Appendix A
Terminal Project Reviews

Capital Program Prioritization
and
Terminal and Repair Facility Capital Projects Review

Contents

Anacortes

A. Projects

There are five projects at Anacortes with budgets of $30.8 million for the 2005-07 biennium and $119.9 million for the 2005-21 biennia. The catch-up preservation project is discussed under systemwide catch-up preservation.

Anacortes Projects
($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
902019U	Anacortes Multimodal Terminal	27,526	16,089	13,292	2,978					59,885
902019X	Anacortes Upland Parking Impr	75								75
902019Y	Anacortes Third Slip Overhead Loading				2,120	11,800				13,920
902019V	Anacortes Terminal Preservation	300	1,156	6,535	17,614	8,277	5,633	3,184		42,699
999940D	Catch-Up Preservation									
	ANO6 Dolphin Replacement Phase II	2,943								2,943
	AN34 Apron Replacement Slip 1			335						335
	Anacortes Total	30,844	17,245	20,162	22,712	20,077	5,633	3,184		119,857

B. Project Expenditures Life to Date

Anacortes Project Expenditures Life to Date (Aug. 06)
($000s)

PIN	902019U	902019V	902019X	Aug 06
Project	Multimodal	Preservation	Upland Parking	Total
Construction	16	5	1,803	1,824
Preliminary Design	2,210		16	2,226
Environmental Permitting	830		22	852
General Project Management	2,979	214	71	3,264
Public Outreach	129			129
PS&E	1,156		200	1,356
Review	29		13	42
Scoping & Planning	314		4	318
CADD	71		55	126
Other	71	1		72
Total	7,805	220	2,184	10,209

Source: WSF

C. Project Status/WSF Identified Risks

- The Upland Parking project is complete.
- The Multimodal Terminal is at 15% design.
- WSF identified risks for Multimodal Terminal (August 22, 2006 Progress Report)
    - Tribal settlement and cultural resources report
    - City concerns include planning for the 520 corridor, customers and immigration move potential from Sidney, wetlands mitigation, bike path construction borne by WSF

- Construction costs including building material prices, General Contractor Construction Manager (GCCM), negotiation of Maximum Allowable Construction Cost (MACC), CSI formatting of project for conformance, WSF internal building design and materials standards
- Permits – permit mitigations exceed project budget, rights of entry for hydroperiod analysis

D. Project Scope, Schedule and Budget Changes

This section summarizes the consultants' review of the change forms provided by WSF on this project.

1. 902019U Anacortes Multimodal Terminal: Scope, Schedule and Budget Changes

This is a Nickel funded project that was added to the capital program in August 2003. The project has been delayed due to moving to a GCCM approach to project management and delays in hiring consultants. Overall the anticipated cost decreased by $1.9 million.

a) Scope Changes 2003-2006

The project was described in August 2003 as improvements to the Anacortes Multimodal Terminal to accommodate a greater range of vessel sizes and improvements to the structure and functionality of the terminal facilities. It was further described in June 2004 as consisting of rebuilding the tie-up slips further offshore (one tie-up slip, one drive-on tie-up slip, and an access trestle for the drive-on tie-up slip; complete in the 2005-07 biennium); rebuilding and expanding the terminal building (Phase 1 complete in the 2007-09 biennium, Phase 2 complete in the 2011-13 biennium); a site-circulation/grade separation element (complete in the 2009-11 biennium); and (in July 2004) building upper parking lot restrooms.

b) Budget Changes 2003-2006

The budget has been only slightly modified from $67.0 million in August 2003 to $65.1 million in March 2006.

Anacortes Multimodal Terminal Budget

($000s)

	Aug-03	Jul-04	Feb-05	Feb-06	Mar-06
	V2003	V2005-3A	V2005-5		
Engineering	9,777	9,956	9,956	9,956	10,626
Construction	57,223	54,447	54,447	54,447	54,446
Total	67,000	64,403	64,403	64,403	65,072

c) Schedule Changes 2003-2006

The multimodal project was originally scheduled to be complete in June 2011. It is now scheduled to be completed by June 2013.

Schedule Change Anacortes Multimodal Project

(End Dates)

	Sep-03	Jul-04	Feb-05
	V2003	V2005-3A	V2005-5
Engineering	Jun-10	Jun-12	Jun-12
Construction	Jun-11	Jun-13	Jun-13

2. 902019X Uplands Parking Improvement

This project, which paved and expanded the upper parking lot and built a trail to the terminal, was completed earlier than originally anticipated and for $935,000 less than originally budgeted.

a) Scope Changes 2003-2006

The project was described in July 2003 as being the expansion and paving of the upper parking lot so that WSF could charge for parking. The scope was increased in February 2004 to include a trail from the parking lot to the terminal building. Parking lot utilities were subsequently added to be installed using the trail route.

b) Budget Changes 2003-06

The budget was $935,000 less than originally estimated.

Anacortes Upland Parking Improvement Budget

($000s)

	Sep-03	Mar-04	Jul-04	Feb-05	Nov-05	Feb-06	Mar-06
	V2003		V2005-3A	V2005-5			
Engineering	634	410	528	528	347	347	347
Construction	2,535	2,150	2,772	1,847	1,937	1,937	1,887
Total	3,169	2,560	3,300	2,375	2,284	2,284	2,234

c) Schedule 2003-2006

This project was accelerated into and completed on schedule in the the 2003-05 biennium.

3. 902019Y Third Slip Overhead Loading

This project will construct a passenger overhead loading for the third operating slip. The project scope, budget and schedule have not changed since 2003. It has a budget of $13.9 million and is scheduled to be complete in June 2015.

4. 902019V Terminal Preservation

The scope of this project has changed appreciably between 2003 and 2007. The original project in 2003 was to include interim trestle preservation, terminal building preservation and overhead loading preservation. There was no right-of-way acquisition in the original budget. Acquisition of Port of Anacortes property was then added, then removed, and finally added again along with the acquisition of two private properties for terminal expansion. A second tie-up slip was added to the project when the multimodal project

removed two existing tie-up slips and replaced them with one new vehicle tie-up slip and one regular tie-up slip. In 2013-2015, the preservation project will provide vessel tie-up capabilities to meet the future needs based on the twenty-year systems plan. Project timeline increased from an end date of 2011 to 2019 due to extension of the WSDOT capital program from 10 to 16 years, which allowed the programming of additional projects in the 2015-17 and 2017-19 biennia.

Right-of-way acquisition has been delayed due to more urgent spending priorities at Friday Harbor. Project costs increased from $18.8 million over a ten year capital program with the original scope and schedule to $42.7 million over a fourteen year capital program with the revised scope and schedule.

a) Scope Changes 2003-2007

- Change Management Form 7/28/03 – The scope included interim trestle, terminal building and overhead loading preservation.
- Project Control Form 6/10/04 – Scope changed to add acquisition of right-of-way from Port of Anacortes to acquire the property on which the terminal sits, replacement of the trestle in addition to interim preservation and retrofit of the transfer span, and deleted terminal building preservation.
- Project Control Form 3/15/05 – Right-of-way acquisition delayed due to the Port of Anacortes' unwillingness to sell the property.
- Project Control Form 7/18/05 – Right-of-way acquisition of three properties, substitute full replacement of a transfer span in lieu of retrofit, deferred interim preservation work and added the second tie-up slip relocation project.
    - The three properties to be purchased are: the Port of Anacortes property on which the terminal lies at $4.5 million; the Hinshaw property adjacent to the terminal to allow installation of a grade separation and an increased number of tollbooths to improve site circulation and processing speed for the traveler for $.2 million; and the Dillar property which is covered with surface parking and is adjacent to the terminal at an expected cost of $1 million. The Dillar property may be used for parking, transit-oriented development and/or wetlands mitigation.
    - The second tie-up slip resulted from the multimodal terminal tie-up slip project that removed two existing tie-up slips and replaced them with one new vehicle tie-up slip and one regular tie-up slip. These slips were relocated 250 feet further out into deeper water to accommodate bigger vessels and as part of eelgrass mitigation. With this new project, another regular tie-up slip will be added, to be located adjacent to the newly constructed tie-up slips. In 2013-2015, this project will provide vessel tie-up capabilities to meet the future needs based on the WSF Long-Range Plan..
- Project Control Form 1/19/06 – Defers acquisition of the Port of Anacortes and Hinshaw properties to a different biennium in order to free up funds for the Friday Harbor project.

b) Budget Changes 2003-2007

The budget reflects the changes in scope and the addition and modifications to the right-of-way plans. In November 2005 the budget changed to a sixteen year budget.

Anacortes Preservation Project Budget Changes

($000s)

	Sep-03	Mar-04	Jul-04	Feb-05	Nov-05	Jan-06	Mar-06
	V2003		V2005-3A	V2005-5	*	*	*
Engineering	4,232	2,960	3,501	3,501	6,248	6,248	6,248
Right-of-Way			4,500		6,043	4,474	4,474
Construction	14,596	15,825	19,101	19,101	31,980	31,980	31,980
Total	18,828	18,785	27,102	22,602	44,271	42,702	42,702
*Sixteen year budget rather than ten							

c) Schedule Changes 2003-2007

Anacortes Preservation Project Schedule Changes

	Sep-03	Mar-04	Jul-04	Feb-05	Nov-05	Jan-06	Mar-06
	V2003		V2005-3A	V2005-5	*	*	*
Engineering	Dec-11		Jun-12		Jun-11	Jun-18	
Right-of-Way			Jun-05		Jun-11	Jun-11	
Construction	Jun-13		Jun-13		Jun-17	Jun-19	

E. Condition Rating

The 2005 bridge inspection report indicates that although 72% of the Anacortes terminal systems and structures are operating within their life-cycle according to the life-cycle cost model, 80% are in good condition and an additional 16% in fair condition.

Life-cycle and Condition Rating Anacortes

Yr. Insp.	Life-cycle Rating	Insp. Units	State				Percent Good or Fair
	Vital	Measured	1	2	3	4	Condition
2005	72%	89,715	71,579	14,190	3,857	69	
%			80%	16%	4%	0%	96%

F. Observations

1. Projects Interrelated

The preservation, multimodal and upland parking improvement projects are interrelated with the preservation budget being used to purchase right-of-way ($4.5 million) to assist with the improvement project. The preservation project is also constructing an additional tie-up slip to replace one that was displaced by the multimodal terminal project.

2. Long-Range Plan

Passenger throughput, parking space counts and overall planning is based on the 2030 ridership projections. The electronic fare system has been included in the planning. No reservation system study has been done. The concept of phasing the project implementation based upon actual passenger ridership has not been explored.

3. Project Management

The project is managed by a WSF program manager and an outside consultant (structural engineer) as project manager.

4. Budget

a. The Phase I construction budget was $20.8 million for a new & interim terminal, parking, entry road, upgrade of the upland parking area, pedestrian plaza, bookstore, restaurant, snack bar and passenger facilities. An outsourced coffee/snack bar at the car holding area is also planned.
b. Current budget estimate is $38.4 million which has been included in the 2007-09 biennium WSF budget submittal.

5. Design

The current planning includes a preferred Scheme N that is currently at 15% completion and a cost estimate is being performed. The Scheme N planning and program assumes an elevated building driven by the need to provide disabled passenger loading. This creates covered parking below the building. The covered parking is currently assumed as secure parking for employees.

6. Schedule

- Presentation to internal steering committee in late November 2006
- 50% design completion planned for November 2006
- 90% design completion planned for March 2007
- Environmental permit schedule planned for January 2007
- GMP delivery planned for March/April 2007
- Construction is planned to commence June 2007
- Completion is planned for January 2009

7. Cost-benefit analysis/life-cycle cost analysis

Has not been done. A formal value engineering workshop and risk analysis are scheduled for March 2007.

8. Construction

The project is the first GCCM (General Contractor Construction Manager) project that WSF has tried at a terminal. This process, which brings a contractor in during design, allows for negotiation of the Maximum Allowable Construction Contract or MACC with

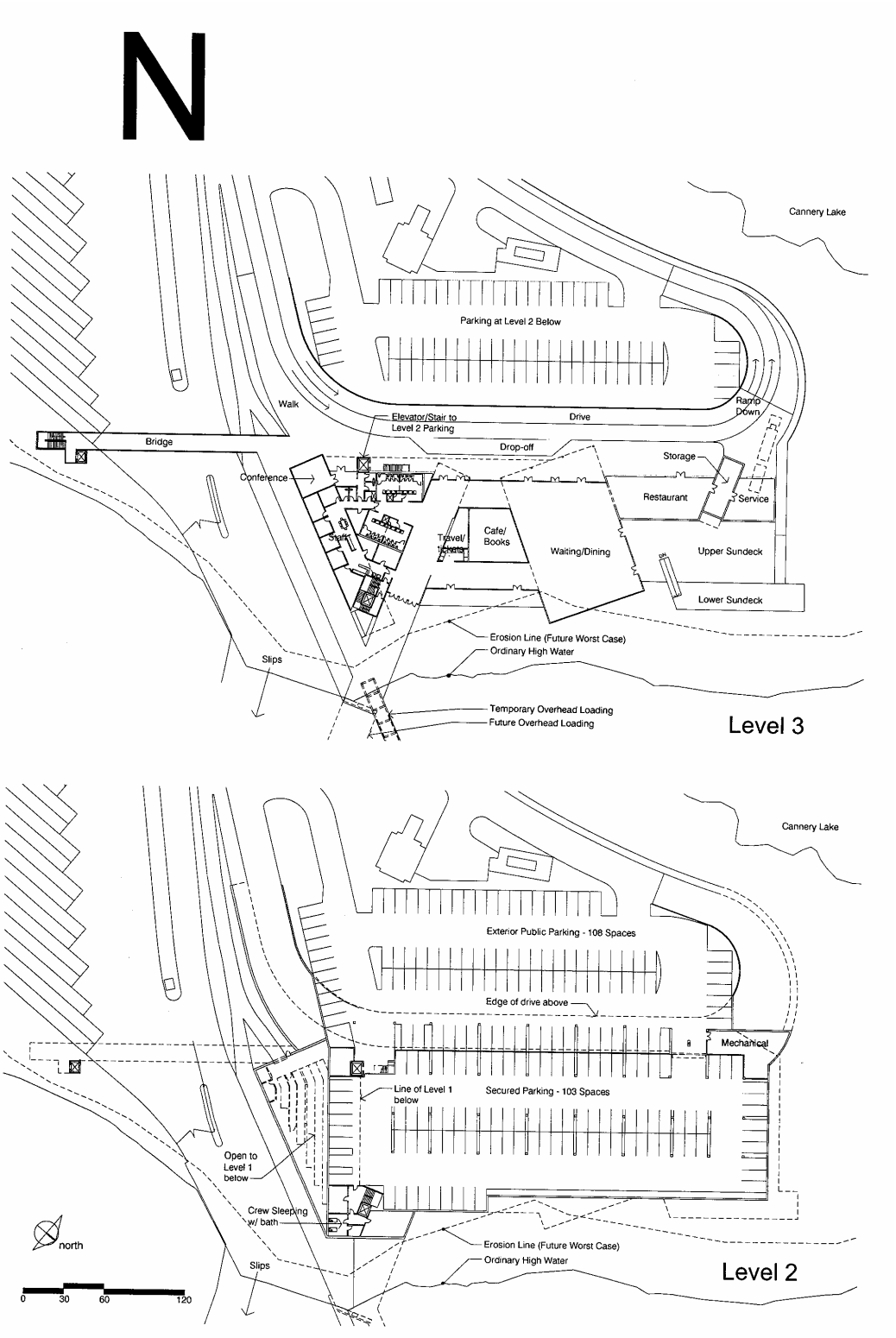
the contractor. The project manager will negotiate the MACC at 90% design and he indicates that this is a risk factor for the project.

9. Ancillary revenue

The design includes an allocation of 3,000 square feet for concessions and a restaurant. This is an inherently risky undertaking. Discussions with the project manager and concession manager indicate that the strongest concession experience has been in the vehicle holding area. The size of the terminal concession area should be reviewed before making a final commitment to the 3,000 square feet.

10. Condition

The Anacortes terminal is in good condition, with the inspection reports showing that the terminal has 80% of its inspected structures in good condition and an additional 16% in fair condition. The bridge inspection reports do not reflect the condition of the building.



Washington State Ferries

ANACORTES FERRY TERMINAL

JULY 2006

Cedar

Bainbridge Island

A. Projects

There are five projects at Bainbridge Island with budgets of $21.9 million for the 2005-07 biennium and $178.3 million for the2005-21 biennia.

Bainbridge Island Projects

($000s)

Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
Bainbridge Island Trestle Impr	10,332	2,302							12,634
Bainbridge Island Multimodal Terminal Impr			1,849	5,954	48,060	25,393			81,256
Bainbridge Island Terminal Multimodal Impr		1,769	5,000	11,872					18,641
Bainbridge Island Terminal Preservation	11,225	12,301	23,877	0	3,643	2,616	3,804	7,970	65,436
Bainbridge Terminal Food Service Impr	310								310
Total	21,867	16,372	30,726	17,826	51,703	28,009	3,804	7,970	178,277

B. Project Expenditures the 2003-07 Biennia

Project expenditures are noted below from the 2003-07 biennia, through July 2006. No expenditures have been made from the two multimodal projects, with the preservation and trestle improvement projects bearing all expenses for right-of-way acquisition and terminal master planning. Expenditures from the multimodal project are scheduled for the 2007-09 biennium.

Bainbridge Island Project Expenditures 2003-07 Biennia (July 2006)

($000s)

PIN	930513A	930513B	930513D	930513C	930513E
Project Title	Trestle Impr	Preserv.	Food	Mulitmodal	Mulitmodal
BA 08 Trestle Widening	1,952	63			
006995 Preservation		7,940			
BA 33 Trestle & Slip 2 Replacement		1,419			
BA 34 Trestle Replacement Phase 2		270			
BA 20a Trestle Widening Mitigation	237				
BA37b - Right of Way Acqusition	1,955	552			
XL2543Terminal Master Planning/Overhead Loading/Terminal Buildinç	701	323			
MS5365 Transfer Span Hydraulic Cyclinder Procurement		261			
MS5426 Transfer Span HPU Procurement		166			
MS5588 Hydraulic Cylinder Replacment		26			
XL2232 Terminal Business Initiatives			8		
Total	4,845	11,020	8	0	0

C. Project Status/WSF Identified Risks

- Trestle Improvement: The trestle widening project is delayed due to permitting difficulties. The original permit application has been withdrawn upon recommendation of the hearing examiner. A new permit application will be submitted pending re-evaluation of the project in the context of the master plan. Project has been placed on the watch list for construction in fall 2008.

- Master Plan: Project consultant contract executed. Project goals established. Concepts under public review. Budgeting to the $168 million cost of the 1998 master plan. Design team slowed progress to allow for joint planning with the City of Bainbridge Island.
- Food Service – At 90% design, construction expected November 2006.
- Risks: (WSF Terminal Engineering Progress Report Sept. 2006)
  - City of Bainbridge Island/WSF issues on Eagle Harbor repair facility likely to affect the Bainbridge project.
  - Original project definition may be inadequate to address current community and city expectations with likely cost and schedule impacts.
  - The estimated funding for the WSF desired level of design, environmental documentation and construction falls short of the programmed budget by $10-15 million. The preferred alternative will be implemented in phases according to a prioritization of needs in order to meet the available funding.

D. Project Scope, Schedule and Budget Changes

The funds are programmed and anticipated to be authorized for Multimodal projects in the 2007-09 biennium. To date, $1,955,000 has been spent from the Improvement PIN for right-of-way acquisition and $701,000 from the Improvement PIN for master planning

E. Condition Report

Life-cycle and Condition Rating Bainbridge Island

Yr. Insp.	Life-cycle Rating	Units	State				Percent Good or Fair
	Vital	Measured	1	2	3	4	Condition
2006	92%	185,387	177,530	6,494	908	455	
%			96%	4%	0%	0%	99%

F. Observations

1. Projects Interrelated

The preservation, trestle improvement and multimodal projects are interrelated. No expenditures have been made from the two multimodal projects, but the master planning and right-of-way acquisitions being made through the preservation and trestle improvement projects are critical to the multimodal projects. This is particularly the case as environmental and cultural resource issues have delayed and may halt the trestle expansion project.

2. Long-Range Plan

Throughput, scope and new terminal sizing are based upon the 2030 long-range ridership projections, specifically the west bound PM commute.

3. Project Management

The process is being managed by an outside consulting planner with WSF staff support.

4. Master Plan

The master plan assumes holding for 575 cars established to provide Level of Service A on the 180 busiest day. (Level of service A is a 0 to 4 minute wait before entering the vehicle holding area.)

5. Schedule

- Summer 2006 – Refine design concepts
- Fall 2006 – Identify alternatives
- Early 2007 – Public and agency scoping
- Summer 2008 – Draft environmental document
- Fall 2008 – Final environmental document
- 2009 – Begin construction

With selection of a preferred alternative in January 2007, the schedule proposed for the terminal project is not likely to be met. Items that have not been performed yet include cost estimates for the alternatives, undertaking cost-benefit analyses, start land acquisition process for the preferred alternative, phasing of the master plan into achievable sections, and initiation of detail design.

6. Cost-benefit analyses/life-cycle cost analyses

Have not been done

7. Flexibility

There are no plans to stagger the phasing with ridership.

8. Environmental

There are significant cultural, environmental and permitting issues associated with this project. The City of Bainbridge Island has imposed several program elements such as vehicle holding, city street improvements, utility improvements and pedestrian walkways. As noted by WSF, problems with the City over the Eagle Harbor Repair Facility are likely to spill over to this project.

9. Ancillary revenue

The food service project moves an existing outdoor concession stand into the current terminal.

10. Condition

The Bainbridge Island terminal is in good condition, with the inspection reports showing that the terminal has 96% of its inspected structures in good condition and an additional

4% in fair condition. The terminal building, which is not part of the bridge inspections, is out of compliance with current seismic codes.

Bremerton

A. Projects

There Bremerton preservation project has a budget of $90 thousand for the 2005-07 biennium and $22.7 million for the 2005-21 biennia. The catch-up preservation project is discussed under systemwide catch-up preservation.

Bremerton Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
930410R	Bremerton Terminal Preservation	90	95		7,706		8,994	1,594	4,267	22,746
999940D	Catch-Up Preservation									
	BR03 Slip 1 Dolphins			2,909						2,909
	BR10 Slip 2 Dolphins			4,656						4,656
	BR18 Apron Replacement Slip 1			291						291
	Bremerton Total	90	95	7,856	7,706		8,994	1,594	4,267	30,602

The Bremerton terminal was rebuilt in 1990 and is "…the first of WSF's planned multimodal terminals. … The Bremerton terminal features ferries and buses plus amenities for pedestrians and bicyclists. … The Bremerton terminal project is nearly complete, with the only remaining phase being a tunnel for ferry traffic to bypass several blocks of congested downtown streets." (Draft Long-Range Strategic Plan Technical Appendix G p. 32-33) The tunnel will not be a WSF expense, although WSF has a project manager assigned to coordinate with WSDOT on the tunnel.

B. Project Expenditures 2005-07 Biennium

Through August 2006 only $3,000 has been spent under the Bremerton preservation project.

C. Project Status/WSF Identified Risks

- Preservation project: In the 2005-07 biennium the budget of $90,000 is for a new agent's office. The project is not complete.

D. Project Scope, Schedule and Budget Changes

Not applicable to this project.

E. Condition Report

Life-cycle and Condition Rating Bremerton

Terminal	Yr. Insp.	Life Cycle Rating	Units	State				Percent Good or Fair
		Vital	Measured	1	2	3	4	Condition
Bremerton	2006	78%	95,018	72,563	16,151	3,245	3,016	
%				76%	17%	3%	3%	93%

F. Observations

1. Interim Preservation

The 2005-07 biennium budget includes $95,000 for non-life-cycle overhead loading control system modifications. This report recommends that this type of maintenance work not be considered capital.

2. Steel Structures

The capital plan includes replacing a steel dolphin (inventory item 2203) installed in 1998 and a steel wingwall (inventory item 2208) installed in 1999. This assumption is based on a 20 year life for the dolphin and a 25 year life for the wingwall. Neither may be necessary in the 2017-21 biennia in which they are planned for replacement.

3. Condition

The Bremerton terminal is in fair condition, with the inspection reports showing that the terminal has 76% of its inspected structures in good condition and an additional 17% in fair condition.

Clinton

A. Projects

There are two projects at Clinton with budgets of $289 thousand for the 2005-07 biennium and $38.8 million for the 2005-21 biennia.

Clinton Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
952616I	Clinton Overhead Loading	0	0	0	4,358	24,260				28,618
952516H	Clinton Terminal Preservation	289	251	262	276		1,246	111	7,739	10,174
	Clinton Total	289	251	262	4,634	24,260	1,246	111	7,739	38,792

The Clinton terminal was rebuilt in 2003 at a total cost of $39.9 million from 1991-2005. "It now has two slips and no overhead loading, but the trestle was built to accommodate future construction of a third slip and overhead loading that will serve the two primary slips." (Draft Long-Range Strategic Plan Technical Appendix G p. 58)

B. Project Expenditures 2005-07 Biennium

Project expenditures are noted below from the 2005-07 biennium, through August 2006.

Clinton Project Expenditures 2005-07 Biennium (August 2006)

($000s)

PIN	Project	Aug. 06
952516H	Preservation	
	007114 Physical Security Infrastructure	37
	MS2597 Eelgrass Mitigation	82
	Total	119

C. Project Status

- Septic System Replacement: The life-cycle cost model includes $50,000 for septic system replacement. Nothing has been expended to date on this project.
- Security Infrastructure: This was not included in the life-cycle cost model budget.
- Eelgrass Mitigation: Two hundred and thirty-nine thousand dollars ($239,000) was budgeted for this element of the project and is a non-life-cycle expense.

D. Project Scope, Schedule and Budget Changes

Not applicable to this project.

E. Condition Report

Life-cycle and Condition Rating Clinton

Yr. Insp.	Life Cycle Rating	Units	State				Percent Good or Fair
	Vital	Measured	1	2	3	4	Condition
2005[1]	100%	259,317	258,401	908	7	1	
%			100%	0%	0%	0%	100%

[1] One dolphin listed as state 3, two listed as state 4

F. Observations

1. Preservation budget

This budget is for on-going eelgrass monitoring and is a non-life-cycle expense.

2. Overhead loading

This improvement is scheduled for the 2011-15 biennia. A cost-benefit and full life-cycle cost analysis should be completed prior to adding this feature at the terminal. A decision to fund this element should also be dependent on ridership.

3. Condition

The Clinton terminal is in good condition, with the inspection reports showing that 100% of the terminal's inspected structures are in good condition.

Eagle Harbor Repair Facility

A. Project

The Eagle Harbor repair facility project, which includes property acquisition, continued Superfund monitoring and maintenance at the facility, has a budget of $15.6 million for the 2005-07 biennium and $37.4 million for the 2005-21 biennia.

Eagle Harbor Repair Facility
($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900040N	Eagle Harbor Terminal Preservation	15,617	20,899				691	161		37,368
	Eagle Harbor Total	15,617	20,899				691	161		37,368

B. Project Expenditures Life to Date through July 2006

Eagle Harbor Repair Facility Project Expenditures through July 2006
($000s)

	July 06
Property Acquisition	1,808
Planning	449
Tribal	4
Environmental	57
Design Slip B	1,074
Design Projects 2 & 3	1,719
Design Phase 2	168
Construction Hydraulics	4
Construction Slip B	5105
Construction Phase 2	1
Legal/Right of Way/Covenant/Memorandum of Agreement	190
Other Projects	486
Public Involvement	103
Total	11,168

Source: WSF

C. Project Status/WSF Identified Risks

- Master Plan and Phasing:
  - Phase 1 – Slip conversion of Slip B from a walk-on to a drive-on slip is complete.
  - Phase 2 – Repairs to dock facilities including replacement of piles and support beams and remodeling of the maintenance building. This phase is delayed for one year (current estimate) due to a challenge to permitting under the State Environmental Protection Act (SEPA) (see risk discussion below).

- Phase 3a – Initial build out of a maintenance building annex. This phase is delayed for two years (current estimate) due to the SEPA challenge.
- Phase 3b – Construction of a permanent storeroom and training facility (not funded**).**

- Risks: (WSF Terminal Engineering Progress Report July 2006)
  - Funding – The scope of Phases three through five (currently Phases 3a and 3b) has changed several times without a corresponding budget adjustment. Program scope is now trimmed to the minimum that will still provide improved functionality of the facility. Further reduction would deter from the intended benefit of the improvements. Inflation on materials and labor has increased significantly in the region and this has not been accounted for in the budget. The design and construction costs of the new hydraulically actuated transfer span were added in part to the project with no additional funding.
  - Permits – A Shoreline Substantial Development Permit (SSDP) is required for Project 3. The SSDP requires several variances on height, setback and landscaping. If the city does not grant these variances, it will impact the size of the building. The SSDP is also tied to the Memorandum of Agreement (MOA) between WSF and the City of Bainbridge Island. The city may want more than one acre for the MOA area, which would reduce the usable area of the facility and limit truck movement around the site.
  - Public Relations and Litigation – Community pressure may influence the legislative effort to freeze funding until further study of alternative locations is completed. There is litigation pending over the city's and local citizens' challenge of lead agency status for the State Environmental Protection Act process, as well as WSF's Declaration of Non-Significance. This is causing delays in permitting, plans, specifications and estimates, and construction. Funding may need to be distributed past the 07-09 biennium and additional funding would be required to cover litigation and delay costs.

D. Project Scope, Schedule and Budget Changes

E. Condition Report

Life-cycle and Condition Rating Eagle Harbor Repair Facility

	Life Cycle Rating	Units	State				Percent Good or Fair
Yr. Insp.	Vital	Measured	1	2	3	4	Condition
2005[1]	57%	155,189	143,099	7,488	2,396	2,206	
%			92%	5%	2%	1%	97%

[1] State 3 and 4 deficiencies are mainly coal tar epoxy coating deficiencies

F. Observations

1. Community Costs

The project costs include $871,000 in Shoreline Substantial Development Permit mitigation measure costs as outlined below.

Eagle Harbor Repair Facility
Community Costs

Mitigation Measure	Budget
North fence with signs	$28,600
Fencing	40,500
Pedestrian lighting	66,000
Physical security	300,000
Landscaping	23,800
Screen wall	393,000
Trail	19,000
Total	870,900

2. Project Management

The project is managed by state staff.

3. Budget

Outlined below is the modified budget for this project which reflects changes in scope and phasing. The budget reflects delaying full build out of the annex for the training center and storage.

Eagle Harbor Repair Facility
Budget Modifications
($000s)

	2003-09 Prior & Budget V2007-1	2003-09 Master Plan (Planned)	2003-09 Revised Scope (Planned)
Maintenance Building	15,706	19,919	18,540
Blue Building/Annex	1,270	17,990	5,144
Archaeologist		18	18
Yard Pier	5,804	563	563
Utilities	1,887	1,681	1,138
Slip B		7,434	7,434
Slip E	6,337	104	104
LEEDS		659	
WSF Parking (Stripe & Light)		141	141
Moving & Labor Costs		921	859
SSDP Mitigation Measure		933	871
Trask Pier (POF tie-up)	2,942	98	98

	2003-09 Prior & Budget V2007-1	2003-09 Master Plan (Planned)	2003-09 Revised Scope (Planned)
Bulkhead/Rip Rap	334		
Eagle Harbor Planning	800	207	207
Pier 1	47		
Weld Shop	212		
Tool Room	157		
Right of Way - Winslow Property	2,000	2,000	2,000
Total	37,496	52,668	37,117
Spent Unfunded Scope ($2,358)			
H-Span (1,500 included in Slip B above)			
Previous Projects (123)			
Shoreline Redesignation Effort		77	77
Resolve DNR Lease		26	26
Covenant Resolution		8	8
KPFF effort Jan 03- Jan 05		235	235
Directors Redirectives		277	277
Rebuild P3e Schedule to new standards		98	98
Public Disclosure Request		5	5
Unfunded Total		726	726
Grand Total		53,394	37,843
Change from V2007-1 Budget		15,898	347

4. Master Plan

An analysis was performed in consideration of consolidating storeroom functions and relocating the contents from the 6th Avenue warehouse to Eagle Harbor. See the High Level Logistics Study by CNA Consulting.

5. Schedule

- Project #1 – Slip conversion, completed 2006.
- Project #2 – Dock/Pier repairs, remodel Maintenance Building, estimated $21.2 million, 2007 start anticipated.
- Project #3 – Maintenance Building Annex (first phase), $6.4 million estimated, on hold. As noted above the schedule has slipped due to permitting problems.

6. Cost-benefit analyses/life-cycle cost analyses

WSF has conducted a cost-benefit analysis on the potential relocation of the repair facility to Seattle. A report, *Condition Evaluation and Seismic Study of Eagle Harbor Building A and Yard Piers* February 2005 by Berger/Abam, compared the life-cycle costs of building new piers compared to maintaining the existing piers. The study concluded that "the likely cost for maintaining the piers for another 30 years of service and

providing a seismic retrofit for both would be approximately one-fourth the cost of demolishing the entire piers ($25 per square foot) and building new ($125 per square foot)." (p 1-1)

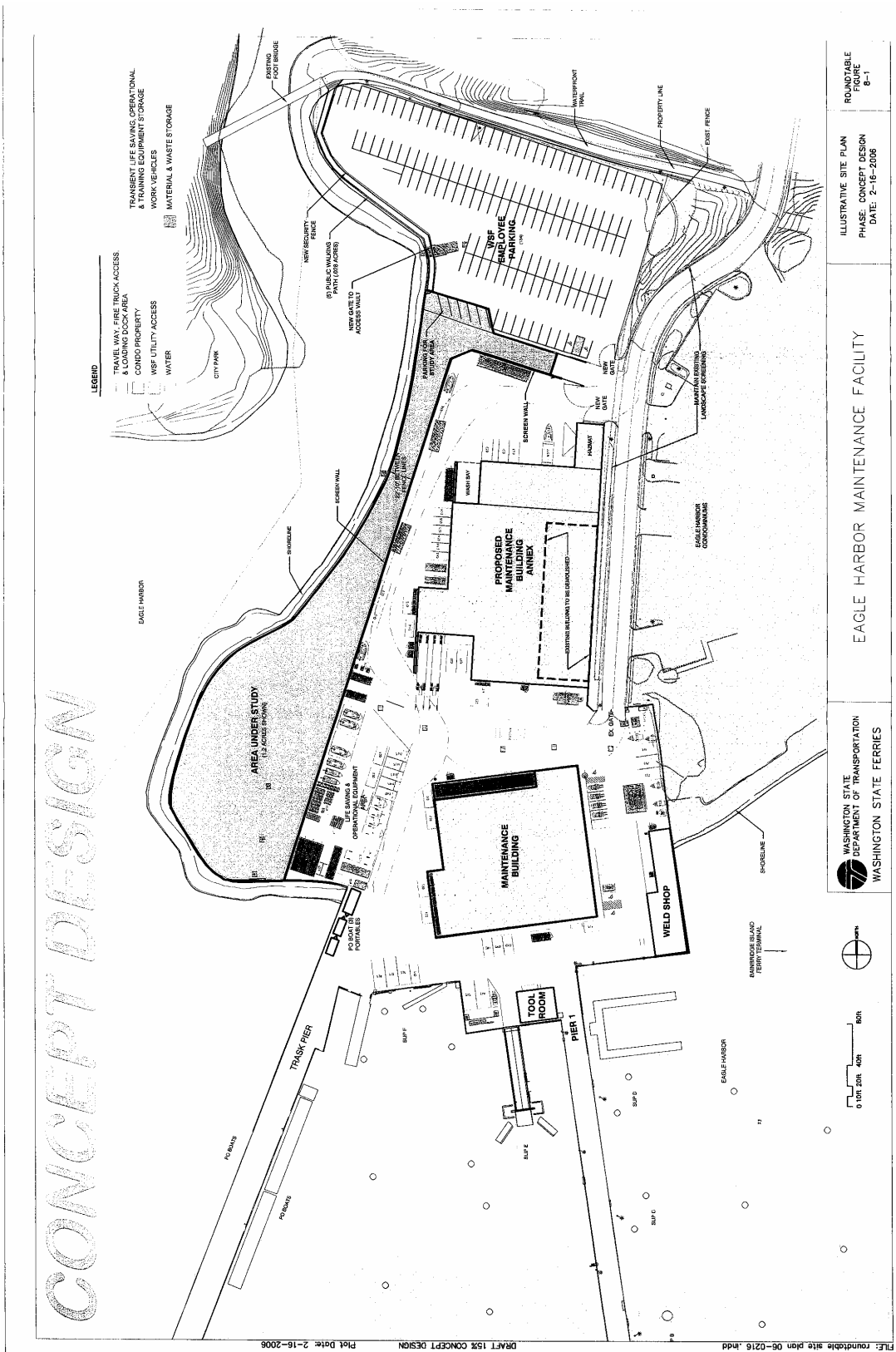
7. Condition

The Eagle Harbor terminal is in good condition, with the inspection reports showing that the terminal has 92% of its inspected structures in good condition and an additional 5% in fair condition. Inspections conducted as part of the Berger/Abam study found that the "general conditions of the pier elements ranged from excellent to fair." (p. 1-1)

There are several concerns with the foundations of the Maintenance Building and Yard Pier, and concerns with Slip E that are not represented in the overall ratings, which summarize all structures at the facility. These concerns include:

- Rotting timber piles with 75% capacity or less (Trask Pier, Yard Pier, and underneath Maintenance Building)
- Rotting timber caps and stringers on the docks
- Timber piles not accessible for inspection
- Inadequate load bearing member support for the columns in the Maintenance Building

The maintenance building structure and foundation, which are not included in the bridge inspection reports have been in service for over 60 years. Awareness of seismic risk in the region, especially waterfront sites like Eagle Harbor, has increased as a result of the 28 February 2001 Nisqually Earthquake. The issues of structural age, condition, maintenance costs and newly appraised environmental loading were considered by WSF.


CONCEPT DESIGN
EAGLE HARBOR MAINTENANCE FACILITY
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
WASHINGTON STATE FERRIES
ILLUSTRATIVE SITE PLAN
PHASE: CONCEPT DESIGN
DATE: 2-16-2006
ROUNDTABLE FIGURE 8-1
LEGEND
TRANSIENT LIFE SAVING, OPERATIONAL & TRAINING EQUIPMENT STORAGE
WORK VEHICLES
MATERIAL & WASTE STORAGE
WATER
WSF UTILITY ACCESS
CONDO PROPERTY
TRAVEL WAY, FIRE TRUCK ACCESS & LOADING DOCK AREA
PROPOSED MAINTENANCE BUILDING ANNEX
MAINTENANCE BUILDING
WELD SHOP
TOOL ROOM
AREA UNDER STUDY
TRASK PIER
PIER 1
EAGLE HARBOR
BAINBRIDGE ISLAND FERRY TERMINAL
SHORELINE
SCREEN WALL
NEW GATE
NEW SECURITY FENCE
WSF ENCLOVEE PARKING
WATERFRONT TRAIL
PROPERTY LINE
EXIST. FENCE
EXISTING FOOT BRIDGE
CITY PARK
EAGLE HARBOR CONDOMINIUMS
MAINTAIN EXISTING LANDSCAPE SCREENING
PARKING FOR STUDY AREA
(E) PUBLIC WALKING PATH (NOW CLOSED)
NEW GATE TO ACCESS VAULT
HAZMAT
WASH BAY
EX. GATE
LIFE SAVING & OPERATIONAL EQUIPMENT
PO BOATS
SLIP F
SLIP D
SLIP C
SLIP E
0 10ft 20ft 40ft 80ft
FILE: roundtable site plan 06-0216 .indd
DRAFT 15% CONCEPT DESIGN
Plot Date: 2-16-2006

Edmonds

A. Project

There is one project at Edmonds with a budget of $1.5 million for the 2005-07 biennium and $57.6 million for the 2005-21 biennia. The project will move the terminal two-thirds of a mile to property formerly owned by Unocal. The project PIN is defined by WSF as funding "…the legislatively determined state share of a partnership between the City of Edmonds (Sponsor) and WSF to build the Edmonds Multimodal Terminal. The WSF project contributes only part of the funding for the acquisition of a new site and building of a new ferry terminal of similar capacity to the existing terminal. The terminal will have a single slip and a passenger overhead loading. It will also provide for grade separation between ferry and rail traffic. When increased ridership warrants and additional funding is available, the facility's capacity will be expanded and multimodal facilities added." (WSF Edmonds Terminal Project Data Notebook Section C)

Edmonds Project

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
910413M	Edmonds Multimodal Terminal	1,500	3,000	3,000	4,295	23,170	22,642			57,607
	Edmonds Total	1,500	3,000	3,000	4,295	23,170	22,642	0	0	57,607
PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total

B. Project Expenditures 2003-07 Biennia

Project expenditures to date from state funds are $8.5 million. In addition to the $57.6 million in the 2005-21 biennia funding, the project has funding of $16.8 million from the United States Department of Transportation (USDOT), of which $4.5 million has been spent primarily on the Environmental Impact Statement (EIS).

Edmonds Project Expenditures Life to Date (as of July 2006)

($000s)

PIN		July 06
ED02.M000	Project Management	135
ED02.S000	Scoping and Planning	8
ED02.E	Permitting	77
ED02.N000	Public Involvement	1
ED02.A000	Real Estate Acquisition	8,233
ED02.D	Design Report	16
Federal	EIS	4,542
	Total	13,011

Source: WSF Earned Value Report 8/14/06

C. Project Status/WSF Identified Risks

- Property Acquisition: A portion of the site has been acquired from Unocal contingent upon Unocal undertaking the environmental clean-up and mitigation of the site.

Appraisal of the upper yard property is complete and an offer should be made in September 2006.

- A Final EIS was issued in November 2004, with a preferred alternative identified. The preferred alternative is identified as the Point Edwards site. When fully complete, the new terminal would have three slips, space for 820 waiting vehicles and a multimodal center in the lower yard. The multimodal center would include a new railroad station, bus terminal, 460-space parking garage, 90-space short-term parking lot, 30-space employee parking area, and weather-protected pedestrian walkway connecting people from the multimodal center to the ferry terminal.
- WSF has assumed the project management role, formerly provided by the City of Edmonds, for the design and permitting process.
- Risks:
  - Existing state and partnership funding will not complete the initial phase of construction. Thirty-seven million dollars ($37 million) in May, 2006 dollars is needed to complete the first construction; $65 million in May, 2006 dollars more will complete the final phase of terminal construction
  - The project is relying on Regional Transportation Improvement District (RTID)/Sound Transit 2 (ST 2) funding. Existing state funding will not allow for a functioning terminal. (WSF Terminal Engineering Progress Report Sept. 06)

D. Project Scope, Schedule and Budget Changes

A separate Project Identification Number (PIN) was used for property acquisition, PIN 910413N0. WSF used $7.8 million from this PIN along with $375,000 transferred from the project PIN (910413M) for acquisition of the Chevron/Unocal property in the 2003-05 biennium.

The Edmonds Multimodal Terminal project, PIN 910413M, has changed from providing a small amount of funds to the City of Edmonds to supporting right-of-way, design and construction of the new terminal.

1. Scope Changes 2003-2006

As noted above, the PIN is described as rebuilding a terminal with similar capacity to the current one. The current Edmonds terminal has "…a single slip with ADA-compliant overhead loading for pedestrians accessed from a new, temporary, terminal building. … Five holding lanes served by three toll booths are located upland a couple of blocks …approximately 160 vehicles can fit in this area …the causeway and trestle have three holding lanes that are each about 20 vehicles long…" (Draft Long-Range Strategic Plan Technical Appendix G p. 45)

The project as now planned is for a much larger capacity and is no longer to replace the terminal with something that is similarly sized.

In 2003 the project was described as contributing funds to a partnership with the City of Edmonds in relocating and building a new Multimodal Terminal (Edmonds Crossing Multimodal Terminal Project).

In March 2004, the project was described as funding the new Edmonds Crossing Multimodal Terminal with funds provided to support ongoing design phase activities with the City of Edmonds. The new terminal will relieve congestion and problems on local streets; improve pedestrian and vehicle safety; and allow WSF to meet ridership demand in the future. This new facility will be built in multiple phases. The Project Control Form July 7, 2004 goes on to state: "In addition to the $2.2 million in design support, the revised project funds the first phase of the Edmonds Crossing Multimodal Terminal. This phase builds a new terminal of similar capacity to the existing terminal at the new site, with the addition of a grade separation between ferry and rail traffic…. Additionally, the new terminal will help WSF meet projected ridership growth on the route."

In July 2004, the V2005-3A statement notes that the scope will include construction of the ferry terminal, including possible expansion. This is the first reference to expansion of the new terminal rather than replacing the existing terminal with one that is similar in size.

2. Budget Changes 2003-2006

The budget has grown from an original 2003 design budget of $2.2 million for engineering to include additional engineering, construction and right-of-way funding.

Edmonds Multimodal Terminal Budget

($000s)

	LEAP 2003	LEAP 2004	LEAP 2004	LEAP 2005			LEAP 2006
	V2003-7	V2005-2	V2005-3	05 LEGFIN	V2005-3A	V2005-4	V06 LEGFIN
Preliminary Engineering	2,200	2,200	18,898	10,549	18,898	18,898	10,146
Construction			50,231	25,116	50,231	50,231	47,758
Right of Way							375
Total	2,200	2,200	69,129	35,665	69,129	69,129	58,279

Project Schedule

The schedule in July 2004 called for construction to get underway in the 2005-2015 ten-year programming period, with construction of the ferry terminal including possible expansion and multimodal facilities, completed after 2015. The schedule has remained consistent.

E. Condition Report

Life-cycle and Condition Rating Edmonds

Yr. Insp.	Life Cycle Rating Vital	Units Measured	State 1	2	3	4	Percent Good or Fair Condition
2005[1]	98%	52,365	41,866	6,245	4,243	24	
%			80%	12%	8%	0%	92%

[1] State 3 is 95% coal tar epoxy coating failure, state 4 includes one dolphin

F. Observations

1. Long-Range Plan

Throughput, scope and new terminal sizing are based on the 2030 long-range ridership projections. The plan assumes that two slips of the terminal will be complete by 2017 to service what is anticipated to be a third Jumbo class vessel in the summer months on the Edmonds-Kingston route.

2. Project Management

WSF is in the process of assuming project management responsibility. "In recent months, WSF has expanded its available workforce, seen changes in the level of accountability required for projects, and issued a draft Long-Range Plan that identifies more detailed goals associated with the Edmonds terminal. These changes have played a major role in our decision to take a more active role in the Edmonds Crossing project and influenced the proposal to change the management structure for the project." (Letter WSF to City of Edmonds August 22, 2006 p.1)

3. Budget

WSF has identified as the primary risk to this project the lack of funding to complete a workable terminal without support from either RTID or ST2. The terminal portion of the project under the preferred alternative is estimated at $167.1 million; with Phase I estimated at $107.6 million and an additional $57.1 million required to complete full project buildout of the Phase 2 facilities. (All costs in May 2006 dollars.)

4. RTID & ST 2

As of July, 2006 the RTID Blueprint for Progress list includes $123.4 million for the Edmonds Crossing Project. ST 2 includes $50.2 to $57.8 million for the project. Both proposals are being reviewed in light of cost increases. Whether the Edmonds project will remain on either or both lists for a possible November 2007 ballot issue is unknown.

5. Master Plan

a. Vehicle Holding Area: The master plan provides a holding area for 820 vehicles and was established using worst-case scenarios of 1) level of service A for median day, 2) projected number of vehicles during the 4-hour peak, 3) meeting a level of service for

the 30th highest day of ridership. The level of service standard for this route is a one boat wait – which is 144 cars.

6. Schedule

- 2012 – Start construction
- 2015 – Operationally complete

7. Cost-Benefit Analysis/Life-cycle Cost Analyses

An analysis of operating costs has been undertaken which shows much higher operating costs for this terminal than the existing one. In particular, the Environmental Impact Statement (EIS) for the Edmonds project shows that the total operating cost for phase one of the preferred alternative would be $3.5 million, and for phase two, $4.7 million. The estimates for the new terminal include operating and maintenance costs for the multimodal center. Some of these costs would transfer to Sound Transit, Amtrak and Community Transit although final operational agreements have not been reached. By comparison the 2003 route summary statement shows the operating cost for both the Edmonds and the Kingston terminals was $4.5 million. How this will impact future farebox recovery is not clear.

Edmonds Annual Operation & Maintenance Costs[1]

(2003 dollars, 000s)

	Operation	Maintenance	Total
Phase I Ferry terminal and holding area	3,567	941	4,508
Phase II Multimodal center, holding area, parking garage	3,179	1,489	4,668
Route Summary - Both Kingston-Edmonds terminals	3,768	749	4,517

Source: Edmonds Crossing Final EIS p. 5-2

8. Flexibility

This terminal can be, and is planned to be, staggered with ridership growth. However, even the first phase will include much larger vehicle holding areas and terminal size than the current terminal.

9. Environmental

The primary environmental issue is cultural resources. WSF's quarterly progress report indicates that they have reached agreement with three tribes and are engaged in further discussion with one other.

10. Condition

The existing Edmonds terminal is in good condition, with the inspection reports showing that the terminal has 80% of its inspected structures in good condition and an additional 12% in fair condition. WSF plans to re-utilize some of the existing terminal elements when it is torn down.

[1] WSF noted an error in the EIS in December, 2006 correspondence. The Phase I costs operating costs should be $2,567,000 not $3,567,000

Fauntleroy

A. Projects

There are two projects at Fauntleroy with budgets of $150 thousand for the 2005-07 biennium and $24.8 million for the 2005-21 biennia.

Fauntleroy Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900005F	Fauntleroy Ferry Terminal Preservation					563	3,042	13,181	7,516	24,302
900005L	Fauntleroy Terminal Preservation	150	350							500
	Fauntleroy Total	150	350			563	3,042	13,181	7,516	24,802

PIN 900005L in the 2005-09 biennia includes $400,000 for interim trestle preservation and $100,000 for an emergency generator for the point of sale system. PIN 900005F is for terminal replacement.

B. Project Expenditures 2005-07 Biennium

Project expenditures for PIN 900005L for the 2005-07 biennium are $2,687.

C. Project Status

The 2005-07 biennium planned projects have not started.

D. Project Scope, Schedule and Budget Changes

Not applicable to this project.

E. Condition Report

Life-Cycle and Condition Rating Fauntleroy

Yr. Insp.	Life Cycle Rating Vital	Units Measured	State 1	State 2	State 3	State 4	Percent Good or Fair Condition
2006[1]	73%	149,720	146,808	2,719	174	19	
%			98%	2%	0%	0%	100%

[1] State 4 includes one dolphin

F. Observations

1. Long-Range Plan

The Draft Long-Range Strategic Plan assumes no changes at the Fauntleroy terminal in light of constraints imposed by the City of Seattle that would make it difficult to expand. The plan notes that the terminal "…was expanded in 1984 and underwent a major refurbishment in 2002. WSF plans to replace the terminal building during the 2017-19 biennium." (Draft Long-Range Strategic Plan Technical Appendix G p. 31-35)

2. Condition

The Fauntleroy terminal is in good condition, with the inspection reports showing that the terminal has 98% of its inspected structures in good condition and an additional 2% in fair condition.

3. PIN 900005F

The $24.3 million budget for this PIN for the 13-21 biennia is built from the life-cycle cost model and includes funding to replace all systems, which is unlikely to occur. The budget should be revised if a condition report performance system is developed.

With the exception of $500,000 in 2005-09, all funding is provided by the 2005 Transportation Partnership Act. This funding is to preserve the north half of the timber trestle, built in 1957 and due for replacement in 1997 (40-year life). Inspection of the trestle indicates that it currently remains serviceable. Replacement is scheduled for 2017, when it will be 60 years old. Future inspections may identify a need to accelerate replacement. None of the funding is for expansion of the terminal.

Friday Harbor

A. Projects

There are three projects at Friday Harbor with budgets of $7.5 million for the 2005-07 biennium and $22.7 million for the 2005-21 biennia.

Friday Harbor Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900028R	Friday Harbor Master Plan	250								250
900028S	Friday Harbor Additional Holding Area	150	600							750
900028Q	Friday Harbor Terminal Preservation	7,121				3,039	5,398	4,042	2,076	21,676
	Friday Harbor Total	7,521	600			3,039	5,398	4,042	2,076	22,676

B. Project Expenditures 2005-07 Biennium

Project expenditures are noted below from the 2005-07 biennium, through August 2006.

Friday Harbor Project Expenditures 2005-07 Biennium (August 2006)

($000s)

PIN	Project	Aug. 06
900028Q	Terminal Preservation	
	006737 Terminal Preservation	4,763
	007034 Tie-up Slip	1,556
	007090 Terminal Building Remodel	514
	XL2678 Tie-up Slip Design	23
	XL 2751Terminal Building Remodel	77
	Total	6,933
900028R	Master Plan	
	MS5484 Transportation Planning	76
900028S	Additional Holding Area	0
	Total Friday Harbor Projects	7,009

C. Project Status/WSF Identified Risks

- The Friday Harbor terminal preservation project was completed in 2006. Work included the repair or replacement of the towers, transfer span and apron, bridge seat, wingwalls and dolphins. In addition, a new restroom facility was added and the tie-up slip was reconstructed.
- The additional holding area project was deleted from the 2006 LEAP project list. It was intended to improve the Park & Ride lot to encourage more walk-on traffic. (See Draft Long-Range Strategic Plan, Technical Appendix G p. 88)

D. Project Scope, Schedule and Budget Changes

E. Condition Report

Life-cycle and Condition Rating Friday Harbor

Yr. Insp.	Life Cycle Rating Vital	Units Measured	State 1	2	3	4	Percent Good or Fair Condition
2005[1]	82%	52,833	44,817	7,915	148	3	
%			85%	15%	0%	0%	100%

[1]Four dolphins listed as State 3, one listed as State 4

F. Observations

1. Future preservation projects

The preservation budget contemplates $3 million in the 2013-15 biennium to replace dolphins, one of which is a steel dolphin installed in 1995. WSF notes: "Steel dolphin # 2494 is an old-style 2-pile dolphin that is incorrectly given a 25-year life in the life-cycle cost model. It is expected to need replacement by 2015. As the time for replacement approaches, it will be inspected and a final determination will be made." (WSF Dec. 2006)

In the 2017-21 biennia major work is planned on the upland parking, crew quarter areas, the trestle and replacing a terminal building constructed in 1992. The budget includes replacement of all systems. This should be reviewed once the life-cycle cost model is updated based on condition and revised standard life-cycles.

2. Condition

The Friday Harbor terminal is in good condition, with the inspection reports showing that the terminal has 85% of its inspected structures in good condition and an additional 15% in fair condition.

Keystone

A. Project

There is one project at Keystone with a budget of $2.2 million for the 2005-07 biennium and $31.2 million for the 2005-21 biennia.

Keystone Project

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
902017J	Keystone Alternative	2,200	16,231	12,800						31,231
	Keystone Total	2,200	16,231	12,800						31,231
PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total

B. Project Expenditures 2005-07 Biennium

Project expenditures are shown below for the 2005-07 biennium through August 2006.

Keystone Project Expenditures 2005-07 Biennium (August 2006)

($000s)

PIN	Project	Aug. -06
XL2460	Terminal Preservation Alternative	840,115

C. Project Status/WSF Identified Risks

- Study: The Keystone Harbor Study was completed January 7, 2005. The study identified four alternatives: relocate the jetty 300 feet to the east and widen the harbor to the east to accommodate a lager vessel with capacity between 124 and 144 cars; extend the jetty 600 feet into the water and widen the harbor to the west to accommodate a larger vessel between 124 and 144 cars; use the existing harbor and acquire new, unique vessels with a special propulsion system that would allow them to operate in the existing Keystone Harbor; or use the existing harbor and terminal and acquire new vessels that are similar in size to the existing vessels, approximately 65 car capacity.
- Options currently being studied: The September 2006 terminal engineering progress report identifies the project as including options to restore the terminal and prepare for the retirement of the Steel Electric vessels. Options include:
  - Relocation of the jetty 300 feet to the east and dredging the entrance to the harbor to the east to allow for service with an Issaquah class vessel.
  - Extend jetty and widen the harbor entrance to the west to allow for service with an Issaquah class vessel.
  - Utilize the existing harbor with a new 100-car/smaller draft vessel that has a special propulsion system.
  - Utilize existing harbor with a new vessel with a similar hull size to the existing Steel Electric serving the Keystone Port Townsend route.
  - Out of harbor alternative at Red Barn Site.
- Risks: (WSF Terminal Engineering Progress Report Sept. 2006)
  - Overall WSF financial concerns

- Vessel decision
- State Parks, Corp of Engineers, Legislator concerns, Ebey's Landing. (Note the harbor and terminal are part of Ebey's Landing National Historic Reserve)

D. Project Scope, Schedule and Budget Changes

E. Condition Report

Life-cycle and Condition Rating Keystone

	Life Cycle Rating	Units	State				Percent Good or Fair
Yr. Insp.	Vital	Measured	1	2	3	4	Condition
2006	30%	11,427	9,754	1,538	130	5	
%			85%	13%	1%	0%	99%

F. Observations

1. Harbor Study and Long-Range Plan

In conducting the analysis of these four alternatives the Keystone Harbor Study concluded that option four, using the existing harbor and acquiring new vessels the size of the current ones, would have the highest total life-cycle costs because "…the additional cost of a third vessel on the route, and the fact that the costs cannot be shared with the rest of the system." (p.2) Both of these assumptions are reliant on the forecasts of ridership. It is assumed that given ridership projections "the Keystone Special vessel would have no utility elsewhere in the system, as its size and speed would not meet service schedules and capacity needs on any other route beyond 2010". (p. 20) The study also states that "[d]uring the period FY 2011 through FY 2017, there will be travel demand for two (Keystone Special) vessels in the summer and one vessel in the winter….During the period FY 2018 through FY 2041, there will be travel demand for three vessels in the summer and two in the winter." (Keystone Ferry Terminal Study Cost Analysis of Alternate Courses of Action p. 11) If these two assumptions related to ridership increases are not made, the total life-cycle cost of the Keystone Special vessel would be less than the other three alternatives.

2. Port Townsend

The Keystone and Port Townsend terminal projects are interrelated. "The root need for examining alternatives to the existing Keystone terminal and Port Townsend terminal is WSF's decision to replace its 76-year-old Steel Electric class vessels, the only WSF vessel class that can use the existing Keystone harbor. … Keystone harbor and the existing facilities at both Keystone and Port Townsend need to be either upgraded to accommodate the Issaquah 130 Class or other vessel with similar characteristics … or the terminals need to be relocated and redeveloped at an alternative site where the navigational and upland holding and ingress/egress requirements of the replacement vessels can be more effectively accommodated." (WSF Purpose and Need Nov. 24, 2003

p. 2) Additional costs to accommodate the larger vessels at the Port Townsend terminal were not considered in the Keystone Harbor Study.

3. Keystone Cancellations

Because of low tides, strong currents, wind and wave conditions as well as fog, vessels have grounded in the Keystone harbor. WSF has adopted a policy that ferries may not enter the harbor when cross-currents at the mouth of the harbor exceed 3.5 knots or if fog limits visibility. WSF is able by consulting tide charts to schedule these cancellations. In 2001 there were 91 scheduled cancellations, in 2002, 91scheduled and 6 unscheduled (due to fog) cancellations, in 2003, 83 scheduled and 12 unscheduled cancellations. The scheduled cancellations represent approximately 2% of the of the 4,410 annual scheduled trips from Keystone. (WSF Purpose and Need Nov. 24, 2003 p. 3) The WSF web site notes that the ability to schedule cancellations makes this a workable situation. "Yes (it works). The traveling public understands the concern for safety, and appreciates the opportunity to plan ahead and minimize the inconvenience." (www.wa.wsdot.gov/ferries)

4. Project Management

The project is being managed by WSF staff.

5. Budget

The 2005-07 biennium budget total is $31.3 million, of which $25.5 million is for construction. The Keystone Harbor Study identified the terminal construction costs for the two options that do not use the existing terminal as ranging from $31 million to $51 million. It is likely that the cost of relocating the terminal will be higher than the amount allocated.

6. Schedule

- 2004 – WSF begin EIS process and harbor alternatives study
- June 2004 – Keystone Citizen Advisory Group formed
- Winter 2005 – WSF submits Keystone Harbor Study recommending four alternatives
- Spring 2005 – $31.4 million allocated for the project
- Spring 2006 – WSF begins SEPA environmental review
- Winter 2007 – Draft EIS scheduled for public comment
- 2008 – Final EIS issued
- 2008-2009 – Port Townsend terminal construction
- 2009 – Hood Canal bridge closure
- 2009-2010 – Keystone preservation or reconstruction begins

7. Cost-benefit analysis/life-cycle cost analyses

A cost-benefit analysis was done as part of the Keystone Harbor plan. See discussion above.

8. Flexibility

Potential phasing is not available at this point.

9. Impact on farebox recovery

The Port Townsend-Keystone route has one of the lowest farebox recovery rates, recovering 58% of costs in 2005. The relocated terminal operating costs are $115,000 higher per year than the jetty extension options. Fare box recovery rates have not been analyzed for the options.

10. Condition

The Keystone terminal is in good condition, with the inspection reports showing that the terminal has 85% of its inspected structures in good condition and an additional 13% in fair condition.

Out-of-Harbor Alternative Added

WSF Responds to Comments from Agencies, Tribes and Others on Need for Thorough Analysis

During the scoping period, permitting agencies and tribes (including the U.S. Army Corps of Engineers, Washington Department of Fish and Wildlife, the National Park Service, and the Swinomish Tribe) asked WSF to study an alternative outside Keystone Harbor. Commenters noted the need to compare a wide range of alternatives in order to ensure a balanced Environmental Impact Statement (EIS). WSF's technical team screened several locations along Admiralty Inlet before selecting a site east of Keystone Spit (see photo below) as the most feasible. This location will be considered along with the four other terminal and vessel alternatives that were presented during the scoping period.

"The process requires a complete, balanced analysis that weighs the impacts of both in and out of harbor options — in-harbor options may have impacts that the out-of-the-harbor option doesn't, and without studying them, sound environmental decisions cannot be made."
- Scoping Comment Submitted April 2006

Keystone Project Alternatives

The following alternatives will be studied in the Environmental Impact Statement*:

A Relocate the jetty 300 feet to the east and widen the harbor to accommodate a larger vessel. The larger vessel would have a capacity of between 124-144 vehicles.

B Extend the jetty 600 feet into the water and widen the harbor to the west to accommodate a larger vessel. The larger vessel would have a capacity of between 124-144 vehicles.

C Use the existing harbor and acquire new, unique vessels with a special propulsion system that would allow them to operate in the existing Keystone Harbor.

D Use the existing harbor and terminal and acquire new vessels that are similar in size to the existing Steel Electrics (approximately 65-car capacity).

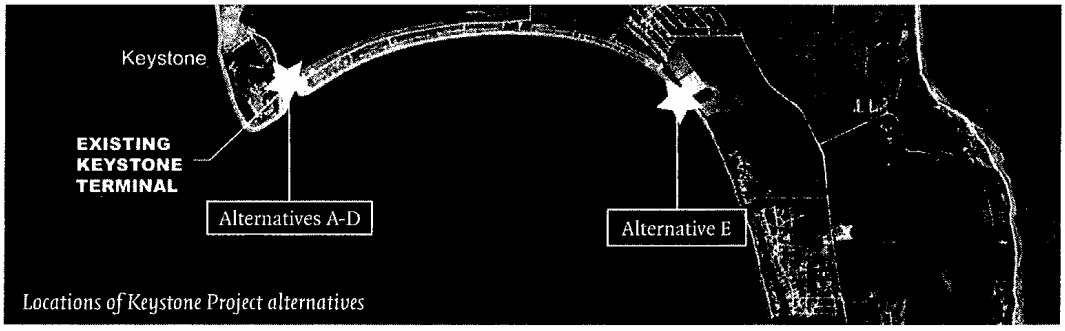
E Relocate the terminal to a site east of the existing terminal and Keystone Spit. The relocated terminal would be built to accommodate a 124-144 vehicle vessel.

F No action alternative.

All of these alternatives:

- Provide the opportunity to integrate the terminal design with the area's natural historical setting.
- Include terminal preservation work and expanded vehicle holding.
- Replace the existing terminal's creosote-coated timber berthing structures.

* *Detailed drawings of each alternative are available on the project Website at: www.wsdot.wa.gov/ferries/projects/keystoneharbor*



Locations of Keystone Project alternatives

Kingston

A. Projects

There are three projects at Kingston with budgets of $987 thousand for the 2005-07 biennium and $29.3 million for the 2005-21 biennia. The catch-up preservation project is discussed under systemwide catch-up preservation.

Kingston Projects
($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
910414R	Kingston Site Planning Study		260							260
910414N	Kingston Terminal Preservation	987	3,838	1,100		636	1,177	6,044	11,451	25,233
999940D	Catch-Up Preservation									
	K13 Dolphin Replacement			3,841						3,841
	Kingston Total	987	4,098	4,941		636	1,177	6,044	11,451	29,334

B. Project Expenditures 2005-07 Biennium

Project expenditures are noted below from the 2005-07 biennium, through August 2006. No expenditures have been made from the two multimodal projects, with the preservation and trestle improvement projects bearing all expenses for right-of-way acquisition and terminal master planning.

Kingston Project Expenditures 2005-07 Biennium (August 2006)
($000s)

PIN	Project	Aug 06
007012	Toll Booth Replacement	658
XL1795	Vashon Transfer Span Retrofit	2
XL2343	Hydraulic Actuated Span	123
XL2404	Toll Booth Replacement	9
XL2897	Emergency Generator Replacement	15
	Total	807

C. Project Status/WSF Identified Risks

- Toll Booth Replacement: The toll booths have been rebuilt.

D. Project Scope, Schedule and Budget Changes

Not applicable to this project.

E. Condition Report

Life-Cycle and Condition Rating Kingston

	Life Cycle Rating	Units	State				Percent Good or Fair
Yr. Insp.	Vital	Measured	1	2	3	4	Condition

2005	96%	138,645	126,127	11,213	1,305	0	
%			91%	8%	1%	0%	99%

F. Observations

1. Non-Life-Cycle Preservation Budgets

The Kingston preservation budget includes a number of non-life-cycle cost items. These are outlined below.

Kingston Preservation Budget Non-Life-Cycle Items

($000s)

Non-Life-Cycle Item	05-07	05-21
Transfer Span Retrofit		2,643
Overhead Control System Modifications		95
Right-of-Way (Terminal Property)	15	1,115
Back-up Generator	437	437
Total Non-Life-Cycle	452	4,290
Total Preservation Budget	987	29,334
% Non-Life-Cycle	46%	15%

2. Future Preservation Projects

The preservation budget contemplates $4.2 million of the $7.2 million budget in the 2015-19 biennia to replace all systems, including the water supply, sewer, storm drainage etc. These systems will not necessarily need replacement. An additional $12.5 million is planned to replace steel wingwalls and an aluminum overhead loading apron. This should be reviewed once the life-cycle cost model is updated based on condition and revised standard life-cycles. (WSF notes: "The steel wingwalls and OHL aprons are scheduled for replacement in 2021. The wingwalls will be 3 to 4 years beyond their standard life of 25 years. Two aluminum OHL aprons will be 9 years beyond their life. As the time for replacement approaches, these structures will be inspected and a final determination will be made." (WSF Dec. 2006))

3. Right-of-Way/Planning Study

Under the preservation budget, WSF wants to acquire the property from the Port of Kingston on which the terminal sits, plus other property. The planning study, an improvement project in the 2007-09 biennium budget, would examine site alternatives. These two projects combined would most likely lead to substantial work to examine re-configuration of the Kingston terminal. (WSF notes in December 2006 that this project has been removed from the 2007 capital program list.)

4. Condition

The Kingston terminal is in good condition, with the inspection reports showing that the terminal has 91% of inspected structures in good condition and an additional 8% in fair condition.

Lopez

A. Projects

There are three projects at Lopez with budgets of $3.3 million for the 2005-07 biennium and $17.1 million for the 2005-21 biennia. The catch-up preservation project is discussed under systemwide catch-up preservation.

Lopez Projects
($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	05-21
900022G	Lopez Terminal Preservation				2,491	5,000	90	96	4,256	11,933
900022H	Lopez Additional Parking Impr						1,189			1,189
999940D	Catch-Up Preservation									
	LO02 Dolphin Replacement	3,279								3,279
	LO03 Interim Terminal Preservation				313					313
	LO11 Apron Replacement			378						378
	Lopez Total	3,279		378	2,804	5,000	1,279	96	4,256	17,092

B. Project Expenditures

Not applicable to this project.

C. Project Status/WSF

Not applicable to this project.

D. Project Scope, Schedule and Budget Changes

Not applicable to this project.

E. Condition Report

Life-cycle and Condition Rating Lopez

Yr. Insp.	Life Cycle Rating Vital	Units Measured	State 1	2	3	4	Percent Good or Fair Condition
2005[1]	72%	52,390	30,683	6,466	15,231	10	
%			59%	12%	29%	0%	71%

[1] State 2 and state 3 items are almost 100% coal tar epoxy coating failures

F. Observations

1. Future Preservation Projects

The future preservation projects should be reviewed when the life-cycle cost model is updated. The projects include funding to replace all systems in the 2015-21 biennia as well as replacement of a concrete riprap not due for replacement until 2031.

2. Added Parking

WSF has budgeted to add parking at Lopez in the 2015-17 biennium. The Draft Long-Range Strategic Plan notes that WSF owns 50 parking spaces on the Island and San Juan County owns another 17. The Plan estimates parking demand for 2,893 spaces in 2012. (Draft Long-Range Strategic Plan Technical Appendix G p. 80)

3. Condition

The Lopez terminal is in fair condition, with the inspection reports showing that the terminal has 59% of its inspected structures in good condition and an additional 12% in fair condition.

Mukilteo

A. Projects

There are two projects at Mukilteo with budgets of $14.5 million for the 2005-07 biennium and $130.9 million for the 2005-21 biennia. Project J is for federal and local grants for the project and K is for state funds.

Mukilteo Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
952515J	Mukilteo Multimodal Terminal	4,279	8,370							12,649
952515K	Mukilteo Multimodal Terminal	10,249	60,724	47,251						118,224
	Mukilteo Total	14,528	69,094	47,251						130,873

B. Project Expenditures Life to Date

Project expenditures life to date are $11.3 million through July 2006.

Mukilteo Project Expenditures 2001-07 Biennia (July 2006)

($000s)

PIN	01-03	03-05	05-07	Total
Consultant				
952515J		3,839	92	3,931
952515K		1,157	3,218	4,375
Other	1,162			1,162
Sub-Total	1,162	4,996	3,310	9,468
State				
952515J		173		173
952515K		452	1,056	1,508
Other	164			164
Sub-Total	164	625	1,056	1,845
Consultant & State				
952515J		4,012	92	4,104
952515K		1,609	4,274	5,883
Other	1,326			1,326
Total	1326	5,621	4,366	11,313

C. Project Status/WSF Identified Risks

- Master Plan: The project is to move the Mukilteo terminal to the Tank Farm property. The master plan was completed in May 2004. The terminal will include a new ferry dock with two slips, a new terminal building with an overhead pedestrian bridge connecting ferry riders to the Sounder station and bus transit center, holding capacity for two boatloads of waiting vehicles, a new access road, a parking garage, four tollbooths, bike facilities and a pedestrian promenade. The second ferry slip and

parking garage will be deferred pending further funding. (www.wsdot. wa.gov /ferries /mukilteoterminal)

- Alternatives Being Considered
  - Upland alternative - $152 million based on 2005 estimate
    - Less expensive
    - 10 holding lanes
    - Not as efficient
  - Compact alternative - $168 million based on 2005 estimate
    - Out over the water
    - Preferred: 26 holding lanes
    - More efficient/quicker turnaround
  - No build alternative – not estimated
    - Replace marine facilities
    - Rebuild/renovate existing
- Environmental Impact Statement (EIS): A draft EIS is being prepared.
- Property Acquisition: The Tank Farm property is owned by the Department of the Air Force. The Air Force is planning on transferring the property to the Port of Everett. WSF, Sound Transit and the Port are working on the cost of acquisition.
- Risks: (WSF Terminal Engineering Progress Report Sept. 2006)
  - City has indicated that building a parking structure by 2015 will be a condition of both Sound Transit's and WSF's permits.
  - Need to strive for approval of longest possible window for in-water construction work to avoid delays that could affect the year of opening.
  - Acquisition cost for property on the Tank Farm site could be high.
  - Acquisition was not part of the original legislative scope of work.

D. Project Scope, Schedule and Budget Changes

The project scope, budget and schedule have changed somewhat.

1. Scope Changes 2003-2006

The scope has remained to replace the Mukilteo terminal. However, it is now a phased project and the scope has been changed to include a parking garage.

2. Budget Changes 2003-2006

The total budget for the project has increased from $122 million to $136 million, with the change coming in part from additional federal grants. The engineering budget in the K project has absorbed the anticipated right-of-way acquisition costs. The J project budget, which is for local and federal grants, notes in 2004 that federal grants have been obtained ($7.8 million) that will be used in lieu of Regional Transportation Improvement District (RTID) funding.

Mukilteo Budget Changes 03-06

($000s)

PIN	01-03	03-05	05-07	Total
Consultant				
952515J		3,839	92	3,931
952515K	1,162	1,157	3,218	5,537
Sub-Total	1,162	4,996	3,310	9,468
State				
952515J		173		173
952515K	164	452	1,056	1,672
Sub-Total	164	625	1,056	1,845
Consultant & State				
952515J		4,012	92	4,104
952515K	1,326	1,609	4,274	7,209
Total	1,326	5,621	4,366	11,313

3. Schedule Changes 2003-2006

The schedule has changed to anticipate an end date for construction in 2010 rather than 2011.

Mukilteo Schedule

	Aug-03	Jul-04	Feb-05	Mar-06
Engineering	Jun-07	Jun-07	Jun-07	Dec08
Construction	Jun-11	Jun-11	Jun-11	Jun-11

E. Condition Report

Life-cycle and Condition Rating Mukilteo

	Life Cycle Rating	Units	State				Percent Good or Fair
Yr. Insp.	Vital	Measured	1	2	3	4	Condition
2005	63%	23,046	19,567	2,827	618	34	
%			85%	12%	3%	0%	97%

F. Observations

1. Long-Range Plan

Throughput, scope and new terminal sizing are based on the 2030 long-range ridership projections.

2. Project Management

Project management is being done internally with an outside PM consultant (the former terminal engineering director now with Moffat Nichol).

3. Budget

Sound Transit 2 currently has $12.1 to $13.9 million identified for a parking garage in Mukilteo in its package. Funding is to construct up to 130 parking stalls for Sounder riders in a joint-use parking garage. It is not known whether the project will remain in the Sound Transit 2 package going to the voters in November 2007.

4. Schedule

- 2005-2007 – Environmental Review
- 2007-mid 2008 – Design
- 2008-2010 – Construction

5. Cost-benefit analysis/life-cycle cost analyses

Have not been done.

6. Flexibility

The terminal will have the opportunity to stagger improvements with ridership since the project will not include the second slip in the first phase.

7. Environmental

There are significant cultural, environmental and permitting issues associated with this project. Archaeological investigations were to be completed by the end of September 2006.

8. Condition

The Mukilteo terminal is in good condition, with the inspection reports showing that the terminal has 85% of its inspected structures in good condition and an additional 12% in fair condition. Approximately $4.0 million has been spent on the existing terminal since 2000 including the construction of a new dolphin in 2000 and steel wingwalls in 2001. These expenditures were through PIN 952515L, Mukilteo Terminal Preservation.

Compact Terminal Alternative

Compared to the Upland Alternative, the Compact Alternative:

- **Places vehicle holding area over water**
- **Requires a shorter access road with overflow holding lanes**
- **Consumes a smaller amount of upland property, leaving more space for waterfront development and public open space**
- **Allows buses and cars to enter transit center/ parking garage from 1st Street**
- **Has a more-efficient holding lane configuration**
- **Requires fewer operations staff**
- **Has less space for parking garage (275-400 stalls) due to height limitations**

Orcas

A. Projects

There are three projects at Orcas with budgets of $967 thousand for the 2005-07 biennium and $12.9 million for the 2005-21 biennia. The catch-up preservation project is discussed under systemwide catch-up preservation.

Orcas Projects
($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900026L	Orcas Terminal Preservation	917			394	5,828		718		7,857
900026M	Orcas Upland Property Purchase	50								50
Catch-up Preservation										
	OR02 Dolphin Replacement		4,944							4,944
	Orcas Total	967	4,944		394	5,828		718		12,851

B. Project Expenditures 2005-07 Biennium

Project expenditures are noted below from the 2005-07 biennium, through August 2006.

Orcas Project Expenditures 2005-07 Biennium (August 2006)
($000s)

PIN	Project	Aug. 06
900026L	Terminal Preservation	219
900026M	Upland Property Purchase	0
	Total	219

C. Project Status/WSF Identified Risks

- Terminal Preservation Project: The 2005-07 biennium budget is for an interim trestle preservation project ($400,000) and the purchase of a back up generator for the electronic fare system ($517,000). The work has not been completed. The 2007-21 biennia budget includes replacement of the trestle, transfer span retrofit, and replacement of the building and paving of the upland holding area.
- Upland Property Purchase: A master plan has also been completed ($95,000) to buy an upland parcel to expand a vehicle holding area in the future. This parcel evidently has major rock outcroppings and will require heavy earthwork construction to make it usable.

D. Project Scope, Schedule and Budget Changes

This section summarizes the consultants' review of the change forms provided by WSF on this project.

1. 900026L Terminal Preservation

a. Scope Changes 2003-2006

The project's functional intent has remained the replacement or refurbishment of terminal systems and structures when they reach the end of their useful life. In July 2004 it was

noted that the work includes interim preservation of the trestle, followed later by replacement of the trestle and associated pavement and utilities; retrofit of the transfer span and installation of an emergency generator. In July, 2005 the project was increased to provide for a non-redundant safety retrofit to the hydraulic controls until the redundant H-span retrofit can occur. Programming of the generator was added to the project. "With the implementation of the M_PET system for the vessels, security improvements, and Electronic Fare System equipment, the generator will provide assurance that the network communication systems have the ability to continue to transmit data during local power outages at the terminal. The originally scheduled cost was for construction only, it did not include programming contingencies, sales tax, etc." (Project Control Form July 18, 2005 p. 1)

b. Budget Changes

The budget changes reflect the addition of funds for the programming of the emergency generator and the change from a ten year to a sixteen year capital program.

Orcas Preservation Budget

($000)

	Jul-04	Mar-05
	10 year	16 year
Engineering	702	898
Construction	3,804	6,959
Total	4,506	7,857

E. Condition Report

Life-cycle and Condition Rating Orcas

	Life Cycle Rating	Units	State				Percent Good or Fair
Yr. Insp.	Vital	Measured	1	2	3	4	Condition
2005	75%	29,894	21,320	6,975	1,558	41	
%			71%	23%	5%	0%	95%

F. Observations

1. Project Management

The preservation project is managed by the maintenance staff.

2. Life-Cycle Cost Model

The budget for this project should be reviewed once the life-cycle cost model has been revised. Future projects include replacement of sewer and water systems. The project control forms note that maintenance on the apron has increased its life to forty years, which does not appear to have been modified in the life-cycle cost model inventory. Discussions with the project manager indicate that the trestle is in good shape and does not need to be replaced during this capital program.

3. Non-Life-Cycle Work

The Orcas Island preservation budget for the 2005-07 biennium is 100% for non-life-cycle work and is 35% of the 2005-21 biennia budget.

Orcas Island Non-Life-Cycle Budget
($000s)

Non-Life-Cycle Item	05-07	05-21
Trestle Interim Preservation	400	400
Back-up Generator	517	517
Transfer Span Retrofit		3,642
Total Non-life-cycle costs	917	4,559
Total Preservation Budget	917	12,851
% Non-life-cycle	100%	35%

4. Condition

The Orcas Island terminal is in fair condition, with the inspection reports showing that the terminal has 71% of its inspected structures in good condition and an additional 23% in fair condition.

Point Defiance

A. Projects

There are two projects at Point Defiance with budgets of $368 thousand for the 2005-07 biennium and $4.3 million for the 2005-21 biennia. The catch-up preservation project is discussed under systemwide catch-up preservation.

Point Defiance Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900001F	Point Defiance	368					623	3,041		4,032
Catch-up Preservation										
	PD08 Apron Replacement				306					306
		368			306		623	3,041		4,338

B. Project Expenditures 2005-07 Biennium

Project expenditures are noted below for the 2005-07 biennium, through August 2006.

Point Defiance Project Expenditures 2005-07 Biennium (August 2006)

($000s)

	Project	Aug. 06
007016	Systemwide Hydraulic Controls Upgrade	268
XL2281	Point Defiance/Tahlequah Feasibility Study	1
	Total	269

C. Project Status/WSF Identified Risks

- Preservation: The projects planned for the 2005-07 biennium include $268,000 for interim trestle preservation and $100,000 for an electronic generator to back-up the electronic fare system.
- Feasibility study: A feasibility study was conducted using the preservation budget in the 2003-05 biennium. "WSF recently conducted a study of the Pt. Defiance and Tahlequah terminals …to assess options for expanding operations given ridership growth and the challenges facing the current terminals. No action is planned at this time." (Draft Long-Range Strategic Plan, Appendix G p 23)

D. Project Scope, Schedule and Budget Changes

This section summarizes the consultants' review of the change forms provided by WSF on this project.

1. 90001F Terminal Preservation

a. Scope Changes 2003-2006

The project's functional intent has remained the replacement or refurbishment of terminal systems and structures when they reach the end of their useful life. In February 2005 it was noted that the work includes interim preservation of the trestle, replacement of

dolphins, and preparation of a feasibility study and master plan. In July 2005 it was noted that "condition assessment of the dolphins indicated that their replacement may be postponed." (Project Control Form July 18, 2005 p. 1) In February 2006 the scope was changed to delete the master plan and include installation of a generator to support the electronic fare collection system.

b. Budget Changes

The budget has decreased for this project from $4.5 million for a ten year program to $4.1 million for a sixteen year program. Part of the reduction is the decision not to pursue a master plan for the terminal.

	Feb. 05 V2005 10 year	Feb. 06 V2006 16 year
Engineering	879	724
Construction	3,621	3,424
Total	4,500	4,148

E. Condition Report

Life-Cycle and Condition Rating Point Defiance

	Life Cycle Rating	Units	State				Percent Good or Fair
Yr. Insp.	Vital	Measured	1	2	3	4	Condition
2006	99%	37,085	30,167	4,804	2,096	18	
%			81%	13%	6%	0%	94%

F. Observations

1. Project Management

The project is managed by WSF maintenance staff.

2. Life-Cycle Cost Model

The budget for this project should be reviewed once the life-cycle cost model has been revised. The budget in future biennia includes replacement of the trestle, which staff indicates is in good condition and does not need replacement, and the replacement of a steel dolphin that has the standard life-cycle of 25 years in the life-cycle cost model.

3. Non-Life-Cycle Work

The Point Defiance preservation budget for the 2005-07 biennium is 100% for non-life-cycle work. As noted above, this includes trestle interim preservation and a generator.

4. Condition

The Point Defiance terminal is in good condition, with the inspection reports showing that the terminal has 81% of its inspected structures in good condition and an additional 13% in fair condition.

Port Townsend

A. Projects

There are two projects at Port Townsend with budgets of $3 million for the 2005-07 biennium and $37.3 million for the 2005-21 biennia.

Port Townsend Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900012D	Port Townsend Terminal Preservation		18,740				831	1,335		23,865
900012G	Port Townsend Ferry Terminal Imprs		1,940	11,488						13,428
	Port Townsend Total	0	20,680	11,488			831	1,335		37,293

B. Project Expenditures 2005-07 Biennium

Project expenditures are noted below from the 2005-07 biennium, through August 2006. All planning expenses for the terminal improvement have been expensed to the preservation project. Total expenditures this biennium through August are $1.3 million, of which $1 million has been for CH2MHill's work on planning and scoping, $38,000 for public involvement and $50,000 for project management and civic engineering support.

Port Townsend Project Expenditures 2005-07 Biennium (August 2006)

($000s)

PIN	Title	Aug. 06
XL 1984	Ferry Terminal Improvement Project	1,331

C. Project Status/WSF Identified Risks

- Improvement: WSF proposes to extend the existing dock 180 feet to hold an additional 100 vehicles on the trestle; relocate an adjacent park to the other side of the terminal in order to straighten the exit lanes; move the tollbooths side-by-side to speed up processing; and create a new remote holding area along SR 20 to replace an existing one that WSF does not own.
- Environmental: WSF is preparing its environmental review. "In an effort to shield the project from schedule risk, the project team is taking steps to divorce vessel related work from the project. The elements of the project that are vessel dependent are the outer dolphins and dredging." (Quarterly Project Report September 2006, p. 1). The environmental review assumes three potential vessel sizes – 65-vehicle, 100-vehicle and 144-vehicle. If a 65-vehicle vessel is chosen, then no additional permits will be needed. For a 100-vehicle vessel, WSF would apply for additional permits for three additional dolphins, and appropriate traffic mitigation along SR 20. For a 144-vehicle vessel, WSF would apply for additional permits for three additional dolphins, dredging, and appropriate traffic mitigation along SR 20.
- Risks: (WSF Terminal Engineering Progress Report Sept. 2006)
  - Vessel decision – considering three vessel sizes (65, 100, 144 vehicle)
  - City traffic issues
  - Hood Canal Bridge

- Keystone Project
- WSF budget shortfalls
- BC Olympics
- Sand Lance – beach adjacent to terminal

D. Project Scope, Schedule and Budget Changes

In 2003 the Port Townsend project budget was $14.4 million for a ten year capital program based on WSF acquiring new vessels for the Port Townsend-Keystone route. All expenses to date have been borne by the preservation project. The improvement project was added in 2005 with the justification that expanded holding capacity was required on the trestle.

1. Project 900012D Port Townsend Terminal Preservation

a) Scope Changes

In a July 22, 2003 change management form the project was justified based on construction of new vessels as follows:

> **Description:** This project replaces two operating slips (wingwalls, towers, bridge seats, transfer spans, aprons, and dolphins); rebuilds and realigns the tollbooths; and funds the long-term monitoring for the environmental mitigation associated with the offshore expansion of the trestle. This work will occur in conjunction with the Keystone Relocation (902017F) and Port Townsend Offshore Expansion (900012F) Projects.
>
> **Description of Change:** WSF will be building a new vessel for the Port Townsend-Keystone route. This vessel will have a deeper hull, which may require that the Port Townsend operating slips be moved further offshore. As a result, near-term offshore preservation in the currently approved program has been cancelled, and the preservation will occur with the Keystone Relocation and Port Townsend Offshore Expansion projects. In addition, there was an Upland Improvement project (900012E) in the previously approved budget. With the possible offshore expansion of the trestle, the upland improvement work may no longer be necessary as the larger trestle will provide increased holding capacity; the final arrangement of the terminal will be determined in the environmental process. The money for tollbooth reconstruction and realignment that had been incorporated into the Upland Improvement project has been added to this preservation PIN, as it has been determined that the tollbooth work is more accurately categorized as preservation. Finally, long term monitoring costs for the mitigation associated with the trestle expansion have been added to this PIN (WSF policy has been to classify any environmental mitigation associated with an improvement project as an improvement, but to classify any subsequent monitoring as preservation). (Project Control Form July 22, 2003 p. 1)

In 2004 the project was described as replacing two operating slips, rebuilding and realigning the tollbooths and funding the long term monitoring of environmental mitigation. The scope was expanded in 2005 to include the purchase of property adjacent to the terminal and to relocate the remote holding area because the Indian Point property where WSF had been using an adjacent street for holding was purchased by a developer.

b) Budget Changes

The budget has increased from $16.3 million to $25 million, with modifications including the addition of right-of-way acquisition to secure a new remote holding area and to acquire property adjacent to the terminal. Federal funding was included in the first versions but reduced in later budgets.

Preservation Project Budget

($000s)

	Jul-03	Mar-04	Jul-04	Feb-05	2006	Jan-06
	v 2003-7	v2005-2	v 2005-3A	v 2005-4	v 2007-2*	v 2007-2a*
Construction State	3,131	15,372	18,250	18,250	19,782	19,782
Construction Federal	6,067	1,587				252
Construction Bond	5,238	1,806			252	
Construction Sub-total	14,436	18,765	18,250	18,250	20,034	20,034
Engineering State	1,903	3,210	3,332	3,332	4,159	4,159
Right-of-Way State					1,000	800
Total	16,339	21,975	21,582	21,582	25,193	24,993

* Sixteen year capital plans (others are ten year capital plans)

c) Schedule Changes

The schedule changed to reflect that the environmental review took a year longer than anticipated.

Preservation Project Schedule

	Jul-03	Mar-04	Jul-04	Feb-05	2006	Jan-06
	v 2003-7	v2005-2	v 2005-3A	v 2005-4	v 2007-2*	v 2007-2a*
Preliminary Engineering	Jun-06	Dec-06	Dec-06	Dec-06	Jun-07	Jun-18
Construction	Jun-13	Jun-08	Jun-08	Jun-08	Jun-09	Jun-19
Right-of-Way					Jun-09	Jun-09

* Sixteen year capital plans (others are ten year capital plans)

2. Project 900012G Port Townsend Terminal Improvements

a) Scope Changes

The scope of the improvement project was described in January 2005 as improving the efficiency of vessel loading by building a vehicle holding area within the terminal.

Why doing project:
Project will improve service at the Port Townsend Ferry Terminal by adding on-site parking for vehicles awaiting ferry service. Vehicles waiting to board a ferry currently use State Route 20 as a holding area. This adversely affects local community traffic.

The Port Townsend-Keystone Ferry Route connects the Olympic Peninsula with central Whidbey Island. The route will experience an increase in ridership from 799,000 people and 374,000 vehicles in FY 2004 to 1,500,000 people and 500,000 vehicles in FY 2030.

The existing facility has reached the end of its useful life, cannot accommodate summer peaks and is inadequate in its current configuration to handle projected increases.

End Result:
When complete, the Port Townsend Ferry Terminal will have increased holding capacity (approximately 200 cars). The new configuration will provide for a safer, more efficient operation. Additional parking will allow WSDOT to meet current and future demand for ferry service.

Benefits:
This project improves the Port Townsend Ferry Terminal capacity to load vessels and the safety and efficiency of terminal operations by increasing vehicle holding capacity and providing additional parking. Also, it reduces congestion on local streets caused by inadequacies of existing holding capacity. The project will minimize traffic problems on SR-20 by increasing the vehicle holding areas. Finally, it will minimize the effect of propeller-wash on the eelgrass by letting vessels dock and operate further offshore in deeper water. (WSDOT Transportation Partnership Act Marine Transportation Project Selection p. 5)

The scope of the project has not changed.

b) Budget Changes

This is a TPA funded project. The budget has not changed since its inclusion on the TPA list.

Port Townsend Improvement Project Budget

($000s)

	Sept. 05 v 2005-3A	Jan-06 v 2007-2a	Mar-06
Preliminary Engineering	1,940	1,940	1,940
Construction	10,587	10,587	10,587
Right-of-Way	901	901	901
Total	13,428	13,428	13,428

It is not clear how the preliminary engineering and right-of-way budgets in this project relate to the preservation project budget.

E. Condition Report

Life-Cycle and Condition Rating Port Townsend

	Life-Cycle Rating	Units	State				Percent Good or Fair Condition
Yr. Insp.	Vital	Measured	1	2	3	4	
2006	58%	122,566	92,689	26,433	3,215	223	
%			76%	22%	3%	0%	97%

F. Observations

1. Projects Interrelated

The preservation and improvement projects are interrelated. The preservation project will provide for replacing wingwalls, dolphins and other structures for the expanded trestle.

2. Non-Life-Cycle Costs

The life-cycle cost model attributes 100% of the 2005-07 biennium appropriation to life-cycle costs. All of the actual expenditures are in support of the improvement project.

3. Keystone/Vessel

The terminal decisions at Port Townsend are tightly linked with the vessel and Keystone terminal decisions. (See discussion in the Keystone terminal section.)

4. Project Management

WSF staff are serving as project managers.

5. Master Plan

- Winter 2006/7 – Environmental Determination Issues
- Spring 2007 – Construction of Remote Holding Begins
- Spring 2007 – Keystone Project Draft EIS Released
- Spring 2007 – Port Townsend Terminal Construction Begins

6. Cost-benefit analysis/life-cycle cost analyses

Staff have analyzed the cost of upland versus trestle holding area.

Cost Comparison of Overwater vs. Upland Holding

	$/sf	sf/staff	$/staff
Overwater - trestle construction	$120	200	$24,000
Upland - land acquisition	$20	200	$4,000
Upland-grading & paving	$20	200	$4,000
Total Upland			*$8,000*

7.Flexibility

There are no plans to stagger project with ridership.

8. Environmental

There are significant cultural resource issues associated with the trestle expansion. The Port Townsend Preservation Project Risk Workshop noted that there is potential for significant opposition from tribes with over-structures. (Workshop Number 1 March 28, 2005 p. 1)

9. Condition

The Port Townsend terminal is in fair condition, with the inspection reports showing that the terminal has 76% of its inspected structures in good condition and an additional 22% in fair condition.

Port Townsend: Proposed Action

- Extend the dock 180 feet (Adds holding for 100 more vehicles, up from the 200 the terminal and remote holding lot now accommodate).
- Relocate Rotary Park (straightens exit lanes).
- Move tollbooths side-by-side to speed up processing
- Create a remote holding area along SR 20 (near Boat Haven) and shift the bike/pedestrian path behind the poplar trees.

Existing Port Townsend Terminal

Conceptual view of proposed terminal design

Seattle

A. Projects

There are five projects at Seattle with budgets of $9 million for the 2005-07 biennium and $228.9 million for the 2005-21 biennia.

Seattle Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900010I	Seattle South Trestle Expansion	5,294	18,876	51,000						75,170
151902F	Seattle SR 519 P52 Access Imprs	37								37
900010H	Seattle Interim Retail Development	1,124								1,124
900010G	Seattle Terminal Building Repl.- New Retail	67	206	634	1,516	539				2,962
900010A	Seattle Terminal Preservation	2,521	10,605	24,328	77,714	25,412	2,878	2,967	3,194	149,619
	Seattle Total	9,043	29,687	75,962	79,230	25,951	2,878	2,967	3,194	228,912

B. Project Expenditures 2005-07 Biennium

Expenditures this biennium for Seattle Colman Dock projects total $2.9 million, of which $1.9 million has been expended on the Colman Dock Long-Range Plan. In the 2005-07 biennium an additional $900,000 was spent on pedestrian access controls related to the electronic fare system under project 900010H Interim Retail Improvements.

Seattle Project Expenditures 2005-07 Biennium (August 2006)

($000s)

PIN	Project	Aug. 2006
900010I	South Trestle Expansion	
	XL1987 Colman Dock Long-Range Plan	133
900010A	Terminal Preservation	
	006924 Terminal Coating Repair	19
	006989 Physical Security Infrastructure	90
	XL1982 Overhead Loading Maintenance	13
	XL1987 Colman Dock Long-Range Plan	1,723
	Sub-total PIN 900010A	1,845
900010G	New Retail Space	0
900010H	006716 Interim Retail Improvements	181
	007103 Pedestrian Access Control	497
	MS5420 North Kiosk Signage	119
	XL1712 Interim Retail Improvements	3
	XL2367 Pedestrian Access Control	106
	Sub-total PIN 900010H	906
151902F	SR 519 Access	0
	Total	2,884
	Total Long-Range Plan	1,856
	% Long-Range Plan	64%

C. Project Status/WSF Identified Risks

- Master Plan: WSF is developing the Seattle terminal master plan. As discussed in the September 2006 Terminal Engineering Quarterly Report the options range from replacing the existing terminal building with a new building sized for future growth to constructing a new-mixed-use complex that would generate revenue for WSF. The financial feasibility of construction beyond the base building will be evaluated in parallel with the environmental review.
  - The terminal project will include
    - Replacing the deteriorated timber piling and dock structure
    - Upgrading the power distribution system
    - Replacement of Slip 3 tower, bridge seat and transfer span
    - Replacement of the dolphins
    - Replacement of the main terminal building
  - The terminal project may also include
    - Expanding the holding lanes to accommodate future growth
    - Upgrading vehicle and passenger transfer facilities
    - Improved connection to the freeway system
    - Improved pedestrian connections to transit and downtown Seattle
    - Addition of a fourth slip
    - Mixed-use co-development
- Risks: (WSF Terminal Engineering Quarterly Report Sept. 2006)
  - Feasibility and community acceptance of expanded co-development
  - Size of the dock
  - Amount of over water coverage
  - Traffic associated with the long-range plan
  - Joint mitigation with Alaskan Way Viaduct project
  - The long-term use of Pier 48
  - Availability of a remote holding area.

D. Project Scope, Schedule and Budget Changes

1. Project 900010A Seattle Terminal Preservation

a. Scope Changes

The terminal preservation project has been described as preserving various systems and structures at the Seattle terminal. Reference to funding for an Environmental Impact Statement is included, but no specific reference is made to the Colman Dock Long-Range Plan. The Colman Dock Long-Range Plan has been funded largely through this project.

In July 2003 the project was described as preserving the systems and structures at the Seattle Ferry Terminal. Over the next ten years, work includes interim preservation and replacement of the timber trestles and overhead loading (slips 2 and 3); vehicle slips and dolphins (slips 2 and 3); the terminal building; the power vault; and exit gates. In March 2004 the project description was changed to eliminate the terminal building, the power

vault, and exit gates. In July 2004 it was described as interim preservation of the north trestle, followed by replacement of the trestle; preservation of the overhead loading structures for slips 2 and 3 followed by replacement of the structures; replacement of the terminal building, dolphins, slip 3 towers, bridge seat and transfer span; installation of exit gates; removal of the passenger-only facilities; and the reconstruction/upgrade of the power vault.

The WSF 2005-07 budget request states that this project begins with interim preservation of the north trestle, preservation of slip 2 and 3 passenger overhead loading structures, and installation of exit gates. This is followed by the major work that replaces the north trestle. Work includes replacement or refurbishment of trestle sections A through E, bulkheads, riprap; selected slip 2 and 3 towers, bridge seats, apron, transfer span, and dolphins; overhead loading structures for slips 2 and 3; the main terminal building and other buildings; pavement on the trestle and retained fill; and utilities.

It goes on to note that the preservation for Colman Dock is currently in the preliminary design phase. Additional work has been identified that includes the following sections of the EIS process: environmental strategy, project management and design criteria, draft purpose and need statement, Section 106 consultation, hazard materials assessment, functional diagramming concept, design and related public involvement activities. This work requires additional funding of $300,000.

b. Budget Changes

The budget for this project has changed little since 2003.

Seattle Preservation Project Budget

($000s)

	Sept. 03 v2003-7	Mar-04	2005 v2005-3a	Feb-05 v 2005-4	Feb-06 v 2007-2a*
Engineering State	30,641	10,822	22,359	22,659	24,995
Construction State	123,945	138,595	131,995	131,995	128,385
Construction Federal		5,301			
Sub-total Construction	123,945	143,896	131,995	131,995	128,385
Total	154,586	154,718	154,354	154,654	153,380

* Sixteen year capital program (others are ten year capital program)

c. Schedule Changes

The schedule has been extended by six years due to the difficulties of the site and downtown Seattle constraints.

Seattle Preservation Project Schedule

	Sept. 03 v2003-7	Mar-04	2005 v2005-3a	Feb-05 v 2005-4	Feb-06 v 2007-2a
Engineering End Date	Jun-10	Jun-10	Jun-10	Jun-10	Jun-20
Construction End Date	Jun-13	Jun-13	Jun-14	Jun-14	Jun-21

2. Project 900010I Seattle South Trestle Expansion

a. Scope Changes

This project has been described since July 2004 as expanding the south trestle of the Seattle Ferry Terminal to increase holding capacity for vehicles waiting to load onto ferries. The new trestle will help WSF maintain operations when the north trestle is replaced. The project was described the same way in the July 2004 submittal of the WSF 2005-2008 Budget Request v2005-3A. It is described as part of the Colman Dock Long-Range Plan in the project control form of January 2006.

b. Budget Changes

The budget increased with the addition of federal funds which allowed for the transfer of state funds to other projects in 2006. The receipt of federal funds in 2005 to be used for preliminary engineering and/or environmental work previously funded by the state allowed state funds to be used for co-development analysis and regulatory and legislative analysis that had previously been unfunded. In 2006 the budget was reduced because "…the Seattle Long-Range Project, which includes the south trestle expansion, has been delayed due to the late completion of the WSF System Plan and tariff analysis. As a result, $650,000 is available in the 2005-2007 biennium to be used for needs elsewhere in the program." (Project Control Form January 10, 2006)

Seattle South Trestle Expansion Project Budget

($000s)

	Jul-04	Jul-05 v2007-1	Nov-05 v 2007-2	6-Jan v2007-2a
Engineering State	10,980	11,349	11,349	10,699
Engineering Federal			5,800	5,800
Engineering Total			17,149	16,499
Construction State	60,414	58,955	58,955	58,671
Construction Federal				
Sub-total Construction	60,414	58,955	58,955	58,671
Total	71,394	70,304	76,104	75,170

c. Schedule Changes

The schedule for this project has remained unchanged, with construction scheduled to end in June 2011. This may no longer be applicable given the projected schedule for the Environmental Impact Statement.

Seattle South Trestle Expansion Project Schedule

	Jul-04	Jul-05 v2007-1	Nov-05 v 2007-2	6-Jan v2007-2a
Engineering End Date	Jun-08	Jun-08	Jun-08	Jun-08
Construction End Date	Jun-11	Jun-11	Jun-11	Jun-11

3. Project 900010G Seattle Terminal Building Replacement – New Retail Space

a. Scope Changes

This project has been identified since 2003 as being for greater retail development of the new ferry terminal in order to generate more income for the ferry system. In 2004 it was noted that the project will occur simultaneously with the redevelopment project.

b. Budget Changes

The budget for this project has changed l0ittle since 2003.

Retail Improvement Project Budget

($000s)

	Sep-03	Mar-04	Jul-04	Feb-06
	v2007-3	v2005-2	v2007-1	v 2007-2a
Engineering State	600	98	457	419
Construction State	2,400	2,902	2,543	2,543
Total	3,000	3,000	3,000	2,962

c. Schedule Changes

The schedule has changed to reflect changes in the overall project schedule.

Retail Improvement Project Schedule

	Sep-03	Mar-04	Jul-04	Feb-06
	v2007-3	v2005-2	v2007-1	v 2007-2a
Engineering End Date	Jun-10	Jun-07	Jun-07	Jul-10
Construction End Date	Jun-10	Jun-13	Jun-14	Jun-14

E. Condition Report

Life-Cycle and Condition Rating Seattle

Terminal	Yr. Insp.	Life Cycle Rating Vital	Units Measured	State 1	2	3	4	Percent Good or Fair Condition
Seattle Slip 1			371,862	358,134	10,289	3,438	1	
Seattle Slip 2			408,627	300,001	79,816	28,577	233	
Seattle Slip 3			29,512	12,687	8,760	5,214	2,851	
Seattle POF			23,348	14,880	7,378	1,090	0	
Seattle Total	2005	55%	833,349	685,702	106,243	38,319	3,085	
	%			82%	13%	5%	0%	95%

F. Observations

1. Projects Interrelated

The trestle expansion, preservation and new retail development projects are all inter-related and are being jointly managed. The preservation budget is being used to fund the majority of the master planning expenses.

2. Long-Range Plan

The design program and scope are based on the 2030 Long-Range Plan. The car holding plan assumes 1,485 cars, which is roughly equivalent to two boat loads for the Bainbridge, Bremerton and new Southworth runs. The current holding capacity is 650 cars. A fourth slip is planned to accommodate Southworth-Seattle service. The new terminal building will be 50,000 to 60,000 square feet. The existing building is 30,000 sf.

3. Budget

Proposed projects are estimated at $275 million including a new terminal building, upgraded utilities, new/refurbished marine loading facilities, expanded car holding and enhanced pedestrian connections, construction delays, LEED Silver Rating, expanded terminal retail, public plazas required by local code, Pier 48 demolition and mitigation, and tribal mitigation. This is $46 million more than currently identified.

4. Project Management

The project manager is a consultant to WSF.

5. City of Seattle

WSF is seeking modifications to Seattle's Comprehensive Plan needed for expanded co-development. The Seattle Department of Transportation has commented extensively on WSF's Notice of Scoping for Seattle Ferry Terminal Environmental Impact Statement. Their comments include:

- …integrated passenger-only facilities should be included in all alternatives regardless of whether WSF operates those services.
- The City will not support any alternatives that use the surface level of Pier 48 uplands for auto holding or access.
- The need to coordinate construction and cultural resource reviews with the Alaskan Way Viaduct project.
- All alternatives should include a transportation demand management component with the objective of accommodating planned growth while potentially reducing the need for expensive capital facility investments by effectively managing demand for the facility. This plan should include pricing, methods to shift modes and methods to shift peak travel to off-peak travel. (City of Seattle Letter, May 19, 2006, p. 2-9)

6. Cost-Benefit Analysis/Life-Cycle Cost Analyses

Have not been completed.

7. Project Schedule:

- 2006-1st Quarter 2007 – Planning
- 2006-2010 – Environmental
- 2009-2011 – Design
- 2006-2010 – Permitting
- 2011-2016 – Phased Construction

8. Flexibility

Phasing of the project has not been determined.

9. Environmental

There are significant environmental and cultural resource issues. See discussions above regarding the City of Seattle's comments.

10. Ancillary revenue

The interim retail project was designed to increase concession revenues to WSF. The consultants have not seen a report comparing actual revenues to those projected.

11. Condition

The Seattle terminal is in good condition, with the inspection reports showing that the terminal has 82% of its inspected structures in good condition and an additional 15% in fair condition.

SEATTLE FERRY TERMINAL PROJECT AT COLMAN DOCK

Washington State Ferries

What is WSF considering for transit-oriented development?

WSF will consider a range of privately-funded development strategies and building heights

- All ideas and concepts will be evaluated for environmental impacts, effectiveness and cost.

There are many possibilities for privately-funded development on and near Colman Dock

April 2006

U.S. Department of Transportation
Federal Highway Administration

Washington State
Department of Transportation

Seattle Ferry Terminal Project at Colman Dock

Why is WSF considering transit-oriented development?

- Transit-oriented development would help pay for public amenities.
- Transit-oriented development would generate non-farebox revenues to help off-set rising operating costs.

Privately-funded development at Colman Dock would help pay for additional public amenities

April 2006

U.S. Department of Transportation
Federal Highway Administration

Washington State
Department of Transportation

SEATTLE FERRY TERMINAL PROJECT AT COLMAN DOCK

Washington State Ferries

A combination of holding strategies will be required to accommodate growth

Ideas include:

- Expanding the existing dock
- Adding holding adjacent to Colman Dock
- On-street queuing
- Remote holding

Are there other ideas we should consider?

April 2006

U.S. Department of Transportation
Federal Highway Administration

Washington State
Department of Transportation

SEATTLE FERRY TERMINAL PROJECT AT COLMAN DOCK

Washington State Ferries

he followin elements will be considered as WSF develops alternatives for the Seattle Ferry erminal

re there other ideas we should consider?

April 2006

U.S. Department of Transportation
Federal Highway Administration

Washington State Department of Transportation

Shaw

A. Projects

There are two projects at Shaw with budgets of $60,000 for the 2005-07 biennium and $7.9 million for the 2005-21 biennium. The catch-up preservation project is discussed under systemwide catch-up preservation.

Shaw Projects
($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900024E	Shaw Terminal Preservation	60					3,599		2,180	5,839
Catch-up Preservation										
	SH04 Dolphin Replacement			2,016						2,016
	Shaw Total	60		2,016			3,599		2,180	7,855

B. Project Expenditures the 2005-07 Biennium

No expenditures have occurred on this project this biennium.

C. Project Status

- 2004 Project: In 2004 a major renovation of the Shaw terminal was undertaken with new wingwalls, transfer spans, aprons, towers, bridge seats and mechanical and electrical systems.

D. Project Scope, Schedule and Budget Changes

Not applicable to this project.

E. Condition Report

Life-Cycle and Condition Rating Shaw

Yr. Insp.	Life Cycle Rating Vital	Units Measured	State 1	2	3	4	Percent Good or Fair Condition
2005	75%	14,947	13,654	479	408	406	
%			91%	3%	3%	3%	95%

F. Observations

1. Life-Cycle Cost Model

The projected Shaw Island trestle and systems replacement improvements in the 2015-17 biennium and the proposed restroom and paving projects in the 2019-21 biennium should be re-examined when the life-cycle cost model is updated.

2. Life-Cycle Cost Analysis

The Shaw project team did a life-cycle cost analysis of alternatives for the Shaw Island slip reconstruction in 2004.

3. Condition

The Shaw Island terminal is in good condition, with the inspection reports showing that the terminal has 91% of its inspected structures in good condition and an additional 3% in fair condition.

Southworth

A. Projects

There are three projects at Southworth with budgets of $3.7 million for the 2005-07 biennium and $31.5 million for the 2005-21 biennia.

Southworth Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
916008N	Southworth Terminal Preservation	1,554			2,090	11,641	726	111		16,122
916008Q	Southworth Second Slip	2,150	2,850							5,000
916008P	Southworth Trestle Imprs				1,427	8,944				10,371
	Southworth Total	3,704	2,850		3,517	20,585	726	111		31,493

B. Project Expenditures the 2005-07 Biennium

Project expenditures are noted below from the 2005-07 biennium, through August 2006. Nothing has been spent on the Second Slip project.

Southworth Project Expenditures the 05-07 Biennium (July 2006)

($000s)

PIN	Project	Aug. 06
9160008N	Terminal Preservation	
	007068 Replace Southworth Trestle Deck Preservation	997
	XL2396 Interim Southworth Trestle Preservation	175
	Sub-total	1,172
916008Q	Second Slip	0
	Total	1,172

C. Project Status/WSF Identified Risks

- Trestle Preservation: The interim preservation project scheduled for this biennium has been completed.
- Second Slip: Funding is for design of the second slip, but work has not started.

D. Project Scope, Schedule and Budget Changes

Not applicable to this project.

E. Condition Report

Life-Cycle and Condition Rating Southworth

Yr. Insp.	Life Cycle Rating Vital	Units Measured	State 1	2	1&2	3	4	Percent Good or Fair Condition
2006	58%	85,049	71,545	9,772		2,460	1,272	
%			84%	11%	96%	3%	1%	96%

F. Observations

1. Life-Cycle Cost Model

The trestle replacement project planned for the 2011-15 biennia, which include the replacement of all systems and utilities, should be reviewed once the life-cycle cost model is updated.

2. Preservation vs. Improvement

In the 2011-15 biennia WSF has identified a non-life-cycle trestle widening project that should be reviewed if new definitions of improvement and preservation are adopted.

3. Long-Range Plan

The Long-Range Strategic Plan assumes the addition of a route between Southworth and Seattle that would necessitate a second slip.

4. Condition

The Southworth terminal is in good condition, with the inspection reports showing that the terminal has 84% of its inspected structures in good condition and an additional 11% in fair condition.

Tahlequah

A. Projects

There are two projects at Tahlequah with budgets of $1.4 million for the 2005-07 biennium and $5.3 million for the 2005-21 biennia. The catch-up preservation project is discussed under systemwide catch-up preservation.

Tahlequah Projects
($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
90002E	Tahlequah Terminal Preservation	200						3,041	850	4,091
Catch-up Preservation										
	TA05 Transfer Span Retrofit	1,243								1,243
		1,443						3,041	850	5,334

B. Project Expenditures 2005-07 Biennium

Expenditures for this biennium include some expenditures on a PIN for adjacent property acquisition that was active in the 2003-05 biennium.

Tahlequah Project Expenditures 2005-07 Biennium (Aug. 2006)
($000s)

PIN	Project	Aug 06
900002E	Terminal Preservation	
	007016 Statewide Hydraulic & Controls Upgrade Ph 2	152
	MS5597 Building Removal	15
	Sub-total	167
90002F	Adjacent Property Purchase	4
	Total	171

C. Project Status/WSF Identified Risks

- Trestle Interim Preservation: The preservation project was intended to make an interim improvement to the Tahlequah trestle. This was determined not to be necessary based on the condition assessment. In the 2003-05 biennium the project had replaced and capped some piling and re-paved the trestle.
- Other Expenditures: In lieu of interim trestle preservation the funds were used to upgrade the hydraulics and to remove a building that was located on property acquired under PIN 90002F, adjacent property purchase, in the 2003-05 biennium. Upgrading the hydraulic controls was supplemented with $250,000 from the maintenance budget.

D. Project Scope, Schedule and Budget Changes

1. Project No. 90002E Tahlequah Terminal Preservation

a) Scope Changes

The scope was changed in June 2004 from replacement of the trestle, utilities, emergency generator and dolphins to interim trestle preservation and funding for a feasibility study and master plan. Dolphin replacement was shifted to another fund source – the Systemwide Catch-up Preservation program. In July 2005 the Tahlequah master plan was cancelled because a feasibility study for expansion of the terminal was determined to provide sufficient information for planning purposes.

b) Budget Changes

The project budget changed with the decision not to develop a master plan and then increased to reflect the additional term of the capital program.

Preservation Project Budget

($000s)

	Jul-04 v2007-1	Jul-05 *
Engineering State	314	1,125
Construction State	658	3,472
Total	972	4,597

***** Sixteen year capital program (other is ten year capital program)

c) Schedule Changes

The schedule has remained the same.

Preservation Project Schedule

	Jul-04 v2007-1	Feb-06 v 2007-2a
Engineering End Date	Jun-06	Jun-06
Construction End Date	Jul-07	Jul-07

2. Project 90002F Adjacent Property Purchase

The project was instituted in 2004 to purchase property adjacent to the terminal to be land banked. The right-of-way was acquired for $336,000 in the 2003-05 biennium.

E. Condition Report

Life-Cycle and Condition Reports Tahlequah

	Life Cycle Rating	Units	State				Percent Good or Fair
Yr. Insp.	Vital	Measured	1	2	3	4	Condition
2006	78%	47,978	37,453	8,627	1,896	2	
%			78%	18%	4%	0%	96%

F. Observations

1. Projects Interrelated

The preservation and adjacent property acquisition projects are interrelated, with preservation funding being used to remove a building from the acquired property.

2. Life-Cycle Cost Model

The project planned for the 2017-21 biennia, which includes funding to replace all systems and utilities, should be reviewed once the life-cycle cost model is updated.

3. Preservation vs. Improvement

In the 2011-15 biennia WSF has identified a non-life-cycle trestle widening project that should be reviewed if new definitions of improvement and preservation are adopted.

4. Condition

The Tahlequah terminal is in fair condition, with the inspection reports showing that the terminal has 78% of its inspected structures in good condition and an additional 18% in fair condition.

Vashon

A. Projects

There are two projects at Vashon with budgets of $850 thousand for the 2005-07 biennium and $44.8 million for the 2005-21 biennia. The catch-up preservation project is discussed under systemwide catch-up preservation.

Vashon Projects
($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
900006N	Vashon Terminal Preservation	850		925		3,089	20,581	5,339	3,194	33,978
Catch-up Preservation										
	VA03 Vashon Dolphin Replacement		8,074							8074
	VA07 Transfer Span Retrofit		2,671							2,671
	Vashon Total	850	10,745	925		3,089	20,581	5,339	3,194	44,723

B. Project Expenditures 2005-07 Biennium

Two hundred and eighty-five thousand dollars ($285,000) has been spent on this project this biennium through August, 2006.

Vashon Project Expenditures 2005-07 Biennium (Aug. 2006)
($000s)

PIN	Project	Aug. 06
XL2403	Interim Trestle Preservation	285

C. Project Status

- Interim Trestle Preservation: The current project at this location is for preservation and replacement of piles, structural braces and stringers. WSF only received one bid for the construction, which was rejected because it was too high. Re-scoping of the project is underway.

D. Project Scope, Schedule and Budget Changes

Not applicable to this project.

E. Condition Report

Life-Cycle and Condition Reports Vashon

	Life Cycle Rating	Units	State				Percent Good or Fair
Yr. Insp.	Vital	Measured	1	2	3	4	Condition
2006	50%	205,791	119,894	78,460	6,541	894	
%			58%	38%	3%	0%	96%

F. Observations

1. Life-Cycle Cost Model

The projects planned for the 2013-21 biennia should be reviewed once the life-cycle cost model is updated. The project includes funding to replace all systems and utilities and to replace steel dolphins installed in 1997 and 2002.

2. Non-Life-Cycle Costs

In the 2005-07 biennium the preservation project is a non-life-cycle interim preservation or maintenance project.

3. Condition

The Vashon terminal is in fair condition, with the inspection reports showing that the terminal has 58% of its inspected structures in good condition and an additional 38% in fair condition.

Systemwide Catch-up Preservation

A. Projects

This is a Nickel funded project to allow WSF to "catch-up" to its preservation goals of having 90 to 100 percent of vital systems and 60to 80 percent of non-vital systems operating within their life-cycle.

Catch-up Preservation Projects

($000s)

PIN	Project Title	05-07	07-09	09-11	11-13	13-15	15-17	17-19	19-21	Total
999940D	Catch-Up Preservation									
	ANO6 Anacortes Dolphin Replacem	2,943								2,943
	AN34 Apron Replacement Slip 1				335					335
	BR03 Bremerton Slip 1 Dolphins			2,909						2,909
	BR10 Bremerton Slip 2 Dolphins			4,656						4,656
	BR18 Apron Replacement Slip 1			291						291
	KI13 Phase 3 Dolphin Replacement			3,841						3,841
	LO02 Dolphin Replacement	3,279								3,279
	LO03 Lopez Interim Terminal Preservation				313					313
	LO11 Apron Replacement			378						378
	OR02 Dolphin Replacement		4,944							4,944
	PD08 Apron Replacement				306					306
	SH04 Dolphin Replacement			2,016						2,016
	TA05 Transfer Span Retrofit	1,243								1,243
	VA03 Vashon Dolphin Replacement		8,074							8,074
	VA07 Transfer Span Retrofit		2,671							2,671
	Catch-Up Preservation Total	7,465	15,689	14,091	954					38,199

B. Project Expenditures 2005-07 Biennium

Two hundred and forty-three thousand dollars ($243,000) has been spent in the 2005-07 biennium on the hydraulic system at Tahlequah, $294,000 on the Anacortes dolphin replacement project and $523,000 on the Lopez dolphin replacement project.

Catch-Up Preservation Expenditures 2005-07 Biennium (as of Aug. 06)

($000s)

PIN	Project	Aug. 06
007016	Systemwide Terminal Hydraulic & Controls Upgrade Phase 2 (Tahlequah)	243
007161	Lopez Dolphin Replacement	58
XL1991	Lopez Dolphin Replacement	475
XL2717	Anacortes Dolphin Replacement Phase 2	294
	Total	1,070

C. Project Status

- Tahlequah: Scope changed substantially from a transfer span retrofit estimated at $1.2 million to work on the hydraulics for $243,000. Funds saved will be used at Lopez and Anacortes.
- Lopez: Construction is underway with work to be completed by February 2007. Bids were 5.6% under the engineer's estimate.

- Anacortes: Construction is underway with scheduled completion by February 2007. Bids were at the engineer's estimate.

D. Project Scope and Budget Changes

The projects to be accomplished and the budgets in the catch-up preservation program have been modified as outlined below. These adjustments were made in light of the condition of the asset (i.e. deleting the replacement of the dolphins at Eagle Harbor), availability of other project funding (i.e. Southworth transfer span retrofit), and/or changes in scope. They also reflect WSF's changes in preservation priorities.

Catch-up Preservation Project Scope & Budget

($000s)

Project	**2003** v2005-3A	2004 v2005-2	2004 v2005-3A	2006 v 2007-3
Anacortes Dolphin Replacement	3,769	3,140	2,943	2,943
Anacortes Apron Replacement			335	335
Bremerton Slip 1 Dolphins	3,300	3,301	2,909	2,909
Bremerton Slip 2 Dolphins	5,281	5,282	4,656	4,656
Bremerton Apron Replacement			291	291
Eagle Harbor Tie-Up Slips A-D Preservation	4,367			
Friday Harbor Timber Trestle Replacement	2,812	2,241		
Friday Harbor Timber Dolphin Replacement		2,839		
Kingston Dolphin Replacement			3,841	3,841
Kingston Toll Booth Replacement		727		
Lopez Trestle Replacement	2,082	1,946	2,086	
Lopez Dolphin Replacement			3,476	3,854
Lopez Apron Replacement			378	378
Lopez Interim Preservation				313
Orcas Dolphin Replacement			4,944	4,944
Orcas Upland Preservation			627	
Point Defiance Upland Preservation			189	
Point Defiance Transfer Span Retrofit (non-life-cycle)	1,709	1,709	1,560	
Point Defiance Apron Replacement			306	306
Seattle Transfer Span Retrofit (non-life-cycle)	1,472			
Shaw Dolphin Replacement		2,246	2,016	2,016
Southworth Transfer Span Retrofit (non-life-cycle)	1,583			
Tahlequah Transfer Span Retrofit (non-life-cycle)	1,370	1,370	1,243	1,243
Tahlequah Dolphin Replacement			533	533
Vashon Dolphin Replacement	8,587	8,586	8,074	8,074
Vashon Transfer Span Retrofit (non-life-cycle)		2,945	2,671	2,671
Total	36,332	36,332	43,078	39,307

E. Observations

1. Life-Cycle Cost Model

The projects included in catch-up preservation project should be reviewed once the life-cycle cost model is updated.

2. Non-Life-Cycle Costs

The intent of the catch-up preservation program is to increase the percentage of systems and structures operating within their life-cycle. It appears inconsistent with that purpose to include non-life-cycle expenditures within the project.