

North-South LRT: the 1.6% Solution

Little-Known City Ridership Study Shows the Proposed \$800+ Million Project Will, at Best, Only Get 900 Cars Off The Road.

The purpose of this paper is to introduce evidence and analysis that would lead a reasonable person to conclude that the proposed North-South LRT project contains fundamental planning flaws, important data omissions and significant misrepresentations. A reasonable person would further conclude that the current plan is neither an efficient nor effective means of contributing to Council's goal of achieving 30% of all vehicle commuters traveling by public transit. All evidence used to support these conclusions will come entirely from the City's official planning documents.

Note, this paper will not restate the many valid reasons to dismiss the North-South LRT project that have already received some degree of coverage, such as costs, routes, design, etc. The intent of this paper is to add to these objections so that, on balance, Council is convinced the proposed project *should not be approved*. Much more effective, more efficient, more economical and easier-to-implement alternatives exist. Council should task City staff to get it right.

The Report They Don't Want You to See

It would appear that the political and bureaucratic leaders of the North-South LRT project have decided to suppress public awareness of, and access to, a key ridership study. The study was one of the documents held under the veil of secrecy surrounding the RFP for selecting the City's private partnership to design, construct and maintain the project. The study contains damning information that exposes how weak the case is for the proposed North-South LRT project. No record in Council or Transportation Committee minutes indicates the report was ever officially tabled, presented or accepted by Council. To-date, report has not been part of the public debate or the public record. Only recently could it be found buried deep within a vast and Byzantine array of directories and documents on a City-maintained website that is inaccessible by search engines.

This report is significant because it is the only document associated with the North-South LRT project that directly sheds meaningful decision-making light on the degree to which the project contributes to the City's peak-hour modal-split goals and, indirectly, shows the degree to which it is simply moving people who would otherwise be taking public transit if the North-South LRT was not to proceed.

The North South Corridor Light Rail Transit Project Ridership Study, prepared by the respected IBI Group in February 2005, provides an extremely detailed and methodical view into the incremental ridership that would result from the N-S LRT project. *The report concludes that, by the year 2021, the N-S LRT project will only divert 1,090 net new peak hour transit riders from automobiles, and that the rest will simply be diverted from other public transit.*¹ *This number represents 1.6% of the 67,000 new peak-hour riders needed to achieve Council's 30% modal*

¹ North-South Corridor Light Rail Transit Project Ridership Study, IBI Group, February 2005, page 81.

*split goal.*² The extension of the service to Barrhaven Town Centre is responsible for only an incremental 140 net new riders.³

“Net new riders,” the report explains, are those “diverted from auto mode to the LRT service due to the enhanced level-of-service and coverage provided with the North-South Corridor LRT Project. This corresponds to 16% of the 6,000 [peak-hour] LRT riders expected to be using the service, with the remaining 84% representing ridership diverted from other transportation services along the Corridor.”⁴ Net new ridership analysis is a common practice for evaluating public transit projects in many jurisdictions and is required by law in some.

It should be noted that accomplishing 1,090 net new peak hour transit riders is also dependent on Riverside South’s population growing from 4,200 in 2001 to 54,000 in 2021, and Barrhaven’s population growing from 38,800 to 105,200 during the same period. If these communities do not grow this fast, the number of net new transit riders as a result of this project would be reduced proportionately.

Clearly, a “best case” scenario, dependant on a wide range of assumptions including enormous population growth, that results in only 1,090 riders diverted from the use of their automobiles is not a compelling business case. The fact that it will cost about \$750,000 per diverted rider goes some way to putting the economics of this in stark perspective.

Misrepresentations to Council

Perhaps with the knowledge the ridership study had been successfully obscured from scrutiny, the June 12, 2006 Report to Council, requesting approval for the proposed North-South Light Rail Transit Project, contains false and misleading representations regarding “anticipated outcomes from failure to develop the North-South LRT project.” Specifically, the misleading statements include:

“The failure to meet Council’s 30% transit modal split target.” This claim is not supported by the evidence; the North-South LRT will be responsible for generating only 1,090 net new peak-hour riders of the 67,000 needed to achieve the modal split target. Not only does the project make a completely inconsequential contribution towards achieving the target, it ensures that no other money will be available for more pragmatic and effective ways to otherwise achieve the modal split target.

“The following north-south arterials ...will fail: River Road, Limebank, Hawthorne, Airport Parkway, Albion, Bank, Conroy.” Diverting 1,090 riders would equate to approximately 838 vehicles (at 1.3 average number of commuters per vehicle⁵) and these alone will not cause seven north-south arterial roads to fail. The arterial road network may indeed fail as a result of the

² The Transportation Master Plan, City of Ottawa, September 2003, page 23 Figure 3.5. The plan states that peak-hour person trips must grow from 37,000 (in 2001) to 104,000 in 2021 to meet the 30% modal split goal. This means the City must achieve 67,000 new peak-hour transit riders and 1,090 is 1.6% of 67,000.

³ North-South Corridor Light Rail Transit Project Ridership Study, IBI Group, February 2005. The best case results in 950 net new riders with service to Riverside South (page 19). Extending the service to Barrhaven Town Centre generates 1,090 net new riders, a difference of 140.

⁴ Ibid, page 20.

⁵ Transportation Master Plan, September 2003, page 25.

aggressive development in Riverside South, however the LRT is neither a sufficient nor appropriate approach to solve the problem of north-south arterial congestion.

“About 2,000 extra peak vehicles per hour will be on N/S roads.” This claim is false according to the ridership study. The study’s projection of 1,090 diverted riders equates to 838 vehicles and this number represents the total number of diverted riders for the morning commute period, not an hourly rate.

“If the City was to maintain the existing level of service...3 additional lanes per direction... [would be required for] Limebank-Riverside, Bank Street, Albion-Lester-Airport Parkway...” Again, an incremental 838 commuter vehicles does not result in a requirement for 3 extra lanes in each direction on several roads.

Unfortunately, the most important “anticipated outcomes from failure to develop the North-South LRT project” were not stated in the report: failure to approve the project would free-up \$800 million that could then be used to fund other, much more effective, efficient and economical projects that actually will increase transit ridership and relieve the City’s road budget.

This May Be Our Only Federal or Provincial Assistance

For planning purposes, no other known federal or provincial financial funding source can be expected to assist with any remaining element of the City’s multi billion dollar rapid transit plan. To the City’s great credit, it has negotiated \$400 million of assistance and, to its great fortune, the City will also be the recipient of a share of annual provincial gas tax revenue. Unfortunately, the N-S LRT has consumed virtually all of these funds⁶ leaving no further assistance available for other transit projects needed to otherwise achieve Council’s transit ridership and modal split objectives.

Without any further financial assistance, or without a substantial increase in the municipal tax base, no other major improvement to the transit system will take place and all hope of achieving the modal split objectives will be lost.

SOx, NOx, and Greenhouse Gases will be Worse

The June 12 report to Council states (in bold font) that “the federal and provincial governments are contributing \$400 million to build City Council’s priority North-South Light Rail Transit project because it will improve air quality... reducing greenhouse gases by more than 15,000 tonnes annually and thereby being a major step towards achieving Kyoto goals.”

It is interesting to see this statement because nowhere in any public document associated with the City’s transportation or environmental planning has any attempt been made to understand Ottawa’s system-wide transportation greenhouse and smog emissions. Unfortunately, Citywide transportation related emissions modeling has not been conducted by the City and, of all things, the Environmental Assessment for the N-S LRT is negligently and highly simplistic in its limited treatment of the topic. Transportation-generated greenhouse gases in Ottawa amounted to 2.47

⁶ The City’s 2006 Capital Budget Council provided authority for these sources to be applied to the N-S LRT project.

million tonnes annually in 1998.⁷ This number will increase as a result of population growth however, as gridlock gets worse, emissions will increase disproportionately on a per capita basis. The City's N-S LRT ridership data suggests that gridlock will increase much faster than net new transit ridership.

Further, the N-S LRT will represent incremental demand on the electricity grid that Ontario shares with the Eastern United States. The majority energy source for generating incremental electricity on this grid is fossil fuel; in particular coal. In Ontario, a net consumer of electricity from the grid, 39% of OPG's electricity-generating capacity in 2005 came from fossil fuels and almost all of this is from coal.⁸

Thus, not only will the proposed N-S LRT not only fail to get people out of their cars, it will, to a significant degree, be fueled by coal.

Conclusion

There is one fundamental, legitimate and necessary condition for council approving the N-S LRT project. This condition is that any new major transit project, let alone one that will take a generation to pay for, must make a substantial contribution towards achieving the 30% modal split target. Only by increasing the use of transit, by people who would otherwise drive to work by car, will the City be able to reduce its road construction and repair budgets and achieve per capita reductions in local transportation-related smog and greenhouse gases. Among a vast array of other defects and questions with insufficient answers, the current motion before Council is notable for its complete absence of any evidence of the NS project's contribution towards achieving this objective.

The debate on this project has seen high-handed but vacuous platitudes that have been used to politically justify this project. The debate has also seen low-handed personal attacks, half-truths and outright falsehoods. In a veritable sea of documents, process and publicity, all designed to create consent by a combination of fatigue, confusion and apathy, no coherent or compelling case has been made that the proposed N-S LRT is either the right thing to do or the best among alternatives.

The decision before Council amounts to an enormous transfer of taxpayer wealth into an array of private hands. If a strong, clear and objective case could be made that this was the right thing to do, then all would be good. That is how transparent free markets and governments operate. No such case has been made for the proposed N-S LRT project. There are many interests this money may serve however the evidence seems clear that the public's interests are not high among them.

For the sake of sound transportation governance, for the sake of the environment, for the sake of the taxpayer, and for the sake of integrity in public process, the conclusion for Council is clear: Ottawa City Councilors should vote NO to the proposed North-South LRT project.

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⁷ City of Ottawa Official Plan states that the City of Ottawa generated 2.47 million tones (1000 kg) of transportation related CO2 in 1998.

⁸ Ontario Power Generation website: <http://www.opg.com/ops/systems.asp> as of July 10, 2006