

The Fast Ferry Cultivation Study included a detailed analysis of the proposed ferry service and included the following:

- Market Analysis
- Case Studies
- Cost Model for Alternative Service Delivery
- Sensitivity Analysis
- Preliminary Vessel Design and Operating Plan Recommendations
- Wake Wash Analysis
- Safety Analysis
- Emissions and Travel Efficiency Analysis
- Terminal and Docking Recommendations
- Revenue Strategies

The full study is available online at:

[www.halifax.ca/metrotransit/documents/FastFerry-Final.-August2006.pdf](http://www.halifax.ca/metrotransit/documents/FastFerry-Final.-August2006.pdf)

## Economic Model Results

The economic model constructed for the analysis tested the following variables:

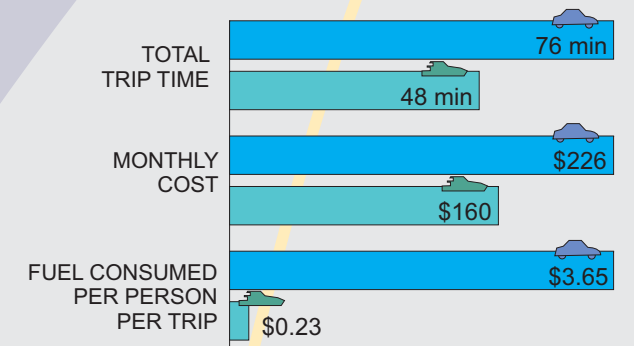
- Ferry Capacity (206 and 350 passengers)
- Ferry Speed (28 and 35 knots)
- Number of Ferries in Operation at Peak (2 and 3)
- Bedford Parking On-site of Off-site with Shuttle
- Downtown Shuttle Buses (yes or no)

Bedford Parking	Downtown Shuttle	Profit (\$M/yr)
On-Site with Fee	Yes	-\$1.0
	No	-\$5.6
Off-Site Free w/Shuttle	Yes	\$6.9
	No	-\$0.7
None	Yes	-\$4.4
	No	-\$32.9

The table to the left shows economic results for an optimal scenario of two-350 passenger vessels with a one-way cash fare of \$5.00. Although the combination of off-site parking in Bedford plus a downtown shuttle achieves the best results, several other alternatives do nearly as well.

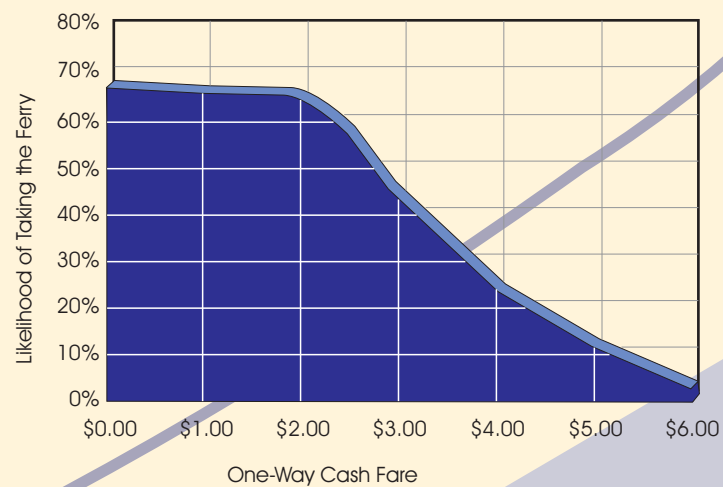
Profit is revenue less operating and capital costs and is expressed as millions of dollars per year. The green box represents a profit and the red box indicates increasing debt. All other results demonstrate some contribution to achieving return

The chart to the right shows the economics of ferry travel (green bars) versus automobile travel (blue bars) for a typical commuter travelling from a residence near Mill Cove to Purdy's Wharf downtown. It compares the cost of driving to and parking in downtown with the cost of taking the ferry and walking to the office.



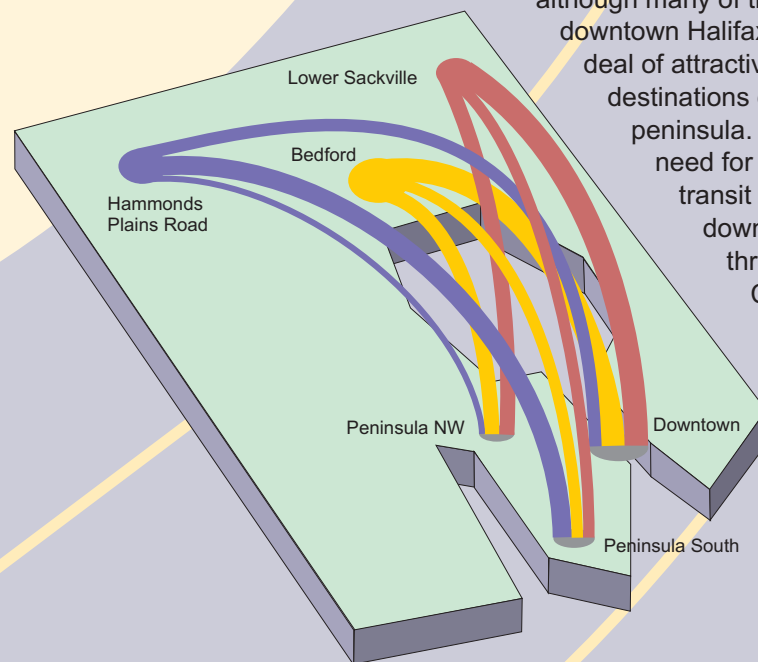
## Market Survey Results

A telephone survey was conducted in June, 2005 to gain an understanding of the characteristics and scale of potential ferry ridership in Bedford, Sackville and the Hammonds Plains Road area. A sampling of the results is shown here.

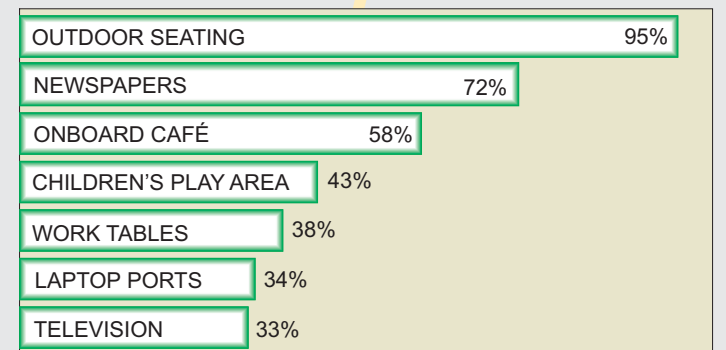


This graph is used to determine the sensitivity of potential customers to the fare charged for travelling on the ferry. Although ridership can be expected to decrease with fares greater than \$2.00, higher fares may be needed to manage demand and/or to ensure that operating costs are better covered.

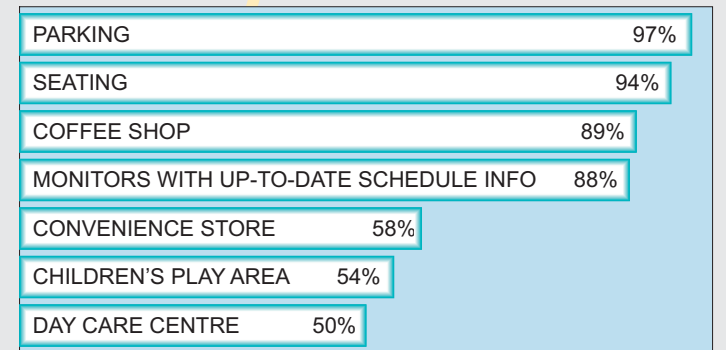
This map shows the commuting patterns of the 472 people surveyed within the market area. In this diagram, wider bars indicate more people making the trip. This plot shows that, although many of the trips are destined for downtown Halifax, there is still a great deal of attractiveness to other destinations on the Halifax peninsula. This underlines the need for establishing good transit connections from the downtown Ferry Terminal throughout the Regional Centre.



The market survey asked respondents what they would like to see onboard the ferries. At right are the top suggestions.



Similarly, there were a number of suggestions for features to be included in the ferry terminal.



## Preliminary Specifications for the Vessel and the Service

- Two catamaran ferries operating at 35 knots
- Estimated cost - \$8 million per vessel
- Passenger capacity of 350
- Four diesel engines at 4,200 hp
- Low wake design with waterjet propulsion
- Full speed to dead stop in two boat lengths
- Fuel consumption of 0.63 tons/hour at full speed
- One-way trip time of 15 minutes, dock to dock
- Departures every 20 minutes during peaks
- Service all day and weekends

## Key Features of Fast Ferry Service

- ✓ Ferry routes are integrated with the HRM Regional Plan settlement strategy to minimize future transportation demands
- ✓ Supports HRM's bid for the 2014 Commonwealth Games by providing high capacity transit service directly to the Games site
- ✓ Contributes substantially to reduction targets for greenhouse gas emissions

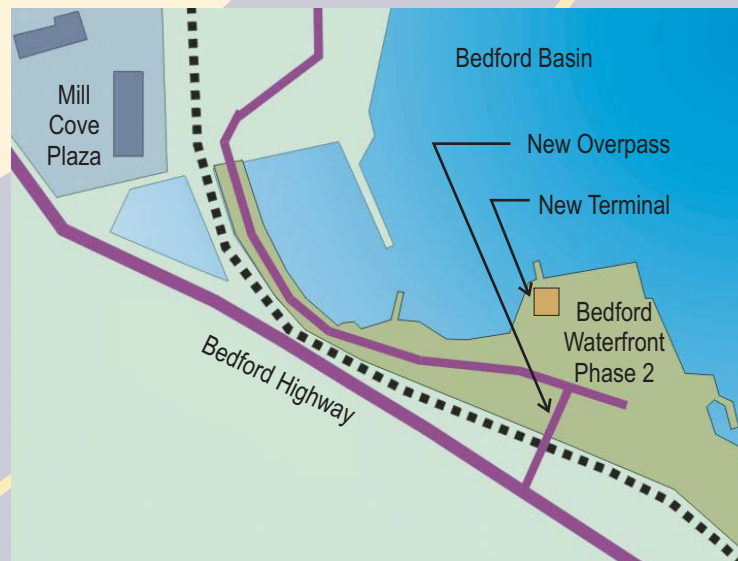
## Fast Ferry Demonstration

In October, 2005, Mayor Peter Kelly hosted a demonstration of fast ferry service. The Whaling City Express was brought to Halifax Harbour from Massachusetts for several trial runs over a period of two days. With both invited guests and the general public on board, the vessel proved capable of making the trip from Bedford in under 15 minutes and demonstrated its low wake generation and exceptional manoeuvrability. The demonstration generated tremendous enthusiasm with the public and the media.

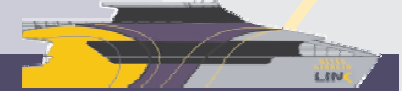


## A New Terminal in Bedford

Although very preliminary, these sketches give an indication of where the Bedford terminal is expected to be located and what it might look like.



The



# Halifax HarbourLink Project Update

October 2006

The evolution of high-speed, low-wake catamaran ferries for urban commuter travel means that longer routes within our harbour may now be serviced efficiently and reliably.

TDV Global Ltd. and Halifax Regional Municipality have recently completed the Halifax/Bedford Fast Ferry Cultivation Study. This project evaluated the market, the financial metrics, and the operating criteria for a high speed commuter ferry service between Mill Cove in Bedford and downtown Halifax.

This study provided encouraging projections for the success of the service and, in July of 2006, Halifax Regional Council endorsed the findings and directed that, not only should the project proceed, but that consideration should be given to other fast ferry routes within Halifax Harbour.



Metro Transit



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