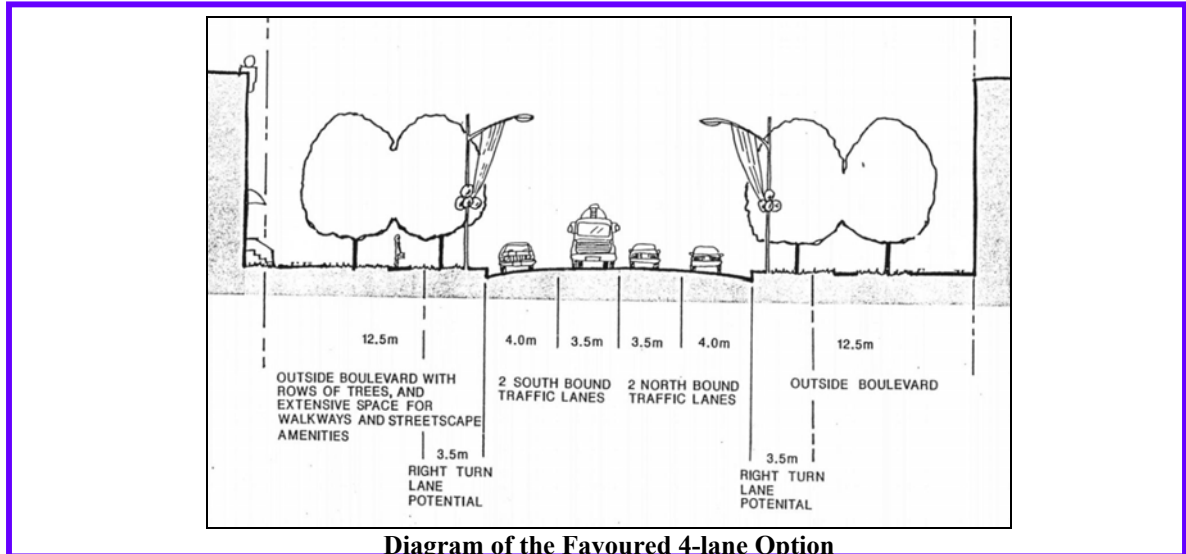


# REPORT: 4 Lanes on King Edward Avenue - It Is Possible -

King Edward Avenue Task Force, 2007

## Issue

The citizens of Lowertown and Sandy Hill want King Edward Avenue to be reduced from 6 to 4 lanes between Sussex and Rideau and from 4 to 2 lanes from Rideau to Laurier, and for the space to be reallocated to create a grand boulevard and bike lanes.



## Central Argument

In 2002, transportation planners from a consultancy argued that reducing King Edward Avenue from 6 to 4 lanes was not possible. Since 2006, King Edward Avenue has been reduced to 4 lanes for the duration of construction. It has been this way for almost a year. The predictions of traffic chaos have not been realized. There have been no major delays southbound from 7am to 9am in the mornings and northbound from 3:30PM to 5PM. This is proof that lane reductions are possible.

## Did you know?

- **Trucks continue to use King Edward Avenue**  
Trucks, sometimes carrying very dangerous goods, will continue to have access to King Edward as a truck route even if a bridge is built. A bridge might be built and reduce 18-wheeler truck traffic, but smaller local truck traffic will continue. Until the bridge is built, within the next 10 years, the 4-lane option is a good compromise to solve some of the community's problems.
- **There are only 4 lanes connecting to the Macdonald-Cartier Bridge**  
There are 6 lanes on the bridge, but only 4 of those lanes go to King Edward. The other two connect to Boteler and Sussex.
- **A T-intersection was supposed to replace the ramps to the Macdonald-Cartier Bridge**  
In the original 1990's improvement plan, the Lowertown community was promised a T-intersection to replace the ramps to the Macdonald-Cartier Bridge. This was a cornerstone of the transformation of King Edward from a

highway to a residential street. This promise was revoked in the 2002 renewal plans by the consultants due to negative effects on traffic.

➤ **City staff has conceded that the 4 lane option is possible**

Although city staff has officially opposed the reduction of lanes on King Edward, it has conceded that it is possible to work with 4 lanes as demonstrated by the following two quotes:

“We seem to have been able to manage the traffic during the construction with the 4 lanes between Boteler and St.Patrick.” (City of Ottawa Official, April 11<sup>th</sup>, 2007)

“People are accustomed to driving on 2 lanes, and even before the work the third lane was only used by 30 or 40% of cars...” (Phill Kerridge, City of Ottawa, Le Droit, 1 Dec 2007, p. 7)

➤ **Cars are not the only way to travel between Gatineau and Ottawa**

Traffic engineers still do not agree, and the philosophy of transportation planning is not yet a perfect science. Studies have proven that increasing the number of lanes on a road encourages more people to drive, while decreasing lanes discourages the use of cars. Putting tolls on the Ottawa bridges during commuting hours would also discourage driving; this would be a form of congestion pricing. Where do people go? In the short-term, people try to find alternative routes, and leave at different hours. Others are encouraged to use the transit system, which is always in need of additional riders. Some will walk or bike. A light rail link between Ottawa and Gatineau would also add to transit options. In the long-term, people move closer to where they work depending on the efficiency of the transportation network. If lanes are reduced on King Edward, there will be options for commuters.

➤ **Increased Bus Passenger Capacity is available between Gatineau and Ottawa**

There is passenger capacity of up to 4.7 million person trips available between Gatineau and Ottawa as supported by the objectives of the Société de transport de l’Outaouais (STO): “The STO plans... increasing current ridership by 25%.” (STO’s 2005-2015 Strategic Plan, Link: [http://www.sto.ca/a\\_propos/plan\\_strategique\\_e.html](http://www.sto.ca/a_propos/plan_strategique_e.html)) The Rideau Street Charette of a few years back also recommended an OC Transpo and STO bus sharing arrangement that could also lead to a decrease of 40% in buses required while increasing transportation capacity by up to 70%.

## QUANTITATIVE ANALYSIS

### Traffic Analysis

The following table compares counts of traffic on the inter-provincial bridges and King Edward before and after the avenue was reduced to 4 lanes.

<i>Peak 8-hour Traffic counts at King Edward Intersections (totals of all directions)</i>	<i>Year</i>	<i>Vehicles</i>	<i>Vehicles 2007</i>	<i>Change</i>
<b>King Edward &amp; St. Patrick</b>	(2004)	22,286	20,547	-8%
<b>King Edward &amp; Wilbrod</b>	(2006)	10,737	8,613	-20%
<b>King Edward &amp; Stewart</b>	(2006)	10,103	8,875	-12%
<i>Peak 12-hour Traffic counts on the Inter-provincial Bridges (inbound and outbound totals)</i>				
<b>Macdonald-Cartier Bridge</b>	(2006)	52,699	47,721	-9.45%
<b>Alexandra Bridge</b>	(2006)	17,999	17,496	-2.79%
<b>Portage Bridge</b>	(2006)	30,275	28,815	-6.80%
<b>Chaudière Bridge</b>	(2006)	19,329	18,887	-2.29%

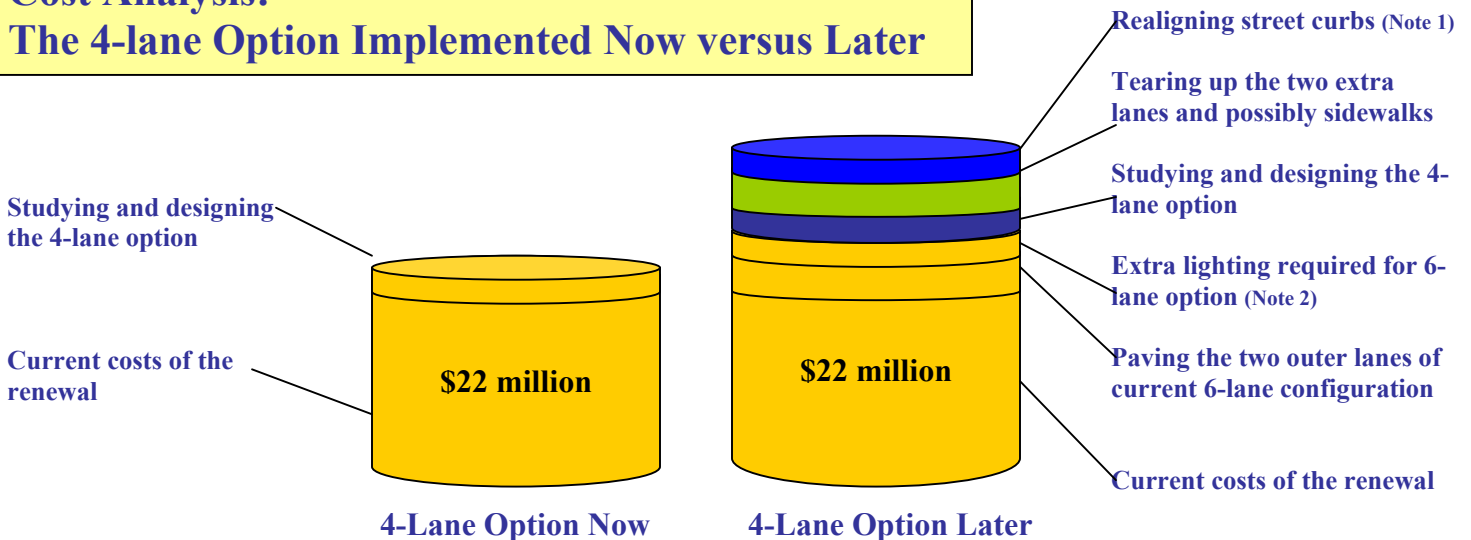
*Counts from the City of Ottawa*

## **Key Finding – Traffic has not been diverted to other corridors**

### **Highlights of the analysis:**

- According to statistics collected by the City of Ottawa, traffic from Gatineau using King Edward has not been diverted to other potential bridges in the downtown area. In fact, there has been a net decrease in all four of the bridges considered.
- Traffic has not been diverted to other streets in Lowertown. The decrease of approximately 8% on King Edward Avenue is equivalent to the decrease of 9% on the Macdonald-Cartier Bridge.
- Some of the traffic has spread out throughout the day, because commuters are coming into and leaving work earlier.
- Where has the 8% of the traffic gone? A number of things may have occurred.
  - Non-essential trips may have been eliminated all together.
  - Others may have switched modes and are now using the bus or biking.
- These numbers do not reveal the extent of congestion in the downtown due to decreased lanes, but the community or the media has observed no major traffic problems. There is no traffic gridlock.

### **Cost Analysis: The 4-lane Option Implemented Now versus Later**



#### *Notes:*

- *Note 1 – There is an additional cost for adding an enlarged median with curbs or moving the two outer curbs of the 6-lane road to reduce it to 4 lanes later.*
- *Note 2 – Extra lighting – The 6-lane configuration requires more light standards due to the increased surface area that requires light; going with the 4-lane option would remove the cost of this additional lighting.*
- *Land freed up from the renewal project will result in vacant property valued at \$4 million offsetting project costs*
- *The street has already been designed to be reduced to 4 lanes offsetting some of the redesign costs*
- *Cost savings will be realized due to the removal of tree planters originally required for the 6-lane option*

## **Key Finding: It is less costly to implement a 4-lane option now than in future**

### **The consultant and city staff's analysis is missing the qualitative element:**

There is a claim that the lane reductions would create increased congestion on downtown streets such as Sussex and Wellington. This is the trade-off for a significant improvement to King Edward Avenue. Nevertheless, it is important to note that the increased congestion is in non-residential corridors. This increase is only occurring in one direction for a few hours during the commuting period of the morning and at night. The benefits of creating a hospitable environment on King Edward appear to far outweigh the minor inconveniences to commuters. (see following page for qualitative analysis)

Another argument is that there is no additional road capacity to take on the diverted traffic. This does not account for additional capacity available in the bus system described earlier. Where does this additional capacity come into the equation?

There is an important difference between city staff's analysis and the one presented in this document. This document not only reviews the quantitative arguments, but also weighs them against the more qualitative aspects of the problems involved.

# QUALITATIVE ANALYSIS

## Pros

- Shortens distance for pedestrians to cross the street
- Allows space for bicycle lanes, and connects bike paths to the outer downtown network
- Encourages commuters to use alternative modes of transportation, such as buses
- Traffic calming including decreasing speeding and increasing safety
- Creates a large green space
- Provides a buffer zone between the community and the cars and trucks
- Reduces noise
- Reduces vibrations
- Creates a spectacular entrance to the City of Ottawa and considerably enhances the street environment
- Reestablishes historic conditions
- Provides some relief to long-standing issue of large trucks and poor living conditions
- Less costly to build and maintain 4 lanes now instead of 6
- Encourages people to live downtown
- Helps revitalize the community
- Only 4 lanes come on & off of the MacDonald-Cartier Bridge and connect with King Edward
- Encourages redevelopment of empty lots
- Reduces air pollution
- Allows enough ground space for trees to grow and survive the salt, exhaust fumes, and dry summer conditions

## Cons

- **Increased congestion (based on modeling)**  
*Wrong:* King Edward has been reduced to 4 lanes for the past year and there has been no major congestion. Residents will be provided with some relief while trucks and cars continue to move along the avenue.
- **Increased pollution**  
*Wrong:* Traffic has not increased substantially, people will be encouraged to use buses, and there will be room for many more trees.
- **Wait for the bridge to be built**  
*Wrong:* It's time to move ahead. Lowertown has been waiting for 4 decades. Should we wait another 10 or 20 years? Also, the same old arguments will be used to dismiss the idea of reducing lanes if a bridge is ever built.
- **The 4-lane option was already studied**  
*Wrong:* In theory, the 4-lane option has been proven difficult; however, in practice, the option has been proven to work. As well, previous analysis did not include the additional bus capacity available between Gatineau & Ottawa nor the impact of noise, vibrations, and air quality on the community.
- **Commerce will stop**  
*Wrong:* The majority of trucks pass during non-congested hours.
- **The 4-lane option will be expensive**  
*Wrong:* See the section on costing in this report.

## SUMMARY

King Edward Avenue can be 4 lanes. The neighbourhood will never be what it once was, but we believe that we can do a lot better. Rebuilding King Edward Avenue was meant to bring some kind of long-lasting relief to the community, but it turned out to be mainly a renewal of the underground utilities, and the replacement of the above-ground infrastructure. The 4-lane option is the only real viable solution until a bridge is built, and the community needs it urgently. We ask for your support.