

Document 5 – Executive Summary of Jurisdictional Survey of Vision Zero Practice and Associated Costs

Pursuant to the City of Ottawa’s Strategic Road Safety Action Plan (SRSAP) 2020-2024, as part of a motion submitted to [TRC on December 4, 2019 and approved by Council the following week on December 11](#), staff received direction to investigate funding requirements that work towards zero fatalities on City of Ottawa roadways by 2035.

Staff hired a consultant, MORR Transportation Consulting Ltd. to develop, deploy and analyze a survey of leading jurisdictions in the Vision Zero field to investigate practices, lessons learned, and costs associated with achieving zero fatalities.

The “*Jurisdictional Survey of Vision Zero Practice and Associated Costs*”, study explored operational and capital cost implications that would work towards the City’s 2035 road safety goals. Data was collected through the development and administration of a survey of international jurisdictions that had achieved zero fatalities one or more years in the past to learn about their experiences and approach to Vision Zero, with an emphasis on costs associated with implemented actions. The purpose of this survey was to develop a more comprehensive understanding of the operational and capital cost implications for achieving zero traffic deaths in Ottawa.

The cities for the jurisdictional survey were selected from the DEKRA Vision Zero map, which was filtered to select those with the highest population. Out the higher population cities on the map, contact information was found for 27, of which nine provided a response to the survey invitation. Cities who completed the survey were then invited to participate in an in-depth interview about their road safety practice and approach toward achieving zero fatalities and injury reduction.

While much can be learned from international cities, Ottawa has unique features, such as a large rural area and periods of heavy snowfall with associated winter maintenance requirements, making comparison of road safety trends difficult, and the study recommends that care should be taken in directly applying the study findings to the Ottawa context.

Information gathered from the survey was analyzed to pull together common operational success factors of cities with significantly reduced traffic deaths. These operational considerations were explored by integrating findings from the various data sources with

discussions centering on the reported key actions taken by municipalities and on staffing levels. The resultant actions were grouped into five categories:

1. **Road Safety Culture:** These actions spoke to the idea that road safety was a shared responsibility that required action from community members, stakeholders, and departments across the municipality. The concept of road safety culture aligns with other discussions related to systemic and interconnected approaches to road safety. Cities did not only suggest one directional communication from the city to residents to provide road safety education, they also talked of “public relations” and of “involvement of citizens”. This suggests that achieving improved road safety is not only about informing residents, but about active involvement of citizens. It is about cultivating a culture of road safety in the community.
2. **Speed Management:** Any action related to reducing vehicle speeds was categorized under speed management. Speed management was mentioned by three cities, also emerging in interview conversation. These noted actions among cities were similar to those already applied by many Canadian jurisdictions (e.g., automated enforcement, reduced speed limits, traffic calming measures).
3. **Infrastructure for Vulnerable Road Users:** These actions included planning, design, construction, and maintenance of infrastructure for vulnerable road users. Infrastructure for vulnerable road users emerged as a common theme in the actions reported by cities. While specific actions were wide ranging, municipalities spoke to themes of innovation, context-specific planning and design, staffing, and maintenance. The actions suggested the same approaches taken towards infrastructure for vehicles be carefully applied to infrastructure for cyclists and pedestrians.
4. **Incorporating Safety into New Infrastructure Planning:** These actions related more to proactive approaches to road safety, where future collisions are prevented through safe road design from the beginning.
5. **Improving Safety of the Existing Road Network:** These actions related to reactive approaches to road safety, where existing roads are improved to reduce the risk of serious injuries.

The top three categories of actions provided some indication of the areas of focus for road safety work among the cities surveyed – creating a culture of safety, speed management, and vulnerable road users – while the other two categories (i.e.,

incorporating road safety in new infrastructure planning and improving safety of existing road network) indicated both proactive and reactive approaches are needed.

On the matter of cost, since the work of road safety is split across numerous departments and aligned with achieving other objectives, cities were not able to determine how much was spent specifically on road safety. Findings were informed by survey responses as well as a review of the budget documents for cities where publicly available. It is worth noting, due to differences in corporate structure, the structure of various municipalities budget documents, and factors such as snow clearing that are unique to Ottawa, it was challenging to make direct comparisons. For the three cities who responded with a road safety budget on the survey, the amount spent per 1,000 population on road safety ranged from around \$2,000-\$7,500 CAD per year. By comparison, a rough estimate of road safety spending by the City of Ottawa was around \$10,000 per year per 1,000 population, slightly higher than leading cities. In general, the analysis demonstrated that cities with low traffic deaths and serious injuries did not necessarily have very large road safety or transportation budgets.

Beyond total budget numbers, cities were asked how they allocated their road safety budget. While definitive conclusions were not possible with only two cities responding to this item, there was reasonably strong alignment in the responses from the two cities, both indicating they spent over half of their road safety budget on engineering and road design. Enforcement, speed management, and education were also reported as important priorities in terms of road safety funding allocation. These results generally aligned with discussions where road safety culture, speed management, and infrastructure were identified as the top categories of action.

Overall, cities were reluctant to discuss budgets for road safety, and many left the survey questions blank. However, responses suggest that what was most important in terms of their success was to ensure every dollar spent by the City had the maximum road safety benefit, instead of trying to maximize the budget allocated for road safety itself. By embedding road safety throughout the organization, every department's budget could contribute to the objective of eliminating death and serious injury from the transportation network. At the same time, in terms of allocation of the road safety budget itself, infrastructure for all road users appeared to be of importance for cities in working towards zero traffic deaths.

In conclusion, the study summarized findings related to trends in the operational and financial expenditures of jurisdictions that have achieved substantial reductions in traffic deaths. After reviewing survey responses, email interactions, budget documents, and

interviews, one of the key findings is that cities did not attribute their success as much to specific actions or to large budgets. Instead, their responses suggested that the systemic, integrated, and objective oriented approach they took was foundational to their success. Municipalities suggested that the actions and costs related to road safety were difficult to pin-point because separating everything out into “road safety related” vs. “not road safety related” would be contrary to their systemic and integrated approach.