

Port of Edmonds  
Fuel Program Analysis

Background

In the late seventies and early eighties, the Port of Edmonds Fuel Dock was operated by three different privately-owned companies. In the late eighties, the Port of Edmonds began operating the Fuel Dock. Prior to 2000, fuel was supplied by a distributor for Union 76. (Texaco was used for two years by one of the lessees.) Until 1999, the fuel supplied was branded unleaded and diesel. As a result of a survey completed during that time period, tenants indicated that they had no preference for branded versus unbranded fuel. Due to aging equipment and ongoing maintenance concerns regarding the dispensers on the fuel dock, the Port decided to change out the fuel dispensers and incorporate a new point of sale system and pay at the pump system at the same time

Fuel Program Profit and Loss Statements

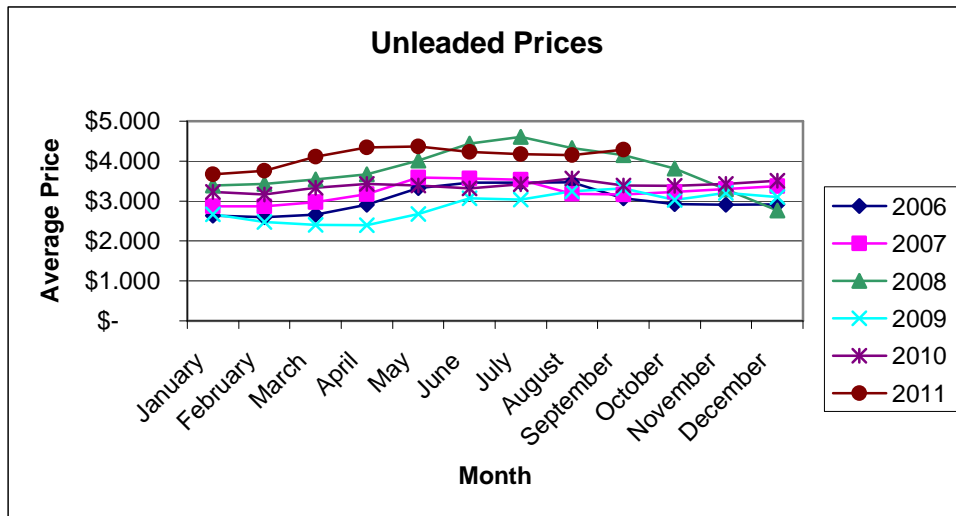
The fuel program profit and loss statements for 2006 to 2010 are shown below.

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Fuel Sales	754,658	779,826	871,877	723,554	723,212
Cost of Sales					
Fuel and Oil	630,237	648,297	765,921	593,670	598,287
Credit Card Processing Fees	8,329	8,919	9,678	7,355	6,207
Pay-at-the-Pump Cards		1,361		2,652	
Annual Maintenance Fee on Equipment			995	1,509	
Total Cost of Sales	<u>638,566</u>	<u>658,576</u>	<u>776,594</u>	<u>605,186</u>	<u>604,494</u>
Gross Profit	<u>116,092</u>	<u>121,250</u>	<u>95,283</u>	<u>118,368</u>	<u>118,718</u>
Expenses					
Advertising and Notices			63		
Bad Debt Expense	724			47	643
Business Taxes	3,176	3,191	3,774	2,919	2,978
Employee Benefits	7,285	9,091	10,921	11,029	9,415
Insurance	12,480	11,312	12,768	12,302	13,547
Miscellaneous	395	438	162	(17)	(4)
Office	173	13	587	455	
Payroll Taxes	4,084	4,254	4,784	5,265	4,777
Professional Services		5,880	2,961	1,302	
Repair and Maintenance	3,098	1,725	10,437	9,261	5,051
Salaries and Wages	31,178	35,608	41,783	45,037	37,344
Supplies	384	2,873	2,598	527	666
Utilities	3,525	4,539	4,422	4,681	4,251
Operating Expenses Before Depr, O/H	<u>66,502</u>	<u>78,924</u>	<u>95,260</u>	<u>92,808</u>	<u>78,668</u>
Depreciation	43,556	43,847	43,848	48,344	50,928
Operating Expenses Before O/H	<u>110,058</u>	<u>122,771</u>	<u>139,108</u>	<u>141,152</u>	<u>129,596</u>
Net Income/(Loss) from Operations Before O/H	<u>6,034</u>	<u>(1,521)</u>	<u>(43,825)</u>	<u>(22,784)</u>	<u>(10,878)</u>
Overhead	<u>50,920</u>	<u>78,858</u>	<u>86,361</u>	<u>84,160</u>	<u>105,160</u>
Net Income/(Loss)	<u>(44,886)</u>	<u>(80,379)</u>	<u>(130,186)</u>	<u>(106,944)</u>	<u>(116,038)</u>

Fuel Prices

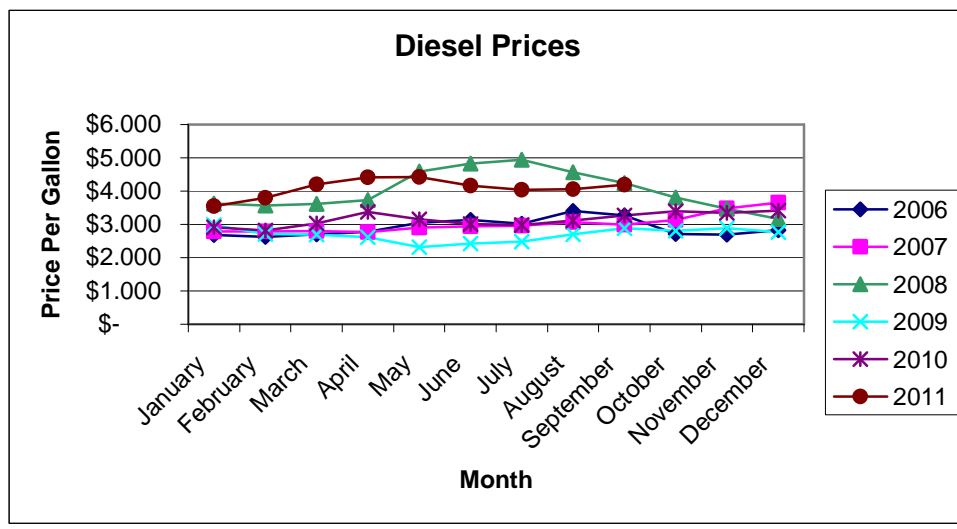
The average unleaded fuel prices from January 1, 2006 to September 30, 2011 are shown below.

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
January	\$ 2.634	\$ 2.872	\$ 3.391	\$ 2.669	\$ 3.229	\$ 3.669
February	\$ 2.596	\$ 2.871	\$ 3.429	\$ 2.480	\$ 3.168	\$ 3.758
March	\$ 2.663	\$ 2.971	\$ 3.540	\$ 2.405	\$ 3.336	\$ 4.112
April	\$ 2.912	\$ 3.172	\$ 3.667	\$ 2.395	\$ 3.431	\$ 4.340
May	\$ 3.322	\$ 3.589	\$ 4.013	\$ 2.675	\$ 3.391	\$ 4.366
June	\$ 3.458	\$ 3.569	\$ 4.442	\$ 3.067	\$ 3.317	\$ 4.233
July	\$ 3.465	\$ 3.534	\$ 4.609	\$ 3.037	\$ 3.421	\$ 4.174
August	\$ 3.466	\$ 3.184	\$ 4.328	\$ 3.245	\$ 3.562	\$ 4.149
September	\$ 3.067	\$ 3.165	\$ 4.147	\$ 3.321	\$ 3.388	\$ 4.283
October	\$ 2.928	\$ 3.232	\$ 3.814	\$ 3.030	\$ 3.380	\$ -
November	\$ 2.907	\$ 3.300	\$ 3.291	\$ 3.204	\$ 3.429	\$ -
December	\$ 2.917	\$ 3.377	\$ 2.763	\$ 3.098	\$ 3.511	\$ -



The average diesel fuel prices from January 1, 2006 to September 30, 2011 are shown below. For the most part, fuel prices start to increase in April and May and start to decrease in September and October. The Port’s markup was \$.55 per gallon in 2006 and 2007, and was increased to \$.57 in 2008. The markup is currently \$.57.

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
January	\$ 2.680	\$ 2.787	\$ 3.629	\$ 2.985	\$ 2.910	\$ 3.546
February	\$ 2.624	\$ 2.787	\$ 3.570	\$ 2.708	\$ 2.821	\$ 3.796
March	\$ 2.700	\$ 2.793	\$ 3.617	\$ 2.695	\$ 3.026	\$ 4.205
April	\$ 2.778	\$ 2.767	\$ 3.733	\$ 2.619	\$ 3.373	\$ 4.418
May	\$ 3.050	\$ 2.906	\$ 4.591	\$ 2.320	\$ 3.154	\$ 4.422
June	\$ 3.139	\$ 2.942	\$ 4.825	\$ 2.422	\$ 3.014	\$ 4.167
July	\$ 3.017	\$ 2.964	\$ 4.941	\$ 2.482	\$ 2.977	\$ 4.040
August	\$ 3.404	\$ 3.064	\$ 4.568	\$ 2.698	\$ 3.111	\$ 4.055
September	\$ 3.272	\$ 2.991	\$ 4.241	\$ 2.889	\$ 3.271	\$ 4.193
October	\$ 2.715	\$ 3.132	\$ 3.804	\$ 2.809	\$ 3.391	\$ -
November	\$ 2.693	\$ 3.478	\$ 3.475	\$ 2.889	\$ 3.344	\$ -
December	\$ 2.826	\$ 3.653	\$ 3.162	\$ 2.770	\$ 3.410	\$ -



Average fuel prices were highest in 2008 and 2011. Gallons of fuel sold were also lowest during those periods.

Port staff compares the Port's prices to local fuel docks twice a month. This comparison is interesting, but is not a valid benchmark because the Port knows that all marinas in our market region have different pricing models and philosophies. The Port of Edmonds Commission established a fuel program goal of break even, including direct operating expenses, depreciation, and applied overhead, and that the marina should not be subsidized by property taxes. Privately owned fuel docks may need to cover their employees costs and rent. One facility's goal is to have the cheapest fuel in Puget Sound. Some facilities subsidize their operations with property taxes. Some facilities don't track the individual program costs, but include all the costs as marina. Some facilities don't include sales taxes in their prices. Some facilities are able to add a lower markup because their volumes are much higher.

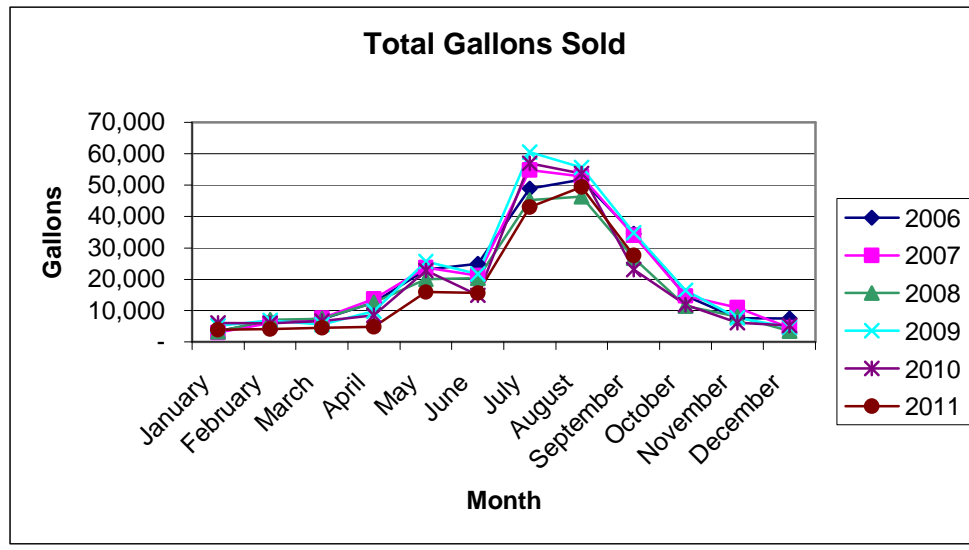
The 3<sup>rd</sup> quarter survey is attached as Exhibit A. Facilities traditionally surveyed are DesMoines, Kingston, Everett (public owned/operated), and Shilshole and Elliott Bay

(privately owned/operated). Effective October 1, 2011, the Port is also surveying Brownsville and Poulosbo.

Fuel Volumes

The gallons of fuel sold at the Port of Edmonds fuel dock from January 1, 2006 to September 30, 2011 are shown below.

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
January	3,424	2,973	3,277	5,120	6,003	3,843
February	6,431	6,051	7,026	6,859	5,905	4,058
March	7,241	7,553	7,366	5,486	6,592	4,476
April	12,495	13,615	12,494	9,765	8,480	4,785
May	23,127	23,726	20,079	25,703	22,794	15,914
June	24,965	21,170	20,369	21,679	14,916	15,586
July	48,914	54,767	45,235	60,522	56,938	42,993
August	51,765	52,745	46,352	55,601	53,717	49,382
September	34,504	34,062	26,772	34,888	23,165	27,613
October	14,629	14,689	11,375	16,457	11,845	-
November	7,572	10,852	8,055	7,673	6,142	-
December	7,479	4,481	3,495	4,674	5,176	-
	<u>242,546</u>	<u>246,685</u>	<u>211,894</u>	<u>254,427</u>	<u>221,673</u>	<u>168,650</u>



Ethanol

In 2010, following extensive research, the Port of Edmonds changed from selling clear unleaded fuel to unleaded fuel with 10% ethanol and ValvTect. Some Port tenants and customers have concerns about putting ethanol in their boats, and may have chosen to purchase their fuel at facilities that sell only clear unleaded. However, there have been

no confirmed reports of any problems associated with this changeover. The Port of Edmonds provides a high marine grade fuel product.

### \$.10 Per Gallon Discount

As an incentive for tenants to self-fuel using the pay at the pump system, which was intended to reduce staffing costs, the Port implemented a \$.10 per gallon discount on fuel. Immediately following implementation of the pay at the pump system, the fuel dock was not staffed on a full-time basis. The result of the change was that Port staff received increased complaints from customers and commissioners regarding lack of personnel on the fuel dock.

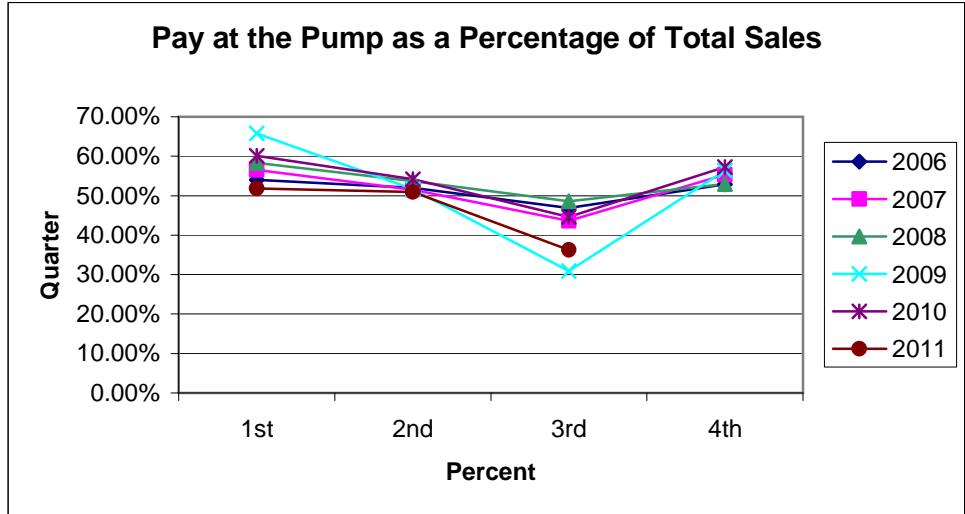
In response to the complaints, the Port began staffing the fuel dock on a full time basis on Fridays, Saturdays, and Sundays during peak season beginning in 2005. During the 2010 and 2011 seasons, it was staffed according to business levels in an effort to better utilize personnel and keep direct costs down. During off-season there is no dedicated staffing. Tenants and guests that require assistance can call Marina Operations office by VHF or phone line and request assistance. A staff person responds as soon as possible.

During the 2011 budget cycle, staff suggested that the pay at the pump system did not reduce costs by eliminating the need for staff, and in fact resulted in additional costs to maintain special equipment that allows self-fueling and staff time to charge out the fuel. Therefore, staff recommended discontinuing the \$.10 per gallon discount, increasing net income by approximately \$11,000 annually.

### Pay at the Pump System

In 2000, the Port incorporated a 24-hour fueling service with the purchase of a pay at the pump system. Permission was granted by the U.S. Coast Guard and by the City of Edmonds Fire Marshal to install such a system, with the understanding that a training program would be required for all users and that those users must be tenants of the Port.

The percentage of pay at the pump sales does not appear to be influenced either by fuel markup or the absence of the \$.10 per gallon discount. The graph below shows that during peak season (3<sup>rd</sup> quarter) a greater percentage of purchases are point of sale purchases as opposed to pay at the pump purchases. The greatest percentage of point of sale purchases occurred in 2009, when unleaded fuel prices were \$3.037 to \$3.321 per gallon and diesel prices were \$2.482 to \$2.889 per gallon. In other words, of total sales during the peak season (3<sup>rd</sup> quarter), only 42% of the sales were to pay at the pump customers who benefitted from the \$.10 discount. The remaining 58% paid full price.



	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
1st	54.01%	56.56%	58.31%	65.81%	60.09%	51.81%
2nd	51.97%	51.47%	53.70%	51.64%	54.17%	50.90%
3rd	46.88%	43.64%	48.60%	30.92%	44.63%	36.28%
4th	52.90%	55.35%	52.97%	56.38%	57.30%	

Fuel Markup

In 1999, the fuel markup was \$.25 per gallon. In approximately 2002, the Port Commission expressed their philosophy that the fuel program should cover its full costs to manage and operate, including depreciation and overhead. Therefore, the markup was increased to \$.40 per gallon. The table below shows the markups from 1999 to present. The current markup is \$.57 per gallon.

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Markup	\$ 0.25	\$ 0.25	\$ 0.30	\$ 0.40	\$ 0.45	\$ 0.50	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.57	\$ 0.57	\$ 0.57	\$ 0.57

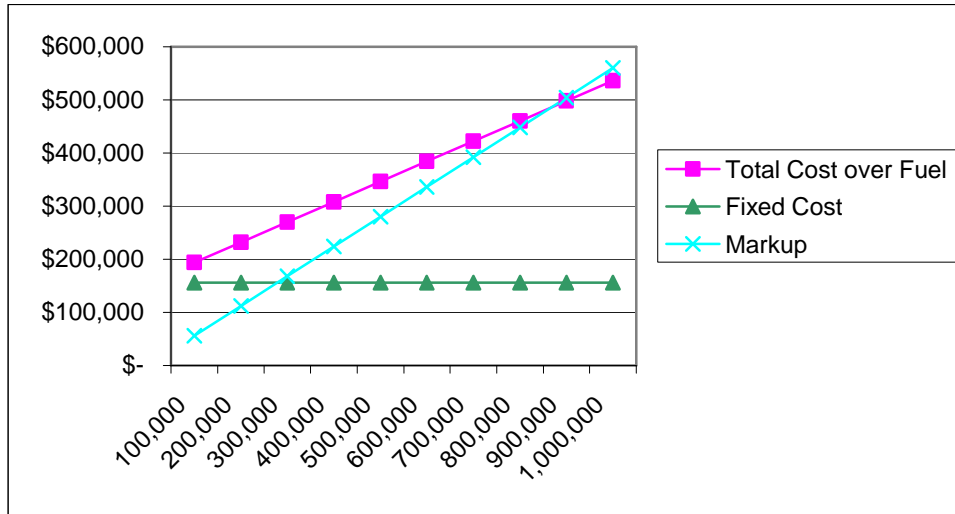
At the current sales volumes of approximately 230,000 gallons, the Port of Edmonds needs to markup the fuel approximately \$.43 per gallon to break even with direct operating expenses. To cover direct operating expenses and depreciation, the Port needs to markup the fuel approximately \$.64 per gallon to break even.

Calculating break even including operating expenses, depreciation, and overhead is a little more difficult because overhead is variable. Overhead is applied as a percentage of revenues, so as fuel program revenues increase, more overhead is applied to the program. In addition, total overhead is not consistent from year to year. Based on the numbers shown below with an average applied overhead of \$92,000, the Port would need to mark gallons up by approximately \$1.04 to break even including direct operating expenses, depreciation, and overhead.

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Cost of Sales, w/o Fuel	8,329	10,280	10,673	11,516	6,207
Expenses	66,502	78,924	95,260	92,808	78,668
Operating Expenses	74,831	89,204	105,933	104,324	84,875
Depreciation	43,556	43,847	43,848	48,344	50,928
OE + Depr	118,387	133,051	149,781	152,668	135,803
Overhead	50,920	78,858	86,361	84,160	105,160
Total Costs	169,307	211,909	236,142	236,828	240,963
Gallons Sold	242,546	246,685	211,894	254,427	221,673
Markups					
To Cover OE	\$ 0.31	\$ 0.36	\$ 0.50	\$ 0.41	\$ 0.38
To Cover OE + Depr	\$ 0.49	\$ 0.54	\$ 0.71	\$ 0.60	\$ 0.61
To Cover Total Costs	\$ 0.70	\$ 0.86	\$ 1.11	\$ 0.93	\$ 1.09
Average Markups	\$ 0.51	\$ 0.53	\$ 0.50	\$ 0.51	\$ 0.56

At the current average markup of \$.56 per gallon, the Port would need to sell approximately 865,000 gallons per year to cover direct operating expenses, depreciation, and applied overhead of \$92,000. From 2006 to 2010, in our highest year, the Port sold 254,427 gallons of fuel. The Port's underground storage tank capacity for unleaded is 24,000 gallons and for diesel is 12,000 gallons.

Gallons Sold	Total Cost over Fuel	Fixed Cost	Markup
100,000	\$ 194,088	\$ 156,088	\$ 56,000
200,000	\$ 232,088	\$ 156,088	\$ 112,000
300,000	\$ 270,088	\$ 156,088	\$ 168,000
400,000	\$ 308,088	\$ 156,088	\$ 224,000
500,000	\$ 346,088	\$ 156,088	\$ 280,000
600,000	\$ 384,088	\$ 156,088	\$ 336,000
700,000	\$ 422,088	\$ 156,088	\$ 392,000
800,000	\$ 460,088	\$ 156,088	\$ 448,000
900,000	\$ 498,088	\$ 156,088	\$ 504,000
1,000,000	\$ 536,088	\$ 156,088	\$ 560,000



### Fuel Pricing Method

Prior to 2002, the Port of Edmonds priced its fuel based on the delivery price plus markup. The price of fuel would remain the same until the Marina Manager estimated that the fuel in the tanks was no longer the “old” fuel, and the fuel remaining in the tanks was now the “new” fuel. The price would then be adjusted to the “new” fuel delivery price plus markup. The issue with this program was that it wasn’t very precise, and the Marina Manager had to monitor the tank usage very careful in order to decide when to raise the price.

From 2002 to September 2009, the Port priced its fuel on the date of fuel delivery based on the weighted average cost of all fuel in the tanks, and then marked up from the weighted average number. As the price was an average and it was calculated upon receipt of a delivery of fuel, the Port was often pricing out of sequence from the market. This system frequently created negative arbitrage to the price. Either the price was too high for the market or we were selling below current cost.

In September 2009, the Port of Edmonds changed its pricing model. The Port of Edmonds receives an OPIS (Oil Price Information Service) report daily. Fuel is priced weekly, based on the Tuesday OPIS price plus a \$.57 per gallon markup. The price is no longer based on the cost of fuel in the ground, but instead follows the market.

The difference between the average markup in 2009 of \$.51 and the average markup in 2010 of \$.56 shows the result of that price change. Average markup is calculated by subtracting the cost of fuel from revenues, and dividing that number by total gallons of fuel sold.



## External Factors

There are a number of external factors the Port is unable to control that influence the Port's price of fuel, the consumers' perception of the price of fuel, and the demand for fuel:

- The economy.
- The weather.
- The fishing.
- A change from clear unleaded fuel to unleaded with ethanol and ValvTect.
- Overall decline in boating.
- Fuel prices fluctuate daily and even during the day. Fuel that the Port may purchase today may cost much more or much less than yesterday. For example, the price of diesel on October 20, 2011 was \$3.3104. The price of diesel on October 21, 2011 was \$3.3450.
- The Port of Edmonds Commission directed staff to track revenues and expenses by cost center. One of these cost centers is the fuel dock. There is no reason for the Port to believe that other fuel docks track their revenues and expenses the same way.
- Location of the facility and location of the fuel refinery. For example, deliveries of unleaded fuel from Tacoma to the Central Puget Sound region are multiplied by 1.0031% to obtain the delivered price. Deliveries of the same fuel from Tacoma to the Peninsula are multiplied by 0.9995 to obtain the delivered price.

## Summary

In 2011, the Port of Edmonds fuel markup is \$.57 per gallon, with no discount. In order to break even including direct operating expenses, depreciation, and overhead, the Port needs to markup its fuel by approximately \$1.04 per gallon. In the current environment, this does not seem to be a good idea. The Port could cover its direct operating expenses and depreciation by increasing its markup to approximately \$.64 per gallon.

## Conclusions

1. Under the current financial conditions, being competitive with other facilities and/or offering a discount from the current markup directly conflicts with the policy of the fuel dock covering its costs and the assumptions used in the Cash Flow Model.
2. Whether or not to offer a discount on fuel is a policy question, not an accounting question.
3. If the Commissioners decide to restore the \$.10 per gallon discount, its budget impact for 2012 will be approximately \$11,000 in reduced revenue and net income.
4. This reduction in revenue and net income is not factored into the Cash Flow Model or the current 2012 budget.

Port of Edmonds 3<sup>rd</sup> Quarter Fuel Survey

Exhibit A

Distance from Edmonds In Nautical Miles		27 Est.	4.6	7.8	13	11.5		
Date:		Edmonds	DesMoines	Kingston	Shilshole	Everett	Elliot Bay	
7/5/2011	Gas	4.109	3.909	4.129	4.599	4.149	4.599	4.249
	Diesel	3.819	3.749	3.719	4.599	3.899	4.599	4.064
7/26/2011	Gas	4.219	3.929	4.159	4.649	4.169	4.649	4.296
	Diesel	4.089	3.729	3.879	4.649	3.939	4.649	4.156
8/6/2011	Gas	4.209	3.929	4.169	4.699	4.199	4.699	4.317
	Diesel	4.119	3.729	3.919	4.649	3.999	4.649	4.177
8/26/2011	Gas	4.149	3.839	4.129	4.749	4.169	4.749	4.297
	Diesel	4.109	3.679	3.919	4.699	3.999	4.699	4.184
9/6/2011	Gas	4.289	3.899	4.259	4.899	4.149	4.899	4.399
	Diesel	4.259	3.779	4.029	4.819	4.099	4.819	4.301
9/28/2011	Gas	4.139	3.979	4.259	4.899	4.149	4.899	4.387
	Diesel	4.089	3.769	3.999	4.759	4.099	4.759	4.246
<b>*Quarterly simple Avg Unleaded</b>		4.186	3.914	4.184	4.749	4.164	4.749	
<b>*Quarterly simple Avg Diesel</b>		4.081	3.739	3.911	4.696	4.006	4.696	

<b>*Quarterly simple Average All Facilities Combined</b>	
Unleaded	4.324
Diesel	4.188

**Fuel Facilities Discounts:**

**Edmonds** None

**DesMoines** None

**Shilshole** .05 off over 100 gallons - .10 off over 200 gallons - .12 off over 300 gallons ON DIESEL ONLY PER GALLON

**Elliott Bay** .05 off over 100 gallons - .10 off over 200 gallons - .12 off over 300 gallons ON DIESEL ONLY PER GALLON

**Everett** **On unleaded** - .05 off over 200 gallons - .10 off over 1000 gallons - .15 off over 3000 gallons - .25 off over 4000 gallons  
**On Diesel** - .05 off per gallon over 200 gallons

**Kingston** None

**Fuel Brand**

**Valvtect**

**Unbranded**

**Valvtect**

**Valvtect**

**Unocal**

**Texaco**

**\*Note:** These are simplified averages based on 6 point in time prices.

**\*\*\*All diesel prices include tax.**