London, Ontario Strategic Road Safety Strategy

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Abstract

The City of London has initiated a strategic road safety program to reduce the number and severity of motor vehicle collisions. The basic form of the program follows the traditional state/provincial or municipal approach of analysing collision statistics, identifying the nature of the most severe problems, matching countermeasure programs to address the most severe types and developing delivery strategies.

The first step in finding the target areas was to conduct a broad-based literature search and compare it to the collision database. The collision data were then analysed looking for traditional and non-traditional areas of high collision frequency.

In subsequent stages of the project, there are two elements of the program which may be considered somewhat different from traditional programs.

First, the selection of emphasis areas is not solely data-driven. While the basis of the emphasis areas will certainly be the hard data, the choice will be modified by input from an extensive public contact campaign (to determine perceived safety issues) as well as a selection of target areas previously determined by City staff or Council.

Second, to maximize the potential for success, the choice of emphasis areas is to be adjusted based on a number of factors, which include the severity of the collisions, the potential effectiveness of the countermeasures and the capacity of the involved agencies to change or add to their current programs to deliver countermeasures specific to the safety strategy.

A. Introduction

Over past decades, improved roads, vehicles, driver licencing and other initiatives have led to a decline in number of motor vehicle collisions. However, in recent years, with few new roads being built and more and more cars on the roads, congestion has continued to increase. This has led to collision frequencies that are leveling off and, in some cases, starting to rise for the first time in many years.

In response, major agencies world-wide have focused energy and efforts on reducing the number severity of motor vehicle collisions. In May 2011, the United Nations declared 2011-2020 the Decade of Action for Road Safety. In Canada, Transport Canada named 2011 as the Year of Road Safety, and followed that up with a revised national road safety strategy called Strategy 2015.

Strategic road safety programs have become more and more common, as an effective way to address road safety issues. In general, strategic road safety programs are used to improve the understanding of the state of road safety and consequently, improve the safety performance of the road component of a transportation network. A typical strategic road safety program uses a multidisciplinary approach to address the issues of road safety identified from statistical data. Historically, in North America, there have been major initiatives involving all U.S. states, funded by the federal government. Federal legislation such as the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) mandated each state to develop, implement and update its own strategic highway safety plan, prior to accessing funding for improvements. This will continue with the implementation of the MAP-21 program (Moving Ahead for Progress in the 21st Century). The state model, or a similar approach, was subsequently adopted by municipalities in Canada, such as Edmonton, Ottawa and Hamilton. The key difference in Canada, of course, is the funding source. Municipalities are most usually required to fund the strategic safety program, and the resultant action plans, from local sources (e.g. with a few exceptions such as the program formerly run by the Insurance Bureau of British Columbia, no provincial or federal funding is available).

The City of London, Ontario has recently initiated a strategic road safety program, which it has entitled the “London Road Safety Strategy” (LRSS). While this program contains many of the typical aspects of a strategic road safety program, there are two areas in which the London programme is somewhat different and perhaps innovative. This paper primarily discusses London’s program and highlights the differences between London’s program and a typical strategic road safety program.

Complementary to the LRSS, the City of London has just completed its 2030 Transportation Master Plan (TMP). The City is also currently working on a very exciting initiative called “ReThink London”, which will set the goals and priorities that will influence the future of the city for years to come. All these initiatives; LRSS, TMP, and ReThink London are in line with the City of London Strategic Plan which identified a vision as a “City of Opportunity”. The plan identified five strategic outcomes to guide future planning and contribute to a continuation of the high quality of life in London. The outcomes are:

- A Vibrant and Diverse Community
- A Green and Growing City
- A Sustainable Infrastructure

- A Caring Community
- A Strong Economy

The above initiatives combined have relation to road safety including, but not limited to, investing in strong, safe, modern and efficient infrastructure networks, investing in efficient and effective public safety services, and promoting safety in neighbourhoods.

B. City of London Structure, Demographics, Safety Statistics and Safety Initiative

The City of London is a middle sized city (population 366,150 in 2011) located in the south-west part of the province of Ontario, Canada. While the city was the primary initiator of the road safety strategy, the adjoining County of Middlesex (population 70,800 in 2011) was invited aboard as a partner. The nature of the roadway systems in the two jurisdictions are somewhat different, the City of London being primarily urban/suburban with some small amounts of rural roadway, while the County of Middlesex is primarily higher-speed two-lane and rural in nature.

The City of London hosts several postsecondary educational institutions, and as such, has a higher than expected density of young walkers and drivers.

Statistically, the City of London had available a fairly good motor vehicle collision database, while the County of Middlesex had a more rudimentary set of data available. In the city, for the last three years, the annual average was approximately 7450 reported collisions (police and self-reporting centres), which included about 1500 injury motor vehicle collisions and between 9 and 18 fatal collisions. In the County of Middlesex, for 2011, the comparable numbers were 694, 161 and 7. The County has a lower number of injury and fatal collisions per capita (about one-half), but without exposure data (traffic volume information is not available), it is not possible to determine if this is an actual and/or significant difference.

The basic trend in the City of London was roughly stable number of injury and fatal motor vehicle collisions over the past three years.

Road safety improvements have been of interest to the City of London Municipal Council and the public for many years. The City wished to undertake a programme to make inroads in reducing the impacts of these collisions and close the gaps in understanding local traffic issues so that effective countermeasures and programs can be identified.

C. Project Structure

The project benefitted from having an already active road safety committee in place. The key intent of the LRSS was to bring a sharper focus to the actions of the committee. The London-Middlesex Road Safety Committee had been active for over sixteen years and contained a wide base of active participants in the exercise of road safety. For the LRSS, the Road Safety Committee was expanded by several members. As well, it was felt that for expediency and efficiency, a two-tiered approach would be implemented. A small administrative committee was struck containing representatives of the classic

3E's. The engineering, enforcement and education group were represented with the presence of the City of London, the London police force and the chairman of the London Middlesex road safety committee who also represented the Middlesex-London Health Unit. A transportation consultant was engaged to provide consulting services in all aspects of support in developing the road safety strategy. The organization chart is shown in Figure 1.

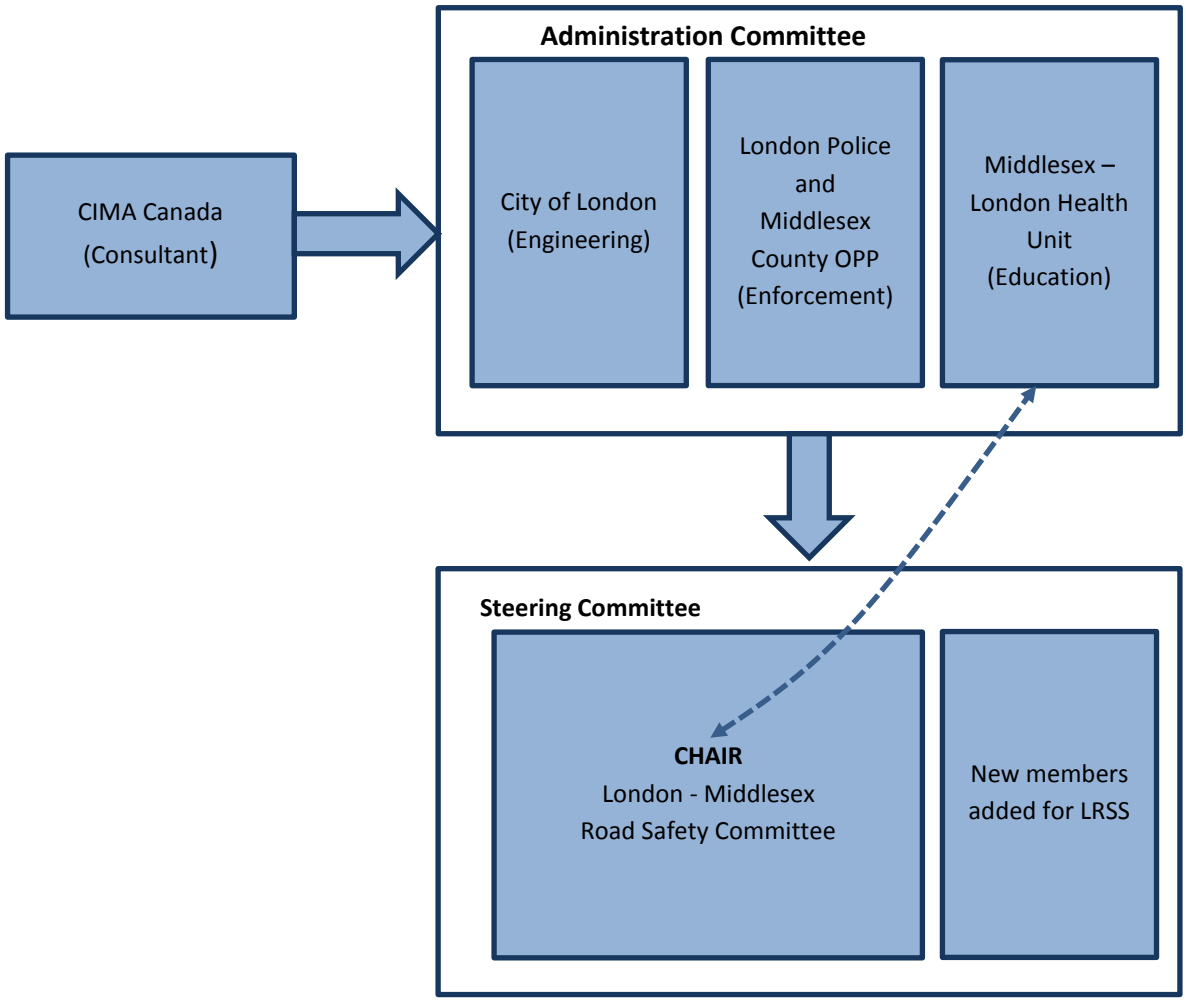

Figure 1. Organizational Structure for the London Road Safety Strategy

The majority of the decision-making was undertaken by the administrative committee, but most major decisions were vetted through the steering committee, which was comprised of the London-Middlesex Road Safety Committee, as expanded. Initial indications are that this structure is very efficient in that the administrative committee can be organised for meetings on limited notice and is capable of making rapid decisions while the steering committee is accepting of this overall structure, as long as they are kept informed.

D. Development of Emphasis Areas

The classic approach to implementing a road safety strategy is to first identify the target, or emphasis, areas to be addressed, and then to develop programs aimed at reducing the number and/or severity of the collisions in the emphasis areas. The LRSS follows this overall approach but is somewhat different in the exact methodology.

E. Sources of Information – Developing Target Areas

Traditional strategic road safety programs often focus solely on road safety statistics. The City of London programme is somewhat different in that it incorporates input from three separate sources. First is the traditional statistical data. Second, the City of London had identified seven areas of interest to be specifically considered in the development of the target emphasis areas. The City did not specifically define these as being part of the final programme but requested that the seven areas be considered in the course of developing targets. The third source of input requested by the City was public input. The concept of including public input was to incorporate component which reflected "perceived" or subjective safety rather than real or objective safety. The rationale for including perceived safety is that some aspects of mobility, particularly walking and cycling, depend on the participant having confidence in their travels. With the growing emphasis on alternative modes of transportation which do not involve the single motor vehicle, perceived safety has a major role to play in encouraging alternate modes of transportation. The outcome of the public consultation exercise will be described in detail later in this paper.

E.1 Using Literature to Identify Focus areas in the Collision Data

When reviewing and analysing motor vehicle collision data there are a number of different approaches which can be taken to cross-section the data. To ensure the highest likelihood that all major contributors to London's collision issues were identified, a literature search was performed and the targeted emphasis areas for a range of road safety programs across North America were identified and summarised. These are shown in Figure 2.

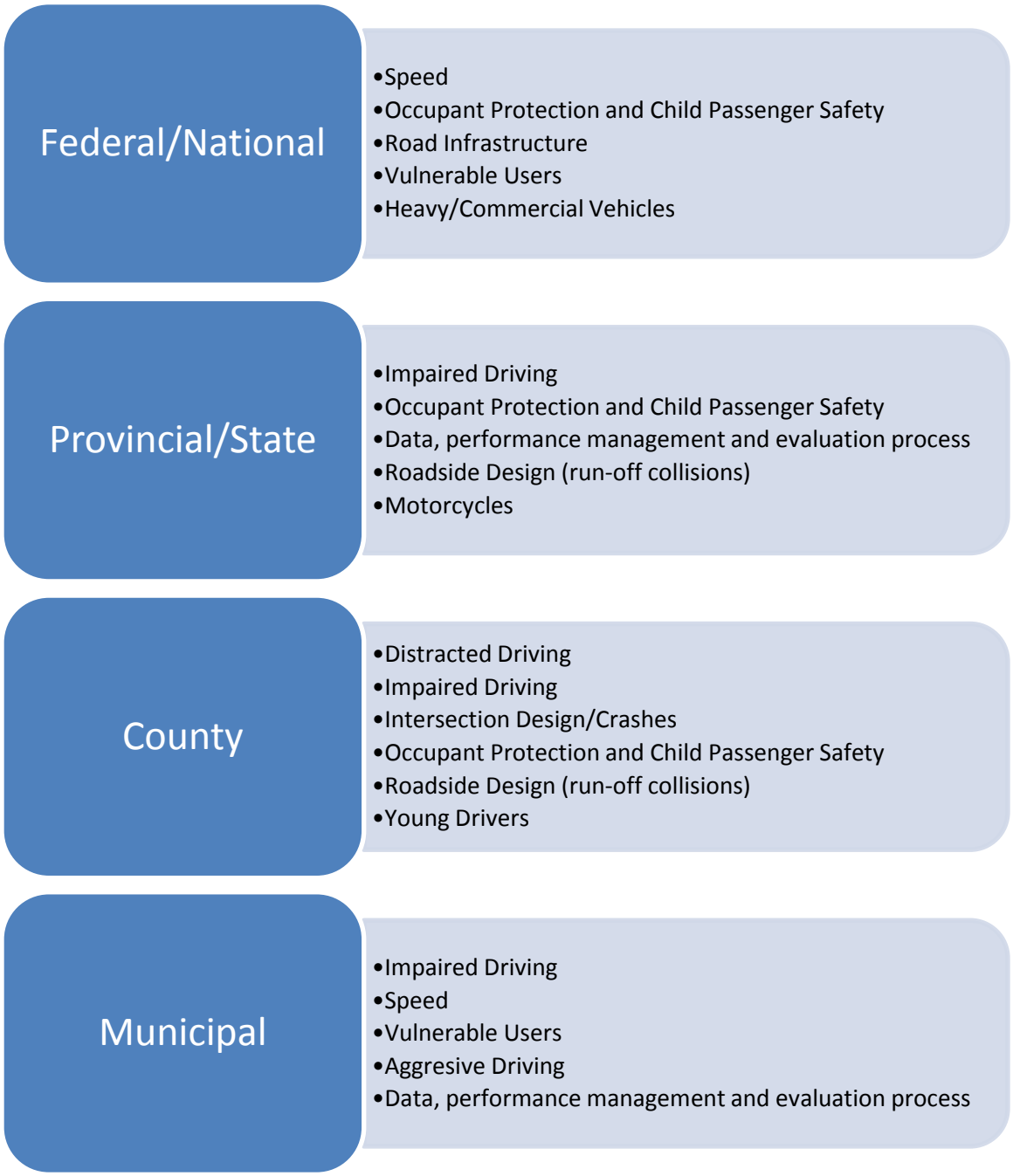

Figure 2 - Comparison of Most Commonly Found Focus Areas for Various Jurisdiction Types

When sorted numerically based on those identified in the literature reviewed, the list in Figure 3 was found:

Ranking	Emphasis Area	Frequency
1	Impaired Driving	17
2	Occupant Protection and Child Passenger Safety	15
3	Speed	12
4	Data, performance management and evaluation process	11
5	Young Drivers	11
6	Vulnerable Users	10
7	Road Infrastructure	9
8	Roadside Design (Run-off collisions)	9
9	Aggressive Driving	8
10	Intersection Design/Crashes	8
11	Motorcycles	8
12	Distracted Drivers	6
13	Heavy/Commercial Vehicles	6
14	Health and Road safety, Prehospital care	3
15	People and Safety Behaviors	3
16	Senior Drivers	3
17	Safety Culture	2
18	Vehicles and Safety Devices	2
19	Congestion	1
19	Coordination and consultation processes	1
19	High-Crash Corridor/High-crash locations	1
19	Legislative Issues	1
19	Licensing	1
19	Native	1
19	Police Traffic Services (PTS)	1
19	Railway Crossing	1
19	Residential Neighborhoods	1
19	Roadway Design/Crashes	1
19	Rules of the Road	1
19	School Zone	1
19	Transit	1
19	Work Zones	1

Figure 3: List of Focus Areas Found in the Literature Review Sorted by Frequency

This list was used to ensure all relevant analyses were performed on the City's collision data. These were then compared to the importance of the same problem as calculated from the City of London and the County of Middlesex data. The frequencies of various types of contributors to motor vehicle

collisions in the City and County are shown in Figure 4. It should be noted that the target or emphasis areas are overlapping and more than one may contribute to the occurrence of a single collision.

The Middlesex data is limited, but does show different priorities, as would be expected with the different environment. While many programs noted in the literature focus on alcohol-related collisions, alcohol involvement in collisions in the City is relatively rare and a minor contributor, suggesting that existing programs are working well.

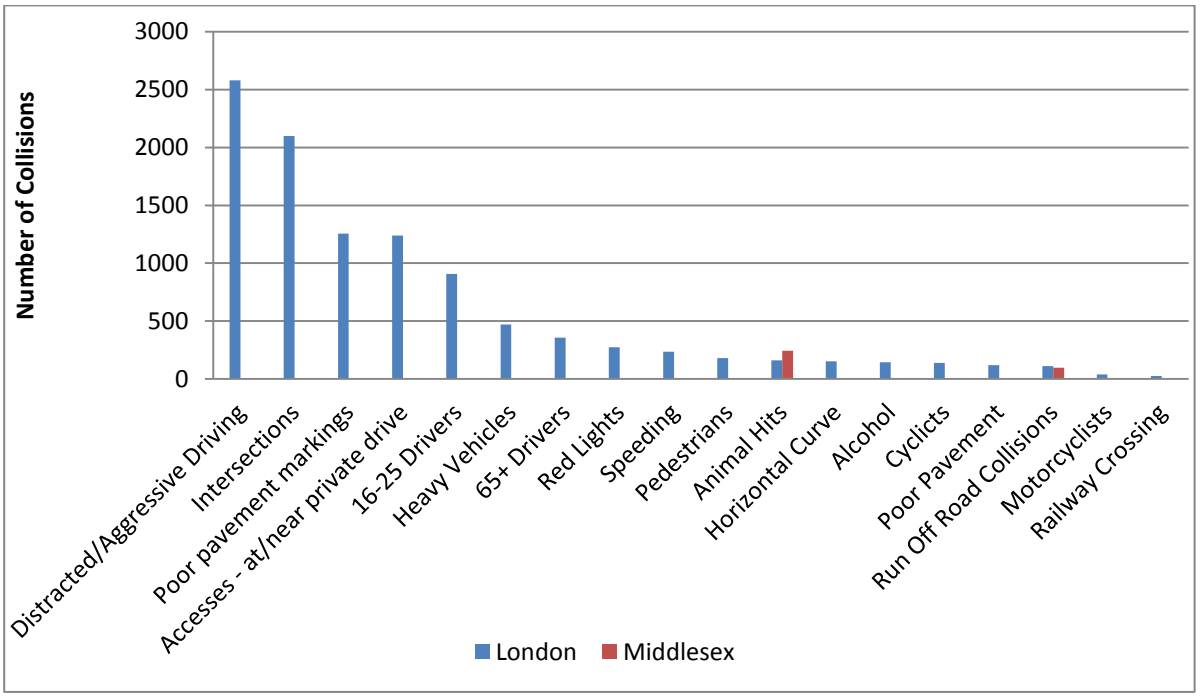

Figure 4: List of Focus Areas Found in the London and Middlesex Collision Data Sorted by Frequency

The review did point out two minor weaknesses in the City of London database. The City of London does not input information on occupant restraint use nor does it put in the specific injury data for involved persons. Occupant restraint is mentioned frequently as an area for emphasis in countermeasure development in a number of jurisdictions. However in London, the collisions are typically lower speed and the known seatbelt use in the province Ontario is quite high. Nonetheless, statistics from hospital admissions[1] show lower seat belt usage among those seriously injured in collisions in the London area. Without additional information on general seatbelt usage this area was not followed up. Since the motor vehicle report form does indicate whether a collision is injury causing or not, the relative severity of injury was not considered to be a major deficiency in the data.

[1] 5-Year Analysis of Severe Motor Vehicle Traffic Collisions with Injury Severity Score (ISS) ≥ 12, Residents of London-Middlesex, Treated at London Health Sciences Centre, 2007-2011

E.2 Goal: Injury Collisions versus All Collision Types

A goal setting exercise was undertaken with the steering committee and subsequently with the administrative committee. A program such as the London Road Safety Strategy needs a firm target so that the members have a clear idea of the effort required. A goal also provides the ability to measure success. In the course of setting the goal for the LRSS, the question of exactly what was to be measured was discussed. It was decided that only injury/fatal collisions should be part of the goal for the program. This was based on the fact that injury and fatal collisions have a much greater impact on society as a whole and also that statistically, the quality of the data is much better (police officers fill out all injury collision reports) leading to more reliable and stable statistics. The emphasis areas with the largest numbers of collisions for injury/fatal only collisions were compared to the previous targets which were based on all collisions reported either by a police officer or through the self-reporting centres. This is shown in figure 5. While distracted driving and aggressive driving have different basic causes and will lead to different choices of countermeasures, the outcomes in terms of collision types are often very similar. An example is rear-end collisions – was the driver distracted by some event within the car or was the driver following too close? As such the two have been combined for statistical purposes.

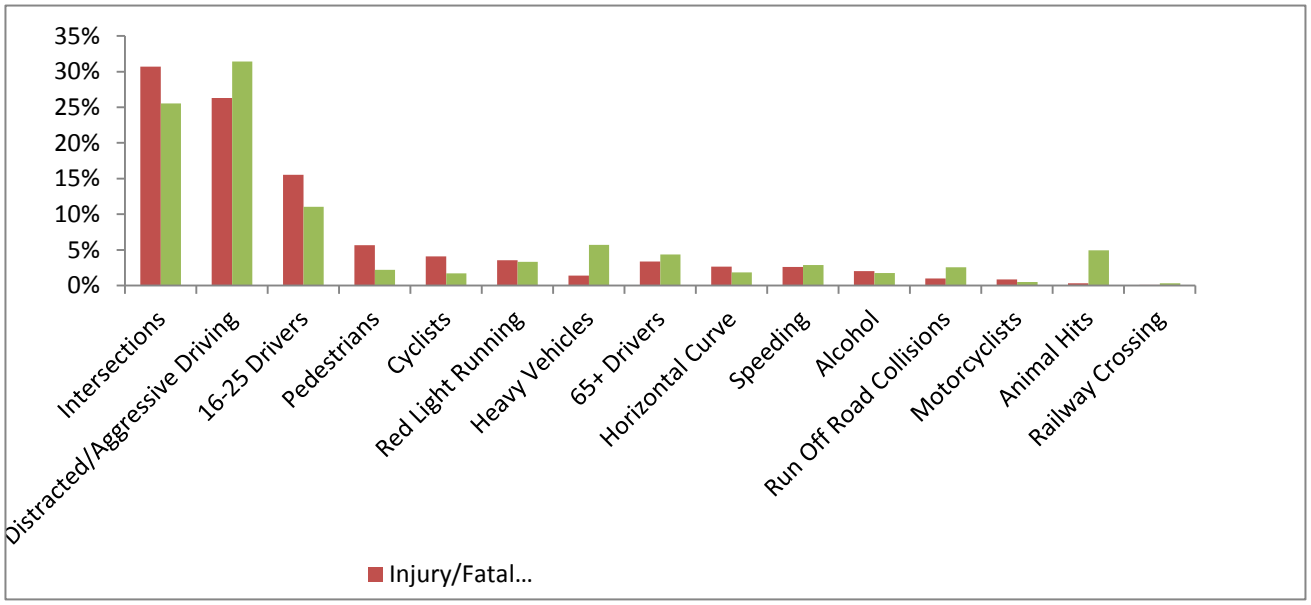

Figure 5. Comparison of Highest Frequency Collision Types for the Overall Data and for Injury/Fatal Collisions Only

The result was a reordering of areas to be addressed, with some significant changes. Not unexpectedly, collisions involving pedestrians and cyclists, which almost always result in injury, were promoted to a higher priority. Similarly, collisions involving intersections, which often involve right angle and other types of severe collisions, moved from second to the number one position. It might be assumed that collisions involving distracted driving are more likely to be rear-end collisions which have a lower

likelihood of causing personal injury. For the purposes of developing countermeasures, the top six areas of collision occurrence, based on injury/fatal collisions only, were chosen.

E.3 Designated Inputs

At the outset, the City noted seven specific safety topics to be considered. Three of the topics are primarily behaviours which lead to collisions (speeding/aggressive driving; impaired driving; red light running), two are a combination of countermeasure and contributing factor (access management; use of seat belts), one is primarily a countermeasure (education campaigns) and one is a general topic area (vulnerable road users). Of the seven areas specifically identified by the City of London for review, three were found to be in the top group of causes of collisions in London (aggressive driving, red light running and both pedestrians and cyclists, which comprise vulnerable road users).

E.4 Public Input

In order to understand public perception of road safety in the City of London and the County of Middlesex, the public's attitudes and knowledge were assessed by a four-part program. The core of the programme was a questionnaire which covered off a range of topics, many of which paralleled those identified from the data. The questionnaire was first applied to a pilot group of over 500 City of London employees. The pilot test confirmed that the basic questionnaire was satisfactory for the purpose and only very minor changes were made. The questionnaire was then provided to a market research firm which has access to a wide range of participants. The research firm applied the questionnaire to over 1000 residents of the City of London or County of Middlesex. The questionnaire was then placed online by the City and this was advertised through the local newspapers as well as the City of London website. Finally, the City and the consultant conducted an all-day walk-in public information booth at a local farmer's market. The public were encouraged to fill out hardcopy forms of the questionnaire or go online to access the electronic version.

The summary of public perception input is shown in Figure 6.

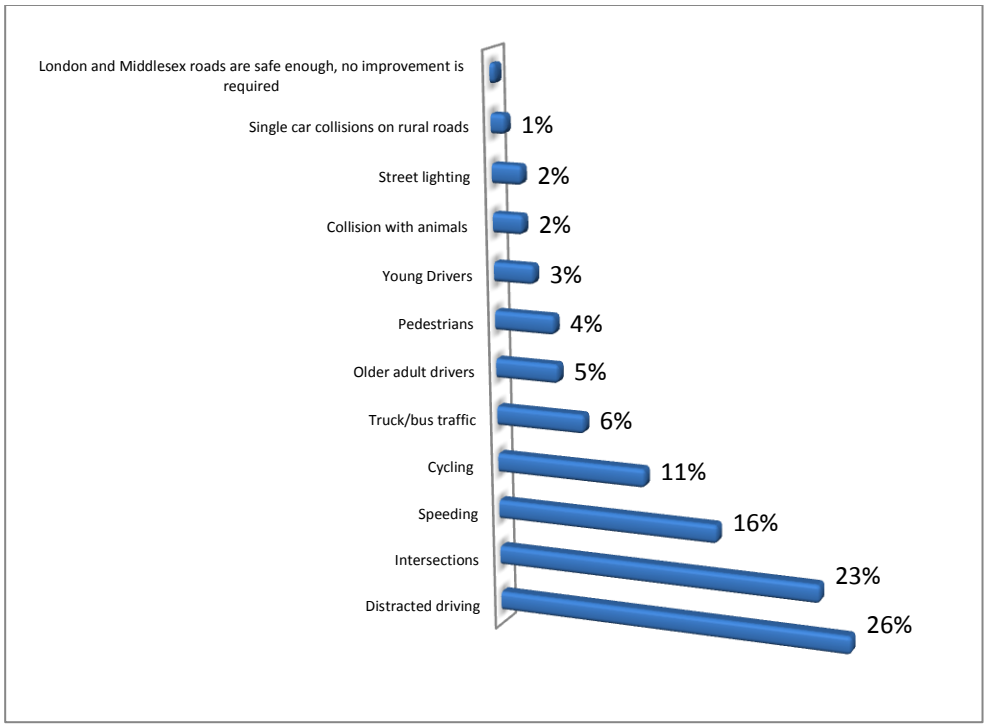

Figure 6. Summary of Public Perception of Road Safety Issues in London

The public perception was then compared to the target areas which had previously been identified through the collision database and through the City of London input. The comparison is shown in Figure 7.

Rank	Collision Database Results (for injury or fatal collisions)	Rank	Public Input Results
1	Intersections	2	Intersections
2	Distracted and Aggressive Driving	1	Distracted Driving
3	Drivers [16-25] Age Group		Not mentioned as a high priority
13	Speeding	3	Speeding
4	Pedestrians	5	Pedestrians
5	Cyclists	4	Cyclists
6	Red Light Running		Not mentioned as a high priority-
15	Heavy Vehicles	6	Truck and Bus Traffic
9	Drivers 75+	7	Older Adult Drivers

Figure 7 - Comparison of Identified Emphasis Areas

In general, there is a fairly close match between the public perception of road safety in the City of London and County of Middlesex and the collision database analysis. The public rated speeding and heavy vehicles higher than the data, and did not think that young drivers were a major factor. Speeding by itself did not appear a major factor in the data, but speeding is closely related to aggressive driving which is part of the second most critical emphasis area. Young drivers were kept as an initial emphasis area, despite having almost no profile with the public, because this appeared to be an area that might provide opportunity for collision reduction, and exactly because the issue needs to be highlighted.

F. Definition of Target Areas to be Addressed

The second major of area in which the LRSS has demonstrated some difference and innovation is in the exercise of developing the countermeasures and targeted emphasis areas. Traditional road safety programs identify the targets based on the highest number of collisions or other similar criteria. What is often lacking is understanding of the true potential for success in addressing these targets. In the LRSS, two factors are being woven into this discussion. They are the effectiveness of the individual countermeasures, and the capacity of the service deliverers to provide the countermeasures chosen.

The final decision on the choice of target emphasis areas will be based on a combination of:

- the overall number of injury/fatal collisions, adjusted by
- the effectiveness of a range of proposed countermeasures in reducing the number of collisions for that target area, adjusted by
- the ability of the safety committee and/or external agencies to deliver the countermeasure

G. Countermeasure Development

The development of countermeasures followed the following steps:

For each of the six identified target areas, a brainstorming session involving practitioners experienced with road safety strategies and road safety implementation identified at least one and often more countermeasures for each of the classic three “E”s, education, engineering and enforcement, as well as a fourth “E”, empathy. The empathy countermeasure is somewhat similar to the traditional education countermeasure, but looks at the roadway system more holistically and attempts to get users to understand each other’s positions to be more effective. The accumulation of six target areas times the four options led to a minimum of 24 countermeasures, but in fact, final total was 35. The next step will be to assign a degree of effectiveness to each of these pairings. This is an extremely difficult task. For engineering countermeasures, the road safety toolboxes are becoming more and more knowledgeable about the effects of various specific countermeasures. However, when the program is the application of a countermeasure citywide (example, improved traffic signal head conspicuity) or the implementation of network screening followed by a countermeasure program, the effectiveness is more difficult to quantify. For the enforcement and education groups, there is relatively little information in the literature and these outcomes are highly dependent on the intensity and duration of the programme as delivered. For example, it is known that police enforcement effective increases if applied on a regular basis in a highly visible manner.

Therefore, the degree of effectiveness to be ascribed to each of the countermeasures will be in large part a subjective decision based on experience and knowledge of other similar programs. Nonetheless, it was still felt that it was better to estimate this statistic than not to attempt the use it. The application of an effectiveness or value is both relative and absolute. In relative terms it helps to choose which countermeasures should be undertaken. On an absolute basis, it gives an understanding of the expected number of collisions to be reduced, which can be compared to the total which was the goal set by the programme, to ensure enough programmes are chosen to meet the target total.

The list of countermeasures is below:

ENGINEERING COUNTERMEASURES

TARGET AREA No. 1 – INTERSECTIONS Annual Average – Injury of Fatal Collisions : 965		
Proposed Countermeasure	**Examples**	
Countermeasures targeted City-wide based on a specific collision primary impact type(s)	Improved visibility/conspicuity of signals heads for rear-end collisions	Right-turn channels for right turn sideswipes
Network screening driven countermeasure program for top ranked intersections (or top-ranked that have not already been addressed recently)	Specific locations	
TARGET AREA No. 2 – DISTRACTED AND AGGRESSIVE DRIVING **Annual Average – Injury of Fatal Collisions : 826**		
Proposed Countermeasure	**Examples**	
Design Elements	Forgiving roads	Future designs to better match to speed and volume
Countermeasures targeted City-wide based on a specific collision primary impact type(s) identified as associated with distracted/aggressive driving	Improved visibility/conspicuity of warning signs	Enhanced guidance through better street name signs
TARGET AREA No. 3 – YOUNG DRIVERS (16-25 AGE GROUP) **Annual Average – Injury of Fatal Collisions : 488**		
Proposed Countermeasure	**Example**	
---	---	(none identified)
TARGET AREA No. 4 - PEDESTRIANS **Annual Average – Injury of Fatal Collisions : 177**		
Proposed Countermeasure	**Examples**	
Improved information on demographics required.	Age data specifically.	
Responses specific to	Pedestrian information	Consider walking speeds Lead pedestrian

pedestrian collisions at traffic signals	plaques and billboards at signals	built into signal timing	intervals
Systemic improvements	Countdown Signal Timing	Pedestrian Refuge Islands	Complete Streets
TARGET AREA No. 5 - CYCLISTS			**Annual Average – Injury of Fatal Collisions : 128**
Proposed Countermeasure	**Examples**		
Investigate cycling collision causes	Riding on sidewalks		
As part of Bike Master Plan	Cycle Lanes	Tracks	Bike Boxes
TARGET AREA No. 6 – RED LIGHT RUNNING			**Annual Average – Injury of Fatal Collisions : 111**
Proposed Countermeasure	**Examples**		
Red Light Cameras	Install Red Light Cameras		
Check all clearance interval timing on-street	Check against accepted guidelines		

ENFORCEMENT COUNTERMEASURES

TARGET AREA No. 1 – INTERSECTIONS		**Annual Average – Injury of Fatal Collisions : 965**
Proposed Countermeasure	**Examples**	
Selective, targeted enforcement	Speeds approaching key intersections	
TARGET AREA No. 2 – DISTRACTED AND AGGRESSIVE DRIVING		**Annual Average – Injury of Fatal Collisions : 826**
Proposed Countermeasure	**Examples**	
Speed enforcement at locations identified as having collisions consistent with inattentive behaviours	Speed enforcement	
Enhanced enforcement of hand-held device use	Hand-held enforcement	
TARGET AREA No. 3 – YOUNG DRIVERS (16-25 AGE GROUP)		**Annual Average – Injury of Fatal Collisions : 488**
Proposed Countermeasure	**Examples**	

Focused enforcement near young driver violation locations or routes such as high schools, Fanshawe and Western U.	Look for speeding, hand-held and general infractions.	Provide positive enforcement for good behaviours.	Alcohol infractions near known sites

TARGET AREA No. 4 - PEDESTRIANS

Annual Average – Injury of Fatal Collisions : 177

Proposed Countermeasure	Example
Difficult, but enforce or warn drivers failing to yield to pedestrians at signals, especially seniors areas	Enforce drivers failing to yield to pedestrains

TARGET AREA No. 5 - CYCLISTS

Annual Average – Injury of Fatal Collisions : 128

Proposed Countermeasure	Examples		
Warnings or infractions?	Illegal cyclist manoeuvres	Sidewalk cycling	Riding in signalized crosswalks

TARGET AREA No. 6 – RED LIGHT RUNNING

Annual Average – Injury of Fatal Collisions : 111

Proposed Countermeasure	Example
Target all locations without RLC systems	Enter intersection on red enforcement

EDUCATION COUNTERMEASURES

TARGET AREA No. 1 – INTERSECTIONS

Annual Average – Injury of Fatal Collisions : 965

Proposed Countermeasure	Examples	
Outreach Campaign	Wheels turned left while waiting to turn left	Look left/right/left for right-angles
Highest cause and why (primary impact types)	Highlight most common cause	

TARGET AREA No. 2 – DISTRACTED AND AGGRESSIVE DRIVING

Annual Average – Injury of Fatal Collisions : 826

Proposed Countermeasure	Examples		
Outreach Campaign	Introduce a pledge	Encourage use of apps that block usage in cars	All kinds of distractions lead to collisions
TARGET AREA No. 3 – YOUNG DRIVERS (16-25 AGE GROUP) **Annual Average – Injury of Fatal Collisions : 488**			
Proposed Countermeasure	**Examples**		
Driver's training schools in London-Middlesex	Provision of informational package information package (collision data, trip planning instruction)		
Parental Enforcement (police supported)	Cellphone tracking	Car Chip	Insurance Company Tracking Device
TARGET AREA No. 4 - PEDESTRIANS **Annual Average – Injury of Fatal Collisions : 177**			
Proposed Countermeasure	**Examples**		
Outreach Campaign at Senior`s Centres	Signal use	Look both ways/eye	
Outreach Campaign All Pedestrians	Visibility at night	Walking against traffic	
Outreach Campaign Schools	Safety Village Concept		
TARGET AREA No. 5 - CYCLISTS **Annual Average – Injury of Fatal Collisions : 128**			
Proposed Countermeasure	**Examples**		
Training courses	Can-Bike or similar		
Helmet use encouragement	Under 16 year of age	Over 16 years of age	
Enhance visibility	More visible colours	Lights at night	
TARGET AREA No. 6 – RED LIGHT RUNNING **Annual Average – Injury of Fatal Collisions : 111**			
Proposed Countermeasure	**Examples**		
Outreach Program	Companion program to red light cameras	Companion program to distracted or aggressive driving	

EMPATHY COUNTERMEASURES

TARGET AREA No. 1 – INTERSECTIONS Annual Average – Injury of Fatal Collisions : 965		
Proposed Countermeasure	**Example**	
Media Package	Turning drivers and pedestrians	
TARGET AREA No. 2 – DISTRACTED AND AGGRESSIVE DRIVING **Annual Average – Injury of Fatal Collisions : 826**		
Proposed Countermeasure	**Example**	
Outreach Campaign	Your child will thank you for not talking to them in the car	
TARGET AREA No. 3 – YOUNG DRIVERS (16-25 AGE GROUP) **Annual Average – Injury of Fatal Collisions : 488**		
Proposed Countermeasure	**Examples**	
Use of electronic media	Distribute some of the best vi (to young people for young pe to high schoolers	Use alternative to driving
TARGET AREA No. 4 - PEDESTRIANS **Annual Average – Injury of Fatal Collisions : 177**		
Proposed Countermeasure	**Example**	
Media Package	Turning drivers and pedestrians	
TARGET AREA No. 5 - CYCLISTS **Annual Average – Injury of Fatal Collisions : 128**		
Proposed Countermeasure	**Example**	
Media Package	Give Bikes Space	
TARGET AREA No. 6 – RED LIGHT RUNNING **Annual Average – Injury of Fatal Collisions : 111**		
Proposed Countermeasure	**Example**	
Outreach Program	Focus on cross traffic	Look both ways

Figure 8 – Preliminary List of Countermeasures

H. Capacity of the Programme Providers to Deliver Service

Beyond the effectiveness of the countermeasures, even more important is the ability of the service providers to deliver the chosen countermeasures. The information line which was highlighted to the members of the road safety committee, who will be charged with implementing the countermeasures, was that in order to achieve success the member organisations had to be prepared to "do more or do

differently". It is understood that if the status quo is maintained in terms of the provision of safety programs, the goal will not be achieved. The starting point was to circulate a questionnaire asking the members of the steering committee exactly which safety programs they were currently providing, their thoughts on those programs and their ability to provide extended or different resources. If the members of the programme are unable to provide the additional resources required for the LRSS, the only alternative will be to search out external resources in the form of third-party funding and or programs. The initial survey results show that the agencies have a range of active road safety programs; although there does not appear to be not complete alignment with the new targets identified by the LRSS, and it is unclear if the committee is capable of delivering the full programme necessary to achieve the defined goal. The next step will be an iterative exercise in which the members will be consulted about their ability to undertake specific countermeasures and a countermeasure program will be adjusted to best reflect the committee members' ability to deliver the programmes.

I. Next Steps

At the time of the writing of this paper, countermeasure development was underway and the two elements discussed above, the potential success of an individual countermeasure and the capacity of the service providers to deliver it, were being evaluated in their final state. It is felt that these two steps, while difficult, bring a great deal of reality and credibility to the development of a road safety strategy and therefore create the greatest likelihood of true success.

J. Conclusion

The two new and/or different elements of the London Road safety strategy are both proven to be of value.

Introducing public input into the process was good information in terms of perceived safety and gives the public and decision-makers confidence that the strategic safety program reflects the public needs.

Often safety programs do not proceed past defining what should be done. They do not consider the hard reality of whether it is possible. The LRSS will provides a reality check terms of the likelihood of success of the countermeasures and the capacity of the programme delivery team to actually achieve the goal. This will lead to a much more realistic expectation of the likely outcome of the programme, short- and long-term.