JOINT TRANSPORTATION COMMITTEE

WASHINGTON STATE FERRIES
VEHICLE RESERVATION SYSTEM REVIEW

January 5, 2010

Cedar River Group
RL Collier

Legislative Direction: 2009 Session

2009-11 Transportation Budget Summary Conference Report

- Budget charts a new path forward for WSF
  - ✓ Provides funding for new vessels
  - ✓ Prioritizes vessel over terminal improvements
  - ✓ Maintains operating funding for all routes
  - ✓ Holds the line on ferry fares
  - ✓ Funds a WSF reservation pilot project after a pre-design study is completed and the JTC recommends a proposed plan to the Legislature in 2010

2009-11 Transportation Budget Proviso

- WSF must complete a pre-design study & present it to the JTC
  - ✓ Must include: evaluation of the compatibility of WSF's electronic fare system, proposed reservation system, & the implementation of smart card
- WSF *may not* implement a reservation system until authorized to do so in the 2010 supplemental budget

Consultants' Approach

Participate in WSF Pre-Design

- Met throughout the process to provide input

Independent Research: Ferry Vehicle Reservation Systems

- Visit – at consultant's own expense – to three other system
- Able to observe
  - ✓ Vehicle processing
  - ✓ Customer interface with reservation systems
  - ✓ Business rules – how far in advance reservations are made etc.
  - ✓ Customer behavior
    - ▪ Customers are more often early than late for a reserved spot
    - ▪ Later sailings open up
  - ✓ Information technology systems
  - ✓ Customer information systems
  - ✓ Operational policies in addition to reservations
    - ▪ Touch & go turning peak periods/deadhead returns

3

Legislative Direction: 2009 Session

• Key findings presented to WSF and at JTC's September meeting

    ✓ *Terminal management.* Need to have local control & discretion

    ✓ *Real time information critical.* All 3 systems use text messaging & email

    ✓ *Access to terminal.* Need to sort cars before arrival at terminal

    ✓ *Holding area for one boatload of cars.* Minimum needed

    ✓ *Standby capacity.* Close to 100% of space available for reservations

    ✓ *Customer responsiveness.* Feedback & adaptability to different user groups important

    ✓ *Freight program.* Recommend WSF consider a position dedicated to freight

• Findings reflected in WSF proposed vehicle reservation system

Two Projects

- WSF proposing *two separate, related projects* for legislative review
  - ✓ Vehicle reservations - $11.6 million
    - Spread peak demand
    - Minimize terminal expansion
    - Reduce customer wait time and uncertainty
    - Recommended on all routes for freight/commercial
    - Recommended on all but three routes for passenger cars
  - ✓ Systemwide communications - $14.3 million
    - Improve communications with walk-on and vehicle customers
    - Recommended for all routes

Vehicle Reservation

- *Recommend legislative concurrence with vehicle reservations:*
  - ✓ Business rules & priority access programs
  - ✓ Commercial reservations on all routes
  - ✓ Passenger car reservations on all but 3 routes
  - ✓ Phasing
  - ✓ IT approach & integration with EFS & smart card approach
- *On-time performance*
  - ✓ WSF: on-time performance is a precondition for reservations
  - ✓ Peak period on-time performance needs improvement
  - ✓ Improve customer certainty for walk-ons & vehicle customers
  - ✓ WSTC 2008 survey found
    - Less satisfaction among peak period customers than non-peak (62% vs. 71% weekday travelers)
  - ✓ *Recommendation: Legislature require peak period on-time performance review & develop weighted on-time measure*

Summer 2009 Peak Sailing On-Time Performance

Route	% >10 minutes late	Time/Direction
San Juans/Sidney/Anacortes	44%	Sunday Noon-8PM Westbound
	37%	10AM-6PM Both directions
Port Townsend-Keystone	38%	10AM-6PM Both directions
Seattle-Bainbridge	31%	3PM-7PM Westbound
Seattle-Bremerton	4%	
Edmonds-Kingston	42%	
Mukilteo-Clinton	19%	
Pt. Defiance-Tahlequah	9%	
Fauntleroy-Southworth	13%	
Fauntleroy-Vashon	17%	

Vehicle Reservation

- *Reservations & on-time performance:*
  - ✓ Implement to encourage faster terminal processing
    - ▪ Separate ticketing purchase from tollbooth & verification
      - ▪ All three systems visited do this
      - ▪ Red Funnel and Wight Link direct to terminal building
      - ▪ Istanbul has automatic ticket machines
    - ▪ Purchase of all tickets (vehicle & passenger) when reserving
    - ▪ Sort vehicles before arrival at tollbooth
  - ✓ Double-sided tollbooth operation
    - ▪ Red Funnel operates from both sides of the tollbooth
  - ✓ Limit vehicles allowed to be in stand-by lane
    - ▪ All three systems turn vehicle away to avoid congestion

Vehicle Reservation

- *Capital costs*
  - ✓ $11.6 million compared to $16.9 million in 2009-25 plan
    - ▪ Primary difference no transponders
  - ✓ $11.6 million includes:
    - ▪ $6.2 million central information technology system
      - o Includes email, text message capacity
    - ▪ $5.4 million terminal improvements
      - o $1.0 Ferry Advisory Radio
      - o $4.4 million signage & tollbooth technology
  - ✓ Cost estimate review
    - ▪ Estimates close to WSDOT guidelines & reasonable for this early stage in the project
    - ▪ Detailed comments will be provided to WSF

Vehicle Reservation

- *Operations costs*
  - ✓ $11.2 million compared to $4.1 million in 2009-25 plan (Program X)
    - ▪ Difference call center staff not included in earlier estimate
    - ▪ 6.0 FTE – call center
    - ▪ 3.7 FTE – terminal support
    - ▪ Per biennium after Phase 3: $2 million (2009 $)
  - ✓ $ 3.7 million in Program C costs 2009-25 plan
    - ▪ 2.0 FTE technology support
    - ▪ Per biennium after Phase 3: $275,000 (2009 $)
  - ✓ Estimates reasonable

Vehicle Reservation

- *Other potential operations costs*
    - ✓ Increase credit card fees
        - ▪ Reservations may increase percentage of credit card sales
    - ✓ Ferry Advisory Radio
        - ▪ Not clear whether operating costs are included
    - ✓ *Recommendation: Review operating costs before report final*

- *Integration with other programs to increase ridership*
    - ✓ FY 10 Nov. ridership forecast lower than March forecast
        - ▪ Revenue $400 million lower over 2009-25 time period
    - ✓ Marketing program
    - ✓ Dedicated freight staff to supplement reservations program
    - ✓ *Recommendation: As reservations implemented, require WSF to demonstrate integration with other programs aimed at improving ridership.*

Communications Improvements

- *Real time information critical – walk-on & vehicle customers*
  - ✓ Finding from review of other Ferry systems
    - ▪ Provide emails and text messages to reservation holders
    - ▪ Use information technology system (load management system) and terminal manager knowledge to provide information on wait times for non-reservation holders
  - ✓ Need confirmed in WSTC 2008 market survey
    - ▪ 77% agreed that the use of technologies such as variable message signs to alert riders to wait times was a good idea
    - ▪ 62% wanted accurate & timely email announcements
    - ▪ 60% thought it a good idea to improve placement of web cams so riders can judge wait times

Communications Improvements

- *Communication proposals/capital costs*
  - ✓ $14.3 million vs. $1.0 million (web cams) in 2009-25 plan
  - ✓ $14. 3 million includes:
    - $9.4 million – variable message signs
      - Funding in 2011-13 & 2013-15 biennia
      - 6 signs in Puget Sound region showing:
        - Next sailing time
        - On-time/minutes delay
        - % full & drive-up (non-reserved) wait time
    - $2.6 million – highway advisory radio
      - At all but Kingston & Shaw
    - $1.3 million – queue detection coils
      - At 6 reservation terminals & Mukilteo/Clinton
    - $1.0 million – web cameras
      - At Seattle, Vashon, 4 San Juans Islands

13

Communications Improvements

- *Communications program*
  - ✓ Need integrated messaging between radio, signage, web, email and text messages
    - First step in implementing communications project
    - Determine relationship to WSDOT systems
  - ✓ Reservation communications
    - Queue detection proposed to provide information for variable message signs and highway advisory radio on wait times
    - Web cameras intended to help customers gauge wait times
    - Relevant only for non-reserved status at reservation terminals
      - o Other systems feed information from load management systems and terminal manager interface
    - *Recommendation. Do not fund queue detection or additional web cameras at reservation terminals. Savings: $1.9 million*

Communications Improvements

- *Communications program*
  - ✓ Non-reservation communications: Mukilteo, Tahlequah, and Fauntleroy routes
    - ▪ Proposal includes
      - o Variable message signs – will have to indicate non-reserved sailings
      - o Highway advisory radio and ferry advisory radio
      - o Vashon: web camera
      - o Mukilteo & Clinton: queue detection
      - o Email & text message capacity for freight reservations
  - ✓ How improve email messages for non-commercial customers.

Implementation

- *Market research*
  - ✓ Recommend testing through WSTC market research
  - ✓ Particularly proposed priority access programs and other business rules