

Sudbury Trip Reduction Network

Final Report

**MIRARCO Mining Innovation
Sudbury, ON**

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Project Goals and Objectives

The objective of the Sudbury Trip Reduction Network is to develop and implement strategies for companies who wish to reduce the number of car trips or drive-alone trips for individuals. The project intends to find 30 local businesses to participate and have its employees participate in the program. The engagement of workplaces will encourage sustainable transportation through ride-sharing, carpooling or the use of public transportation. Participants will also be encouraged to bike, walk or use alternate sources of transportation.

Specific goals for the project include:

- Enrolling of 15 businesses (total) and 300 individuals (total) to participate in the STRN;
- Enlisting of workplace champions – workplace champions are those who will lead the STRN within their own organization and be the point of contact within that organization;
- Reduce the number of drive-alone vehicle trips, and ultimately, the number of kilometers driven by employees at the participating companies;
- Reduce CO₂ emissions through these trip reductions – the expected CO₂ reduction totals 71,280kg or 15% for each participating business;
- Reduce transportation emissions including hydrocarbons and oxides of nitrogen – estimated reductions include 842kg of NO_x and 518kg of hydrocarbons.

Inherently the STRN will also heighten the environmental consciousness of participating businesses and may also result in savings on gasoline, parking and other transportation related costs. Increases in employee physical activity may also invoke more efficient use of employee's time and deter fatigue.

Successes/Accomplishments

Activities/Achievements for the Environment/Community/Economy

Although the ambitious targets for the STRN were not met, the project was successful in its objectives. Ten companies participated in the challenge with total participants equaling 52. This resulted in reductions of 19,930 vehicle km driven and associated levels of greenhouse gas/transportation pollutants. Participating companies include consulting firms, engineering firms, educational institutes, a municipal government group and a provincial government agency. A total of 19,930 vehicle kilometers were not driven in the community. Quantitatively, 4,384.6 kg of CO₂ emissions, 51.8 kg of nitrogen oxides, and 31.9 kg of hydrocarbons was prevented from being released into the atmosphere as a result of the STRN.

Companies who heard the STRN presentation and who received the materials were obviously made aware of the need for environmental conservation efforts in the workplace, specifically as it relates to the reduction of trips and pollution caused by these vehicle trips. The STRN also enhanced recognition of Clean Air Sudbury and its mandate of raising awareness of community air quality issues for Greater Sudbury. Participating companies also learned of the different modes of transportation available to them and how they could capitalize on these other methods. Although minimal, traffic and traffic congestion may have been reduced in the Sudbury area. Communication materials, including a comprehensive Trip Reduction Manual Guide promoting trip reduction programs were created which can be used by any company in the region

Businesses also recognized financial gains from these vehicle trip reductions. Where business travel was required and car pooling was practiced, savings on gasoline, parking and vehicle wear and tear were realized. Individuals also experienced savings as their consumption was reduced.

Community Capacity Building

Throughout this project, Clean Air Sudbury was able to provide knowledge and expertise to individuals and companies about sustainable transportation initiatives. This heightened awareness of the need for sustainable transportation and how individuals could accomplish that task. Participating individuals became conscious of their traveling patterns and learned about how small changes can make a difference in terms of kilometers driven and amounts of fuel consumed. Participating companies were seen to be promoting socially responsible behaviours which impacted on the workplace ethically. Clean Air Sudbury forged partnerships with two educational institutions, two industry companies, three government groups and several other individuals. Clean Air Sudbury also attained much coverage in the local media with news reports (Local news channel); newspaper articles (Northern Life) and numerous articles in company newsletters. Eleven workplace volunteers also directly participated in the STRN project.

Organizational Capacity Building

As a result of the Sudbury Trip Reduction Network, Clean Air Sudbury has raised its profile in the community as a group that promotes the betterment of community air quality in the Sudbury area. Clean Air Sudbury has also begun to establish themselves as a group championing alternate transportation in Greater Sudbury. Benefits for MIRARCO include the development of linkages to other environmental groups in the Sudbury area, skill enhancement for air quality scientists within the Center for Environmental Monitoring and honing of project management skills including budgeting, marketing and time management. A total of twenty six Workshops/Information Sessions/Consultations were conducted as related to the STRN project while fourteen Community events were attended to promote the Sudbury Trip Reduction Network. Products created and disseminated to the community (manual guides, posters, brochures, invitations, presentations, newsletters, newsletter blurbs, factsheets) totaled 315.

Challenges

One major challenge endured in attempting to unfold the Network was the lack of company interest in the concept of a trip reduction network. Although the businesses had time to listen to the presentation and were willing to receive the material, very few firms would take on the trip reduction challenge. Amongst those who did, there was also much delay in signing on to participate. Much communication was required and it was very difficult to find people within the firm who would agree to be the workplace champion. Lack of interest, excessive company work and cost (time and money) topped the list of concerns from company representatives. In a few cases, there was a simple lack of interest in the program. Repeated promotional efforts and endorsement from key individuals in the community were required to engage the companies and many did not sign on until the last quarter of the project (April-June 2006).

It was for the above stated reasons that quantitative shortcomings, in terms of workplaces, workplace champions, CO₂ reductions, and other pollutants, were also noted. The work plan called for increased participation and company commitment with single occupancy vehicle trip reductions beginning in September 2005. Resource development required more time and effort than anticipated. More research was required to assemble a comprehensive guide for company officials, and to produce the posters, brochures and fact sheets for dissemination. Outside resources were also required to design promotional material as opposed to completing this task in house. This consumed more time than anticipated to generate a logo and a design concept to aptly reflect the program.

It was also a challenge to engage the media. Many media contacts did not pursue a story on the Trip Reduction Network. The media felt that the impacts of this small endeavour would not make a noticeable difference to a large, long-term environmental problem. They also stated that results

would not be realized right away and that there was no visual appeal as compared to a photo opportunity like planting trees does. At the time when the media was approached, the network did not have many participants. The media commented that they wanted testimony from companies as to what the benefits of the program are within their own company. Our solution was to engage community organizations and businesses that were in some way associated with members on our steering committee.

Unanticipated Results

Through the Trip Reduction Network, Clean Air Sudbury and the coordinator for CAS have clearly enhanced working relationships with several local organizations. As a result of this, CAS has gained recognition and credibility in Greater Sudbury and has secured additional funding for new initiatives as they relate to community air quality. Follow up from companies, and from the general public, that participated in the STRN yielded general comments and inquiries about air quality issues in the Sudbury area. As the lead organization, MIRARCO also gained much publicity and a few inquiries about the Center for Environmental Monitoring and its role in promoting sustainable transportation.

The largest unanticipated result came from Laurentian University. As of September 2006, Laurentian University now provides a universal bus pass to all its students. Traditionally a bus pass cost a student \$60.00 per month or \$480.00 for the year. The original U-Pass program with standard services would have cost \$200.00/student/year, which is competitively priced when compared to the standard student rates, however, the Student Associations, and other players, were successful in further reducing this cost to \$135.00. This new price for students will be most effective in increasing the number of active transit users. Thus far, the conservative estimate is that 10% of Laurentian University students are now using the passes (500 students), which means a substantial decrease in the number of drive-alone trips and CO₂ and transportation pollutant emissions. Two Clean Air Sudbury representatives from Laurentian University and MIRARCO have been instrumental in assisting the Student Government Association to promote the benefits of the bus pass to students and encouraging them to vote 'yes' in the referendum on this particular ballot question. Although the measurable results cannot be included in this report, representatives from Clean Air Sudbury were involved in the negotiations for the U-Pass for LU students.

It was somewhat discouraging to note the lack of interest from local firms to participate in the STRN. This is perhaps indicative of the disregard for environmental consciousness in an industrial setting or the lack of time that people have to commit to such initiatives. Nonetheless, the program did raise awareness on the issue of sustainable transportation and the program did achieve a degree of pollution reduction.

Sustainability

Two of the participating organizations are committed to making long-term changes to shift the transportation habits of individuals at their places of work. Cambrian College will be undertaking several initiatives to reduce the number of drive-alone trips that are made to and from their campus. They will be piloting a carpooling program in the fall, which will include designated carpool parking spaces and an in-house carpool registry program for students and/or staff so that they can find other carpoolers. The College will also be installing additional bike racks around the campus and actively promoting cycling as a means of transportation to and from the campus. The Coordinator of Clean Air Sudbury has been instrumental in making these changes happen at Cambrian College, with the help of key individuals there. It took many discussions, presentations to the Executive, and a final proposal to convince the College to take these steps.

The most substantial gains have come from Laurentian University, as stated above. The introduction of the U-Pass will reduce the number of drive-alone trips and make it more feasible for students to utilize the local public transit system. As a partner in the U-Pass communications, the City of Greater Sudbury is also committed to enhancing the utility of the public transit system for students by increasing the reach for buses en route from the university and to increase the frequency of its buses to and from the university.

It is uncertain whether other STRN participants will continue with their reductions on drive-alone trips. We are confident that if financial and time savings are noted, the concept will subsist.

Lessons Learned

When planning a project such as this where you require involvement from the business community, be prepared to offer clear incentives and reasons, financial if possible, as to why they should participate. There was an initial overestimation of the anticipated level of interest in this program. In the future, further steps would be taken in the planning stages to gauge the community perspective of our potential programs/projects, perhaps with an interest survey of potential businesses.

Participation from company individuals, in our case the workplace champions, was also overestimated. In the future it would be prudent to anticipate additional time required to perform these tasks. This ultimately affects the work plan and the timing of deliverables. A longer start up and engagement period is recommended for similar projects.

Also, a project of this magnitude requires more than one year to launch and to sustain. Companies are slow to change their culture regarding how their employees get to and from work. The top-down approach, as preferred in this project, slowed the overall process tremendously in terms of securing company approval. A program for trip reductions could not be established and employees could not begin reducing their trips until senior management reviewed, revised and/or created new policies to encourage car pooling or the use of alternate transportation. It was difficult to reach senior management at larger organizations (such as Laurentian University, Canadian Taxation Centre) to discuss the program with them and it took some time before they agreed to participate. At many companies, when senior management was finally reached, they were not interested, or if they were interested, the approval process took a long time.

The idea of workplace champions as a means to reach other employees and management also endured challenges. Individuals were hesitant to 'volunteer' their work time towards this project; most were willing to distribute resource materials, but that was the extent of their involvement.

The marketing of the program should have begun earlier on in conjunction with the development of the resources. This would have allowed additional time to 'warm' the companies to the project idea. With the delay in production of resource materials, the marketing of the program was also delayed past its initial start month of September.

Sharing Experiences

Commuting options other than the drive-alone trip were promoted by Clean Air Sudbury through our Sudbury Trip Reduction Network program. The project goal was to reduce the number of motorized trips made by employees traveling to and from work in an effort to improve our local air quality and educate the community about sustainable transportation. To accomplish these goals, the project coordinator offered guidance via flexible, customized trip reduction programs to each of the participants. A total of nine companies in the City of Greater Sudbury participated which engaged over 100 individuals to reduce their drive-alone car trips. Participants walked, cycled,

used public transportation and carpoled to make their contributions. These participants avoided driving 19,930km, and avoided contributing 4,385kg of CO₂ emissions, 52kg of nitrogen oxides, and 32kg of hydrocarbons into our atmosphere. Nine workplace champions, one at each participating organization, signed on to promote the program, encourage their fellow co-workers to try others means of transportation and discuss a plan of action with senior management. These workplace champions were actively involved in the process. The companies involved derived benefit in areas including cost savings on fleet vehicle usage (where applicable), employee productivity through increased exercise and overall satisfaction through reduced environmental impacts. Additionally, there were marketing benefits as a result of media exposure. Employees noticed financial savings through the reduction of gasoline consumption, and most were able to increase exercise levels during their participation. The community benefited as these individuals were not part of the traffic congestion experienced in Sudbury during peak hours and they contributed less pollution to the atmosphere.

EcoAction Feedback

Information and materials provided by EcoAction were very helpful. Forms for reporting, both financial and project update reports, were easy to follow and provided insight into the details sought by EcoAction. Where questions arose, the EcoAction officer assigned to the project was always available for comment. The EcoAction representative was prompt with responses and explained things thoroughly. Specifically, when a one month extension was requested due to unforeseen setbacks, the process transpired with no delays. There was minor confusion on communications by email at one point as one person appeared to be sending email on behalf of another but through a third email address.