

Overview

In my last article, released on January 10th, I outlined my thoughts on what I thought the future of work would be based on Lean Management methodology, supporting technology and business leaders that would enable change through innovative thinking. Little did I know that on January 11, 2017 a study conducted for the Canadian Automobile Association (CAA) would quantify a few of the points that I made in my article regarding the effects of people commuting to work every day when there's a better way.

The CAA Study

The findings of the study had a few very strong observations:

1. The 20 most congested traffic bottlenecks cover only 65 kilometers (40.6 miles).
2. The additional gas consumption is estimated at 11,000,000 liters (2,906,000 US gallons).
3. Cost of time is 11,500,000 hours (no conversion necessary...that's time away from family and time spent breathing in the pollution of other automobiles).
4. The annual delay on the worst stretch in Canada, Highway 401 between Highway 427 and Yonge Street, creates 15.2 million kilograms (33.07 million pounds) of CO₂ emissions.

Those statistics only allow for normal congestion...everything goes up when you factor in accidents, bad weather and construction.

“Traffic congestion is a major source of stress for Canadians. Our study concludes that traffic bottlenecks affect Canadians in every major urban market, increasing commute times by as much as 50%,” said Jeff Walker, vice-president of Public Affairs for CAA National. **“Reducing these bottlenecks will increase the quality of life for millions of Canadians, save millions in fuel costs and reduce greenhouse gases, helping contribute to Canada’s climate change commitments.”**



Greenhouse Gas Impacts

Canada’s worst bottleneck (a stretch of Highway 401 through Toronto) ranks among the top 10 in North America. New York City, Los Angeles and Chicago have areas of worse congestion. The I90 between Roosevelt Road and N. Nagle Avenue is ranked the worst with a total annual delay of 16.9 million hours lost and a cost of C\$543 million (~US\$407 million). The I90 delay is also estimated to create 60.32 million kilograms (132.98 million pounds) of CO₂ annually.

Is anyone feeling a bit ill yet? We haven’t even talked about the impact of stress yet!

Stress – The Productivity Killer

There are many causes of stress of which one is the daily commute. When a person comes to work under stress many studies and lengthy research shows that they have a higher risk of either being injured or causing injury. They also have a higher rate of causing damage or becoming violent towards others.

Let's talk about stress with some recent information from the United Kingdom.

In a one year span over 2015 / 2016, there were 30.4 million lost productivity days due to illness. Of those days, 25.9 million (85.2%) were due to work-related injury including travelling to and from the workplace. A total of 11.7 million (38.5%) days were lost due to stress...that's 38.5% of the total of 30.4 million lost days caused by stress-related illness. The study in the UK also found that stress-related time off was an average of 24 days per occurrence. Only a major injury or illness requiring a time of hospitalization had longer durations per occurrence.

In North America, there are approximately 1.1 million workers on stress-related sick leave *every business day of the year* (up 17% since 2008) costing their organizations in numerous ways. Estimates of the overall cost to North American business range from \$150 - \$300 billion and the impact to the economy is in the trillions.

Stress lowers the body's immune system which limits its ability to fight off common illnesses that result in short-term absenteeism. Psychological issues such as depression and anxiety and panic attacks are also being reported. Not surprisingly, more than half of workers surveyed state that job-related stress is having a negative impact on their productivity.



In Canada, a recent study shows that stress is causing workers to seek professional care for physical, mental and emotional ailments which is having a dramatic effect on the cost to governments and organizations' employee assistance plans of providing medical services.

Another by-product of stress is fatigue and attention deficit that contributes to productivity decline and a higher risk of accidents. There's also the potential of employees turning to drugs (prescription or illegal), alcohol and gambling as a way to forget the stress at work. Lastly, there's the impact on the worker's personal life.

Link to the CAA study info:

<https://www.caa.ca/bottlenecksincanada/>

Summary

There are alternative methods to working at the office. Telecommuting is viable when supported by all concerned and it has the technological infrastructure to facilitate a person's work as if they were sitting in a cubicle or office. The success of these initiatives will depend upon management's understanding of their roles and need for investment in education, technology and change management methodology.

Just as important to the success of changing our 'drive to work' culture will be the government's role in ensuring that organizations are motivated to make the investment, time and necessary accommodations to get these automobiles off the road and reduce congestion, greenhouse gas and stress while increasing productivity and the health of its people and our planet.

About the Author

Ken Cowman's career has spanned over 44 years with 11 of those in operations management followed by more than 30 years as an enterprise solutions and continuous improvement project manager, educator, seminar leader and management coach. He has had over 70 articles published in various magazines.

A founding executive of the APICS Peel Chapter, Ken was part of the OMERIC team that wrote the Fundamentals of Operations Management courses for APICS. He is also the past Chair of the Business Operations Management Program Advisory Committee at the School of Business at Centennial College.

Ken is the author of Emercomm's Lean Enterprise Management methodology and leads the team that develops the LeanControl RTO© applications.

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