Smart Commute is a program of Metrolinx and the municipalities of the Greater Toronto Hamilton Area (GTHA). The program mandate is to encourage those living and working in the GTHA to choose more efficient transportation choices that reduce congestion and help to improve quality of life in the region. Work-related trips in the GTHA account for more than 40% of AM peak-period travel\(^1\). The Smart Commute workplace program facilitates travel options for employers and commuters, such as travelling at a different time of day, choosing a different mode (e.g., carpooling, transit, walking or cycling), or reducing trips through teleworking. In 2014, Smart Commute worked with 340 workplaces in the region, representing more than 730,000 commuters.

On a value per dollar basis, the Smart Commute workplace program is delivering an estimated 6:1 benefit cost ratio. This report provides a snapshot of the quantitative and qualitative value delivered by the Smart Commute workplace program, as demonstrated by a Business Case Review\(^2\) and interviews with four participating workplaces across the GTHA. Each workplace showcased has unique demographics, industry sector and reasons for joining the program.

IMPACT

On a value per dollar basis, the Smart Commute workplace program is delivering an estimated 6:1 benefit cost ratio (BCR). In the absence of detailed data to describe how the mode shift builds up over that time period, several mode shift ‘ramp up’ scenarios were tested in the business case review. The estimated BCR assumes that as more employees become aware of the travel options and the Smart Commute program adoption increases in the workplace. The methodology for this analysis is noted on page 5.

The key calculated regional and commuter benefits include:

- **Reduced congestion and travel time** quantified in value of time
- **Lower commuter operating costs** in terms of time and expenditures for commuters
- **Improved health** with fewer hospital admissions and reduced social costs

| 2.4 million annual car trips off the road | 40 million Vehicle Kilometres Travelled reduced annually | 2.9 million additional walking and cycling trips annually |

1. Transportation Tomorrow Survey, 2011
2. A Business Case Review is a post-implementation review of an existing transportation program, intervention or investment.
Note there are additional program benefits which have not been captured in the BCR, including:

- **Operational efficiencies**: elimination of parking shortages, reduced maintenance fees, increased visitor parking availability
- **Employee benefits**: increased work-life balance, staff satisfaction, contribution to recruitment & retention
- **Practical business results**: idea generation resulting from cross-department agglomeration of staff in carpools or shuttles
- **Real estate savings**: potential avoidance of new parking construction and reduced land requirements for parking
- **Government Savings**: Lower capital and maintenance costs for roadways over time
- **Air Quality improvements**: fewer air pollutants and greenhouse gas emissions
- **Value of employer-level commuting data** supporting development of other transportation projects and programs
- **Increased economic productivity**: stemming from reductions in regional congestion

Inclusion of these impacts may be investigated as part of future updates to the Business Case Review.

**REGIONAL PROGRAM BENEFITS**

The economic value of the Smart Commute workplace program stems from its ability to move commuters more efficiently between their home and workplace. This value is primarily calculated through a reduction in single occupancy vehicle (SOV) use.

Increases in active transportation, such as walking and cycling, have health benefits to commuters, reducing health care costs paid by tax dollars and supporting a more productive regional work force.

**Table 1: Estimated Impact Post-Smart Commute Workplace Program Implementation**

<table>
<thead>
<tr>
<th>Transportation Mode</th>
<th>Average Reduction</th>
<th>Annual Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lone Drivers</td>
<td>-1.7%</td>
<td>2.4 million car trips off the road</td>
</tr>
</tbody>
</table>

**Table 2: Estimated Active Transportation & Carpool Increases Post-program Implementation**

<table>
<thead>
<tr>
<th>Transportation Mode</th>
<th>Average Reduction</th>
<th>Annual Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>+1.6%</td>
<td>2.9 million additional walking and cycling trips</td>
</tr>
<tr>
<td>Carpool</td>
<td>+1.3%</td>
<td>2.2 million carpool trips taken</td>
</tr>
</tbody>
</table>
The Smart Commute workplace program was found to reduce SOV travel by approximately 40 million Vehicle Kilometres Travelled (VKT), and increase active transportation by nine million kilometres travelled per annum. It generates about $34 million in auto VKT reduction benefits, and $21 million in active transportation health benefits annually, for a net economic benefit of more than $123 million over the evaluation period. The BCR methodology is noted later on in the report.

Workplaces in the Smart Commute program achieve a range of reductions in employees who drive alone, from an estimated two percent (2%) to reductions as high as 35%. On average, a 1.3% reduction also occurs in other ways of getting to work post-Smart Commute workplace program implementation (e.g. “using a corporate vehicle”).

Although mode shift to public transit and flexible work arrangements has occurred at the individual workplace level, no statistically significant change in either modeshare is evident in the aggregated analysis results of Smart Commute workplaces.

**BUSINESS BENEFITS**

**Reduced Costs & Eliminate Parking Shortages:** Inadequate worksite parking facilities can be a barrier to building the required workforce, attracting customers and visitors. Provision and operation of parking facilities cost up to $10 per spot daily. Reductions in lone drivers and increased parking management can address demand and reduce the need for parking expansion, saving employers rent and real estate costs. Less space allocated for parking can also make additional space available for new development, increasing the supply and affordability of work space.

**Business Continuity:** Adjusting work start and end times, even in increments of 15-30 minutes, can help employees avoid travelling during the busiest times of the day and significantly reduce commute times. Flexible and remote work arrangements provide an option for business operations to continue when access to the office is limited (e.g., large-scale events, emergencies, severe weather, etc.)

**Boost Employee Commute Satisfaction, Recruitment, Retention and Morale:** 74% of commuters agree that their commute experience directly affects their overall job satisfaction. Commuters exposed to high traffic congestion arrive at work with higher blood pressure than people who are not exposed. Increasing employee travel and work arrangement options can increase commute satisfaction, improve work-life balance, boost an employer’s attractiveness to qualified applicants, and help retain talent.

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3. AM One-Way Peak Hour Traffic, City of Toronto, Gardiner Expressway Environmental Assessment, 2014
5. Quantifying the Business Benefits of TDM, National Center for Transit Research, 2012
Enhance Corporate Image and Reduce Environmental Impact: Transportation Demand Management (TDM) and trip reduction strategies align with corporate social responsibility programs, and can reduce air pollutants and greenhouse gas emissions.

**Commuter Attitudes Survey, 2014**
74% of commuters agree that their commute experience directly affects their overall job satisfaction.

**COMMUTER BENEFITS**

**Personal Cost and Time Savings:** There is potential for significant cost savings through the use of different modes. This could range from a slight reduction in travel costs (e.g., splitting gas costs with a carpool partner) to eliminating a household vehicle and its related overhead costs (e.g., fuel, insurance, financing and long-term maintenance and depreciation). The Canadian Automobile Association (CAA) estimated the average annual ownership costs in 2013 to be between $6,500 and $8,900.6

**Travel options:** More travel options means greater personal flexibility, reduced dependence on any single travel mode and the freedom to choose how to get from A to B.

**Physical & Mental Health:** Incorporating active transportation into the daily commute can increase physical and mental health. Social interactions and connectivity can also increase as result of carpooling, cycling, walking and using public transit.

**BUSINESS PARTNERSHIPS**

Smart Commute has a solid foundation of expertise in workplace travel planning, and a strong network of delivery agents to reach individual workplaces. Success in the program is tied to the level of commitment of a participating workplace, including:

1. An agreement with Metrolinx demonstrating program delivery intentions and management support.
2. An embedded workplace champion to liaise with Smart Commute, helping to engage staff and deliver staff support tools, requiring limited time commitments (as noted below).
3. An understanding of employee travel habits and site conditions through employee and transportation site assessment surveys.

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NEXT STEPS FOR THE WORKPLACE PROGRAM: BUILDING ON REGIONAL SUCCESS

• **Quality data:** Continue to collect quality commuter data with high employee survey response rates;

• **Flex Work Programming:** Roll out pilots with member businesses to expand flexible and remote work employer programming;

• **New Ride-match Markets:** Reach new carpool ride-matching markets with the Smart Commute online tool;

• **Leverage Change Opportunities:** Support workplaces in preparations for business continuity during the TORONTO 2015 Pan Am/Parapan Am Games and beyond;

• **Tailored Evaluation:** Evaluate the impacts of specific transportation interventions (carpool programs, teleworking, etc.) and the value of specific TDM interventions that encourage more efficient and sustainable travel patterns;

• **Segmentation:** Coordinate research for the region to segment and identify workplaces and individuals with the greatest potential for behaviour change; and

• **Implement Performance Metrics:** Smart Commute Workplace program performance metrics will focus on program reach (size, market penetration, engagement), satisfaction, delivery of infrastructure and services, behaviour change impact and overall cost-effectiveness.

METHODOLOGY, DATA SOURCES & ASSUMPTIONS

This analysis was based on a statistically significant sample of data from employee travel surveys. The sample includes 37 Smart Commute workplaces that completed both baseline and follow-up surveys and met the minimum required response rate at a 95% confidence level. Baseline and follow-up survey dates range between 2005 and 2014, dependent on when the workplace joined the Smart Commute program and was able to gauge employee travel post-program implementation. Employee survey results were used to calculate mode shift and changes in annual trips and annual vehicle kilometres travelled.

The value of the Smart Commute workplace program are attributed to reductions in vehicle kilometres travelled and increased active transportation across the GTHA. Monetized benefits include vehicle kilometres reduced, auto operating savings, accident reduction benefits, travel time saved network-wide and active transportation health benefits per km.

This is a summary of the methodology, assumptions and factors used. For more detail, please view the full [Smart Commute Business Case Review](#).
Reason for Joining Smart Commute:

- Invested in the Smart Commute program for their Sheridan Park head office as an alternative to a parking lot expansion

The Program:

- Financial incentive for each carpool passenger driven or cycling trip recorded
- Priority carpool parking spaces at each of their offices in the region
- New-hire packages and a telework program
- Active staff engagement in Smart Commute campaigns

Hatch’s Success:

- 23% of staff carpool per day; a 13% increase
- Capital and operating cost savings for 65-70 parking spaces
- An average of 120 staff cycling trips per month
- A 22% increase in employee commute satisfaction

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<th>Pre</th>
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<tr>
<td>Drive alone:</td>
<td>78%</td>
<td>65%</td>
<td>13% ↓</td>
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<tr>
<td>Carpool:</td>
<td>10%</td>
<td>23%</td>
<td>13% ↑</td>
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<tr>
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<tr>
<td>Cycle:</td>
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<td>1%</td>
<td>1% ↑</td>
</tr>
<tr>
<td>Walk:</td>
<td>1%</td>
<td>1%</td>
<td>no change</td>
</tr>
<tr>
<td>Commute Satisfaction:</td>
<td>62%</td>
<td>84%</td>
<td>22% ↑</td>
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“In terms of commuting benefits and the workplace, when you think of [Hatch’s] investment over 7 years, it’s not a significant amount on an annual basis for the return it delivers in employee satisfaction and wellbeing. The users of the program are very satisfied and the feedback we receive on the program is very positive. Carpooling creates connections between coworkers that otherwise would not communicate and interact on a day to day basis…You start to create links, and it can really lead to some good discussions that result in practical business results.”

Andrew Tohn Process Engineer at Hatch Ltd
The Hatch Story

Hatch Ltd. joined Smart Commute Mississauga in 2006 when they faced with parking constraints at their Sheridan Park head office, adjacent to the QEW. The company initiated the program as an alternative to investing in an expensive parking lot expansion. Smart Commute has since grown to become a core part of their corporate strategy, demonstrating a commitment to corporate social responsibility and contributing to a high level of employee satisfaction.

Hatch has shown great initiative in collaborating with Smart Commute to deliver sustainable commuting solutions and ensure flexible workforce mobility. Hatch developed internal tracking software that links to their payroll system and allows staff to receive a financial incentive for each carpool passenger driven or cycling trip recorded. The carpool program is supported through the provision of priority parking spaces at each of their offices, and participants are required to use registered carpool tags. Additional policy measures, including new-hire packages and a telework program, complement participation in Smart Commute’s suite of campaigns.

Andrew Tohn, Process Engineer at Hatch Ltd., notes the importance of Smart Commute in delivering the program: “Communication is a key benefit of the Smart Commute program. They are fantastic at creating marketing materials, helping us communicate not only internally, but also externally, ensuring engagement in our initiatives and events.” This engagement – combined with Hatch’s ingenuity – has reaped significant results. An average of 115 staff carpool per day, resulting in capital and operating cost savings for 65-70 of Hatch parking spaces. Cycling has also increased to an average of 120 trips per month.

Ultimately Hatch receives significant value from the program, backed by support from senior management for the program over the past seven years. Hatch has also contributed as a corporate sponsor.
Reason for Joining Smart Commute:

- A suburban office location presented access challenges for many commuting employees
- Alignment with company environmental goals

The Program:

- 100 designated priority carpool parking spaces & ride-matching tool to connect colleagues taking similar trips
- Smart Commute new-hire recruitment packages
- Active colleague engagement in Smart Commute campaigns

Loblaw’s Success:

- 44% of colleagues now carpool to work; a 25% increase
- 16% decrease in colleagues driving alone
- 5% of colleagues now take transit to work, a 2% increase
- 75% of colleagues are satisfied with their commute, an 11% increase

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<th>Post</th>
<th>Results</th>
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<tbody>
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<td>Drive alone:</td>
<td>67%</td>
<td>51%</td>
<td>16%↓</td>
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<tr>
<td>Carpool:</td>
<td>27%</td>
<td>47%</td>
<td>20%↑</td>
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<tr>
<td>Transit:</td>
<td>3%</td>
<td>5%</td>
<td>2%↑</td>
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<tr>
<td>Cycle:</td>
<td>0%</td>
<td>1%</td>
<td>1%↑</td>
</tr>
<tr>
<td>Walk:</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Commute Satisfaction</td>
<td>63%</td>
<td>75%</td>
<td>12%↑</td>
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“Although we encouraged carpooling from the beginning, we didn’t have a sophisticated program to offer to employees. Smart Commute allows us a program that is robust and easy to use.”

Sonya Fiorini, Senior Director, Corporate Social Responsibility, Loblaw Companies Limited.
The Loblaw Story

Loblaw Companies Limited (Loblaw) built their head office in Brampton, Ontario in 2006. While many of the pre-existing offices were located along Toronto’s subway lines, the new suburban location presented access challenges for many commuters. A number of programs were piloted for employee mobility options following the move, and in 2011, Loblaw enlisted Smart Commute’s help to develop a colleague carpooling program.

Due to relatively limited access to public transit, Loblaw utilizes Smart Commute’s online ride-matching service, and offers 100 carpool parking spaces for colleagues which are supported by an internally-managed permit program. The carpool program is complemented by promotion and education of the available transit routes, and participation in awareness campaigns including Smart Commute Week and Carpool Week. The corporate social responsibility team at Loblaw champions the colleague carpool program, as it strongly aligns with the company’s environmental goals.

Loblaw has seen incredible results within three years of launch. Their follow-up survey reported a 16% decrease in colleagues driving alone, a 2% increase in public transit usage and, an impressive 44% of colleagues carpool to work. And, 82% of Loblaw’s colleagues agree that their commute experience directly impacts their job satisfaction. The Smart Commute carpool program is recognized at Loblaw as a relatively small investment resulting in great success, high colleague engagement and an 11% increase in commute satisfaction. Facility operations report that all 100 carpool spaces are typically filled each day. The carpool parking program continues to grow with colleague demand. “Our staff love it because it saves them money and they have someone to drive to work with,” Olga Raposo, Senior Coordinator, Office Services, Loblaw Companies Limited.

The Smart Commute program is supported by human resources, requiring approximately one hour per month of operational oversight. It has become a staple component of employee orientation. Loblaw continues to collaborate with Smart Commute to maintain the colleague carpool program and to identify new travel options for colleagues.
Reason for Joining Smart Commute:

- Proactively address the impact of traffic congestion in business operations
- build on sustainability initiatives
- improve employee access to interregional offices

The Program:

- option for flex hours, work remotely or at a mobile work station
- bicycle racks and change room and shower facilities on-site
- carpool ride-matching tool promotion
- subsidized transit pass sales
- electric vehicle charging spaces

Hatch’s Success:

- A 4% decrease in solitary drivers
- 67% of staff now take transit to work, a 2% increase
- 14% of staff now walk or cycle to work, an 8% increase
- A 3% increase in staff who are satisfied with their commute
- corporate culture that supports employee mobility

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<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive alone</td>
<td>17%</td>
<td>13%</td>
<td>4% ↓</td>
</tr>
<tr>
<td>Carpool</td>
<td>4%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Transit</td>
<td>65%</td>
<td>67%</td>
<td>2% ↑</td>
</tr>
<tr>
<td>Cycle</td>
<td>1%</td>
<td>4%</td>
<td>3% ↑</td>
</tr>
<tr>
<td>Walk</td>
<td>5%</td>
<td>10%</td>
<td>5% ↑</td>
</tr>
<tr>
<td>Commute Satisfaction</td>
<td>52%</td>
<td>55%</td>
<td>3% ↑</td>
</tr>
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“[Smart Commute’s] materials and tools are effective and engaging, and although the workplace champion still needs to put in some effort, Smart Commute makes it as easy as could be,”

Derek Myke, Project Manager, Sponsorship and Brand Activation
The Manulife Story

Manulife is a leading Canadian-based financial services company with global operations and more than 3,100 employees at their headquarters in Toronto. Manulife joined Smart Commute Toronto-Central in 2008 to proactively address the impact of traffic congestion in their business operations, build on their sustainability initiatives and identify cost-effective ways for employees to access and travel between Manulife’s multiple offices in the Greater Toronto and Hamilton Area.

Manulife understands that we are in a new era of work style and therefore are driven to design a workspace and provide tools that reflect how their employees want to work. Their workplace transformation initiative demonstrates Manulife’s commitment to improved work-life balance for employees through flexibility and mobility in terms of where and when work is performed. Manulife provides the appropriate technology for staff, allowing employees the option to work remotely. This makes it possible for employees to avoid peak traffic congestion or reduce their need to travel altogether. When they choose to come into the office, staff can use mobility stations equipped for their needs. As a life and health insurer, active transportation also fits well with Manulife’s corporate objectives. Manulife provides bicycle racks and change room and shower facilities on-site. In addition to Smart Commute’s carpool ride-matching tool, subsidized transit passes and electric vehicle charging spaces are also available for employees at its global headquarters.

Manulife uses Smart Commute’s awareness campaigns to cross-promote all of these employee options. Because of this, administering Manulife’s program requires relatively minimal resources from Derek Myke, Project Manager, Sponsorship and Brand Activation.

Over the period of Manulife’s partnership with Smart Commute, there has been a 4% decrease in solitary drivers and an increase in the number of employees who walk, cycle or work from home. By creating a corporate culture that supports and cares about employee mobility, Manulife aims to increase employee productivity, retention and recruitment. Sustainable commuting can also help Manulife gain credits within LEED applications, reduce overall road congestion in the region and save their employees time and money. Not only has Manulife contributed to a healthier environment, they have also been able create a positive work environment for their employees.
**Reason for Joining Smart Commute:**

- Staff parking demand was greater than supply, resulting in overflow to visitor spaces

**The Program:**

- Designated priority carpool parking spaces & ride-matching tool to connect staff
- Secure bike parking facilities
- Smart Commute new-hire recruitment packages
- Active staff engagement in Smart Commute campaigns

**Southlake’s Success:**

- 11% decrease in staff who drive alone
- 12% of staff now carpool to work; an increase of 5%
- Improved parking supply management and increased parking revenue
- 12% of staff now walk or cycle to work; an increase of 5%
- 75% of staff are satisfied with their commute

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<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td>Drive alone:</td>
<td>82%</td>
<td>71%</td>
<td>11% ↓</td>
</tr>
<tr>
<td>Carpool:</td>
<td>7%</td>
<td>12%</td>
<td>5% ↑</td>
</tr>
<tr>
<td>Transit:</td>
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<tr>
<td>Cycle:</td>
<td>4%</td>
<td>5%</td>
<td>1% ↑</td>
</tr>
<tr>
<td>Walk:</td>
<td>3%</td>
<td>7%</td>
<td>4% ↑</td>
</tr>
</tbody>
</table>

“The right people have to be involved within the organization ... if you have the people department and parking department working together, you can get it done. The team there [at Smart Commute Central York] is great, and they were great right from the start! They don’t give up on us, and with their support it makes it easy to deliver the program to staff and experience buy-in.”

Marcel Moniz, Director of Facility Operations at Southlake Regional Health Centre
The Southlake Story

Southlake Regional Health Centre (SRHC) joined Smart Commute Central York in 2007, motivated by parking issues and a commitment to sustainability. The program is co-managed by the Facility Operations and Human Resources departments, leveraging their wide reach, knowledge of what’s impacting the organization and ability to roll out hospital-wide solutions.

SRHC’s insufficient supply of staff parking was resulting in overflow to visitor spaces, thereby compromising both revenue and the satisfaction of visitors and staff alike. Supported by Smart Commute, SRHC conducted a staff parking survey to inform programming opportunities, and utilized Smart Commute’s ride-matching tool to connect staff, manage carpool program enrollment and provide designated priority carpool parking spaces. Staff report improved work-life balance stemming from reduced costs, time savings and a positive social experience. Secure bike parking and electric vehicle charging stations complete the site’s suite of sustainable parking options. SRHC ensure staff engagement by incorporating Smart Commute into their new-hire recruitment program, participating in all local and network-wide Smart Commute events and opening their doors to outreach partners like PRESTO and YRT Viva.

The enthusiastic commitment to Smart Commute has produced strong results, with 35 registered carpools that free up more than 35 parking spaces per day, and 40-50 cyclists that use the secure cycling cage during peak periods.

Smart Commute is now tightly integrated into SRHC’s operations, as a key component of the Green Team, and it is aligned with their Action 360 health and wellness committee and strategy. The tools and resources provided by Smart Commute have generated awareness of sustainability and staff programming that was previously unachievable, and thanks to enthusiastic collaboration between the Smart Commute Central York and SRHC teams, they are seeing significant results and innovation. Looking ahead, there are aspirations to evolve the program to include programing and marketing targeted to students and volunteers, ensuring everyone working at Southlake can experience the benefits of Smart Commute.
For more information about Smart Commute, connect at:

www.smartcommute.ca  @SmartCommute  info@smartcommute.ca