

Operational and Pricing Strategy Options

Paula J. Hammond, P.E.
Secretary

David L. Dye
Deputy Secretary

Steve Reinmuth
Chief of Staff

David Moseley
Assistant Secretary, Ferries Division

Ferry Advisory Committees
June 2008



Why Are We Here Today?

The Ferry Financing Legislation (ESHB 2358) states:

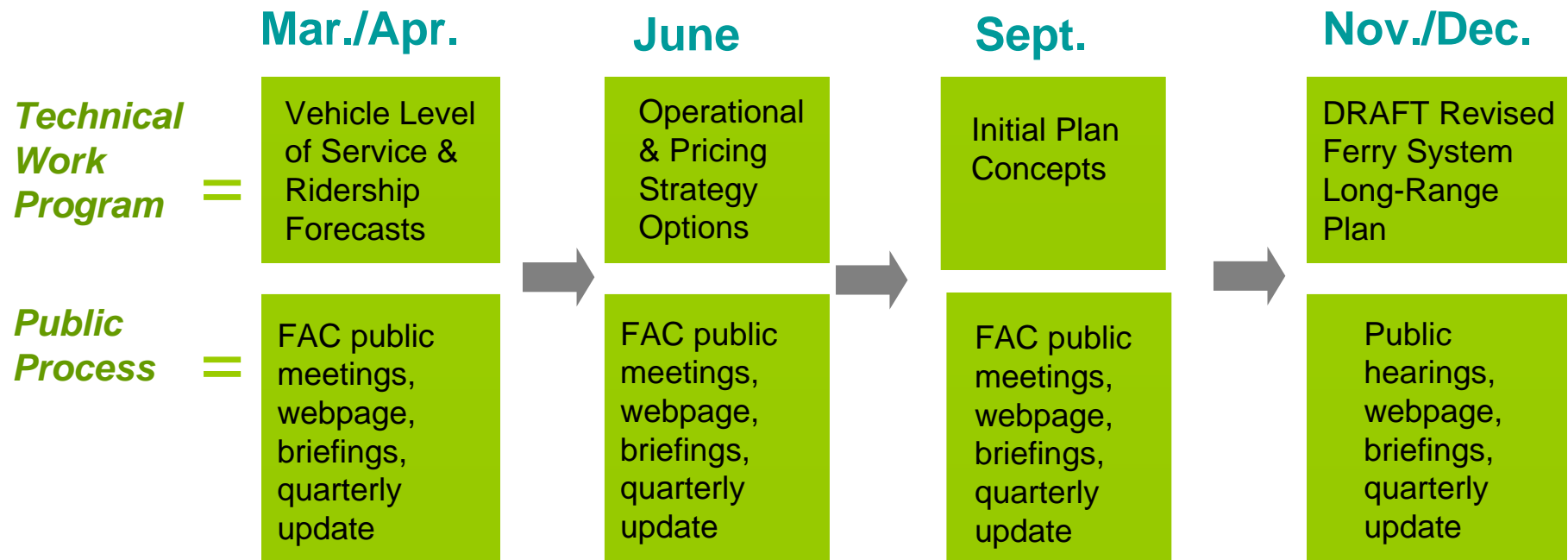
“... it is the intent of the legislature that Washington state ferries be given the tools necessary to maximize the utilization of existing capacity and to make the most efficient use of existing assets and tax dollars.”

Specifically, the legislation directed WSF to study:

- Ridership forecasts
- Level-of-service standards
- **Operational strategies**
- **Pricing strategies**
- Terminal design standards

Where Are We in the Work?

The work culminates in a revised long-range plan for the ferry system.



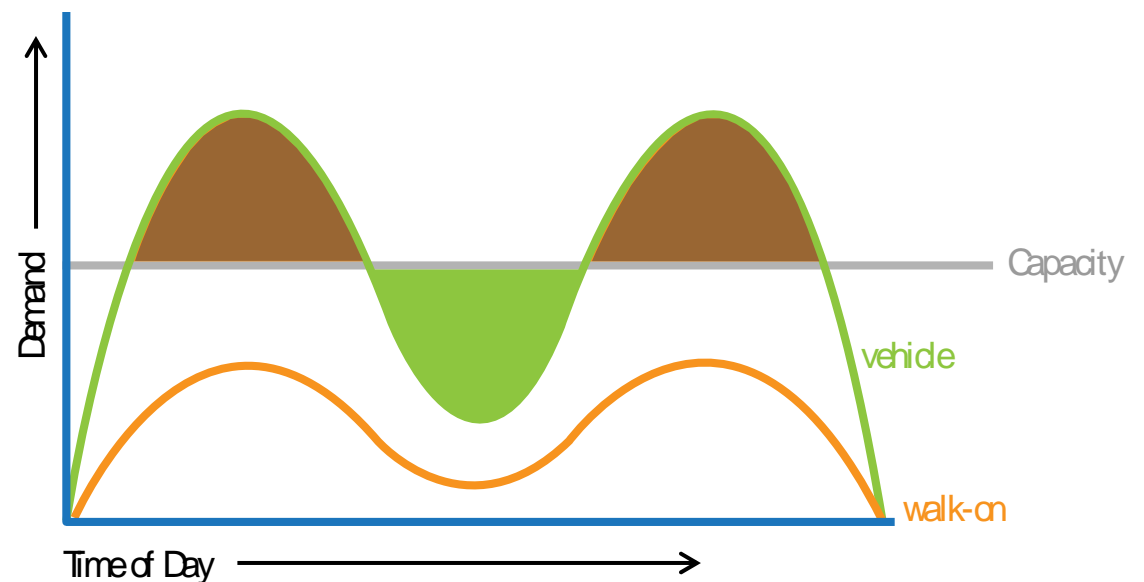
Goal of Operational and Pricing Strategies

ESHB 2358:

“... it is the intent of the legislature that the Department of Transportation adopt adaptive management practices in its operating and capital programs so as to keep the costs of the Washington state ferries system as low as possible while continuously improving the quality and timeliness of service.”

Supply and Demand: The Imbalance

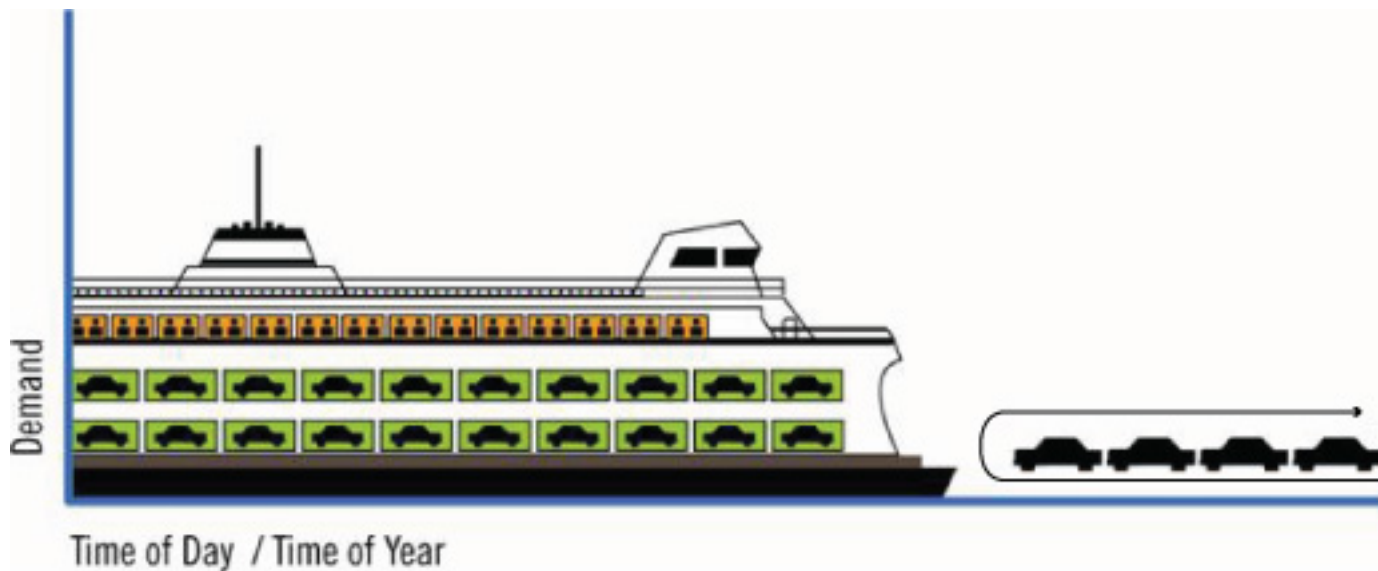
- Vehicles are the constraint
- Excess vehicle demand in specific times of day, week, and by season.
- Expanding supply (accommodating more vehicles) is expensive. The system faces increasingly high capital and operational costs.
- Excess capacity in specific times of day, week, and by season.
- Excess walk-on capacity all the time.



The ferry system is not unique in this challenge. Cell phone, electricity and water providers also deal with balancing supply and demand.

Supply and Demand: The Consequences

- System imbalance:
 - congestion in peak periods
 - underutilized vessels and facilities in off-peak times



- Unhappy customers and avoidance of the system.
- Queue impacts on ferry communities and the environment.

What has been done to address the operational and pricing legislative directives?

Step 1

Conducted a thorough examination of all current strategies in place at the ferry system and other transportation agencies to develop a long list of strategies.



Step 2

Screened strategies based on the following criteria:

- Manages Demand
- Increases operation efficiency
- Customer convenience
- Ferry terminal community impacts
- Environmental impacts
- Ease of implementation
- Capital costs
- On-going operating cost
- Interaction with other strategies



Step 3

Strategies were categorized into nine groups:

- Pricing
- Reservations
- Transit Access Enhancements
- Technologies for Improved Fare Collection
- Non-motorized Access Enhancements
- Enhanced User Information
- Promotion of Non-SOV Modes
- Traffic and Dock Space Management
- Parking and Holding

Pricing

1

This category includes strategies such as:

- Peak period or congestion pricing
- Mode shift pricing or reducing SOV's
- Off-peak discount pricing
- Pricing simplification

Primary Benefits

- Encourages time shift
- Encourages mode shift
- Attracts new demand to underutilized passenger capacity
- Reduces queue lengths

Non-Commercial Vehicle (Auto) Rates to Peaks Island	
Peak Season (mid-April through Columbus Day)	
Thursday, Friday, & Saturday, Sunday until 5:00 PM	\$80.00 (\$70.00 handicapped plates)
After 5:00 PM on Sunday, Monday, Tuesday & Wednesday	\$60.00 (\$50.00 handicapped plates)
Off-Peak Season (Columbus Day through mid-April)	
all days, all times	\$34.00

Application/Implementation

- Evaluated from a revenue neutral standpoint
- Most effective during peak periods and on routes with the highest vehicle demand
- Price to address each route or travel-shed according to the primary customer types
- Highly compatible with a Reservations System

Reservations

2

Concept:

- Customers buy a vehicle fare for a specific sailing and for a specific vehicle.
- Reservations are made at automated walk-up kiosks, over the phone, or online.

Primary Benefits

- It is simple for the customer to make a reservation and ONLY involves autos
- It moves the queue from the terminals to the digital world
- Implementation is very flexible
- Each sailing may be treated differently depending on demand and the needs of current users
- Changes to pricing are not required for implementation
- Positive environmental and community impacts

IDO ferries Istanbul, Turkey:

<http://www.ido.com.tr/en/index.cfm>

The Steamship Authority - Martha's Vineyard and Nantucket

<http://www.steamshipauthority.com/ssa/vehavail.cfm>

Cape May, NJ - Lews, DE Ferry

<http://www.cmlf.com>

Canada Bay Ferries

<https://www.canadaferry.com/bokning/en/instructions.asp?ref=cat>

BC Ferries

<http://www.bcferries.com>

Application/Implementation

- Can be designed to fit the ferry system
- Requires up front capital investment, but low ongoing operating costs
- Highly compatible with peak period pricing
- Adaptable to local conditions
- Possible roll out first on high demand routes (i.e. Port Townsend, Central Puget Sound) and refine

Transit Access Enhancements

3

This category includes strategies such as:

- Improved transit connections and frequencies
- Improved transit access at terminals
- Expanded park-and-ride capacity
- Improved transit/ferry schedule coordination
- Real time transit arrival, departure and connections information
- Sheltered transit facilities at terminals



Primary Benefits

- Mode shift
- Attracts demand to available capacity
- Queue reduction
- Adds customer convenience
- Positive community and
- Environmental impact

Application/Implementation

- System-wide applicability
- Requires partnering with transit agencies. Limited control over implementation
- Some elements easy to implement in short term, others geared for medium long term

Technologies for Improved Fare Collection

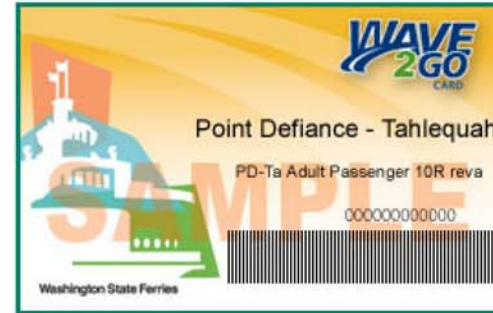
4

This category includes strategies such as:

- Optimized electronic fare system
- Fully automated system
- Transponder-only lanes
- Expanded fare card coordination and marketing
- Limit payment forms accepted
- Round-trip ticketing

Primary Benefits

- Reduces average ticketing time
- Reduces queues outside tollbooth
- Adds customer convenience
- Shortened queues creates a positive community impact



Application/Implementation

- System-wide application
- Implement some elements in the short term (i.e. limited payment forms)
- Optimized fare collection needed to implement reservation systems
- Fully optimized fare collection on automated system = development costs

Non-motorized Access Enhancements

5

This category includes strategies such as:

- Improved pedestrian connections and facilities
- Improved bike connections and facilities

Primary Benefits

- Mode shift
- Attracts demand to available capacity
- Queue reduction
- Adds customer convenience
- Positive community and environmental impact



Application/Implementation

- System-wide applicability, most impact realized in mixed-use higher density terminal areas
- Relatively low cost compared to other model infrastructure investments
- Some elements could be implemented in short term, others require partnering with local jurisdictions (i.e. connecting bike trails)

Enhanced User Information

6

This category includes strategies such as:

- Automated route planning
- Real-time queuing, departure transit and wait information
- Wayfinding: bicycles and pedestrians
- Wayfinding: parking
- Real-time parking capacity information

Primary Benefits

- Encourages mode shift
- Encourages time shift
- Attracts demand to available capacity
- Provides a premium customer convenience
- Positive community and environment impacts



Application/Implementation

- System-wide applicability
- Real-time parking capacity information will have biggest impact at terminals with constrained parking supply (Bainbridge, Port Townsend)
- Up front investment needed to develop automated systems

Promotion of Non-SOV Modes

7

This category includes strategies such as:

- Partnering with Transportation Management Associations (TMAs)
- Expanded carpool definition and HOV priority
- Creation/incentives for car-sharing pods at terminals
- Partner with private transportation services
- General ongoing marketing and promotion of non- SOV modes of ferry access

Primary Benefits

- Mode shift
- Attracts demand to available capacity
- Queue reduction
- Adds customer convenience
- Relatively low cost
- Positive environmental impact



Application/Implementation

- System-wide applicability
- Roll out in Central Puget Sound first where more transit, bike and ped options are already in place, and a TMA exists (Urban Mobility Group)
- Relatively easy to implement, may require additional staffing

Traffic and Dock Space Management

8

This category includes strategies such as:

- Traffic management
- Metered exit queuing
- Minimize employee parking at terminals
- Reorganize flow and lane usage
- Relocate non-essential functions from dock



Primary Benefits

- Reduces queues outside of the holding area
- Improves the clarity and usability of the ferry system for all passengers
- Improves traffic flow on adjacent street network



Application/Implementation

- Specific terminal applicability
- Easily implemented in the short-term
- Low capital and ongoing operating costs
- Employee parking occupies valuable holding space especially at Colman Dock, Bainbridge and Kingston
- Changes to employee parking procedures require working with labor unions

Parking and Holding

9

This category includes strategies such as:

- Parking reservation system
- Shared parking
- Decentralized holding
- Increase parking capacity at terminals

Primary Benefits

- Increased parking supply can encourage mode shift (park car and walk on)
- Reduces vehicle queue
- Adds customer convenience
- Attracts new demand to underutilized passenger capacity



Application/Implementation

- New parking and holding capacity has high capital costs
- Shared parking is low cost, but requires coordination with owners of nearby parking
- Parking may require connecting shuttle services, improved bike and pedestrian connections and wayfinding
- Expanded parking supply could meet with community opposition

What Comes After Tonight?

- Continue evaluation of most promising options
- Integrate public comments and feedback from stakeholders
- Integrate WSTC survey results
- Develop packages of strategies and investments that address long-term needs:
 - Operating and pricing strategies
 - Level-of-service standards
 - Strategic expansions of service
 - Overall funding capacity/requirements