# WASHINGTON STATE LEGISLATURE JOINT TRANSPORTATION COMMITTEE



### **PURPOSE**

#### Joint Transportation Committee (JTC) directed to:

- Conduct a study of the Washington State Ferry (WSF) fares that recommends the most appropriate fare media for use with the reservation system and the implementation of demand management pricing and interoperability with other payment methods
- Include direct collaboration with members of the Washington State Transportation Commission (WSTC) (Transportation Budget)





# **DEFINITIONS**

Interoperability

Degree to which system accepts fare media of other systems and vice versa

Fare Media

The products that are accepted for payment

**Fare Structure** 

The structure and policies setting the fares & to whom they are charged







# **CUSTOMERS**

#### The central focus of the study is the WSF customer

Fare media, interoperability, fare structure, reservations demand management pricing are *interrelated* and *affect* the customer experience, satisfaction, and ultimately WSF's ridership









## **CUSTOMERS AND RIDERSHIP**

### Distinction between customers and ridership

**Ridership** Measures the total number of trips taken by customers

**Customers** Individuals who take at least one trip on WSF

Customers make household buying decisions – decisions that may result in a single ride a year or in 500+

WSF tracks ridership not customers – as do most transit agencies





# **CUSTOMERS AND RIDERSHIP**

From 2000 to 2008

**Ridership** Decreased 13%

**Customers** Increased 10% to 22%

More *customers* are using the system – but *riding* less often

• Estimate 20% drop in rides per customer

WSF served approx. 297,000 customers in 2008/23.3 million riders

Derived from and 2008 WSTC Customer Survey and 2008 ridership data







# WSF CUSTOMERS ARE SEGMENTED

#### **Travel Shed**

Travel Shed	% of riders/customers	Travel Shed	% of riders/customers
San Juans	9%/29%	Clinton	18%/13%
Port Townsend	2%/13%	Fauntleroy	13%/7%
Central Puget Sound	56%/36%	Pt. Defiance	2%/2%

Customers distinct – unlikely to choose an alternate route

WSTC 2010 survey concluded – traveling for purposes of commuting varies by route "This fact would require WSF programs & fares to be tailored to routes or sheds."





# WSF CUSTOMERS ARE SEGMENTED

#### **Trip Purpose**

	Regular Commuters	Regular Non- Commuters	Tourist Recreational	Commercial
Routes with High %	Fauntleroy Pt. Defiance Bainbridge Bremerton	Edmonds Mukilteo Port Townsend	Edmonds Mukilteo Port Townsend San Juans	Edmonds Mukilteo San Juans Vashon

#### Frequency of Travel

Declining frequent riders (use multi-ride products)

- Vehicles 61% infrequent in 2010 compared to 54% in 2000
- Passengers 67% infrequent in 2010 compared to 55% in 2000

#### **Ferry Access**

• Primarily by vehicle – 72% driver or vehicle passenger







# RIDERSHIP

#### Decline 13% 1999 to 2008/16% to 2010

#### **Fare Increases**

- Only 4 small increases in 15 years prior to 2001 & MVET loss
- Increases 10 times since then including 20% in 2001

#### **Service Decreases**

- Reduced winter service hours
- End of passenger-only service
- One boat service Port Townsend 2007-11

#### West Sound Demographics

- Population growth slower on West than East Sound
- Income lower West Sound
- Age older West Sound
- Employment more opportunities to work on West Sound than in the past, telecommuting, recession







# RIDERSHIP

## **Decline Dispropriate Among Routes**

5 routes more decline than share of ridership/3 less Biggest declines on routes with high commuter/frequent rider

Travel Shed/Route	% 2010 Ridership	% of Ridership Decline
Central Puget Sound  Bainbridge  Bremerton  Edmonds	56% 26% 11% 18%	61% 32% 16% 13%
Fauntleroy	13%	17%
Point Defiance	3%	5%
Port Townsend	2%	7% (one boat service)
Clinton	18%	7%
San Juans	8%	2%







# FARE STRUCTURE

#### Legislative Direction on Fares Changed in 2008

#### WSF must:

- Recognize each travel shed unique
- Use data from current WSTC survey
- Be developed with input from public hearings and Ferry Advisory Committees
- Generate revenue required by biennial budget
- Consider impacts on users, capacity & local communities
- Keep fare schedules simple

#### And must consider:

- Options for using pricing to level vehicle peak demand &
- Options for using pricing to increase off-peak ridership







# FARE STRUCTURE PRINCIPLES, DISCOUNTS & SURCHARGES

THREE GUIDING PRINCIPLES FOR BASE FARE STRUCTURE			
CUBE	Tariff Route Equity		Relationship Passenger/Vehicle Fares
Vehicle Rates	Vehicle Rates Passenger Rates		Vehicle Rates Passenger Rates
Fees based on space occupied Height, width & length	Price relationship between routes based on service time/ sheds		Vehicles cost 3.4 times > passengers
Discounts		Surcharges	
Senior, Disabled & Medicare		Peak Season – Full fare vehicles	
Youth (6-18)		Bicycles	
Frequent Vehicle		Fuel	
Frequent Passenger		Vessel Replacement Fund	
San Juans Interisland Passengers Free			
Directors Promotions (RV Sidney – Frequent Commercial)			







# DISCOUNT SURCHARGE CHANGES

# Have Particularly Affected Frequent Passengers

Multi-ride card

40% discount 1997 – effective 2003 20%

No refunds on unused portion – effective 2001

Monthly pass

40% discount 1997 – effective 2003 20%

2006 – limit to 31 rides

#### Frequent Vehicle & Passengers

EFS enforcement of 90 day limit on multi-ride products

Contributed to drop-in frequent vehicle ridership in 2007-08

# WSTC Polls – nearly 40% of frequent passengers have been customers for 10 years or more







# TOLL COLLECTION

Route	Passengers	Vehicles
Vashon Island Routes	1-point toll collection (collected going to Vashon)	1-point toll collection (collected going to Vashon)
Central Sound	1-point toll collection (collected going westbound)	Collected each way
Port Townsend	Collected each way	Collected each way
Mukilteo	1-point toll collection (collected going westbound)	Collected each way
San Juan Islands	1-point toll collection (collected going to Islands)	1-point toll collection (collected going to Islands)

Collected each way

**Traffic Imbalance** – More travel eastbound than westbound 25% more Fauntleroy-Southworth

16% more Bremerton Revenue impact – not clear



Sidney





Collected each way

# FARE MEDIA & INTEROPERABILITY

#### WSF – Currently Three Fare Media

- Electronic Fare System (EFS)/Branded Wave2Go
- One Regional Card for All (ORCA)
- Commercial Accounts

#### Washington State Department of Transportation

Good to Go!







# EFS/Wave2Go

#### **Elements of the System**

- Point of sale devices
- Kiosks
- Internet
- Link to state accounting systems

#### **Products Offered**

- Single ride
- Multi-ride
- Re-value cards
- Monthly passes

#### Vendor

# **Gateway Ticketing**

- Procured in 2005
- Resolved audit situation
- Ticket creation & cancellation







# EFS/Wave2Go CHALLENGES

#### **Fare Computation Complex**

- 22 routes, 7 account classifications, 72 fare types, 9 ticket types, 27 validity periods, 15 passenger types
- Multifunctional traffic statistics, farebox recovery, revenue allocation

#### **Implementing Fare Changes Complex**

Driven by data files – with each change new data file

#### Off the Shelf Software

Limits WSF options

#### Supplier Support

- Limited reservations implementation problem
- 12 month wait

#### Software Design & Code

Cannot easily accommodate changes and modifications







# **ORCA**

#### **WSF**

- Full passenger fares/stored value
- Monthly passes
- Drivers full fare (start end of October)
- Employer program monthly passes

#### Two Features – WSF Does Not Use

- Regional Pass/PugetPass (transfer)
- Stored rides
  - Multi-ride cards
  - Operational decision not system constraint

Launched 2009

Card based system

7 agencies
WSF
Community Transit
Everett Transit
Kitsap Transit
METRO
Pierce Transit
Sound Transit







# Good To Go!

### **Typical Toll Lane**

- Transponder Reader
- Vehicle Detection
- Automatic Vehicle Classification
- License Plate Readers
- Lane Controller

#### Account based

Limited fee categories

Tacoma Narrows Bridge

SR 167 HOT Lanes

SR 520 - soon







# INTEROPREABILITY: OPERATIONAL CONSIDERATIONS

#### **WSF Visual Count Required**

- Coast Guard
- Ticket policies

#### **WSF Passenger Type & Destination**

Needed to value a ticket

#### Communities Outside Good to Go! Area

• Primarily King, Pierce, and to some extent Kitsap using *Good to Go!* 

## **EFS Accounting**

Recognizes revenue when ticket sold, not when used

#### Surcharges

ORCA not able to delineate surcharge to customer







# EFS & ORCA INTEROPREABILITY SYSTEMS CONSIDERATIONS

#### **ORCA and EFS – Distinct Systems**

- WSF turnstiles & seller booths equipped with ORCA card readers
- Special interface device Gate Adaption Kit (GAK)
- GAK and card reader store ORCA fare tables etc.
- ORCA consolidates transactions, creates batch file
- Regional ORCA clearinghouse processes ORCA data

## Front-End (Customer Use)

Reasonably well integrated – accept ORCA for travel

#### Back-End

- No integration between ORCA and EFS
- WSF must keep two sets of data, reporting etc.
- Manual processes to reconcile







# **COMMERCIAL ACCOUNTS**

#### Separate from EFS and ORCA

- Employees carry charge card processed at time of travel
- Travel billing at end of month

#### 1,400 accounts

- Pass credit screen & pay \$50 annual administration fee
- Commercial reservations for account holders in San Juans





# RESERVATIONS & DEMAND MANAGEMENT PRICING

#### **New Vehicle Reservation System**

- Planned for Central Sound routes, Port Townsend & San Juans with commercial reservations on all routes
- Three phase implementation
  - 1. Replace software on current Port Townsend & Sidney system
  - 2. Extend commercial reservations to all routes
  - 3. Central Puget Sound
- Account based system
- Link to EFS critical
  - System using custom rather than off the shelf due to EFS constraints
  - Avoiding EFS vendor support in Phase One vendor 12 month lag to support







# FARE REVENUE

#### 70% (FY 2010) of Operations Funds

#### Vehicle fares (driver + vehicle) - 75% of revenue

- Standard vehicles 67%
- Commercial & oversize 8%

#### Passenger fares – 25% of revenue

#### Single trip fares more revenue than multi-ride

- 68% of revenue
- Revenue from multi-use products down despite fare increases
  - \$12.9 million in FY 2006 to \$10.9 million in FY 2010

# Yield - higher (amount per rider) comparing FY 2006 to FY 2010

- 9% passenger fare increase 11% increase yield
- 8% vehicle fare increase 13% increase yield







# **NEXT STEPS**

#### **WSTC Customer Survey**

Complete first week of Nov.

#### **Three White Papers**

- Interoperability
- Fare Media
- Fare Structure

#### **Review Policy Workgroup Meetings**

- November 8
- November 30



