# INCREASED TRAFFIC IN SMALL TOWNS: THE CASE OF LENNOXVILLE

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> Lennoxville is a bustling college town located at the crossroads leading to all major areas of Quebec and to nearby Vermont, New Hampshire and Maine.... While keeping up with the times, Lennoxville has never lost its small-town, caring, community spirit.
>
> —*(Town of Lennoxville Brochure, 1993)*

Anyone that has driven in Lennoxville over the past several years will understand that the Town of Lennoxville, in describing itself as a "bustling" community, uses the term euphemistically. A quick dictionary description of the term suggests that bustling means "to hurry busily or with much fuss and bother;" "a busy and noisy activity;" "commotion and bother with no sense of order or planning." Indeed much public attention has focused on an apparent loss of control of residential streets to through-traffic, as well as questions of public safety due to traffic speeds and volumes and the fact that the Town of Lennoxville does not do any traffic planning *(The Sherbrooke Record, April 11, 1995).*

Lennoxville, like many other towns and villages in the Eastern Townships, originated at the intersection of important transportation routes — be they river, rail or road. Over time, these small centres have spread out along these routeways, eventually taking on a higher order of population, services and associated land uses. The explosive growth in the use of automobiles since the late 1950s has resulted in significant highway building through-out the region, making all parts of the region accessible and promoting significant levels of inter-urban traffic flow. These increased inter-urban flows have had a major impact on the use of roads running through the heart of these small towns and villages. In

most towns, almost all of the traffic is "through-traffic," with highway signs, traffic control devices, road regulations and policing dedicated to increasing the flow of traffic **through** towns, rather than **within** them.

The purpose of this paper is to examine the issues related to the growing traffic problems that small towns are experiencing, using Lennoxville as a case-study. The paper will outline some of the major transport irritants in Lennoxville, summarize the literature on the problem as experienced in other areas, and examine some of the more successful solutions employed elsewhere in North America and in Europe that could be employed in Lennoxville.

**What is the traffic problem?**

In addressing the root cause of the "traffic problem" in small towns, a number of possible sources may arise: congestion, safety, changing values, habits and personal priorities, the quality of life, or simply a lack of proper transportation planning. Today, these traditionally quiet, localized communities are faced with a number of problems: 1) a growing number of vehicles in the same limited geographic space, resulting in an increase of accidents or near-accidents; 2) increased feelings of insecurity due to the volume and speed of vehicles, especially for pedestrians and cyclists; 3) the change of function for the main street, from serving local pedestrians and motorists to creating an almost uncrossable barrier, simply serving as a through roadway for interurban traffic; and 4) an overall degradation of the local environment due to air, noise and visual pollution.

The problems are numerous, complex, and as Lockwood (1994) suggests, inter-related. The complexity of the traffic problem centres on the increased influence of the automobile on society at all levels: individuals, neighbourhoods, towns and cities as a whole. Canadians travel in automobiles nearly 10% more than residents of other industrialized nations, due at least in part to the large distances that must be travelled between settlements. Most Canadians now travel by automobile, so that, in 1992, for every 100 kilometres individuals travelled, 82 kilometres were by automobile *(Statistics Canada, 1995)*.

Thus, the traffic problem touches on nearly all aspects of life in small towns like Lennoxville. It is certainly a transportation problem, but it also creates social, environmental, health and planning problems as well *(Lockwood, 1994, 1)*. Today, the main streets of these small towns have moved from serving a number of commu-

nity purposes to that of an unsafe, uncomfortable, busy, noisy and smelly place. In many small towns throughout the industrialized world today, the main street's only function is to move cars, trucks and buses through as quickly as possible.

Local roads have become part of the larger inter-urban provincial transportation network which, over time, has become incompatible with the quality of life associated with small towns and their street networks. Now local and provincial road networks have become one, with the provincial goals and regulations for transportation dominating the scene. Also added to the problem are a series of jurisdictional and economic factors.

In Quebec, the provincial Ministry of Transport controls all provincial highways, such as those that meet in the heart of Lennoxville (Figure 1). Municipal governments have usually remained powerless over provincial regulations and norms on these highways, losing any planning or decision-making that would effect the regional, inter-urban goals and objectives of the provincial road system. Therefore, main streets that were built for a few hundred vehicles per day now serve as obstacles for the thousands of vehicles that wish to pass through these small towns each day. Main streets have often been widened and straightened to cope with the increased non-local traffic. Over time, these streets that served as a place for a number of activities, such as shopping, cycling, recreation, housing and parking, now serve as simply a conduit for through motorized traffic.

*Figure 1 — Through highway traffic intersects at Lennoxville.*

**The Growing Traffic Problem in Lennoxville**

Beyond the fact that the heart of Lennoxville is the intersection of two provincial highways (Route 108 and Route 143), there are a number of other compounding factors that should be considered when discussing the town's overall traffic problem:

- The town's population of just over 4,000 residents swells to nearly 8,000 during the academic year, when Bishop's University, Champlain College and Bishop's College School are in session. This educational function adds hundreds of pedestrians, cyclists and automobiles to the streets of Lennoxville during this time.
- The town of Lennoxville is situated near Alexander Galt Regional Secondary School, a school supported by an extensive system of school buses. Combined with the two elementary schools located in Lennoxville, the school system brings over 200 school buses through the town each day, September to June, during peak traffic periods between 8:00 A.M. – 9:00 A.M. and 3:00 P.M. – 5:00 P.M.
- The location of the town is, from a transportation planning point of view, poorly situated in a river valley, where the Massawippi river joins the Saint Francis river, an area subject to flooding and requiring several bridges crossing the two rivers. Over time, the town has expanded away from the flood zone, across the Saint Francis river and up the banks of the river valley.
- Lennoxville represents one of the few places in Quebec where the Canadian Pacific Railway intersects with the Canadian National Railway, with lines running parallel to the main street, several level crossings, including two on Route 108, and varied schedules, each adding to the complexity of the transport problems in the town.
- The town has attracted thousands of cyclists to the area by purchasing the abandoned Quebec Central Rail line, between Lennoxville and North Hatley, and converting it to a recreational trail. This trail has now become part of the larger Sherbrooke Regional trail system, a 42-kilometre trail that runs through the town. Many of the cyclists, however, choose to use existing roads, bridges and sidewalks to access facilities in the town or to avoid some of the more challenging inclines on the actual trail. Having only just opened, there have already been several traffic accidents associated with the increase in cyclists.

- In terms of road maintenance, safety and enforcement, there has been an on-going problem over the jurisdiction of provincial, regional and local authorities. Recent provincial reforms have included the transfer of bridges to the local government, with a complicated system of financing for their repair, and no clear indication of jurisdiction. Likewise, when a local road connects regional or provincial roads, the Town of Lennoxville has always been challenged when they attempted to limit traffic flows or load limits. In particular, Belvidere Street, while being a "local" street, has always been a connector route for trucks and automobiles wishing to access Routes 108 and 143 from Sherbrooke, Ascot and Rock Forest. A recent Transport Quebec study revealed that some 500 heavy vehicles use Belvidere Street every day, and between 1982 and 1990, there were 288 accidents involving 542 vehicles. Two people were killed and another 72 injured in those accidents *(Ministry of Transport, 1992)*.
- Facilitated by a traditional grid-iron street pattern, many drivers opt to avoid the delay and congestion at the only traffic signal in Lennoxville by using side streets through the residential sectors of town. As the bulk of these drivers are travelling to and from Sherbrooke, they use side streets to get from Route 143 to Belvidere Street, thus avoiding Queen Street, central Lennoxville and the slow drive into Sherbrooke via Route 143. Consequently, residential areas have experienced large increases in non-resident traffic, with associated speeding and failure to obey stop signs and posted school crossings. As a result, residents have been vocal in their complaints about neighbourhood safety and the need for town officials to act on the traffic problem.

As in so many other small towns, the growing traffic problem has received little acknowledgement or understanding by residents and local government officials. It is only when a series of factors such as those listed above are recognized that there begins to be some level of understanding of the extent to which motorized vehicles have contributed to an overall "quality of life" problem in a town. Most of us fail to identify it as a transportation planning problem, yet we recognize the symptoms of the problem: congestion, pollution, delays, traffic jams, and a high level of frustration by both drivers, pedestrians and residents.

**Measuring the problem in Lennoxville**

Lennoxville has experienced a tremendous change in the levels of pedestrian, bicycle and motorized traffic travelling in and through its territory. Over the last decade, Bishop's University Geography students have attempted to measure traffic volumes, pedestrian conflicts, the impact of new facilities and general land use and safety concerns. Analyzed along with Ministry of Transport data, there are a number of indicators that show that the volume of traffic has increased, yet the basic infrastructure of the town has remained the same or deteriorated. Table 1 provides a useful indicator of the increased volume of vehicles travelling to Lennoxville on Routes 108 and 143, from data collected in 1972 and 1993. The average number of vehicles per day increased by 26%, from a total of 21,880 vehicles in 1972 to 27,600 vehicles in 1993 *(Ministry of Transport, 1972, 1993)*. The volume of traffic from Sherbrooke remains the highest, growing just over 4% over the 21 year period, always staying above 10,000 vehicles per day. Traffic travelling Route 108 from Cookshire had a 73% increase during this period, from just 4,860 vehicles per day to 8,400. This period also indicates a 27% increase in the average number of vehicles on Route 143 from Stanstead, from 6,800 to 8,600.

None of the Ministry of Transport figures include the dramatic changes in traffic volume and flow that occurred within the Town of Lennoxville during this period. For example, Bishop's University increased its enrolment by over 50%, with a significant increase in the number of staff and students that own cars. Today, while the total number of parking spaces at the university equals 782, Bishop's has registered over 2,500 vehicles. Further, provincial statistics do not include the growth in the number of vehicles

***Table 1***

Volume of Traffic
Travelling To Lennoxville, 1972, 1993

*Average No. of Vehicles per Day*

| Highway No. | From | 1972 | 1993 | % change |
|---|---|---|---|---|
| 108 | Cookshire | 4,860 | 8,400 | 73% |
| 143 | Stanstead | 6,800 | 8,600 | 27% |
| 143 | Sherbrooke | 10,220 | 10,600 | 4% |
| | **Total:** | **21,880** | **27,600** | **26%** |

using Belvidere Street, the western access route that has operated as a "regional" road connecting Lennoxville to Ascot, Sherbrooke and roads west and north of the town. Department of Geography "raw data" counts of the Queen-Belvidere intersection reveal a startling increase in the volume of total vehicular traffic between 1989 and 1994. Counting all vehicles that passed through the intersection between 3:00 P.M. and 5:00 P.M. on a Thursday afternoon in November 1989 and 1994 revealed a 48% increase in volume, from 2,140 in 1989 to 3,164 in 1994.

As discussed earlier, residential streets away from the main highways are experiencing significant increases in traffic too. Spitz (1982) suggests that residential streets in small towns should experience less than 300 vehicles per day to be considered truly residential. Table 2 provides the number of vehicles recorded per day on some of the residential streets in Lennoxville.

***Table 2***

Vehicles per day
at selected Lennoxville residential locations

| *Intersection* | *Vehicles per Day* |
|---|---|
| Clough / Park | 2,970 |
| Park / Church | 1,310 |
| Conley / Depot | 1,122 |
| Speid / McMurray | 909 |

*—(Dept. of Geography, November, 1994)*

**Effects of Increased Traffic**

More and more planners, engineers, sociologists and geographers are arguing that traditional transportation planning is too focused on facilitating automobile and truck traffic, usually to the exclusion of other users such as pedestrians, cyclists, transit riders, local residents, merchants, customers and children *(Mackey, 1990; Lockwood, 1994; Rothe, 1994; Fox, 1995)*. Typical engineering studies and traffic models predict the need for greater capacities on streets and highways, and once built, the predictions seem to come true — more cars use these wider, straighter streets *(Lockwood, 1994, 14)*. But the effects of increased automotive traffic on the other users is usually overlooked, especially in small towns that lack formal planning departments and the authority to

challenge regional and provincial schemes.

Much of the recent literature on transportation planning argues that traditional engineering responses have been directed at optimizing traffic flow. Governments at all levels are usually prepared to respond to increased traffic demand. Yet most measures taken by these agencies have an adverse impact on pedestrian safety. Faster and wider roads increase pedestrian crossing distance, high risk exposure to faster cars, crossing delays, barriers, and increased noise levels. Woodhull (1991) believes that children are the primary victims of these projects, forcing them off of once quiet residential streets and causing parents to drive them places that would be completely unnecessary in an environment that is less hostile to pedestrians. Take for example the pedestrian crossing located on the Belvidere Street hill at Park Street. This crossing is so dangerous that two crossing guards are needed to control the traffic, as well as a flashing amber light, a portable caution sign and orange warning flags. Many parents simply drive their children to school rather than having them risk a serious accident while crossing the road at this point.

In a study of what people valued most in their towns, Appleyard (1981) found that the danger of traffic was the prime concern. He found a direct relationship between the volume of traffic and the feeling of danger. Indeed, recent Lennoxville resident complaints of neighbourhood safety problems are directly related with what residents describe as "an increased volume of non-resident traffic, speeding and a failure to stop at stop signs."*(Neighbourhood Communique, March 1, 1995).*

Increased traffic in small towns and the resultant speed and volume of automobiles has had a negative effect on cyclists. The bicycle is seriously underutilized in Canada, and generally neglected as a serious mode of transport in transportation planning studies. As Woodhull (1991) concluded in his study of cyclists in California, cycling can never be a serious mode of travel until treated as if it is. In small towns such as Lennoxville, the bicycle is viewed strictly as a recreational vehicle. Cyclists have been discouraged from using regular road systems, directly through the construction of circuitous greenways or trails, and indirectly through the elimination of physical space on the streets of the town.

Beyond the direct modal conflicts between increased numbers of vehicles and pedestrians, cyclists and mass transit, increased numbers of vehicles in small towns have effects on the environment and the overall health of the community. Cars are the least

energy efficient mode of transport per person, as well as the most environmentally harmful *(Lockwood, 1994, 20)*. Any community that receives growing numbers of motorized vehicles will certainly feel the effects of increased exhaust emissions that pollute the air, as well as run-off water containing salt and heavy metals. The Canada Mortgage and Housing Corporation found that urban traffic noise is now being recognized as a major factor in residents' quality of life. Surveys found that noise from increased traffic gives rise to greater neighbourhood dissatisfaction than aircraft noise does *(C.M.H.C., 1977)*.

While the effects of increased levels of traffic on the social health of the community are difficult to measure, some studies have found an inverse correlation between the volume of traffic and the amount of social interaction *(Appleyard, 1981)*. As discussed earlier, residents may not actually describe their increased levels of dissatisfaction with an overall increase in traffic, but eventually these irritants have a cumulative effect on the livability of a place.

In Lennoxville, such cumulative effects have surfaced, with residents stating: "I can no longer sit on my front porch without worrying that my children are going to be killed by a speeding car," *(Lennoxville Town Council Meeting, April 10, 1995)*. High traffic on selected streets begins to split neighbourhoods and towns into isolated units. The threat of increased non-resident traffic begins to undermine the very idea of a small town community. In the absence of any type of local traffic planning, residents begin to complain to police and government officials and demand action, creating adversarial relations between each group. Indeed, "the traffic problem" has become part of daily life in the town of Lennoxville.

**Solving the Problem of Increased Traffic**

Faced with a situation where a small town, originally at a crossroads built to allow a few hundred cars to move within and through it, the town must now absorb an enormous increase in the numbers and types of vehicles (in Lennoxville in particular, large transport and logging trucks, some 175 per hour during peak 3:00 – 5:00 time periods). The traditional role of the downtown as a community gathering place is now devoted to serving motor vehicles that wish simply to pass through the town as quickly as possible.

What are the possible solutions to this problem? A review of the urban planning and road network design literature suggests three possible solutions: 1) do nothing; 2) engage in traditional engineering practices of modelling and planning; or 3) engage in effec-

tive measures to reduce volume and speed, thus returning the streets of small towns to the people who reside there. To date, the Town of Lennoxville has chosen solution #1: do nothing.

A review of the research of the Permanent International Association of Road Congresses, a group of over 60 member countries that analyzed traffic safety and environmental problems of through traffic in small towns of populations of 3,000–5,000 inhabitants throughout the industrialized world, reveals three generations of planning solutions to the problem of increased traffic in small towns.

**First Generation Solutions**

First generation solutions to the traffic problem attempt to improve the existing street networks of the town to accommodate a greater number of vehicles. Usual changes are somewhat cosmetic, including street widening through the elimination or narrowing of sidewalks or road shoulders, road painting and signage to direct traffic, synchronized traffic control signals, or a combination of these. Lennoxville is now contemplating such low-level changes in addressing its traffic problems, including a promised planning study of the problem before any action is taken. In the absence of effective transportation planning strategies, small town officials usually engage in these activities simply to be "seen to be responding to the problem *(Solnit, 1974)*."

**Second Generation Solutions**

Second generation solutions, developed largely in the growth periods of the 1960s and 1970s, were to lead the through traffic around the small towns by building new, high volume roadways, known as the "by-pass" or "ring road." These solutions were very popular in planning and engineering circles since they facilitated the growth in motorized vehicles and eliminated the delay and congestion associated with small town arteries.

Taking traffic away from the centre of towns has certainly reduced the pressure on many towns and cities. One need only look at a road map of the United States Inter-State Highway Network to understand how popular this solution has been. However, this strategy has only been partly successful, especially for small towns in Canada. Today, these strategies are not economically feasible as governments find ways of reducing budgets and deficits. While the construction of by-passes may still be

deemed necessary for large communities with high volumes of through traffic, it is certainly not a typical response for the hundreds of smaller communities that cover much of Canada. Added to the cost factor is the growing concern over the environmental impact of highway building and the associated public opinion and resistance to such land uses.

Despite the time lag, the Town of Lennoxville has embraced the ring-road concept as the *only* solution to its traffic troubles. As a neighbour of the greater Sherbrooke Census Metropolitan Area (140,000 residents), Lennoxville has felt the impact of the traffic flow to and from Sherbrooke on Route 108, Route 143 and Belvidere Street. A part of the regional road network plan for years, as seen in Figure 2, the by-pass would certainly alleviate a significant amount of the through traffic in Lennoxville. While this by-pass has been on Ministry of Transport priority lists for close to twenty years, Ministry officials insist that such a road will not be built in this century.

Many small towns in Europe and the United States have found the by-pass strategy to be only partly successful *(Italian National*

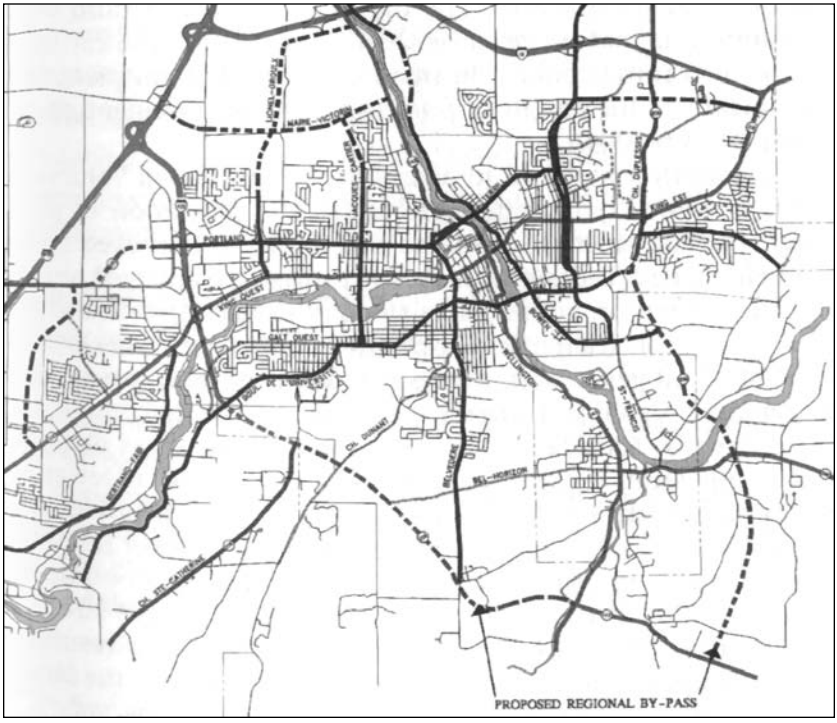


*Figure 2 — The proposed regional by-pass. Source: Ville de Sherbrooke Transport Plan, 1994.*

*Research Council, 1985)*. In the case of Lennoxville, it may be argued that only a certain percentage of the traffic pressure comes from through traffic. As reported earlier, a significant percentage of traffic is generated within the town, from residents, students and vehicles (cars, trucks, bicycles and buses) attracted to the town for its various educational institutions. In a case such as this, a by-pass will not reduce peak hour traffic pressure to any significant degree. Therefore, even if a by-pass were constructed tomorrow, Lennoxville would still have a transportation problem.

**Third Generation Solutions**

The traditional planning and engineering responses have been presented above: enhancing the streets of the town to facilitate a greater volume of traffic, or constructing a by-pass. The realities of the late 1980s and early 1990s economy, paired with a significant change in the way in which we plan our communities, has given rise to a third generation of transportation planning solutions in small towns. While it may be a rather obvious solution, this third generation has enjoyed only recent and limited acceptance by planners and governments. The thinking behind this third wave of planning is that we must reorient our priorities: the car must not be the central concern in small towns. Rather, people, safety and quality of life are given priority in the improvement of our towns *(Mackey, 1990)*.

The solutions involved in addressing the increased volume of traffic is viewed quite differently under this generation of planning. Here the ability to cross the street safely is improved rather than eliminated. Pedestrian and cyclist spaces are enlarged and an emphasis is put on public safety through reduced speeds and less road space, road realignment, strategic landscaping, road closures, etc. This third generation, referred to as "taking back the streets," has enjoyed significant success in Europe, the United States, and more recently, Canada. In Germany, for example, street planning and engineering regulations have been completely redesigned. Today, urban streets have to be designed as part of urban life. Their function is not only for cars but also for all other modes of transportation, for green spaces, for markets, for playgrounds, etc. *(Mackey, 1990)*. The central function of taking back the streets is an overall reduction in the speed of vehicles and a resultant increase in personal safety. The strategy for taking back the streets has been developed through a combination of policies and measures that ameliorate the negative effects of motorized vehicles on

individuals and on communities in general, a method known as *traffic calming (Lockwood, 1994).*

**Traffic Calming as Part of the Solution**

Traffic calming is a radical departure from the traditional solutions to increased traffic in small towns. In a town such as Lennoxville, where transportation planning has never been practised, traffic calming techniques offer new solutions to the traffic problem. Rather than doing nothing, or blaming regional or provincial officials for their inaction, the community itself can take direct, immediate action at solving some of the problems associated with high volumes, speeding, unsafe places and modal conflict. Lockwood *(1994, 66)* summarizes the goals and objectives of traffic calming:

**Goals of Traffic Calming**

Traffic calming will restore the balance towards living as opposed to travel in the town by pursuing the following goals:

- producing livable areas,
- improving the quality of urban life,
- improving conditions for people,
- creating safe and attractive streets,
- reducing collision frequency and severity, and
- ameliorating the negative effects of motorized traffic on the environment.

**Objectives of Traffic Calming**

The objectives of traffic calming include:

- achieving slow speeds for motor vehicles,
- improving the real and perceived safety for non-motorized users of the street,
- incorporating the preferences and requirements of people using the area (residing, working, playing, etc. along the streets(s) or at the intersection(s),
- providing more trees, shrubs, etc.,
- increasing access to land uses for all modes of transportation, and
- promoting pedestrian, cycle, and transit use.

Certainly the introduction of traffic calming is not intended to eliminate first or second generation solutions to the traffic problem. In fact, where traffic volumes and severe traffic problems already exist, this solution may not be feasible, at least by itself. In the case of Lennoxville, it is reasonable to assume that both traffic calming and the long-term fight for the construction of a by-pass can be done at the same time. Clearly, taking back the streets requires that small town governments, in conjunction with their citizens, must become actively involved with the planning process. To date, most small towns like Lennoxville have hesitated in doing this, choosing instead to blame the provincial government for not constructing a regional by-pass.

In their survey of traffic in small towns in over 60 countries, the Permanent International Association of Road Congresses states:

> Traffic calming of the main road in a town may also be considered, even when the definitive solution to be applied in a specific case is the construction of a by-pass. The reconstruction of the through road can be considered either as a first step before the by-pass is constructed, or as an integrated part of the by-pass project. Otherwise, even when the through traffic has been removed from the main street, the objective of reintegrating the main street with the town may not be reached.
>
> —*(P.I.A.R.C., 1991, 13)*

**Results of Street Calming in Other Towns**

Taking back the streets is still a rather new concept in the industrialized countries of the world. Still, there are hundreds of communities involved in street calming activities, with some measurable results. The most obvious improvements to small town quality of life have been those street calming projects designed to reduce the speed of car traffic. Since 1984, communities in the Netherlands have had the power to reduce speed limits to 30 km/h over an entire neighbourhood, rather than applying to Ministry of Transport officials on a street by street basis *(Mackey, 1990).*

In France, a number of communities have reduced speed limits to between 10–20 km/h. What they have found is an overall reduction in the average speed, as well as the near elimination of excessively high speeds. In the ten small towns in France that were studied, the total number of accidents dropped by over 60% *(P.I.A.R.C., 1991).*

Associated with the reduction of speed is the need for changes

in the layout of the streets themselves. Street calming techniques include a wide range of effective street design measures that contribute to both the reduction of speed and an improved local street environment. Figure 3 provides an example of the various kinds of street calming techniques available. Hundreds of communities have adopted one or more of these designs, including cities and towns in Australia, New Zealand, Britain, France, Germany, Switzerland, Holland, Italy, Sweden, Denmark and the United States. Closer to Lennoxville, communities such as Ottawa, Montreal, Quebec City, Hull, Laval, Longueuil, Sainte-Foy, and Sherbrooke have employed one or more of these street calming techniques. Despite rigid transport engineering standards and severe climatic conditions, there is some creative street calming occurring in Canadian communities.

*Figure 3 — An example of simple street-calming technique: Union Street, Sherbrooke.*

**Conclusion**

Similar to so many hundreds of small towns in North America, Lennoxville has experienced a significant rise in traffic volume. This paper has addressed the scale of the problem and has proposed a new approach to solving it. Many planners and politicians try and solve the traffic problem by increasing police patrols or erecting more stop signs or speed limit signs. Effective street calming goes far beyond these types of approaches, including a battery of traffic techniques and designs. If the Town of Lennoxville is going to attempt to find an effective solution in relation to its unique location and diverse population, it will have to employ some of these proven calming techniques. Despite the long-term commitment to a regional by-pass, a parallel process of street calming can begin to solve the immediate problems of speed, accessibility, residential street diversions and modal conflict.

This approach requires nothing less than a complete reorganization of our traditional approach to traffic in small towns, moving from motorized vehicles as the priority to safety and enjoyment of town life by children, students, families, and senior citizens. The recent literature outlining the street calming approach is clear on the need for reintegrating the main streets of the town that not only physically influence the number and flow of motor vehicles,

but also support the various other functions of the town, in harmony with its unique character and physical layout *(P.I.A.R.C., 1991)*. Therefore, for street calming to be successful, there must be collaboration and cooperation between the parties involved: elected representatives, planners, police, provincial representatives and the residents themselves. The residents of Lennoxville seem ready to participate in any process that will alleviate the traffic situation in their town. In view of the noise, exhaust and chaos of hundreds of cars, logging trucks, school buses, cyclists and pedestrians, all coming together at the intersection of Routes 108 and 143, the Town of Lennoxville seems ripe for taking back the streets.

## RESUME

L'étude examine les problèmes soulevés par la densité accrue de la circulation des véhicules moteurs dans les petites municipalités et prend Lennoxville comme modèle. En premier lieu, on y décrit quelques uns des principaux irritants dûs à la circulation dans Lennoxville, puis on y résume les écrits sur le sujet en rapport avec d'autres lieux et enfin on examine quelques solutions des plus fructueuses mises en place ailleurs en Amérique du Nord et en Europe. On suggère que Lennoxville pourrait instaurer un certain nombre de ces solutions à condition de bien vouloir adopter une attitude totalement nouvelle dans sa planification de la circulation routière.

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