

WSDOT Ferries Division

Financial Foundations, Assumptions, and Approaches for the Long Range Plan

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Building the Long Range Plan

Responding to ESHB 2358

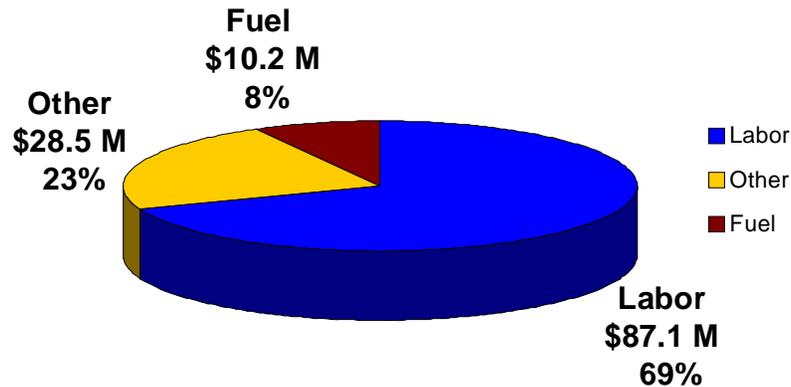
- Maximize Existing Capacity
- Efficiently Use Existing Assets
- Adaptive Management Practices
- Continuous Quality Improvement

Policy Decisions

- Understanding Key Cost Escalation Factors
 - Operating Program: Labor and Fuel
 - Capital Program: Construction, Labor, and Materials
- New Decision-making Approaches
 - Cost-benefit assessments incorporating capital and operating cost impacts of decisions.
 - Applying asset management principles to the development of the capital plan.

Labor and Fuel Significance to Ferries

Actual Expenditures: FY 1998



Total operating costs have grown from \$128.8 million in FY98 to \$201.6 million in FY2007.

Total operating costs have grown even as scheduled service hours have decreased during this time:

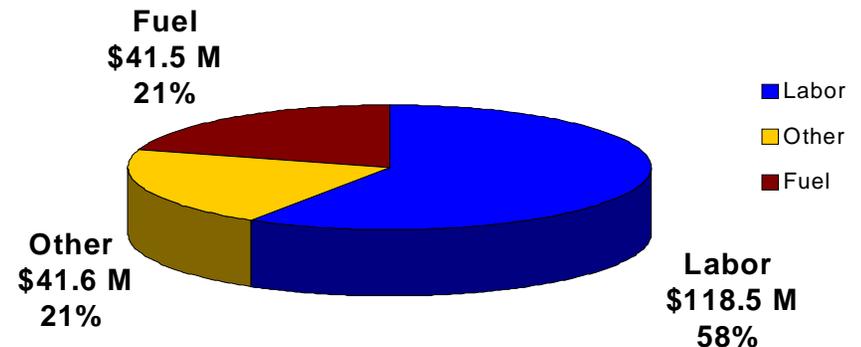
Auto Ferry: (9,036) hours

P.O. Ferry: (11,696) hours

Total operating costs have grown 5.4% per year between FY98 and FY07

- Labor cost growth averaged 3.5%/yr
- Fuel cost growth averaged 17.0%/yr
- Other costs have averaged 4.3%/yr

Actual Expenditures: FY 2007



Labor and Fuel Significance to Ferries

“Fuel and labor account for nearly 80 percent of WSF operating costs. Ninety-two percent of WSF’s employees are covered by labor contracts with binding pay provisions. As a consequence, management has very limited opportunities to manage and control costs.”

*-- from Washington State Ferries Financing Study, p. 54
Final Report, January, 2007
Cedar River Group, LLC*

Foundational Considerations: Operations

Labor

- Base is 2007-09 Service Plan
- Assumes Two Island Home Vessels
- Comparison of Labor Escalation Factors (salary and benefit cost per FTE)
 - 6-year financial plan escalator 1.8% (annually)*
 - Historical 10-year average (1997-2007) 3.6% (annually)

Non-wage labor agreement cost escalators

- Mileage Reimbursement
- Maintenance and Cure (medical for Jones Act injured workers; “until maximum medical cure”)
- Uniforms
- Meal allowance

Fuel

- Consumption Base: 35.1 M Gallons (per biennium)
- Forecast Ranges
 - Global Insights Fuel Costs
 - Fuel Conservation Program

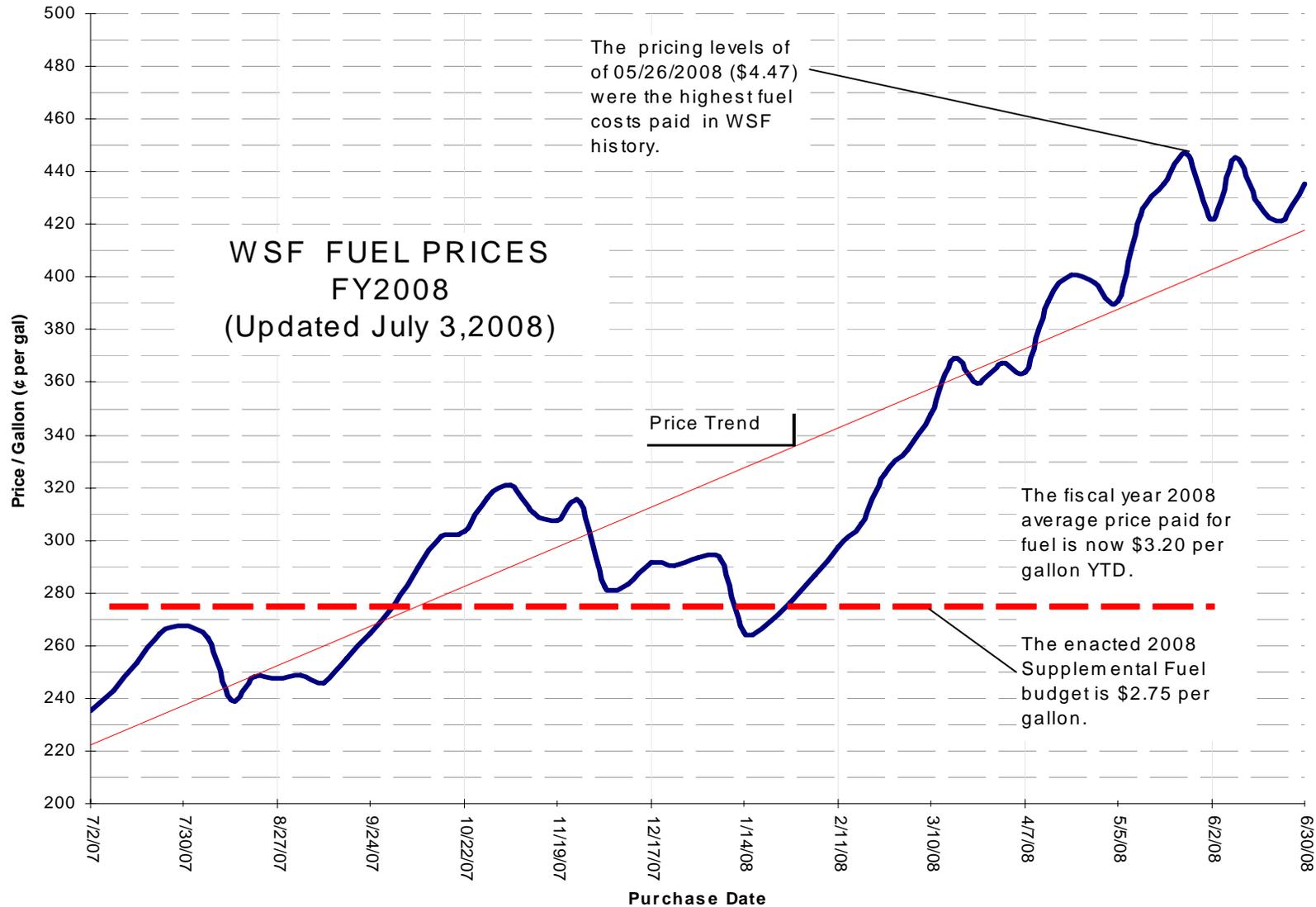
* Legislative Planning Assumption

Foundational Considerations: Operations

Other

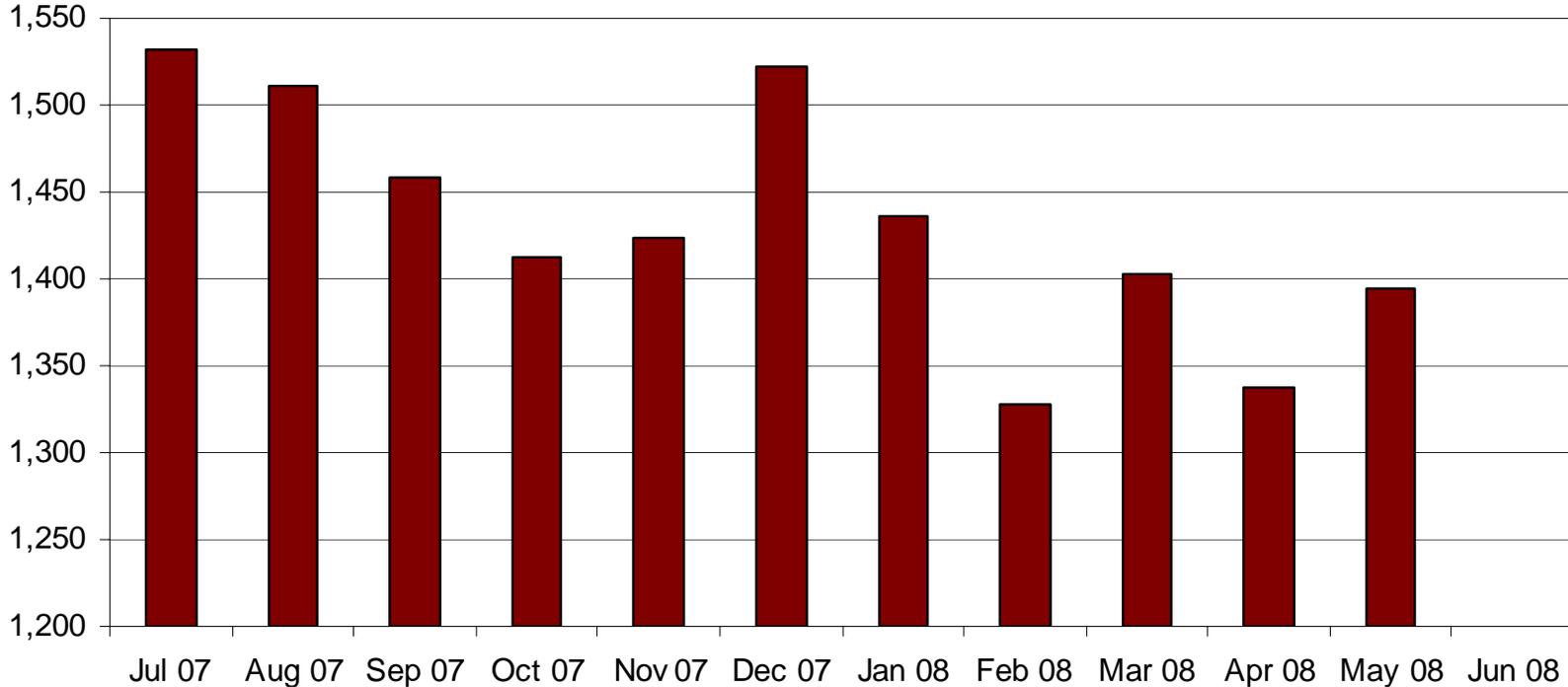
- Largest expenditure categories in Other are:
 - Maintenance Contracts, \$8.4M
 - Materials and Equipment, \$8.3M
 - Insurance, \$4.7M
 - Rents and Leases, \$2.5M
 - Utilities, \$2.0M
- Organizational changes

Fuel Recent History: Prices



Fuel Recent History: Consumption

Gallons (in Thousands)



Consumption through May 2008 = 15.8 million gallons

Fuel Forecast

Global Insights

Ex-tax Price per Gallon

Washington State Ferry Diesel Fuel³

| | Optimistic | Baseline | Pessimistic | |
|-----------------------|-------------|-------------|-------------|------|
| Fiscal Year 2008 | Jul-2007 | 2.29 | | |
| | Aug-2007 | 2.25 | | |
| | Sep-2007 | 2.35 | | |
| | Oct-2007 | 2.75 | | |
| | Nov-2007 | 2.86 | | |
| | Dec-2007 | 2.66 | | |
| | Jan-2008 | 2.52 | | |
| | Feb-2008 | 2.80 | | |
| | Mar-2008 | 3.26 | | |
| | Apr-2008 | 3.54 | | |
| | May-2008 | 3.88 | 3.91 | 3.96 |
| | Jun-2008 | 4.18 | 4.22 | 4.28 |
| Annual Average | 2.93 | 2.93 | 2.94 | |

Note: In recent years fuel prices have been dramatically underestimated by Global Insights and other forecasting sources

Ex-tax Price per Gallon

Washington State Ferry Diesel Fuel³

| | Optimistic | Baseline | Pessimistic |
|-------------------------------|-------------|-------------|-------------|
| FY 2009 Annual Average | 3.67 | 4.03 | 4.29 |
| FY 2010 Annual Average | 3.26 | 3.60 | 3.92 |
| FY 2011 Annual Average | 3.05 | 3.38 | 3.73 |

Taxes and fees added to gas price:

\$.08 Bid margin on all dock fuelings

\$150 - \$375 Delivery Fee

1.0140 Multiplier at PT/Kingston

1.0039 Multiplier on all other tank or truck deliveries

.007% State Hazardous Waste Tax

.00119% Federal Oil Spill Tax

.001% Federal LUST Tax

9.0% State and local sales taxes on total

Approach to Capital Decisions

Vessels and Terminals

Objectives

- Build on WSF existing documents to develop the long term preservation needs.
- Incorporate asset management principles into assessment of need.
- Incorporate specific JTC recommendations.

Background Information

Preservation Project List Vessels and Terminals

- Preservation projects are based on the service lives in the LCCM
- LCCM updates will provide an improved starting point for assessing preservation needs:
 - Terminals:
 - Updated condition rating and life cycles in 2007, resulting in a reduction in project needs over the 16-year legislative capital plan
 - currently reviewing and updating project cost data to reflect current construction materials and labor pricing
 - Vessels:
 - In the process of reviewing and updating condition ratings, life cycles and pricing

Asset Management Concepts

Moving beyond the LCCM

Prioritize all investments based on a cost-benefit analysis

- When resources are limited, not all justified projects can be executed.
- Direct resources to the highest-return investments to maximize the total benefit.

Prioritization of preservation investments based on risk assessment

- The primary benefit of a preservation investment is the cost savings from not incurring a potential failure or service disruption, including:
 - Financial costs to WSF associated with a failure or disruption.
 - Costs associated with customer impacts.
- Vessel cost-benefit analysis needs to account for the potential impact on operations of regulations set by United States Coast Guard (not terminal).

Preservation

Avoided risk: benefit of intervention

- Avoiding risk is the basis for preservation programs.
- Risk is quantified as the product of probability of failure and the expected consequences.
 - Higher for old or poor-condition assets.
 - Higher for assets that significantly effect operation.
- The most important consequence cost is rider effects.

Terminals

Process Steps to Develop Preservation Needs

Development of Preservation Needs

- Condition inspections – completed
- Update LCCM – completed
- Baseline needs analysis from review of LCCM
- Scoping and alternative analysis for next two to six years
- Prioritization of needs using asset management principles
- Project list – in process



Iterative
process

Vessels

Developing Preservation and Replacement Needs

- Opportunity to learn from terminal efforts to incorporate asset management principles in the development of long-term needs.
- Tasks that are underway:
 - Currently updating LCCM to account for JTC recommendations and “lessons learned”
 - Assessment of long-term vessel replacement schedule
- Key task ahead: development of a prioritization methodology for vessel preservation projects that incorporates asset management principles
 - Key factor in vessel risk assessment is the role of the Coast Guard and regulatory requirements for vessel preservation.

Vessels

Updating the LCCM, JTC Recommendations

Incorporate Implications of JTC Vessel Study Findings

- Boats should be replaced when their useful life has expired.
- Improve existing bilge and void maintenance program.
- Expand steel inspection program, especially for older vessels.
- Develop an integrated coating (painting) program focused on steel preservation.
- Assess tradeoffs of adequate preservation funding versus retirement for inactive vessels.
- Develop a consistent vessel rebuild/replacement plan.

Vessels - Preservation

Updating the LCCM, Lessons Learned

Incorporate “lessons learned” from recent vessel issues

- Review and adjust based on recent conditions assessments.
- Revise LCCM treatment of preservation elements based on inspection results and cost impacts.
 - For steel preservation, more accurately capture the way steel replacement actually occurs.
- Design and fund a more robust inspection program to improve condition assessments over time.
- WSF updating inspection plan with United States Coast Guard.
- Review definition and application of the vital/non-vital categorization of asset classes for preservation purposes.
- Review of cost assumptions and escalation factors for preservation of vessel systems.
- Implement a vessel replacement plan to retire vessels on time.

Vessels - Replacement

Current Acquisition/Replacement

- Vessel acquisitions underway would replace the loss of the Steel Electric Class vessels, 87-auto Evergreen State and the 48-auto Rhododendron:
 - Two 64-car Island Home design vessels would replace the Steel Electrics on the Port Townsend-Keystone route.
 - Up to three new 144-car vessels would be used system wide & replace the Evergreen and the Rhododendron and move the 144-car Hyak into standby.

Vessels - Replacement

Future Replacements Needed

- In addition, there are another seven vessels that are scheduled for retirement by 2030 (for a total of 13 potential replacement vessels):
 - Hiyu
 - Evergreen State (Klahowya, Tillikum)
 - Super (Elwha, Hyak, Kaleetan, Yakima)
- In the next 15 years beyond the current planning horizon, there are another eight vessels scheduled for retirement:
 - Replacement of Jumbo Mark I (Spokane, Walla Walla) – retirements 2031-2037.
 - Planning for replacements of Issaquah Class -- six vessels to be retired between 2037 and 2045.
- A total of 21 vessels are scheduled to be retired over the next 37 years or an average of one every 21 months.

Next Steps

Developing the Long-Range Capital Plan

- Complete LCCM updates.
- Develop cost-benefit assessments of preservation needs.
- Develop cost-benefit assessments of potential investments to support operating and pricing strategies and service enhancements, which account for:
 - Potential ridership growth at the route-level
 - Effectiveness of strategies to manage vehicle demand
 - Level-of-service impacts
 - Impacts on customers
 - Impacts on communities
- Develop Long-Range Plan options and identify potential capital investment and operating packages.

Questions?

For additional information on Financial Foundations, Assumptions, and Approaches for the Long Range Plan, please contact:

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