



City of Saskatoon, SK
2012 CAMA Education Award
(Population over 100,000)
Green Street Program

In partnership with PSI Technologies, the University of Saskatchewan and the Saskatchewan Center of Excellence for Transportation and Infrastructure, the City of Saskatoon's **Green Street Program** developed an effective way to produce and use recycled roadway material in roadway construction projects.

In 2009, the City of Saskatoon began researching innovative ways to enhance current standards and practices when constructing roads with recycled materials. During the first phase of the project, more than 160,000 tonnes of surplus asphalt and concrete rubble was processed and successfully used as a substitute for conventional aggregate in road construction activities. The City of Saskatoon saved more than two million dollars by taking advantage of a surplus of stockpiled asphalt and concrete rubble available at the time for free.

The second phase analyzed and improved upon the characteristics of the new aggregate and determined its best use within construction. Further pre- and post-construction testing determined the recycled aggregate was 30 to 50 per cent more effective than conventional aggregate.

The City's education research project has demonstrated the value of using recycled asphalt and concrete (when readily available) in road construction projects, including a significant capital savings, enhanced structural integrity, reduced construction energy requirements and reduced emissions.

More than 20 research papers and technical presentation have been presented on the results of the City of Saskatoon's Green Street Program and currently three Civil Engineering masters students are writing their thesis on subjects directly related to the engineered use of recycled material within the roadway.

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