WASHINGTON STATE LEGISLATURE JOINT TRANSPORTATION COMMITTEE



Fare Media Fare Structure Interoperability Implementation



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)





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DEFINITIONS

Interoperability	Degree to which system accepts fare media of other systems
Fare Media	The products that are accepted for payment
Fare Structure	The structure and policies setting the fares & to whom they are charged



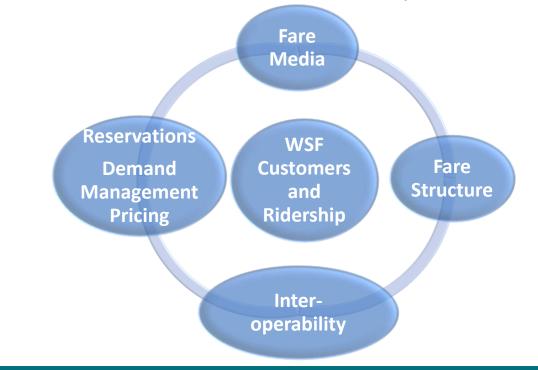


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CUSTOMERS

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







More customers are using the system – but riding less often

- *Ridership* Total number of trips taken by customers Decreased13% from 2000 to 2008
- *Customers* Individuals who take at least one trip on WSF Increased 10% to 22% from 2000 to 2008

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WSF customers are segmented by:

- Travel Shed Customers within travel sheds are distinct
- Trip Purpose

✓ Regular commuters✓ Regular non-commuters✓ Tourist/recreational✓ Commercial

- *Frequency* Declining use of multi-ride products
- Ferry access Greater number drive-on (driver or vehicle passenger)

Customer households use more than one fare media/product

• 68% in preliminary FROG panel survey





Legislative direction on fares changed in 2008

WSF must:

- Recognize each travel shed unique
- Use data from current WSTC survey
- Develop 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

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Current fare structure based on

- Three principles ✓ CUBE
 - ✓ Tariff Route Equity
 - ✓ Relation Vehicle/Passenger Fares
- Discounts (senior, youth, frequent passenger)
- Surcharges (summer, fuel, vessel replacement, overheight)

Fares 70% of WSF operation funds (2010)

• Vehicle fares – 75% of all fare revenue





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FARE MEDIA

Three Fare Media Accepted on WSF

Wave2Go-Electronic Fare System (EFS)

- Ticket issuing and cancellation system
- Addressed long standing audit and control issues
- Provided new options for customers

One Regional Card for All (ORCA)

- Information is stored on the card
- Stored value ("e-cash") for walk-ons, and pending for vehicles; also
 WSF monthly passes for passengers
- "Issuing and cancellation" not intrinsically supported by ORCA
- Stored ride capability (i.e. for multi-ride cards) available not activated by WSF

Commercial Accounts

- Operates as a distinct system
- Billing arrangements with account holders

Good to Go! currently not accepted for WSF travel





WSF CUSTOMER FARE MEDIA OPTIONS

WSF unique in providing two transportation services

- Transit (walk-on customers)
- Marine highway (drive-on customers)

Walk-on & drive-on customers different fare media options

Walk-On Customers	Drive-on Customers
Fare Media Options ✓ <i>Wave2Go</i> ✓ ORCA	 Fare Media Options ✓ Wave2Go ✓ ORCA ✓ Good To Go! (WSDOT tolling system) ✓ Commercial
Fare Products ✓Multi-ride (<i>Wave2Go</i>) ✓Single (<i>Wave2Go</i> & ORCA) ✓Monthly (<i>Wave2Go</i> & ORCA)	 Fare Products ✓ Passengers – same as walk-on ✓ Drivers Multi-ride (<i>Wave2Go</i>) Single (<i>Wave2Go</i> & ORCA (soon))





FOUR INTEROPERABILITY OPTIONS

Options Assessed

- 1. ORCA Stored Ride Feature
- 2. Good to Go! at Attended Toll Booths
- 3. Good to Go! at Unattended Toll Booths
- 4. Account-based WSF System
- Options are not mutually exclusive
- Options 1, 2, and 4 could be implemented with existing fare products and fare structure

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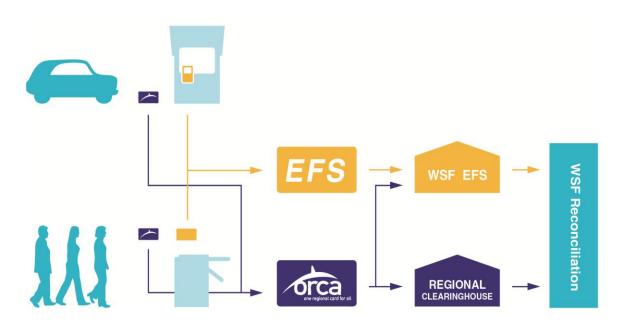
• Option 3 requires that the fare structure for vehicles be simplified to be more like the state highway tolls with charges based on vehicle length, irrespective of the number of people in the car



1. ORCA STORED RIDE FEATURE

Benefit

Walk-on & drive-on customers: Combines WSF fare products & other transit system products on ORCA card



Option Summary Wave2Go – No change in products, some system upgrades needed ORCA – Enable stored rides for walk-on & vehicle travel Good To Go! – Not implemented Commercial accounts – No change

Capital cost <\$0.5 million

Questions to be resolved Ability to accept passenger & vehicle multi-ride on one ORCA card



IMPLEMENT GOOD TO GO! for VEHICLES (Options 2 and 3)

Benefit

Drive-on customers – Can use *Good To Go!* account for WSF travel

Assumptions for both Good To Go! Options

- All vehicle lanes at all terminals accept *Good* to Go! – further analysis needed for implementation at some terminals or some lanes
- New readers & other site infrastructure at terminals needed
- *Good To Go!* back office customer service system used to validate transponders & upload transactions, license plate recognition
- Transactions posted at *Good To Go!* service center & then settled to WSF





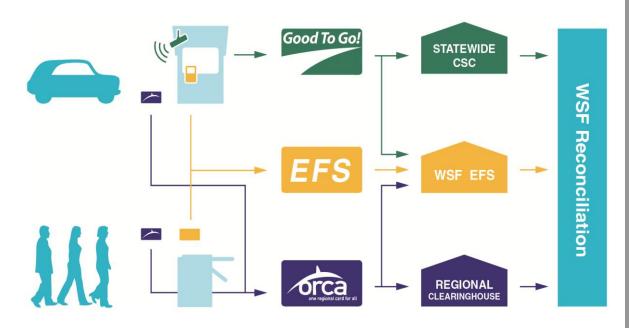
Option Summary Wave2Go – System upgrades needed ORCA – No change Good To Go! – Implemented for vehicles Commercial accounts – No change or convert to Good To Go!

2. GOOD TO GO! ATTENDED BOOTHS

Benefit

CEDAR RIVER GROUP Partners in change. Solutions that last.

Drive-on customers: Customer can elect to use *Good To Go!* with current passenger & vehicle fare structure



IBI group **Option Summary** Good To Go! -Implemented as a peripheral to Wave2Go Wave2Go – No integration required with Good To Go! **Tollbooth** – Fares calculated & charged to Good To Go! account or paid by other fare media Commercial accounts remain separate

Capital cost \$2.0 to \$5.0 million Issues

Cannot use multi-ride cards with *Good To Go!*



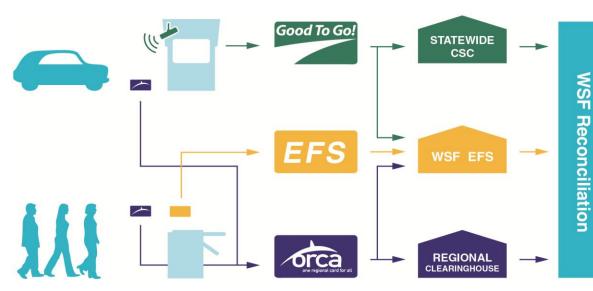
3. GOOD TO GO! UNATTENDED BOOTHS

Benefit

CEDAR RIVER GROUP Partners in change. Solutions that last.

Drive-on customers: Integrated highway tolling & WSF tolling

Major change required to fare structure – vehicle only with no discounts/no passenger fees collected from vehicle passengers



IBI group Option Summary Good To Go! – Replace Wave2Go & ORCA for vehicles Wave2Go & ORCA – Walk-on customers only Commercial accounts – Could migrate to Good To Go!

Capital cost

- \$5.0 to \$8.0 million
- Offset future *Wave2Go* upgrade

Issues to be Resolved

- Separate visual check
- Reservation deposits

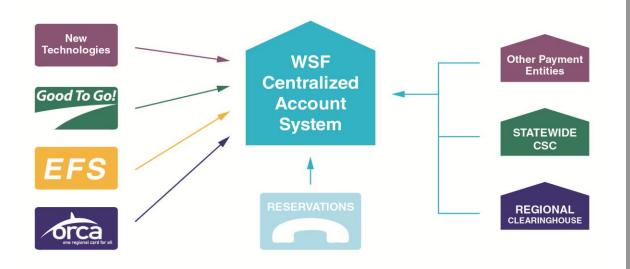


4. ACCOUNT-BASED WSF SYSTEM

Benefit

CEDAR RIVER GROUP Partners in change. Solutions that last.

- Drive-on & walk-on customers could use any existing fare media
- The system could accept any future open payment cards
- The system could link to reservations



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Option Summary

Wave2Go – Major upgrade or replacement required
ORCA– Used as identifier with appropriate fare deducted
Good to Go! – Would be used as an identifier

Commercial Accounts – migrate to new system

Capital cost

- >\$8.0 million
- Leverage vehicle reservation system investment

Compared the four alternatives in the following impact areas:

- 1. Fare media interoperability
- 2. Fare structure changes required
- 3. Technology & infrastructure changes required
- 4. Costs





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Option 1. Implement ORCA Stored Ride

- Requires no changes in existing fare structure
- Requires minimal infrastructure & technology changes
- Relatively low cost
- Provides the least interoperability
- Does not support
 - \checkmark Time of day pricing
 - ✓ Future interoperability/emerging technologies

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 \checkmark Integration with reservation program





Option 2. Implement Good To Go! with Attended Booths

- Improves interoperability significantly
- Requires moderate changes to the fare structure multi-ride cards cannot be used with *Good To Go!*
- Moderate infrastructure & technology changes
- Moderate initial cost (\$2.0 to \$5.0 million)
- Supports
 - ✓ Reservations outside *Good To Go!*





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Option 3. Implement Good To Go! with Unattended Booths

- Improves interoperability but limits drive- on customers to *Good To Go!* (transponder or license plate)
- Requires significant changes to the fare structure
- Moderate infrastructure & technology changes
- Initial capital cost of \$5.0 to \$8.0 million (difference from Option 2 is addition of license plate reader and vehicle classification technology)
 - ✓ Mitigate level of funding needed for future *Wave2Go* upgrade
- Supports
 - ✓ Vehicle time of day pricing
 - ✓ Vehicle reservation –TBD interface needs to be determined





Option 4. Account-based WSF System

- Improves interoperability with any fare media accepted for walkon or drive-on customers
- Requires no changes to fare structure
- Significant infrastructure & technology changes
- Highest initial capital cost (greater than \$8.0 million)
 - ✓ Major upgrade or replacement of *Wave2Go* accomplished
 - ✓ Leverage vehicle reservation system investment
- Supports
 - ✓ Vehicle time of day pricing
 - \checkmark Vehicle reservation



NEXT STEPS

- WSTC Customer Survey Initiate Nov. 9
 - ✓ Focus on household use of WSF fare products, *Good To Go!*, ORCA
 - ✓ Test interest in Ferry/Transportation System Account Concept
 - Single account for ferries
 - Single account for all transportation system

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- Refine interoperability options
 - ✓ Based on discussion
 - ✓ Operations impact
 - ✓ Transaction costs *Good To Go!*
- Fare Structure White Paper Nov. 30 Policy Workgroup Meeting



