicle – that included acquiring license plates, placing logos on the car and adding any special equipment. New vendor contracts have made much of the prep work part of the purchase so that vehicles will arrive ready to go into immediate use. With even a month delay, the state is paying for two vehicles even though it is only using one. Agencies compound the cost by allowing vehicles to sit at DFO for days – or even weeks – before bringing in the old car. This delays the time in which the surplus vehicle can be prepared for sale at auction and ultimately adds unnecessary costs to the operation of the fleet. DFO is preparing a rule that will charge agencies for not picking up vehicles in a timely manner. The Analyst believes that agencies should have no more than three working days to pick up new vehicles once they are deemed ready to use.

DFO as Service Agent and Rule Enforcer

The Division of Fleet Operations is a customer service oriented organization. They also are responsible for enforcement of fleet rules. Some of these enforcement roles are rightly placed with the Division – rules regarding personal use, abuse of vehicles and maintenance of all vehicles are best controlled centrally. Fleet composition is a more difficult issue – DFO is not in a position to dictate to agencies which type of vehicles best suit agency needs. The state should count on experts within each agency to demonstrate to the Legislature appropriate size and composition of agency fleets.

As noted above, the Analyst recommends that any future purchase of a 4x4 or all wheel drive vehicle be approved by the Legislature – even if it replaces an existing 4x4 vehicle. For fleet expansions, all vehicles should be approved by Legislative Appropriation subcommittees. This year the fleet has purchased expansion vehicles for the Attorney General (one of which was a 4x4 SUV), the Courts and the Highway Patrol. Only the vehicles purchased for the highway patrol had specific legislative approval. Since any expansion now requires up-front capitalization, the Attorney General and the Courts must have used operating funds to pay for the new vehicles. If either agency had the $40,000-$60,000 necessary for capitalization in its operating budget, it should have alerted the appropriations committee to that fact.