Information for Links:

- 1. "Homelessness Among Federally Released Offenders"
- Principal Investigator: Dr. Stephen C.P. Wong

Saskatoon, SK

- Amount of SHRP funding committed: \$24,530
- Summary of the housing research:
 - The main objective of the research is to identify factors related to homelessness in federally released offenders. The secondary objective is to determine the services available and those needed to help ex-offenders find stable housing.
 - The scope of the research will focus on identifying factors related to homelessness among
 offenders, including those with mental illness. In addition, the research will also look at
 programs and services that may improve the housing situation for ex-offenders.
 - Data will be collected from federally released offenders and key informants in Saskatchewan. A random sample of up to 100 inmates being released on their warrant expiry date in Saskatchewan during the study period will be included in the sample. Data collected from the released offenders will be obtained from criminal records and face-to-face interviews. Two sets of interviews will take place with the offenders. The first interview will take place while the offenders are still incarcerated. They will be asked about their prior housing situations, housing plans, and what they believe will help them find stable housing. The second interview will take place two to three months after they are released. This follow-up interview will be conducted in order to determine the released offenders' current housing situation. The data will be analyzed quantitatively and qualitatively. Released offenders in housing crisis will be compared to offenders who have found stable housing on a number of characteristics, including behavioural, mental health and general demographic information.
 - Key informant interviews will also take place with halfway house / homeless shelter workers, correctional officials involved in reintegration / housing programs, representatives of community agencies involved in housing programs and / or services for ex-offenders and parole officers to identify factors they believe are causing homelessness in ex-offenders and services that will help them. A review of all the existing housing accommodations and housing services in Saskatchewan will be identified in the literature review and through these interviews. Approximately 10 interviews will be conducted with key informants. These interviews will be analyzed qualitatively by identifying common themes.
 - The Correctional Service of Canada's Offender Management system database is available to the researchers and will provide data on the criminal histories, demographics and background of the offender sample. Interviews with participants will provide detailed information on the current and past housing situations of the offenders, what they believe are causing their homelessness and what services are needed to improve accommodations for ex-offenders. Key informant interviews will gather data on the causes of ex-offenders' housing outcomes and what services are needed / available to help ex-offenders find stable housing.

- 2. "Appropriate System Design and Control for Energy-Efficient Inner City Housing That is Practical, Comfortable, and Affordable"
- Principal Investigator: Office of Energy Conservation (OEC).
 - 6 Research Drive, Regina, SK S4S 7J7
- Amount of SHRP funding committed: \$20,470
- Summary of the housing research:
 - The research question is whether hydronic radiant slab heating, controlled by flux modulation rather than temperature modulation, can provide a significant improvement in energy efficiency compared with a Hot2000 model of the same home. The objective of the research is to quantify and explain the difference between the actual performance and the modelled performance.
 - The research will take place over a 12-month period using data collected during that time from a recently built home in Regina. The data to be collected include at least hourly readings of: outdoor temperature, living space air temperature at two levels, mean radiant surface temperature, slab surface temperature, supply and return water temperatures to and from the radiant floor manifold, domestic hot water energy consumption, exhaust air temperature, and intake air temperature after heat recovery.
 - The home was designed in line with recommendations made by IEAAnnex 37, "Low Energy Systems for Heating and Cooling of Buildings." That is, they have a high quality building envelope with large thermal mass and a heat distribution system that is compatible with low-grade energy sources. The heating system is set to maintain an air temperture of 18°C and a mean radiant surface temperature of 25°C.
 - In this home, there is no thermostat. The boiler is equipped with two temperature sensors, one for inside and one for outside. There is constant liquid circulation through the floors, and the boiler adds heat as required to match the heat loss through the building envelope, maintaining a constant temperature. This flux control follows recommendations by C.R. MacCluer, Ph.D., published in the ASHRAE Journal (September, 1989) on the control of radiant slabs, in which he states, "The present recommended practise of controlling radiant slab heating systems by temperature modulation is ineffective and non-robust. The proper strategy is flux modulation, under which slabs become a superior heating delivery system with the simplest of controls."
 - The collected data will be plotted to graphically display conditions in the home over time and in relation to outdoor temperatures and in relation to both actual and modelled energy consumption. The data will also be entered into the model for radiant heating published in 2003 by Abdelaziz Laouadi of the Institute for Research in Construction, National Research Council of Canada. This use of the model will help to explain the performance of the system, and conversely, the data will help to validate the model.