

----- Shipment Description -----

Commodity	: WHEAT	From	: Lewiston
Commodity Code	: 6241	To	: Portland So
Barge Type	: Covered	Total River Miles	: 361.3
Net Tons	: 3500	Delivery Days	: 5.51
Empty Backhaul	: 100.0%	Days Running	: 2.55

----- Shipment Analysis Summary -----

	\$/Barge	\$/Ton	Description
Carrier Revenue	0.00	0.00	
1QTR98 Full Cost	12033.03	3.44	Rev/Full Ratio: 0.00%

----- Detailed Cost Summary -----

Component	\$/Bargeload	\$/Ton
Wages	: 2780.66	0.79
Fuel	: 3579.02	1.02
Towboat	: 3273.19	0.94
Barge	: 1063.16	0.30
Switching/Fleeting	: 0.00	0.00
Cleaning/Relocation	: 0.00	0.00
Other	: 0.00	0.00
Overhead	: 1337.00	0.38
Total	12033.03	3.44
Terminal Load/Unload	: 6580.00	1.88
Grand Total	18613.03	5.32

----- Input Description -----

Origin	:	Lewiston	Origin Node	:	697
Destination	:	Portland So	Dest Node	:	690
Commodity Code	:	6241	WHEAT		
Net Tons	:	3500			
Barge Type	:	Covered	Barge Size	:	220x42
Tow Type	:	General	Routing via	:	NORMAL
Rate (\$/Ton)	:	0.00	Description:		
Cost Basis	:	1QTR98			
Fuel Price (\$/Gal)	:	0.477			
User Tax (\$/Gal)	:	0.243			
Overhead	:	12.50			

----- Operating and Financial Data -----

River Segment	:	Snake Rive	:	Columbia R	:	Willamette
Tow size (# Barges)	:	3	:	4	:	3
Tow Boat HP	:	3400	:	3400	:	3400
Tow Boat Cap. (\$ 000)	:	\$ 3286	:	\$ 3286	:	\$ 3286
Tow Boat Labor (\$/day)	:	\$ 1652	:	\$ 1652	:	\$ 1141
Tow Boat Oper. (\$/day)	:	\$ 829	:	\$ 829	:	\$ 574
Barge Capital (\$ 000)	:	\$ 396	:	\$ 396	:	\$ 396
Barge Oper. (\$/day)	:	\$ 15	:	\$ 15	:	\$ 15
Miles per Segment	:	138	:	223	:	0

----- Shipment Description -----

Commodity	: WHEAT	From	: Boardman
Commodity Code	: 6241	To	: Portland So
Barge Type	: Covered	Total River Miles	: 169.0
Net Tons	: 3500	Delivery Days	: 4.05
Empty Backhaul	: 100.0%	Days Running	: 1.19

----- Shipment Analysis Summary -----

	\$/Barge	\$/Ton	Description
Carrier Revenue	0.00	0.00	
1QTR98 Full Cost	5584.28	1.60	Rev/Full Ratio: 0.00%

----- Detailed Cost Summary -----

Component	\$/Bargeload	\$/Ton
Wages	: 1161.95	0.33
Fuel	: 1489.25	0.43
Towboat	: 1567.27	0.45
Barge	: 745.33	0.21
Switching/Fleeting	: 0.00	0.00
Cleaning/Relocation	: 0.00	0.00
Other	: 0.00	0.00
Overhead	: 620.48	0.18
 Total	 5584.28	 1.60
Terminal Load/Unload	: 6580.00	1.88
Grand Total	12164.28	3.48

----- Input Description -----

Origin	:	Boardman	Origin Node	:	665
Destination	:	Portland So	Dest Node	:	690
Commodity Code	:	6241	WHEAT		
Net Tons	:	3500			
Barge Type	:	Covered	Barge Size	:	220x42
Tow Type	:	General	Routing via	:	NORMAL
Rate (\$/Ton)	:	0.00	Description:		
Cost Basis	:	1QTR98			
Fuel Price (\$/Gal)	:	0.477			
User Tax (\$/Gal)	:	0.243			
Overhead	:	12.50			

----- Operating and Financial Data -----

River Segment	:	Columbia R	:	Willamette
Tow size (# Barges)	:	4	:	3
Tow Boat HP	:	3400	:	3400
Tow Boat Cap. (\$ 000)	:	\$ 3286	:	\$ 3286
Tow Boat Labor (\$/day)	:	\$ 1652	:	\$ 1141
Tow Boat Oper. (\$/day)	:	\$ 829	:	\$ 574
Barge Capital (\$ 000)	:	\$ 396	:	\$ 396
Barge Oper. (\$/day)	:	\$ 15	:	\$ 15
Miles per Segment	:	169	:	0

Snake River Drawdown Study RAIL LONG HAUL FROM IDAHO - 2 CARRIERS (UP & SHORTLN)

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- SHIPMENT DESCRIPTION ----- PAGE 1

Commodity	: Wheat	STCC Code	: 0110000
From	: Ashton, ID	Net Tons/Car	: 95.0
To	: Portland, OR	Total Miles	: 803.8
Car Type	: Hopper - Covered (0% RR)	Empty Return	: 100.0%
Svc Type	: Unit Train	Transit Days	: 2.5
Cars/Ship	: 25	Car Cycle Days	: 7.1

Routing	:	SLR	UP
Miles	:	48	755
Junction	:		

----- SHIPMENT REVENUE SUMMARY -----

	CAR	TON	CWT	
Carrier Revenue	: 0	0.00	0.00	Rate Descrip :
1QTR98 Variable Cost	: 1700	17.89	0.89	Rev/Var Cost : 0.0%
1QTR98 Full Cost	: 2298	24.18	1.21	Rev/Full Cost : 0.0%

----- DETAILED CARRIER SUMMARY -----

COMPONENT	TOTAL	SLR	UP
Train Crew	422	15	408
Train Operations	130	7	123
Fuel	211	9	202
Locomotives	282	20	262
Track & R.O.W	211	13	198
Yard & Terminal	68	19	48
Car	362	22	340
Clerical	13	7	5
Special Services	0	0	0
Special Charges	0	0	0
Loss & Damage	2	0	2
Variable Cost	1700	112	1588
Fixed Cost	598	70	528
Fully Allocated Cost	2298	182	2116
Carrier Revenue	0	0	0
Revenue/Var. Cost	0%	0%	0%
Revenue/Full Cost	0%	0%	0%

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

- - - - - COSTING INPUT FACTORS - - - - - PAGE 2

From : Ashton, ID STCC Code : 0110000
To : Portland, OR Commodity : Wheat

	SLR	UP
21. Circuitry Factor	1.00	1.00
22. Car Tare Weight	31.4	31.5
24. Loss & Damage Cost/Ton	0.02	0.02
25. Spotted/Pulled Ratio	2.00	2.00
26. Loco Unit Own Cost/Day	125.83	157.35
27. Loco Unit Opn Cost/Mi	0.58	0.79
30. Locos per Unit Train	3.2	2.89
33. Trail Tons/Unit Train	1972	1975
36. Crew Wages-Unit Train	370.6810	191.43
37. Act. Miles-Thru Train	48.5	755.3
38. Act. Miles-Way Train	0.00	0.00
39. Cost per Sw Eng Minute	2.48	4.91
40. Industry Switch Events	1.00	1.00
41. Intc Switch Events	1.00	1.00
42. SwEng Min/Ind Switch	1.78	1.79
43. SwEng Min/Intc Switch	1.95	1.97
44. SwEng Min/Class Switch	0.00	0.00
46. Car Days/Ind Switch	0.5	0.5
47. Car Days/Intc Switch	0.25	0.25
48. Car Days/Class Switch	0.00	0.00
49. Car Days/Ld & Unld	1.00	1.00
50. Car Miles/Ind Switch	2.00	2.00
51. Car Miles/Intc Switch	1.37	1.37
52. Car Miles/Class Switch	0.00	0.00
53. Cars Given Ind Switch	50.00	50.00
54. Cars Given Intc Switch	50.00	50.00
55. Cars Given Class Swtch	0.00	0.00
56. Miles B'n Class Switch	400	400
57. Miles B'n Intc Switch	959	1487
58. Car Miles per Car Day	679	739
62. Const Cost Mrkup Ratio	1.62	1.33
63. General Overhd Factor	1.06	1.04
64. Total Car Days Running	3.57	51.10
65. Total Car Days in Yard	62.5	62.5
66. Accessorial Services	Y	Y
67. Ton Miles Lake Transfer	0	0
68. Tons at Coal Terminal	0	0
69. Tons at Ore Terminal	0	0
70. Tons at Marine Term	0	0
71. No. of Autos Ld & Unld	0	0

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- COSTING INPUT FACTORS (CONT.) ----- PAGE 3

From : Ashton, ID STCC Code : 0110000
To : Portland, OR Commodity : Wheat

	SLR	UP
72. Fuel Cost/Gallon	0.5929	0.5682
91. Revenue Allowance/Car	0.00	0.00
92. RR Owned Car Cost/Mile	0.00	0.00
93. RR Owned Car Cost/Day	0.00	0.00
94. PVT Owned Car Cost/Mile	0.45	0.45
95. PVT Owned Car Cost/Day	0.00	0.00

----- COST FORECAST PER CAR -----

	Current		Forecast			
	1QTR98	2QTR98	3QTR98	4QTR98	1QTR99	
Variable Cost/Car	1700	1698	1718	1725	1746	
Full Cost/Car	2298	2295	2323	2332	2360	
		2QTR99	3QTR99	4QTR99	1QTR100	
Variable Cost/Car		1751	1763	1775	1797	
Full Cost/Car		2366	2384	2400	2428	

COMMENTS:

= Snake River Drawdown Study / RAIL LONGHAUL FROM IDAHO / 1 CARRIER (BN)

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- SHIPMENT DESCRIPTION ----- PAGE 1

Commodity	: Wheat	STCC Code	: 0110000
From	: Deary, Latah Co. ID	Net Tons/Car	: 94.5
To	: Portland, OR	Total Miles	: 437.5
Car Type	: Hopper - Covered (0% RR)	Empty Return	: 100.0%
Svc Type	: Unit Train	Transit Days	: 1.5
Cars/Ship	: 25	Car Cycle Days	: 5.1

Routing : BN
Miles : 438
Junction :

----- SHIPMENT REVENUE SUMMARY -----

	CAR	TON	CWT	Rate Descrip	:
Carrier Revenue	: 0	0.00	0.00	Rate Descrip	:
1QTR98 Variable Cost	: 943	9.98	0.50	Rev/Var Cost	: 0.0%
1QTR98 Full Cost	: 1307	13.83	0.69	Rev/Full Cost	: 0.0%

----- DETAILED CARRIER SUMMARY -----

COMPONENT	TOTAL	BN
Train Crew	232	232
Train Operations	61	61
Fuel	118	118
Locomotives	143	143
Track & R.O.W	155	155
Yard & Terminal	31	31
Car	197	197
Clerical	4	4
Special Services	0	0
Special Charges	0	0
Loss & Damage	2	2
Variable Cost	943	943
Fixed Cost	364	364
Fully Allocated Cost	1307	1307
Carrier Revenue	0	0
Revenue/Var. Cost	0%	0%
Revenue/Full Cost	0%	0%

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

- - - - - COSTING INPUT FACTORS - - - - - PAGE 2

From : Deary, Latah Co. ID
To : Portland, OR

STCC Code : 0110000
Commodity : Wheat

BN

21. Circuitry Factor	1.00
22. Car Tare Weight	31.5
24. Loss & Damage Cost/Ton	0.02
25. Spotted/Pulled Ratio	2.00
26. Loco Unit Own Cost/Day	153.43
27. Loco Unit Opn Cost/Mi	0.80
30. Locos per Unit Train	2.89
33. Trail Tons/Unit Train	1969
36. Crew Wages-Unit Train	5797.09
37. Act. Miles-Thru Train	437.5
38. Act. Miles-Way Train	0.00
39. Cost per Sw Eng Minute	4.86
40. Industry Switch Events	2.00
41. Intc Switch Events	0.00
42. SwEng Min/Ind Switch	1.55
43. SwEng Min/Intc Switch	1.70
44. SwEng Min/Class Switch	0.00
46. Car Days/Ind Switch	0.5
47. Car Days/Intc Switch	0.25
48. Car Days/Class Switch	0.00
49. Car Days/Ld & Unld	1.00
50. Car Miles/Ind Switch	2.00
51. Car Miles/Intc Switch	1.37
52. Car Miles/Class Switch	0.00
53. Cars Given Ind Switch	100.00
54. Cars Given Intc Switch	0.00
55. Cars Given Class Swtch	0.00
56. Miles B'n Class Switch	400
57. Miles B'n Intc Switch	1090
58. Car Miles per Car Day	741
62. Const Cost Mrkup Ratio	1.38
63. General Overhd Factor	1.05
64. Total Car Days Running	29.52
65. Total Car Days in Yard	100.00
66. Accessorial Services	Y
67. Ton Miles Lake Transfer	0
68. Tons at Coal Terminal	0
69. Tons at Ore Terminal	0
70. Tons at Marine Term	0
71. No. of Autos Ld & Unld	0

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- COSTING INPUT FACTORS (CONT.) ----- PAGE 3

From : Deary, Latah Co. ID
To : Portland, OR

STCC Code : 0110000
Commodity : Wheat

BN

72. Fuel Cost/Gallon	0.5283
91. Revenue Allowance/Car	0.00
92. RR Owned Car Cost/Mile	0.00
93. RR Owned Car Cost/Day	0.00
94. PVT Owned Car Cost/Mile	0.45
95. PVT Owned Car Cost/Day	0.00

----- COST FORECAST PER CAR -----

	Current	Forecast			
	1QTR98	2QTR98	3QTR98	4QTR98	1QTR99
	-----	-----	-----	-----	-----
Variable Cost/Car	943	942	961	962	970
Full Cost/Car	1307	1306	1332	1333	1344
		2QTR99	3QTR99	4QTR99	1QTR100
		-----	-----	-----	-----
Variable Cost/Car		972	984	991	1000
Full Cost/Car		1348	1363	1374	1386

COMMENTS:

Snake River Drawdown Study / LONGHAUL FROM NORTH DAKOTA TO SEATTLE

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- SHIPMENT DESCRIPTION ----- PAGE 1

Commodity	: Wheat	STCC Code	: 0110000
From	: Beulah, ND	Net Tons/Car	: 95.0
To	: Seattle, WA	Total Miles	: 1558.9
Car Type	: Hopper - Covered (0% RR)	Empty Return	: 100.0%
Svc Type	: Unit Train	Transit Days	: 3.1
Cars/Ship	: 25	Car Cycle Days	: 8.2

Routing : BN
Miles : 1559
Junction :

----- SHIPMENT REVENUE SUMMARY -----

	CAR	TON	CWT	Rate Descrip	:
Carrier Revenue	: 0	0.00	0.00	Rate Descrip	:
1QTR98 Variable Cost	: 3268	34.40	1.72	Rev/Var Cost	: 0.0%
1QTR98 Full Cost	: 4529	47.67	2.38	Rev/Full Cost	: 0.0%

----- DETAILED CARRIER SUMMARY -----

COMPONENT	TOTAL	BN
Train Crew	826	826
Train Operations	217	217
Fuel	422	422
Locomotives	511	511
Track & R.O.W	552	552
Yard & Terminal	31	31
Car	702	702
Clerical	4	4
Special Services	0	0
Special Charges	0	0
Loss & Damage	2	2
Variable Cost	3268	3268
Fixed Cost	1261	1261
Fully Allocated Cost	4529	4529
Carrier Revenue	0	0
Revenue/Var. Cost	0%	0%
Revenue/Full Cost	0%	0%

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

- - - - - COSTING INPUT FACTORS - - - - - PAGE 2

From : Beulah, ND
To : Seattle, WA

STCC Code : 0110000
Commodity : Wheat

BN

21. Circuitry Factor	1.00
22. Car Tare Weight	31.5
24. Loss & Damage Cost/Ton	0.02
25. Spotted/Pulled Ratio	2.00
26. Loco Unit Own Cost/Day	153.43
27. Loco Unit Opn Cost/Mi	0.80
30. Locos per Unit Train	2.89
33. Trail Tons/Unit Train	1975
36. Crew Wages-Unit Train	20656.19
37. Act. Miles-Thru Train	1558.9
38. Act. Miles-Way Train	0.00
39. Cost per Sw Eng Minute	4.86
40. Industry Switch Events	2.00
41. Intc Switch Events	0.00
42. SwEng Min/Ind Switch	1.55
43. SwEng Min/Intc Switch	1.70
44. SwEng Min/Class Switch	0.00
46. Car Days/Ind Switch	0.5
47. Car Days/Intc Switch	0.25
48. Car Days/Class Switch	0.00
49. Car Days/Ld & Unld	1.00
50. Car Miles/Ind Switch	2.00
51. Car Miles/Intc Switch	1.37
52. Car Miles/Class Switch	0.00
53. Cars Given Ind Switch	100.00
54. Cars Given Intc Switch	0.00
55. Cars Given Class Swtch	0.00
56. Miles B'n Class Switch	400
57. Miles B'n Intc Switch	1090
58. Car Miles per Car Day	741
62. Const Cost Mrkup Ratio	1.38
63. General Overhd Factor	1.05
64. Total Car Days Running	105.18
65. Total Car Days in Yard	100.00
66. Accessorial Services	Y
67. Ton Miles Lake Transfer	0
68. Tons at Coal Terminal	0
69. Tons at Ore Terminal	0
70. Tons at Marine Term	0
71. No. of Autos Ld & Unld	0

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- COSTING INPUT FACTORS (CONT.) ----- PAGE 3

From : Beulah, ND
To : Seattle, WA

STCC Code : 0110000
Commodity : Wheat

BN

72. Fuel Cost/Gallon	0.5283
91. Revenue Allowance/Car	0.00
92. RR Owned Car Cost/Mile	0.00
93. RR Owned Car Cost/Day	0.00
94. PVT Owned Car Cost/Mile	0.45
95. PVT Owned Car Cost/Day	0.00

----- COST FORECAST PER CAR -----

	Current	Forecast			
	1QTR98	2QTR98	3QTR98	4QTR98	1QTR99
	-----	-----	-----	-----	-----
Variable Cost/Car	3268	3265	3330	3333	3359
Full Cost/Car	4529	4524	4615	4619	4656
		2QTR99	3QTR99	4QTR99	1QTR100
		-----	-----	-----	-----
Variable Cost/Car		3369	3408	3434	3464
Full Cost/Car		4669	4724	4760	4801

COMMENTS:

Snake River Drawdown Study / LONGHAUL FROM NORTH DAKOTA TO PORTLAND

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- SHIPMENT DESCRIPTION ----- PAGE 1

Commodity	: Wheat	STCC Code	: 0110000
From	: Beulah, ND	Net Tons/Car	: 95.0
To	: Portland, OR	Total Miles	: 1540.1
Car Type	: Hopper - Covered (0% RR)	Empty Return	: 100.0%
Svc Type	: Unit Train	Transit Days	: 3.0
Cars/Ship	: 25	Car Cycle Days	: 8.1

Routing : BN
Miles : 1540
Junction :

----- SHIPMENT REVENUE SUMMARY -----

	CAR	TON	CWT	Rate Descrip	:
Carrier Revenue	: 0	0.00	0.00	Rate Descrip	:
1QTR98 Variable Cost	: 3229	33.99	1.70	Rev/Var Cost	: 0.0%
1QTR98 Full Cost	: 4475	47.10	2.36	Rev/Full Cost	: 0.0%

----- DETAILED CARRIER SUMMARY -----

COMPONENT	TOTAL	BN
Train Crew	816	816
Train Operations	215	215
Fuel	416	416
Locomotives	505	505
Track & R.O.W	546	546
Yard & Terminal	31	31
Car	693	693
Clerical	4	4
Special Services	0	0
Special Charges	0	0
Loss & Damage	2	2
Variable Cost	3229	3229
Fixed Cost	1246	1246
Fully Allocated Cost	4475	4475
Carrier Revenue	0	0
Revenue/Var. Cost	0%	0%
Revenue/Full Cost	0%	0%

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

- - - - - COSTING INPUT FACTORS - - - - - PAGE 2

From : Beulah, ND
To : Portland, OR

STCC Code : 0110000
Commodity : Wheat

BN

21. Circuitry Factor	1.00
22. Car Tare Weight	31.5
24. Loss & Damage Cost/Ton	0.02
25. Spotted/Pulled Ratio	2.00
26. Loco Unit Own Cost/Day	153.43
27. Loco Unit Opn Cost/Mi	0.80
30. Locos per Unit Train	2.89
33. Trail Tons/Unit Train	1975
36. Crew Wages-Unit Train	20407.08
37. Act. Miles-Thru Train	1540.1
38. Act. Miles-Way Train	0.00
39. Cost per Sw Eng Minute	4.86
40. Industry Switch Events	2.00
41. Intc Switch Events	0.00
42. SwEng Min/Ind Switch	1.55
43. SwEng Min/Intc Switch	1.70
44. SwEng Min/Class Switch	0.00
46. Car Days/Ind Switch	0.5
47. Car Days/Intc Switch	0.25
48. Car Days/Class Switch	0.00
49. Car Days/Ld & Unld	1.00
50. Car Miles/Ind Switch	2.00
51. Car Miles/Intc Switch	1.37
52. Car Miles/Class Switch	0.00
53. Cars Given Ind Switch	100.00
54. Cars Given Intc Switch	0.00
55. Cars Given Class Swtch	0.00
56. Miles B'n Class Switch	400
57. Miles B'n Intc Switch	1090
58. Car Miles per Car Day	741
62. Const Cost Mrkup Ratio	1.38
63. General Overhd Factor	1.05
64. Total Car Days Running	103.92
65. Total Car Days in Yard	100.00
66. Accessorial Services	Y
67. Ton Miles Lake Transfer	0
68. Tons at Coal Terminal	0
69. Tons at Ore Terminal	0
70. Tons at Marine Term	0
71. No. of Autos Ld & Unld	0

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- COSTING INPUT FACTORS (CONT.) ----- PAGE 3

From : Beulah, ND
To : Portland, OR

STCC Code : 0110000
Commodity : Wheat

BN

72. Fuel Cost/Gallon	0.5283
91. Revenue Allowance/Car	0.00
92. RR Owned Car Cost/Mile	0.00
93. RR Owned Car Cost/Day	0.00
94. PVT Owned Car Cost/Mile	0.45
95. PVT Owned Car Cost/Day	0.00

----- COST FORECAST PER CAR -----

	Current	Forecast			
	1QTR98	2QTR98	3QTR98	4QTR98	1QTR99
	-----	-----	-----	-----	-----
Variable Cost/Car	3229	3226	3290	3293	3319
Full Cost/Car	4475	4470	4560	4564	4600
		2QTR99	3QTR99	4QTR99	1QTR100
		-----	-----	-----	-----
Variable Cost/Car		3329	3368	3393	3423
Full Cost/Car		4614	4667	4703	4743

COMMENTS:

Snake River Drawdown Study / MEDIUM HAUL FROM PLYMOUTH WA TO PORTLAND

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- SHIPMENT DESCRIPTION ----- PAGE 1

Commodity	: Wheat	STCC Code	: 0110000
From	: Plymouth, WA	Net Tons/Car	: 95.0
To	: Portland, OR	Total Miles	: 203.2
Car Type	: Hopper - Covered (0% RR)	Empty Return	: 100.0%
Svc Type	: Unit Train	Transit Days	: 1.2
Cars/Ship	: 25	Car Cycle Days	: 4.5

Routing : BN
Miles : 203
Junction :

----- SHIPMENT REVENUE SUMMARY -----

	CAR	TON	CWT	Rate Descrip	:
Carrier Revenue	: 0	0.00	0.00	Rate Descrip	:
1QTR98 Variable Cost	: 458	4.83	0.24	Rev/Var Cost	: 0.0%
1QTR98 Full Cost	: 635	6.69	0.33	Rev/Full Cost	: 0.0%

----- DETAILED CARRIER SUMMARY -----

COMPONENT	TOTAL	BN
Train Crew	108	108
Train Operations	28	28
Fuel	55	55
Locomotives	67	67
Track & R.O.W	72	72
Yard & Terminal	31	31
Car	91	91
Clerical	4	4
Special Services	0	0
Special Charges	0	0
Loss & Damage	2	2
Variable Cost	458	458
Fixed Cost	177	177
Fully Allocated Cost	635	635
Carrier Revenue	0	0
Revenue/Var. Cost	0%	0%
Revenue/Full Cost	0%	0%

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

- - - - - COSTING INPUT FACTORS - - - - - PAGE 2

From : Plymouth, WA
To : Portland, OR

STCC Code : 0110000
Commodity : Wheat

BN

21. Circuitry Factor	1.00
22. Car Tare Weight	31.5
24. Loss & Damage Cost/Ton	0.02
25. Spotted/Pulled Ratio	2.00
26. Loco Unit Own Cost/Day	153.43
27. Loco Unit Opn Cost/Mi	0.80
30. Locos per Unit Train	2.89
33. Trail Tons/Unit Train	1975
36. Crew Wages-Unit Train	2692.5
37. Act. Miles-Thru Train	203.2
38. Act. Miles-Way Train	0.00
39. Cost per Sw Eng Minute	4.86
40. Industry Switch Events	2.00
41. Intc Switch Events	0.00
42. SwEng Min/Ind Switch	1.55
43. SwEng Min/Intc Switch	1.70
44. SwEng Min/Class Switch	0.00
46. Car Days/Ind Switch	0.5
47. Car Days/Intc Switch	0.25
48. Car Days/Class Switch	0.00
49. Car Days/Ld & Unld	1.00
50. Car Miles/Ind Switch	2.00
51. Car Miles/Intc Switch	1.37
52. Car Miles/Class Switch	0.00
53. Cars Given Ind Switch	100.00
54. Cars Given Intc Switch	0.00
55. Cars Given Class Swtch	0.00
56. Miles B'n Class Switch	400
57. Miles B'n Intc Switch	1090
58. Car Miles per Car Day	741
62. Const Cost Mrkup Ratio	1.38
63. General Overhd Factor	1.05
64. Total Car Days Running	13.71
65. Total Car Days in Yard	100.00
66. Accessorial Services	Y
67. Ton Miles Lake Transfer	0
68. Tons at Coal Terminal	0
69. Tons at Ore Terminal	0
70. Tons at Marine Term	0
71. No. of Autos Ld & Unld	0

= Snake River Drawdown Study =

RCAM V6.2 RAILROAD COST ANALYSIS

10-06-1998

----- COSTING INPUT FACTORS (CONT.) ----- PAGE 3

From : Plymouth, WA
To : Portland, OR

STCC Code : 0110000
Commodity : Wheat

BN

72. Fuel Cost/Gallon	0.5283
91. Revenue Allowance/Car	0.00
92. RR Owned Car Cost/Mile	0.00
93. RR Owned Car Cost/Day	0.00
94. PVT Owned Car Cost/Mile	0.45
95. PVT Owned Car Cost/Day	0.00

----- COST FORECAST PER CAR -----

	Current	Forecast			
	1QTR98	2QTR98	3QTR98	4QTR98	1QTR99
	-----	-----	-----	-----	-----
Variable Cost/Car	458	458	467	468	471
Full Cost/Car	635	635	647	648	653
		2QTR99	3QTR99	4QTR99	1QTR100
		-----	-----	-----	-----
Variable Cost/Car		473	478	482	486
Full Cost/Car		655	663	668	673

COMMENTS:

Modal Cost Estimating Procedures. As the basis for estimating changes in transportation system costs that could result from river closure, modal costs for barge, rail and truck were developed using transportation analysis models (TAMs) for each mode. The models were developed and copyrighted by Reebie Associates, Transportation Management Consultants. Reebie costing models are used extensively by both the public and private entities. The specific models used are briefly described as follows:

- **Barge Cost Analysis Model (BCAM).** The BCAM is designed to facilitate the analysis of barge-load shipments on the nation’s inland waterways. The design concept involves bringing data about the river systems, locks and dams, barges, towboats, and commodities to the processing capabilities of the personal microcomputer. All of the inland waterways on which commercial barge-load shipments are made are built into the model. This includes the Mississippi River System, in the central part of the country and the Columbia/Snake River System in the Pacific Northwest. In running the model, the user specifies shipment characteristics; cost factors; operating factors; and, routing.
- **Rail Cost Analysis Model (RCAM).** The RCAM is an enhanced personal computer application of the Interstate Commerce Commission’s Uniform Rail Costing System (URCS) methodology. URCS was adopted by the ICC as a General Purpose Costing System for all regulatory costing purposes in Ex Parte 431, 1989. The URCS itself is a complex set of procedures which transforms annually reported railroad expense and activity data into estimates of the costs of providing specific services. It is based an analysis of cause and effect relationships between the production of railroad output (“service units” such as car miles or gross ton miles) and the incurrance of expenses as defined within the accounting system. These relationships define a series of “unit costs” (e.g. crew costs per train mile) which are applied to the service units generated by a shipment to produce the estimated cost of providing the service.

The Carload Module in the RCAM is designed to enable the user to analyze a carrier’s revenue needs and underlying costs for any type of carload shipment. Costs vary with the type of car, commodity, payload, equipment utilization and service level required for the shipment, as well as the specific route and carriers involved in the movements. The model also allows the introduction of costs for highly specialized services when they are part of a shipment being analyzed.

- **Truck Cost Analysis Model (TCAM).** The TCAM provides the ability to determine the underlying cost and revenue requirements for truck shipments. The TCAM data input process is divided into three sections: primary shipment specifications (11 variables); driver and utilization factors (10 variables); and, detailed costing factors (25 variables). Default values are built into the model for all input variables.

The assumptions made in establishing rail and truck costs are shown in Tables 2-1 and 2-2, respectively.

Table 2-1. Assumptions and Costs for Establishing Rail Shipping Costs.

Assumption or Cost Item	Condition Assumed or Cost Used
Size of train	Unit train of 25 cars
Rail car type	Covered hopper
Rail car capacity	95 tons per car

Backhaul	None—empty return
Routing	1 st choice—single rail carrier
Terminal costs (loading & unloading)	None 1/
Rail car turnover rate	Two trips per month
Note: 1. Terminal costs of \$1.88/ton (\$0.0564/bu.) were identified for barge, but were not utilized in the analysis.	

Table 2-2. Assumptions and Costs for Establishing Truck Shipping Costs.

Assumption or Cost Item	Condition Assumed or Cost Used
Wages of drivers 1/	\$10.00/hr.
Load—short-haul 3/	830 bushels (25 tons)/truck @ 30 mph
Load—long-haul	1000 bushels (30 tons)/truck @ 50 mph
Backhaul	Assumed for one-way distances over 150 miles
Trips per day	Less than 15 miles: 5 trips 15-30 miles: 4 trips 31-50 miles: 3 trips 51-100 miles: 2 trips Over 100 miles: 1 trip
Truck trailer type	Dry Van—48 feet
Additional Driver Time Enroute	1 hour for trips over 100 miles
Truck overhead	18.75% (calibrated against rates from SOR).
Non-revenue tractor and trailer time	20 percent
Basis for tractor/trailer days	Total driver hours / 8 hours per day
Terminal costs (loading & unloading)	None 4/
Notes:	
<ol style="list-style-type: none"> 1. Wages: Drivers are paid on a mileage basis for longer hauls. But studies showed that grain is generally carried as a back-haul for shipments of building materials. Without the primary shipment of building materials, long-distance truck shipments of grain (over 250 miles) would essentially cease. For example, deliveries from Southern Idaho and Western Montana (about 350 miles 1-way) cost about \$360 for the load, with the driver receiving about \$10/hr. for an 8-hour day 2. Traffic share: Continental's Lewiston elevator receives about half its grain deliveries from these longer haul operators and about half from local country elevators or directly from farms. 3. Short Haul: Deliveries from within a radius of 100 miles usually do not have a backhaul. Trucks may make 3 deliveries per day for short haul trips. Driver wages may be higher during peak harvest between mid-July through September, with some drivers earning up to \$30/hour. 4. Terminal costs of \$1.88/ton (\$0.0564/bu.) were identified for barge, but were not utilized in the analysis. 	

----- SHIPMENT DESCRIPTION -----

Commodity	: FIELD CROPS	FROM	: Farm, Idaho Co, ID
STCC	: 0110000	TO	: Grangeville ID, ID
Truck Type	: 1X48' DRY VAN	Trip Miles	: 20.0
Carrier Type	:	Empty Miles	: 20.0
Net Tons	: 30.00	Empty as %	: 100.0%
Equipment	: Average	Delivery Days	: 0.0
Driver	: Single		

----- SUMMARY SHIPMENT ANALYSIS -----

Revenue per Truckload	:	0.00	Description :
4th Qtr 1997 Cost per Truckload	:	65.41	Revenue/Cost Ratio : 0%

----- DETAILED COST ANALYSIS -----

	Per Truckload	Per Mile	Per Ton
Driver Wages	26.31	1.315	0.88
Fuel	3.14	0.157	0.10
Tractor	17.31	0.866	0.58
Trailer	2.59	0.130	0.09
Insurance	1.90	0.095	0.06
Fees and Taxes	3.82	0.191	0.13
Tolls & Driver Expense	0.00	0.000	0.00
Overhead	10.33	0.516	0.34
Sub Total, Costs	65.41	3.270	2.18
Profit			
Total Revenue			

----- TOTAL COST PER TRUCKLOAD FORECAST -----

1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1998	1998	1998	1998	1999	1999	1999	1999
-----	-----	-----	-----	-----	-----	-----	-----
64.77	64.95	65.27	65.99	65.92	66.09	66.27	66.86

----- INPUT DESCRIPTION -----

Origin	: Farm, Idaho Co, ID	New Equipment	: No
Destination	: Grangeville ID, ID	Carrier Type	:
Commodity	: FIELD CROPS	Driver	: Single
STCC	: 0110000	Trip Mileage	: 20.0
Net Tons	: 30.00	Empty Miles	: 20.0
Truck Type	: 1X48' DRY VAN	Empty as %	: 100.0%
Rate (\$/Ton)	: 0.00		
Cost Year	: 4th Quarter 1997	Miles per Day	: 1280
Paid Driver Hours	: 1.75	Delivery Days	: 0.0
Annual Tractor Mileage	: 44495	Annual Trailer Mileage	: 44495
Tractor Days (Incl Non-Rev):	0.31	Trailer Days (Incl Non-Rev):	0.31
Non-Revenue Tractor Time:	20.00%	Non-Revenue Trailer Time:	20.00%
Driver Wages	: \$10.000/hr	Fringe Benefits	: 15.00%
Tractor Ownership	: \$46.928/day	Tractor Maintenance	: \$0.063/mile
Trailer Ownership	: \$6.509/day	Trailer Maintenance	: \$0.014/mile
Overhead Markup	: \$10.33	Toll Cost	: \$0.00
State & Fed. Fees	: \$8930/year	Insurance	: \$0.048/mile
Fuel Cost (Incl. Tax)	: \$1.000/gal	State & Fed. Fuel Tax:	\$0.493/gal
Fuel Consumption	: 5.900 MPG	Driver Expenses	: \$0.00

*** Snake River Drawdown (Alt Dest / Longhaul / No Backhaul) *** 10-06-1998

***** TCAM - TRUCK COST ANALYSIS MODEL ***** Page 1

----- SHIPMENT DESCRIPTION -----

Commodity	: FIELD CROPS	FROM	: Twin Falls, ID
STCC	: 0110000	TO	: McNary, WA
Truck Type	: 1X48' DRY VAN	Trip Miles	: 435.0
Carrier Type	:	Empty Miles	: 435.0
Net Tons	: 30.00	Empty as %	: 100.0%
Equipment	: Average	Delivery Days	: 0.4
Driver	: Single		

----- SUMMARY SHIPMENT ANALYSIS -----

Revenue per Truckload	:	0.00	Description :
4th Qtr 1997 Cost per Truckload	:	1181.36	Revenue/Cost Ratio : 0%

----- DETAILED COST ANALYSIS -----

	Per Truckload	Per Mile	Per Ton
Driver Wages	572.18	1.315	19.07
Fuel	68.35	0.157	2.28
Tractor	202.01	0.464	6.73
Trailer	32.18	0.074	1.07
Insurance	41.41	0.095	1.38
Fees and Taxes	78.69	0.181	2.62
Tolls & Driver Expense	0.00	0.000	0.00
Overhead	186.53	0.429	6.22
Sub Total, Costs	1181.36	2.716	39.38

Profit

Total Revenue

----- TOTAL COST PER TRUCKLOAD FORECAST -----

1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1998	1998	1998	1998	1999	1999	1999	1999
1169.90	1173.20	1178.87	1191.99	1190.69	1193.64	1196.95	1207.58

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----- INPUT DESCRIPTION -----			
Origin	: Twin Falls, ID	New Equipment	: No
Destination	: McNary, WA	Carrier Type	:
Commodity	: FIELD CROPS	Driver	: Single
STCC	: 0110000	Trip Mileage	: 435.0
Net Tons	: 30.00	Empty Miles	: 435.0
Truck Type	: 1X48' DRY VAN	Empty as %	: 100.0%
Rate (\$/Ton)	: 0.00		
Cost Year	: 4th Quarter 1997	Miles per Day	: 1740
Paid Driver Hours	: 11.75	Delivery Days	: 0.4
Annual Tractor Mileage	: 97333	Annual Trailer Mileage	: 97333
Tractor Days (Incl Non-Rev):	3.13	Trailer Days (Incl Non-Rev):	3.13
Non-Revenue Tractor Time:	20.00%	Non-Revenue Trailer Time:	20.00%
Driver Wages	: \$10.000/hr	Fringe Benefits	: 15.00%
Tractor Ownership	: \$46.928/day	Tractor Maintenance	: \$0.063/mile
Trailer Ownership	: \$6.509/day	Trailer Maintenance	: \$0.014/mile
Overhead Markup	: \$186.53	Toll Cost	: \$0.00
State & Fed. Fees	: \$8930/year	Insurance	: \$0.048/mile
Fuel Cost (Incl. Tax)	: \$1.000/gal	State & Fed. Fuel Tax:	\$0.493/gal
Fuel Consumption	: 5.900 MPG	Driver Expenses	: \$0.00

----- SHIPMENT DESCRIPTION -----

Commodity	: FIELD CROPS	FROM	: Walla Walla, WA
STCC	: 0110000	TO	: Pendleton, OR
Truck Type	: 1X48' DRY VAN	Trip Miles	: 155.0
Carrier Type	:	Empty Miles	: 155.0
Net Tons	: 30.00	Empty as %	: 100.0%
Equipment	: Average	Delivery Days	: 0.2
Driver	: Single		

----- SUMMARY SHIPMENT ANALYSIS -----

Revenue per Truckload	:	0.00	Description :
4th Qtr 1997 Cost per Truckload	:	407.91	Revenue/Cost Ratio : 0%

----- DETAILED COST ANALYSIS -----

	Per Truckload	Per Mile	Per Ton
Driver Wages	203.88	1.315	6.80
Fuel	25.31	0.163	0.84
Tractor	58.19	0.375	1.94
Trailer	9.55	0.062	0.32
Insurance	14.76	0.095	0.49
Fees and Taxes	31.82	0.205	1.06
Tolls & Driver Expense	0.00	0.000	0.00
Overhead	64.41	0.416	2.15
Sub Total, Costs	407.91	2.632	13.60

Profit

Total Revenue

----- TOTAL COST PER TRUCKLOAD FORECAST -----

1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1998	1998	1998	1998	1999	1999	1999	1999
403.96	405.10	407.06	411.59	411.14	412.16	413.30	416.97

----- INPUT DESCRIPTION -----

Origin	: Walla Walla, WA	New Equipment	: No
Destination	: Pendleton, OR	Carrier Type	:
Commodity	: FIELD CROPS	Driver	: Single
STCC	: 0110000	Trip Mileage	: 155.0
Net Tons	: 30.00	Empty Miles	: 155.0
Truck Type	: 1X48' DRY VAN	Empty as %	: 100.0%
Rate (\$/Ton)	: 0.00		
Cost Year	: 4th Quarter 1997	Miles per Day	: 620
Paid Driver Hours	: 8.00	Delivery Days	: 0.2
Annual Tractor Mileage	: 132146	Annual Trailer Mileage	: 132146
Tractor Days (Incl Non-Rev):	0.82	Trailer Days (Incl Non-Rev):	0.82
Non-Revenue Tractor Time:	20.00%	Non-Revenue Trailer Time:	20.00%
Driver Wages	: \$10.000/hr	Fringe Benefits	: 15.00%
Tractor Ownership	: \$46.928/day	Tractor Maintenance	: \$0.063/mile
Trailer Ownership	: \$6.509/day	Trailer Maintenance	: \$0.014/mile
Overhead Markup	: \$64.41	Toll Cost	: \$0.00
State & Fed. Fees	: \$6642/year	Insurance	: \$0.048/mile
Fuel Cost (Incl. Tax)	: \$1.000/gal	State & Fed. Fuel Tax:	\$0.473/gal
Fuel Consumption	: 5.900 MPG	Driver Expenses	: \$0.00

*** Snake River Drawdown (River Dest/Medium Distance/Backhaul) *** 10-06-1998

***** TCAM - TRUCK COST ANALYSIS MODEL ***** Page 1

----- SHIPMENT DESCRIPTION -----

Commodity	: FARM PRODUCTS	FROM	: Sandpoint, Bonners , ID
STCC	: 0100000	TO	: Central Ferry, WA
Truck Type	: 1X48' DRY VAN	Trip Miles	: 170.0
Carrier Type	:	Empty Miles	: 20.0
Net Tons	: 30.00	Empty as %	: 11.8%
Equipment	: Average	Delivery Days	: 0.2
Driver	: Single		

----- SUMMARY SHIPMENT ANALYSIS -----

Revenue per Truckload	:	0.00	Description :
4th Qtr 1997 Cost per Truckload	:	316.58	Revenue/Cost Ratio : 0%

----- DETAILED COST ANALYSIS -----

	Per Truckload	Per Mile	Per Ton
Driver Wages	124.96	0.735	4.17
Fuel	16.88	0.099	0.56
Tractor	75.65	0.445	2.52
Trailer	11.40	0.067	0.38
Insurance	9.04	0.053	0.30
Fees and Taxes	28.65	0.169	0.96
Tolls & Driver Expense	0.00	0.000	0.00
Overhead	49.99	0.294	1.67
Sub Total, Costs	316.58	1.862	10.55
Profit			
Total Revenue			

----- TOTAL COST PER TRUCKLOAD FORECAST -----

1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1998	1998	1998	1998	1999	1999	1999	1999
-----	-----	-----	-----	-----	-----	-----	-----
313.51	314.40	315.92	319.43	319.08	319.87	320.76	323.61

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----- INPUT DESCRIPTION -----

Origin	: Sandpoint, Bonners , ID	New Equipment	: No
Destination	: Central Ferry, WA	Carrier Type	:
Commodity	: FARM PRODUCTS	Driver	: Single
STCC	: 0100000	Trip Mileage	: 170.0
Net Tons	: 30.00	Empty Miles	: 20.0
Truck Type	: 1X48' DRY VAN	Empty as %	: 11.8%
Rate (\$/Ton)	: 0.00		
Cost Year	: 4th Quarter 1997	Miles per Day	: 380
Paid Driver Hours	: 8.00	Delivery Days	: 0.2
Annual Tractor Mileage	: 49097	Annual Trailer Mileage	: 49097
Tractor Days (Incl Non-Rev):	1.36	Trailer Days (Incl Non-Rev):	1.36
Non-Revenue Tractor Time:	20.00%	Non-Revenue Trailer Time:	20.00%
Driver Wages	: \$10.000/hr	Fringe Benefits	: 15.00%
Tractor Ownership	: \$46.928/day	Tractor Maintenance	: \$0.063/mile
Trailer Ownership	: \$6.509/day	Trailer Maintenance	: \$0.014/mile
Overhead Markup	: \$49.99	Toll Cost	: \$0.00
State & Fed. Fees	: \$8930/year	Insurance	: \$0.048/mile
Fuel Cost (Incl. Tax)	: \$1.000/gal	State & Fed. Fuel Tax:	\$0.493/gal
Fuel Consumption	: 5.900 MPG	Driver Expenses	: \$0.00

*** Snake River Drawdown (River Dest 2 w/ Backhaul) *** 10-06-1998

***** TCAM - TRUCK COST ANALYSIS MODEL ***** Page 1

----- SHIPMENT DESCRIPTION -----

Commodity	: FARM PRODUCTS	FROM	: Northwest, ND
STCC	: 0100000	TO	: Lewiston, ID
Truck Type	: 1X48' DRY VAN	Trip Miles	: 922.0
Carrier Type	:	Empty Miles	: 20.0
Net Tons	: 30.00	Empty as %	: 2.2%
Equipment	: Average	Delivery Days	: 1.2
Driver	: Single		

----- SUMMARY SHIPMENT ANALYSIS -----

Revenue per Truckload	:	0.00	Description :
4th Qtr 1997 Cost per Truckload	:	1228.50	Revenue/Cost Ratio : 0%

----- DETAILED COST ANALYSIS -----

	Per Truckload	Per Mile	Per Ton
Driver Wages	619.54	0.672	20.65
Fuel	94.24	0.102	3.14
Tractor	152.51	0.165	5.08
Trailer	25.66	0.028	0.86
Insurance	44.84	0.049	1.49
Fees and Taxes	97.75	0.106	3.26
Tolls & Driver Expense	0.00	0.000	0.00
Overhead	193.97	0.210	6.47
Sub Total, Costs	1228.50	1.332	40.95

Profit

Total Revenue

----- TOTAL COST PER TRUCKLOAD FORECAST -----

1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1998	1998	1998	1998	1999	1999	1999	1999
1216.59	1220.03	1225.92	1239.56	1238.21	1241.28	1244.72	1255.77

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----- INPUT DESCRIPTION -----			
Origin	: Northwest, ND	New Equipment	: No
Destination	: Lewiston, ID	Carrier Type	:
Commodity	: FARM PRODUCTS	Driver	: Single
STCC	: 0100000	Trip Mileage	: 922.0
Net Tons	: 30.00	Empty Miles	: 20.0
Truck Type	: 1X48' DRY VAN	Empty as %	: 2.2%
Rate (\$/Ton)	: 0.00		
Cost Year	: 4th Quarter 1997	Miles per Day	: 628
Paid Driver Hours	: 19.95	Delivery Days	: 1.2
Annual Tractor Mileage	: 166705	Annual Trailer Mileage	: 166705
Tractor Days (Incl Non-Rev):	1.98	Trailer Days (Incl Non-Rev):	1.98
Non-Revenue Tractor Time:	20.00%	Non-Revenue Trailer Time:	20.00%
Driver Wages	: \$10.000/hr	Fringe Benefits	: 15.00%
Tractor Ownership	: \$46.928/day	Tractor Maintenance	: \$0.063/mile
Trailer Ownership	: \$6.509/day	Trailer Maintenance	: \$0.014/mile
Overhead Markup	: \$193.97	Toll Cost	: \$0.00
State & Fed. Fees	: \$5549/year	Insurance	: \$0.048/mile
Fuel Cost (Incl. Tax)	: \$1.000/gal	State & Fed. Fuel Tax:	\$0.443/gal
Fuel Consumption	: 5.900 MPG	Driver Expenses	: \$0.00