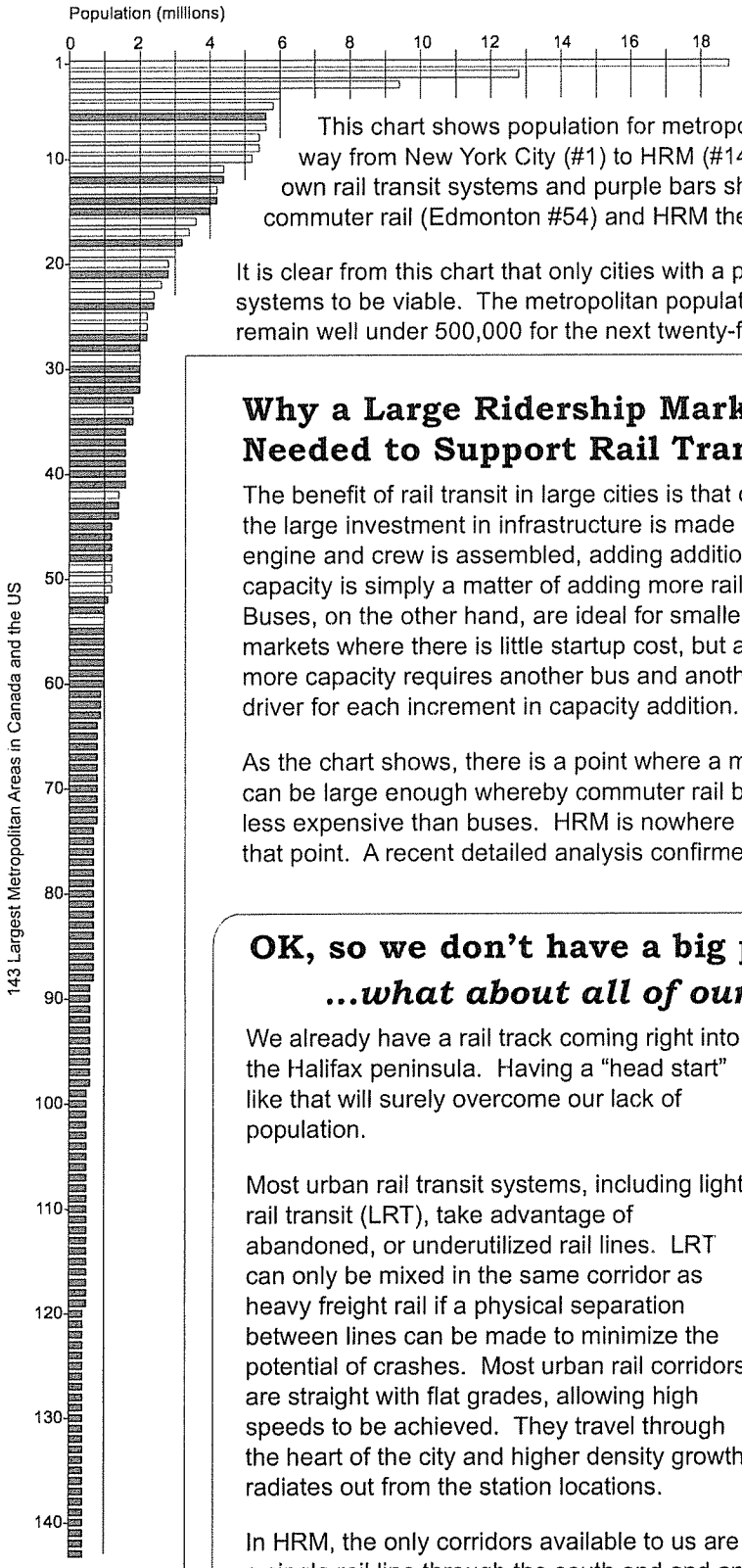
JUNE, 2008

Rail Transit and HRM's Regional Transportation Plan



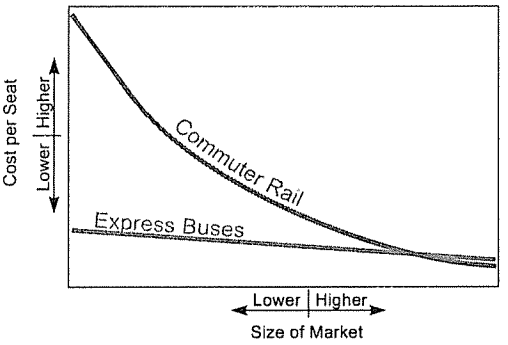
Rail Transit is effective in North America's bigger cities

This chart shows population for metropolitan areas in the United States and Canada all the way from New York City (#1) to HRM (#143). Yellow bars indicate metropolitan areas with their own rail transit systems and purple bars show areas without. Between the smallest city with commuter rail (Edmonton #54) and HRM there are 88 cities without rail transit.

It is clear from this chart that only cities with a population of one million or more have found rail transit systems to be viable. The metropolitan population of HRM is currently 385,000 and is expected to remain well under 500,000 for the next twenty-five years.

Why a Large Ridership Market is Needed to Support Rail Transit

The benefit of rail transit in large cities is that once the large investment in infrastructure is made and an engine and crew is assembled, adding additional capacity is simply a matter of adding more railcars. Buses, on the other hand, are ideal for smaller markets where there is little startup cost, but adding more capacity requires another bus and another driver for each increment in capacity addition.



As the chart shows, there is a point where a market can be large enough whereby commuter rail becomes less expensive than buses. HRM is nowhere near that point. A recent detailed analysis confirmed that the per-seat cost of rail from Bedford to downtownHalifax would be significantly more than the cost of express transit buses.

OK, so we don't have a big population...
...what about all of our "natural advantages"?

We already have a rail track coming right into the Halifax peninsula. Having a "head start" like that will surely overcome our lack of population.

Most urban rail transit systems, including light rail transit (LRT), take advantage of abandoned, or underutilized rail lines. LRT can only be mixed in the same corridor as heavy freight rail if a physical separation between lines can be made to minimize the potential of crashes. Most urban rail corridors are straight with flat grades, allowing high speeds to be achieved. They travel through the heart of the city and higher density growth radiates out from the station locations.

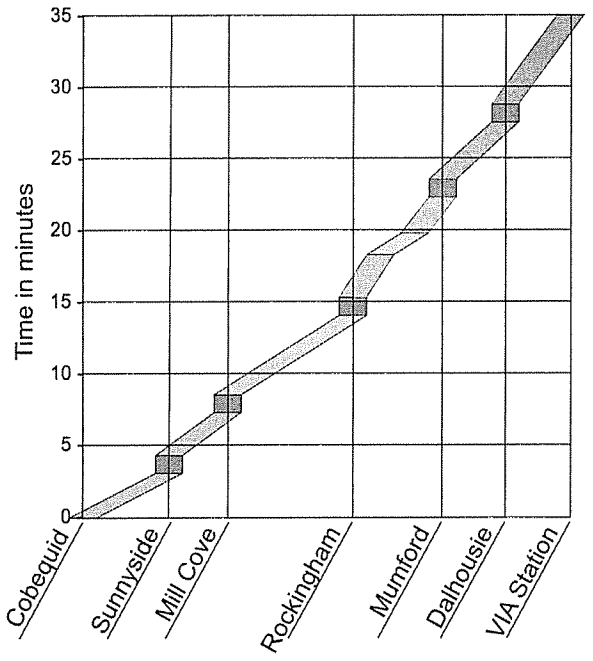
In HRM, the only corridors available to us are a single rail line through the south end and an abandoned line along the north end waterfront.

The lands across which the north end line traveled have now been redeveloped and can no longer realistically be re-assembled into a rail corridor. Using the still-active south end corridor poses many potential problems on its own:

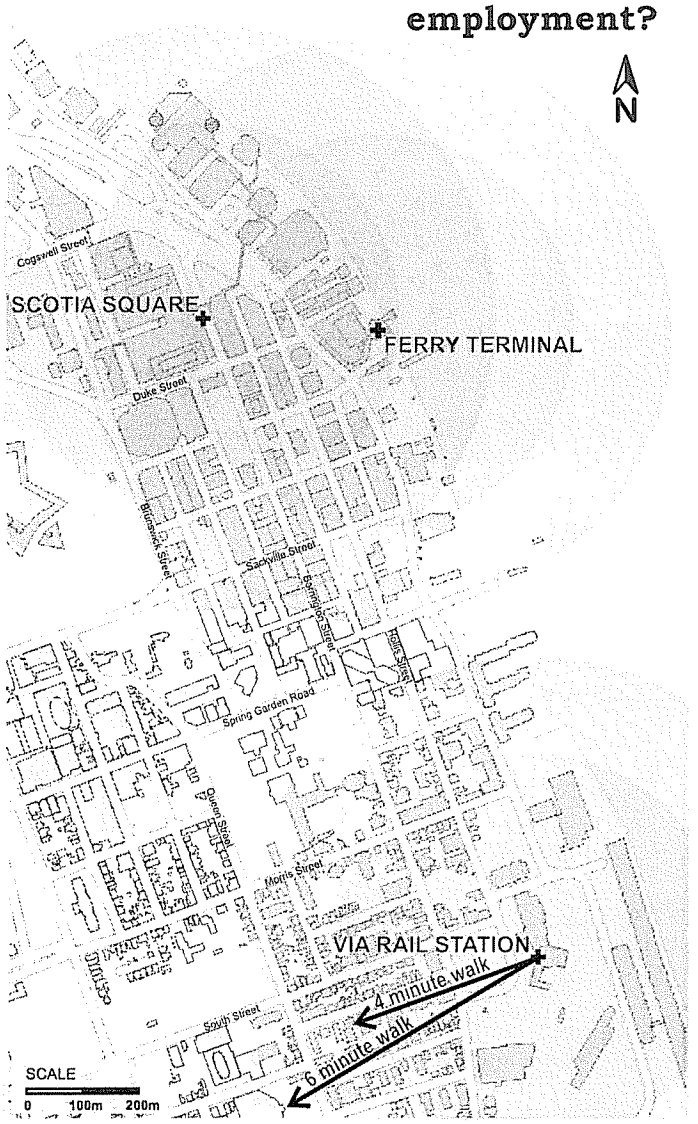
- The single line must be shared with a regular schedule of freight train traffic. Rental would be paid to CN.
- Adding a second parallel rail line is expensive and could not be separated enough to allow for the use of LRT trains.
- The curvature, sight distances, yard movements and grade crossings dictate speed limits of 15-20 miles per hour along lengthy sections of the line.
- Much of the line travels along the waterfront where the needed high-density development is contentious and can only "radiate" in one direction.

Track speed limits mean "rapid transit" will not be so rapid.

This diagram shows a passenger train trip from Cobequid Road in Sackville to the VIA Rail station in downtown Halifax. The total length of the trip is 35 minutes with five intermediate stops. The travel time downtown by local bus from Sackville in peak time is only 30 minutes and by express bus is 24 minutes. The trip from Mill Cove in Bedford to downtown is 27 minutes which is significantly more that the 15-18 minutes that a high speed ferry would take.



How well does the terminus at the VIA Rail station serve downtown employment?



A commuter rail line would terminate at the the VIA Rail station, as this is where the track ends. Although other cities will run LRT trains along streets, that is not practical here as LRT trains can not be used in the CN corridor alongside heavy rail freight trains. As the map on the right, shows very little of our downtown employment is located within comfortable walking distance of the VIA Rail station, particularly when compared to other downtown transit nodes. A system to shuttle passengers to downtown employment by bus is possible, but this adds time to the already long commuting trip shown in the box above.

	Employment within 4 minute walking radius	Employment within 6 minute walking radius
SCOTIA SQUARE	12,400	18,500
FERRY TERMINAL	11,300	16,100
VIA RAIL STATION	2,200	4,500

Although HRM's 25-year Regional Plan does not include rail transit, it does suggest that "in the more distant future, there may be potential to use rail lines in HRM for some form of transit, either on rails or using busways built on abandoned track beds." The Plan recommends that steps be taken to preserve these future opportunities on corridors with high ridership market potential.

For more information on HRM's transit planning visit www.halifax.ca
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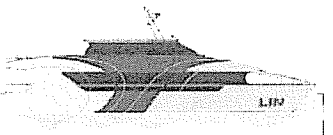
FREQUENTLY ASKED QUESTIONS



HRM's Fast Ferry (HarbourLink) Project

HRM's Five-Year Transit Plan approved by Regional Council in April, 2008 includes funding for initiation of HarbourLink, a project which would create high speed ferry transit between Mill Cove and Halifax. Development of additional ferry route destinations around the harbour may follow in future phases.

Further work is underway to design the project, but it is known that the service will begin with two ferries large enough to carry between 250 and 350 passengers and travel at a speed between 24 and 30 knots (45 to 55 km/h) or about four times the speed of our existing ferries.

How much do the ferries cost?

Many passenger ferries of this size are built in North America and around the world every year so the costs can be accurately predicted. Each ferry is expected to cost between six and eight million dollars to construct.

Wouldn't that money be better spent on buses?

Some of HRM's commuting trips are now generating enough trips that more economic means of carrying high volumes of passengers must be considered. The daily cost of operating transit services far outweighs the initial cost of purchasing buses or ferries. There are significant economies of scale to be realized by carrying high volumes of passengers on a large ferry compared to carrying that same volume on several buses. Our data suggests that the operating cost per seat for ferry is about one-half of the cost by bus.

Where will the ferries be built?

There are shipyards within Nova Scotia that are capable of building the type of ferry being considered for this project. Tendering of the vessel construction will be done in such a way that Nova Scotia shipbuilders will be well-positioned to participate in the construction of the ferries.

Where will the Bedford Ferry terminal be?

An exact site for the Mill Cove Ferry Terminal has not been finalized. The value of a ferry terminal as an anchor for growth at Mill Cove was recognized by the Community Vision for the Bedford Waterfront.

Are there speed limits in the harbour?

There are no speed limits on the harbour, but all vessels must operate in a safe and prudent manner. High speed ferries of this type operate in harbours throughout the world. At top operating speed, the catamaran design raises the ferry up out of the water resulting in reduced wake generation, reduced drag, and quick stops once the power is cut.

What about ice and fog?

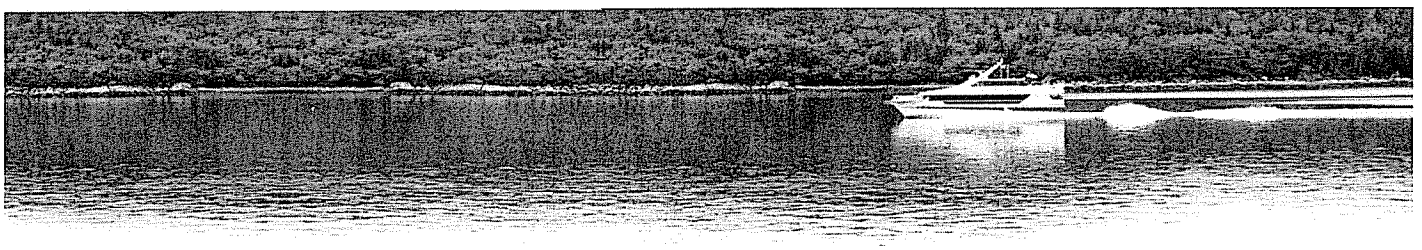
Ferries like this operate in all kinds of climates and can be designed to handle the icing expected during a hard winter. The ferries will be fitted with special equipment, used in other parts of the world, that permit safe operation under low visibility conditions.

Will container ships get in the way?

Some simulation modeling has already been conducted with the Navy, the Port Authority and the Harbour Pilots. This modeling has determined that when a container ship is passing through "The Narrows" two fast ferries can pass safely, one on either side of the container ship.

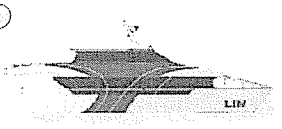
What will the fare be?

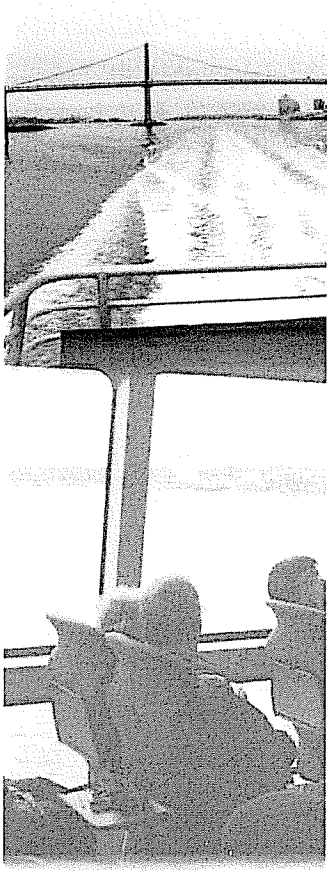
Fares will be set and publicized prior to the introduction of the service. The ferry will be an integral part of the Metro Transit network so the fare will be consistent with other higher-order regional services and, like our existing ferries, transferring to other parts of the transit network will be permitted.



MORE FREQUENTLY ASKED QUESTIONS

HRM's Fast Ferry (HarbourLink) Project





Where will the ferry passengers come from? How will they get to the ferry terminal?

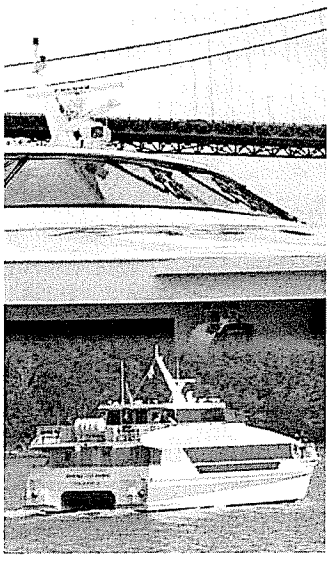
It is expected that ferry passengers will walk or bicycle to the ferry terminal, get dropped off, transfer from a bus serving nearby neighborhoods, or "park-and-ride".

The ferry terminal will be located within walking distance of many current residents of Bedford. Equally important is the potential for new residential units in the next phase of the Bedford waterfront development. These are residents who will choose to locate in this neighborhood knowing that high quality ferry service to downtown is in place. It is very likely that a high percentage of residents who will make this location choice will do so because they can make use of the ferry in their trip to work.

An emphasis will be placed on making access to the ferry terminal convenient and safe for both walking and bicycling. Connections will be made to the waterfront walking trail and the bicycle lanes on the Bedford Highway.

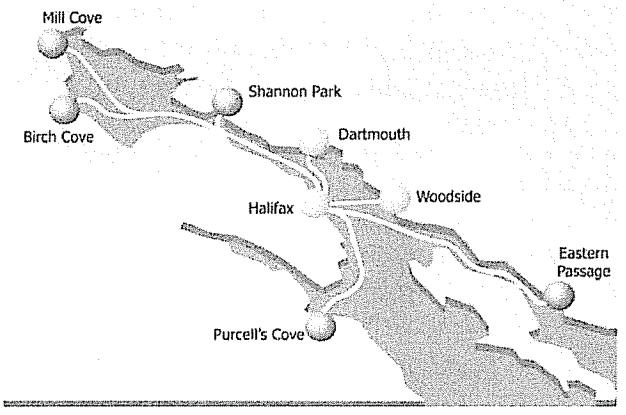
The overall project includes funding to improve transit connections on both ends of the ferry trip. The aim is to maximize the number of people who will find the ferry a valuable part of a combined transit trip. The Downtown Transit Shuttle project envisages hybrid-diesel electric buses waiting for the arrival of each ferry at the downtown terminal to shuttle them quickly to major employers such as the universities, hospitals, and dockyard. New collector bus routes will connect existing communities like Bedford and Sackville and new communities like Bedford South and Bedford West to the terminal.

Park-and-ride traffic will be managed in a way that provides convenience for the customer without saturating the Bedford waterfront lands with parking. A large, no-cost park-and-ride lot will be constructed on Hammonds Plains Road near the Highway 102 interchange. This park-and-ride lot will be serviced regularly by shuttle buses that will be timed to match the arrival and departure of each ferry. Some parking will be provided at the terminal, but it will be limited and will have a daily and hourly charge. The park-and-ride connection will be valuable to communities like Kingswood, Hammonds Plains, Lucasville, Glen Arbour, White Hills and Sackville.



Are other fast ferry routes possible?

Success of the Bedford fast ferry would certainly generate interest in developing additional ferry routes. There are a number of potential destinations around the harbour for future service. The blue dots on the map to the right show possible future locations for ferry service. Market surveys will be undertaken soon to gauge the viability of these routes.



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